



**AgEcon** SEARCH

RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

*The World's Largest Open Access Agricultural & Applied Economics Digital Library*

**This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.**

**Help ensure our sustainability.**

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

[aesearch@umn.edu](mailto:aesearch@umn.edu)

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

*No endorsement of AgEcon Search or its fundraising activities by the author(s) of the following work or their employer(s) is intended or implied.*

## Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.





**UNITED STATES DEPARTMENT OF AGRICULTURE**

**Miscellaneous Publication No. 223**

**Washington, D. C.**

**Issued December 1935**

**STUDIES OF FAMILY LIVING IN  
THE UNITED STATES AND  
OTHER COUNTRIES:  
AN ANALYSIS OF MATERIAL AND METHOD**

**By**

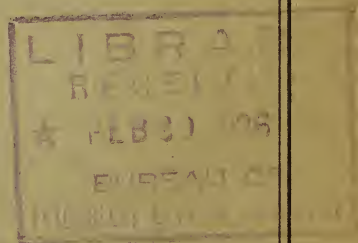
**FAITH M. WILLIAMS**

**Former Senior Economist, Bureau of Home Economics**

**and**

**CARLE C. ZIMMERMAN**

**Associate Professor of Sociology  
Harvard University**





# UNITED STATES DEPARTMENT OF AGRICULTURE

Miscellaneous Publication No. 223

Washington, D. C.

December 1935

## STUDIES OF FAMILY LIVING IN THE UNITED STATES AND OTHER COUNTRIES: AN ANALYSIS OF MATERIAL AND METHOD

By FAITH M. WILLIAMS, former senior economist, Economics Division, Bureau of Home Economics, and CARLE C. ZIMMERMAN, associate professor of sociology, Harvard University<sup>1</sup>

(The Bureau of Home Economics in Cooperation with the Social Science Research Council and the Institute of Pacific Relations)

### CONTENTS

	Page		Page
Preface, by Max Handman.....	2	Annotated bibliography—Continued	
Introduction.....	3	Europe and the Mediterranean region—	
History of studies of family living.....	6	Continued:	
The United States and Canada, by		Portugal.....	280
Faith M. Williams.....	6	Rumania.....	381
Other countries, by Carle C. Zimmerman.....	14	Russia.....	381
Methods used in studies of family living.....	37	Spain.....	397
The Le Play school, by Carle C. Zimmerman.....	37	Sweden.....	397
The statistical schools, by Faith M. Williams.....	42	Switzerland.....	401
Annotated bibliography.....	68	Syria.....	408
North America.....	68	Turkey.....	409
United States (continental).....	68	Africa.....	410
Alaska.....	213	Algeria.....	410
Hawaii.....	213	Egypt.....	411
Puerto Rico.....	214	French West Africa.....	412
Canada.....	214	Morocco.....	413
Mexico.....	216	Tunisia.....	413
South America.....	217	Union of South Africa.....	414
Argentina.....	217	Asia.....	414
Peru.....	219	Arabia.....	414
Uruguay.....	219	Ceylon.....	415
Europe and the Mediterranean region.....	220	China.....	415
Austria.....	223	Chosen (Korea).....	424
Belgium.....	223	Dutch East Indies.....	424
Czechoslovakia.....	236	French India.....	425
Denmark.....	239	India.....	426
Estonia.....	241	Japan.....	436
Finland.....	241	Philippine Islands.....	438
France.....	242	Siam.....	441
Germany.....	287	Australasia.....	442
Great Britain and Ireland.....	330	Australia.....	442
Greece.....	359	New Zealand.....	444
Hungary.....	369	Several countries.....	445
Iceland.....	361	Key to material in studies in the United States and Canada.....	453
Italy.....	361	Key to method in studies in the United States and Canada.....	522
Latvia.....	373	Key to material and method in studies in other countries.....	544
Netherlands.....	373	Author index.....	611
Norway.....	376		
Poland.....	379		

<sup>1</sup> The authors are indebted to Meredith B. Givens, of the Social Science Research Council, and to Hildegarde Kneeland, principal economist, Bureau of Home Economics, for assistance in developing the plan of the investigation and for advice at its various stages. They are also indebted to Marian A. Wayave, assistant economist, and Helen Connolly, junior economist, of the Bureau, and to Eleanor M. Hough, formerly of the Bureau staff, for assistance in collecting and analyzing studies of family living for the United States and Canada; to the special staff who assisted in making the analyses: Elin L. Anderson, Ruth W. Ayres, Ruth P. Brush, Thes G. Davis, Leo Haak, Rachel Hibbard, Olive T. Kephart, Gertrude Richards, Matilda White Riley, Estelle Shrifte, Bernice Park Volkmann, and N. L. Whetten, and to Mildred L. Hart-sough, who edited the section of the report dealing with studies of family living for countries other than the United States and Canada.

## PREFACE

By MAX HANDMAN, *professor of economics, University of Michigan*

For sometime the Social Science Research Council has been concerned with the research needs and possibilities in the related fields of consumption and leisure. These fields offer an unusual opportunity for cooperative scientific effort because of the very comprehensiveness of their problems.

The council's first investigations in these fields were initiated by Wesley C. Mitchell. In the spring of 1931 an interim committee on consumption and leisure was appointed under the chairmanship of the present writer.<sup>2</sup> Very early in the committee's work it became apparent that an intelligent appraisal of the research needs in this area of investigation must begin by ascertaining what has already been discovered concerning consumption through the many studies of family living made in the United States and in other countries.

Such a survey and appraisal of existing information had been started by the United States Bureau of Home Economics at the request of the first Pan-Pacific Women's Conference, held in Honolulu, Hawaii, in 1928. At that conference a discussion of studies of standards of living indicated that in many different countries there were agencies concerned with problems of family living, and it seemed apparent that there was a need to find out what studies had been made and what they involved.<sup>3</sup> The conference appointed an international committee with Louise Stanley, of the United States Bureau of Home Economics, as chairman, to collect precise information on what had been done, what was in course of investigation at that time, and what might be done in the near future in the fields of standards of living and dietary studies. A preliminary report on studies made in the United States had been prepared by the Bureau of Home Economics, under the direction of Faith M. Williams, for use at the second Pan-Pacific Women's Conference in 1930, and a full report on investigations in this country was under way at the Bureau.

In order to care for the enormous mass of existing material on consumption in other countries, the chairman of the committee approached Carle C. Zimmerman, of Harvard University, with the suggestion that he undertake an appraisal of studies of family living abroad. Since the proposal fell in with Professor Zimmerman's own research projects, he was willing to undertake the task.

In the summer of 1932 an agreement was concluded between the Social Science Research Council and the United States Department of Agriculture by which the council agreed to provide Professor Zimmerman with funds for collecting and evaluating the foreign material in addition to funds already furnished him by the Harvard Committee on Research in the Social Sciences. The Department agreed to analyze studies of family living in the United States and Canada, and to publish the completed report. Later, because of the large number of studies discovered, and the need for editorial work on

<sup>2</sup> This committee in its various stages was made up of the following persons: F. H. Knight and Haze Kyrk, University of Chicago; Alvin Hansen and Ronald Vaile, University of Minnesota; T. D. Eliot, Northwestern University; Carle C. Zimmerman, Harvard University; Hildegard Kneeland, U. S. Bureau of Home Economics; and the present writer as chairman.

<sup>3</sup> PAN PACIFIC UNION. WOMEN OF THE PACIFIC. Pan-Pacific Women's Conf. Proc. 1:268. 1928.



the report additional funds were secured from the Social Science Research Council and the Institute of Pacific Relations.

This report will serve as a source book for all those who wish an evaluation of the technics used in collecting information on the consumption of individual families, and for those who wish to know the kind of information obtained in such investigations. A glance at the studies annotated discloses the lack of unity in their methods. It is hoped that this analysis will lead to some agreement among research workers as to the methods which should be used to insure comparability of results when different social groups are studied in the same country, or when similar groups are studied in different countries. The problems involved in such comparative studies may be insolvable. Perhaps valid comparisons can be made only between families living in similar cultures.

## INTRODUCTION

By FAITH M. WILLIAMS

The importance of planning systematically for production and distribution, and of taking account in that planning of consumer demand both at home and abroad, has come to be very generally recognized in the United States. With this recognition has come a realization of the need for satisfactory information on consumption habits and consumption needs. Most of the studies of consumption made in the United States in recent years have included relatively small groups. Furthermore, very different methods of collecting and analyzing data have been used in these investigations, and it is, therefore, extremely difficult to utilize the results in planning for the production and distribution of consumer goods.

The inadequacy of the available data has long been appreciated by research workers in the United States.<sup>4</sup> The emergency situation created by the depression has made large groups of legislators, business men, and Government administrators aware of the deficiencies of our knowledge of consumption.

The increased recognition of the need for data on consumption will undoubtedly result in extensive investigations in the field of family living in the near future, since most of our population live in family groups. It is, therefore, especially important at the present time to evaluate for research workers in this field the methods which have been used in gathering and analyzing data on family living, and to index the material already published. There are many studies of family living which are not easily accessible. Frequently students have begun their investigations without knowing the material already available or the various methods used in this field.

Approximately 1,500 studies of family living made in 52 countries are included in the bibliography presented herein. These studies analyze the consumption of family groups in many different ways. They are alike in presenting data from individual families and in giving figures on either the total money income or the total money expenditures of the families studied for the period of the report, since, in order to limit the field of this survey to manageable proportions, it

<sup>4</sup> For a discussion of the limitations of the material on the subject, and a plan for a comprehensive study of consumption, see the following publication: SOCIAL SCIENCE RESEARCH COUNCIL. CONSUMPTION ACCORDING TO INCOMES. 52 pp. 1929. [Mimeographed]. 2d imprint, July 1934. Washington, D.C.

was agreed to include only studies fulfilling these conditions.<sup>5</sup> From this point on, however, there is great divergence in the kind of data presented.

Many of the students of family living whose work has been analyzed have evaluated the consumption of the groups they studied simply by means of data on annual money expenditures. Some students have gone further and have secured data on the quantity of goods and services purchased, and of goods produced at home for family use. Others have added to information about goods and services currently received, data on savings from current income during the period of the study, and on past accumulations in money, in investments, and in durable consumption goods. Some students have included figures on food consumption and on housing which make it possible to evaluate with a good deal of certainty the adequacy of these aspects of the family living. A few studies have secured measurements of the physical health of the group and have related these data to those on consumption. Some investigators have gone still further and have attempted to describe the satisfactions and dissatisfactions experienced at a given level of living; and some, under the influence of Frédéric Le Play and his school, have attempted an ethical evaluation of the consumption of the group concerned.

The divergence in the kind of data presented in the different reports is equaled by the variation in terminology. The terms used in studies of family living are taken from everyday speech and as found in the literature have a great variety of meanings. For the sake of clarity in this publication, the following usages have been adopted:

The term "standard of living" is used to mean an ideal or a norm of consumption. It is not always, but it may be, described definitely in terms of goods and services of a specific quantity and quality. There is, for example, the standard of living concretely defined as the "poverty line" by Rowntree (1907, pp. 119-142),<sup>6</sup> the American standard of living as defined by the minimum-quantity budget prepared by the United States Bureau of Labor Statistics,<sup>7</sup> and the professional standard of living as defined by the Heller committee for research in social economics of the University of California.<sup>8</sup>

"Content of living" is used to refer to the quantity and quality of goods and services actually consumed, whether purchased or received without direct money payment; "level of living" is used as a summary term when comparing the content of one living with another, or with a standard, or when generalizing about the content of living of a group.

"Cost of living" is used to mean the cost of a specified list of goods and services, either those actually consumed by a family or a group of families, or those included in a given standard of living.

The term "family expenditures" is used to include money expenditures for current living only, not savings.

<sup>5</sup> Compilations of previously published material not presenting any new analyses have been excluded, as well as studies of the consumption of national groups based on statistics of production and of foreign and domestic trade, and studies of cost of living based on ideal or standard family budgets and not presenting any new material on actual consumption.

<sup>6</sup> Italic numbers in parentheses refer to the Annotated Bibliography, pp. 68-452.

<sup>7</sup> UNITED STATES DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS. MINIMUM QUANTITY BUDGET NECESSARY TO MAINTAIN A WORKER'S FAMILY OF FIVE IN HEALTH AND DECENCY. U. S. Dept. Labor, Bur. Labor Statis., Monthly Labor Rev. 10 (6): 1-18. 1920.

<sup>8</sup> HELLER COMMITTEE FOR RESEARCH IN SOCIAL ECONOMICS, UNIVERSITY OF CALIFORNIA. QUANTITY AND COST ESTIMATE OF THE STANDARD OF LIVING OF THE PROFESSIONAL CLASS. Calif. Univ. Pubs., Econ 5: 129-160. 1923.



The term "savings" is used to describe that part of current income not used for current consumption but put aside, either to pay for purchases made in the past for which debts were incurred, or with a view toward future consumption. It includes payments on the principal of mortgages or of other family debts previously incurred, payments on life-insurance policies and annuities, money placed in savings banks, purchases of production goods, and other investments made out of current income.

"Money value of current living" is used to include current family expenditures, plus the money value of consumption goods received without direct money payment (such as food and fuel furnished a farm family from its own farm, and the current money value of the family's use of its equity in its own home). It includes the money value of unpaid labor in the service of the family, the money value of the depreciation of durable consumption goods used by the family, and the money value of all goods made available to the family without direct money payment by an industry, a community, or individuals, wherever these foods and services are evaluated in terms of money.

"Total money value of living" is used to include current money expenditures, money value of goods and services received without direct money payment, and savings.

The term "budget" is used to mean a plan for the future. When used without a modifier, it means a plan for disbursing money. It is also used to mean a plan in the phrases "time-budget", "production-budget", and "consumption-budget."

When these various terms appear in titles or in quotations from the studies analyzed, they frequently have other meanings than those defined here, and their meaning must in such cases be judged from the context.

The sections on the history of studies of family living attempt to present the purposes for which some of the most important studies in this field have been made and the uses to which their results have been put. To those who look upon research in the social sciences as one of the most important of the tools of the administrator in business, in government, and in education, it is important to ascertain, whenever possible, the purpose and the apparent results of research projects of different types undertaken in the past.

The section on the history of studies of family living in Russia is of especial interest, because the original Russian studies are inaccessible to most English-speaking students. It is necessarily based almost entirely on secondary sources.

The sections on the methods of the Le Play school and the statistical school deal with the technics used in collecting and analyzing data on family living, in an attempt to provide the investigator of the future with the criteria for judging what technics will be best adapted to the type of problem with which he is particularly concerned.

In the bibliography, annotations are presented for all of the studies made in the United States and in its outlying territories and possessions, and in Canada. For some of the studies in other countries, however, references appear without annotations, as copies of the reports on these studies were not accessible for examination. This is particularly the case with the Russian material.

The studies are arranged in the bibliography according to continents or main geographic regions, and alphabetically by countries



within these regions. In the case of countries represented by more than 50 studies, a further division of the material has been made into studies dealing with (1) farm families, (2) families of wage earners, low-salaried workers, and small proprietors, (3) other independent families, and (4) dependent families. The material for Russia, however, is an exception to this rule. So much of it comprised citations only that a classification by types of families was not attempted. Within the groups, assembled either by country, or by country and type of family, the studies are arranged by the chronological period to which the consumption data apply; wherever definite information is lacking on this point, the date of publication of the study has been used instead.

The keys to material and method, which follow the bibliography, bring together in compact form a great many specific facts about the nature of the material presented in each study and the methods used in obtaining and in summarizing the data. These keys serve as a supplemental source of information to the bibliography, presenting data not included in the annotations.

All of the studies made in the United States and Canada have been indexed for material and method, with the exception of three studies by members of the Le Play school. The complicated pattern of the investigations of this group made it seem unwise to attempt to prepare keys for them. The inaccessibility of many of the foreign reports made it impossible to provide keys for all of the studies in other countries, but the most important of the studies made by members of the statistical schools have been analyzed in detail for material and method.

In the keys, the method of arrangement of the studies is the same as that followed in the bibliography. Where information is lacking on the date or dates to which the consumption data apply, the study has been classified by the date of publication, and a footnote reference has been made to indicate this fact.

## HISTORY OF STUDIES OF FAMILY LIVING

### THE UNITED STATES AND CANADA

By FAITH M. WILLIAMS

There was no subject more interesting to the early settlers and the early travelers in the Americas than ways of living in the new countries. Their letters, their diaries, and their official reports are full of descriptions of the family life of the country, enthusiastic or despairing, according to their fortunes and their temperaments. A review of the early literature suggests that there is much to be done in building up a systematic account of variations in family living in North America before 1860. There is a great deal of published material which has not been evaluated from the point of view of the economist.

Governor Bradford<sup>9</sup> and Governor Winthrop,<sup>10</sup> both of Massachusetts, are among the more important of those who have left reports, letters, and diaries which include material descriptive of

<sup>9</sup> BRADFORD, W. HISTORY OF PLYMOUTH PLANTATION, 1606-1646. 437 pp. New York. 1908.

<sup>10</sup> WINTHROP, J. WINTHROP'S JOURNAL, HISTORY OF NEW ENGLAND. Ed. by J. K. Hosmer. 2 v. New York. 1908.

colonial households. The letters of John and Abigail Adams,<sup>11</sup> the autobiography of Benjamin Franklin,<sup>12</sup> and the diaries of George Washington<sup>13</sup> are some of the valuable sources of information on the period of the American Revolution and the period just after. In the uncataloged archives of libraries in the United States and Canada, and in unexplored attics there are doubtless many household account books for the period before 1860 which remain to be edited and interpreted.

The earliest systematic reports of family living in the United States which have been located are for the years 1816-17 and 1835. Each of these studies is an analysis of household accounts kept by an individual family for its own information. The earlier (420) presents the family expenditures of an employee in the professional service of the Federal Government in Washington, D. C. The later report (421) was presented to the twenty-fourth Congress in May 1836—

in obedience to the resolution of the Senate directing the several heads of the Executive Departments to report to the Senate their respective opinions upon the justice and propriety of increasing the compensation of all or any of the clerks in their respective departments.

In compliance with the request of his immediate superior, a clerk in the Treasury submitted his household accounts for the use of the Senate and they were published as a Senate document.

These early household accounts of family living in the United States are the only complete reports located for the period before the Civil War. The year 1869, however, marked the beginning of a succession of studies which has continued without interruption to the present time. Up to the close of the World War, investigations of urban families were much more numerous than those of farm families, but during the past 15 years the emphasis has been reversed. From 1869 to 1900 there were 109 studies of families of wage earners, low-salaried workers, and small proprietors in the United States, from 1900 to 1914, 60 studies, and from 1914 to 1919, 24. Studies of farm families during each of these periods numbered only 8, 7, and 3, respectively. From 1919 to 1924, however, there were 39 studies of farm families, from 1924 to 1929, 57 studies, and from 1929 to 1934, 51 studies, while for wage earners, low-salaried workers, and small proprietors the number of studies dropped to 14 during the first of these 5-year periods, and increased only to 19 during the next 5 years, and to 28 during 1929 to 1934.

Reports on the living of other types of independent families in the United States have been relatively infrequent. Only 33 such studies have been noted—13 covering families in the professional group, another 13 covering "middle-class" families or families of salaried workers (including some from the professional group), and the remaining 7 covering families with a wide range of incomes and occupations. In addition, 6 studies of the living of dependent families have been noted.

In all, studies of the living of 458 groups of families have been located for the United States, from the first study in 1816-17 to the spring of 1934. In this count, however, several investigations are

<sup>11</sup> ADAMS, J., and ADAMS, A. FAMILIAR LETTERS OF JOHN ADAMS AND HIS WIFE ABIGAIL ADAMS DURING THE REVOLUTION. 424 pp. New York. 1876.

<sup>12</sup> FRANKLIN, B. THE AUTOBIOGRAPHY OF BENJAMIN FRANKLIN. 253 pp. Boston and New York. 1896.

<sup>13</sup> WASHINGTON, G. THE DIARIES OF GEORGE WASHINGTON. 1748-1799. 4 v. Boston and New York. 1925.

represented 2 or even 3 times, since they include data from different economic groups or present their results in more than one report.

In contrast to this large output of studies in the United States, only six studies of family living have been located for Canada. The first of these is an account of the living of an individual farm family for the year 1861-62, made by a follower of Le Play (464); the last, a report of the living of 129 farm families in the Red River Valley of Manitoba, made in 1931 by the Canadian Department of Agriculture (469). The other 4 studies have dealt with families in the wage-earning group.

#### STUDIES OF FAMILY LIVING AMONG WAGE-EARNING AND SALARIED GROUPS

The purpose of many of the early reports in the United States was to compare levels of living at home and abroad. In 1870 Edward Young, Chief of the Bureau of Statistics of the United States Treasury, published a report <sup>14</sup> that included three tables on expenses of living. The first presents average retail prices of provisions and groceries and other leading articles of consumption for each of the States for 1867 and 1869; the second, average weekly expenditures of workingmen's families in some of the manufacturing towns of the United States in 1869, for 14 groups of family expenditures, clothing being omitted; and the third, average income and expenditure of workingmen's families in Belgium, taken from Ducpétiaux' report of 1853. The author does not give his reasons for collecting and publishing these figures, but it may be significant that his investigation was begun in a year of monetary difficulty in the United States when a revision of the tariff was under consideration.

Young went to Europe in 1872 as a delegate to the international statistical congress and availed himself "of the opportunities thus afforded for commencing an inquiry into the rates of wages, the cost of subsistence, and the condition of the working classes in the Old World" (171, p. IV). For this second report he secured figures on the expenditures of workingmen's families in the United States in 1874 and in Canada in 1873 for the items listed in the 1870 report, and included in addition data on expenditures for clothing and on earnings. "Leaving it to others to deduce therefrom such conclusions as from their respective points of view may seem legitimate," he presented separate figures for 95 families of varying composition in 31 States and for 18 families in Canada.

When Carroll D. Wright became chief of the Massachusetts Bureau of Statistics of Labor in 1873 he brought with him a knowledge of the work of Le Play, Ducpétiaux, and Engel, and of the statistics on family living available in Europe, an interest in obtaining representative data, and a zeal for securing figures on the expenditures of large numbers of families. The report of this bureau for 1875 (172) presents a comparison of the expenditures of 397 wage-earning families in Massachusetts with Engel's data on the expenditures of European workingmen's families. The comparison led Wright to the conclusion that—

as regards subsistence, rents and fuel, the workingmen's families we visited paid therefore larger percentages of their incomes than do workingmen's families with like incomes in Prussia and other European countries.

<sup>14</sup> YOUNG, E. THE COST OF LABOR AND SUBSISTENCE IN THE UNITED STATES FOR THE YEAR 1869, AS COMPARED WITH PREVIOUS YEARS. U. S. Treasury Dept., Bur. Statist. 75 pp. 1870.



When Wright became United States Commissioner of Labor Statistics, the interest in international comparisons was no less keen. The revision of the tariff had been under discussion for sometime. President Cleveland's annual message to Congress in December 1887 was devoted entirely to the tariff and urged vigorously a general reduction of duties, and more especially the removal of duties on raw materials.<sup>15</sup> The Commissioner of Labor was instructed by Congress to investigate the "cost of producing articles at the time dutiable in the United States in leading countries where such articles are produced \* \* \* and the comparative cost of living and the kind of living" (226, p. 3). In accordance with these instructions an extensive investigation was undertaken in the United States and abroad. The British Board of Trade study of 1903 (1479) reflects the same interest. All these investigations compared the actual expenditures of wage earners in different countries, translating expenditure data from one currency to another, and comparing totals in money and percentage distributions.

The recent study (395) of the expenditures of minimum wage employees of the Ford Motor Co. in Detroit, the content of their living, and the cost of an equivalent level of living in European countries, proceeded by a different method. In this investigation no figures were obtained on actual expenditures abroad, but the cost abroad of a level of living equivalent to that enjoyed by the Ford workers in 1929 was calculated with great care.

A large proportion of the State investigations analyzed in the annotated bibliography for the United States were initiated in order to help solve problems of factory hours and wages. Not a few of the State departments of labor were primarily interested in investigating the housing of wage earners, and confined the material they gathered on family living to figures on amount and source of family income, total family expenditures, and amounts paid for rent. A study of income, wages, and rents presents similar figures for Montreal, Canada, for 1898.

Some of the early investigations of family living made by State departments of labor were undertaken primarily for the purpose of determining the number of families depending on supplementary earnings from wife and children, and the level of living in those families. This especial concern with the welfare of children in families of different economic types has been inherited by the investigators of the National Child Labor Committee and the United States Children's Bureau. Along with studies of working conditions in factories, their investigations have been of some importance in the development of the movement for Federal legislation on the subject of child labor.

Federal and State bureaus and private philanthropic organizations have not infrequently studied family living conditions where they were known to be somewhat unsatisfactory, in order to ascertain the extent and the cause of the unfavorable conditions, and to uncover any variations which might suggest possibilities of improvement. An outstanding example of this type of investigation is that conducted by Chapin (297) in New York City in 1907. After Chapin's records had been analyzed, he was able to indicate the income level at which it seemed possible for a family of five with exceptionally good manage-

<sup>15</sup> TAUSSIG, F. W. THE TARIFF HISTORY OF THE UNITED STATES. Ed. 5, rev., p. 253. New York. 1923.

ment and no unusual expenses due to illness or accident to maintain a satisfactory standard of living in New York City; also the somewhat higher income level at which the majority of families with fair management and no indulgence in excesses might maintain a satisfactory standard.

Periods of rising prices, with maladjustments between the purchasing power of customary wages and the cost of the customary standard of living, have been most prolific of studies of living expenditures at such times. Federal and State bureaus of labor and agriculture, social agencies engaged in family relief, and employers' organizations want to know just what level of living can be maintained with a given income at the new price level. The investigation of the expenditures of 25,440 families, made by the United States Bureau of Labor Statistics in 1901 and adjacent years, was the outcome, at least in part, of the rise in prices which began in 1900 (274). The increase in living costs at the time of the World War was the signal for a number of studies of expenditures, notably that by the United States Bureau of Labor Statistics in 1918-19, covering 12,096 white families and 741 colored families (350, 351).

The material collected in the extensive investigation of 1901 was used to show the most important foods consumed by workingmen's families in the United States, and how their prices should be weighted in the construction of an index number showing relative changes in the cost of food at retail. Material gathered in the investigation of family expenditures of wage earners and low-salaried workers in 1918-19 was used by the United States Bureau of Labor Statistics to weight the prices included in a new index number measuring relative changes in the cost of food, rent, fuel and light, furniture and furnishings, and miscellaneous items, purchased by urban families of this type. In 1933 an act of Congress made changes in the salaries of Federal employees dependent on changes in the cost of living. Material collected in that year in an investigation of the family expenditures of Federal employees living in the District of Columbia, made by the United States Bureaus of Labor Statistics and Home Economics cooperating, was used to determine the commodities which should be priced in computing an index of living costs of the Federal-employee group and how these prices should be weighted.

The few studies of family living at the standard of the professional group have usually been undertaken for one of two reasons: To determine in periods of changing prices whether or not salaries have kept up with living costs; or to demonstrate that teachers (college teachers in particular) are not receiving salaries commensurate with their training and ability, as shown by salaries in other professions with similar requirements, and that it is necessary to supplement teachers' salaries by outside work to maintain the standard of living of the group.

#### STUDIES OF FARM FAMILY LIVING

Studies of the living of farm families in the United States are not only less numerous, on the whole, than those of wage-earning and low-salaried groups, but they cover, as a rule, a smaller sample of families. This contrast is due in part to the fact that it is more difficult to visit farm families for systematic interviews than to visit urban families, and in part to the inherent difficulty of obtaining



accurate data on farm-furnished goods. Also farm groups in the United States did not become conscious of their common economic problems until later than wage-earning groups and did not until recently see the value of facts on the cost of family living. One of the few large studies of farm families was made by the Michigan Bureau of Labor and Industrial Statistics in 1894 (3). It included material secured by the schedule method from 5,600 farm laborers of whom 2,488 lived in family groups. The schedule provided for securing data on total earnings during the previous year and asked, "Do you receive extras such as house rent? Fuel? Cow pastures? Team? Garden?" There was no attempt to evaluate these perquisites in money.

The first study of farm families in the United States which attempted to value in money the whole range of family living was made by Warren (13) in Livingston County, N. Y., in 1909. A study made by Funk<sup>16</sup> in 1913 included only the quantity and value of goods furnished by the farm, but it had a great deal of influence on later investigations of broader scope. Funk's study "constituted part of the investigations conducted by the Office of Farm Management of the Bureau of Plant Industry relative to profits in farming. The farm should be credited with the indirect income it furnishes to the farmer, \* \* \* and its real value not appreciated." Using the schedule method, Funk obtained estimates from 483 families in scattered areas east of the Rockies on the quantity and money value of food and fuel purchased and furnished by the farm, and on the value of their dwellings. Estimates were also obtained of the value of the household labor used in preparing meals and caring for the house, based on what the farmer's wife thought she would have to pay someone to do this work during the year. From these data the average annual cost of food, fuel, and labor per person chargeable to board was computed. As a result of the investigation, Funk concluded that the income from what the farm furnishes in food products, fuel, and house rent "adds as much to the real wealth of many farmers as does the net income from the sale of farm products."

The interest of the State agricultural experiment stations in studies of farm family living was greatly stimulated by a cooperative project initiated by the Bureau of Agricultural Economics of the United States Department of Agriculture, under the direction of E. L. Kirkpatrick. Data were secured from 2,886 white farm families in 11 States for 1 year in the period 1922-24 (43).

The report on this investigation states that an effort was made to select for study "localities in which average farming conditions prevail" but does not give the method used in determining average farming conditions. The data collected in the investigation have been very widely used as representative of the situation of farm families in the United States. They were used, for example, to determine items to be included in the Bureau of Agricultural Economics index of the prices of commodities farmers buy for family use, and the method of weighting that index. As a matter of fact more recent material makes it seem probable that the 1922-24 study presented a picture too optimistic to be representative of the living of median American farmers.

<sup>16</sup> FUNK, W. C. WHAT THE FARM CONTRIBUTES DIRECTLY TO THE FARMERS' LIVING. U. S. Dept. Agr. Farmers' Bull. 635, 21 pp., illus. 1914.

The large numbers of studies of farm family living made by the State agricultural experiment stations since 1924 may in general be divided into two groups: (1) Those which attempt merely to discover and describe the various levels of living prevailing among the group studied; and (2) those which seek to determine the factors conditioning variations in farm family living among the group studied. Studies of the second type are the more difficult to perfect but have the greater usefulness both for the groups for which they are made and for the development of national policy.

A recent development in studies of farm family living has significant implications for the future use of statistics in this field. In the fall of 1929, groups of farm families in different parts of the country began to meet together to discuss the possibilities of agriculture in their communities, under the auspices of the Extension Service of the United States Department of Agriculture. Before these groups met, they surveyed their own communities, gathering data on livestock and crop production, on goods furnished the family by the farm, family expenditures, farm dwellings and their equipment, and suggestions for improving family living. Committees appointed by the ensuing conferences used the survey material on farm family living in setting up family budgets.

The budgets formulated emphasize the value of raising a large proportion of the family's food supply on the farm, additions to the household equipment, and provision for the education of both adults and children. At every one of these conferences expenditures recommended for adequate family living considerably exceeded average actual family expenditures as shown by the preconference surveys. The methods used in summarizing and presenting the data collected in these county surveys frequently show evidence of haste and inexperience, but the reports which give the conference materials and committee reports are very valuable in their reflection of the situation and the aspirations of certain farm groups in the United States in the period 1929-31.

#### STUDIES OF FAMILY LIVING EMPHASIZING FOOD CONSUMPTION

The passage of the Hatch Act in 1887, granting \$15,000 annually to each State and Territory for the maintenance of one or more agricultural experiment stations, was the culmination of an agitation for more scientific information on questions of direct practical importance, for which W. O. Atwater, professor of chemistry at Wesleyan College, was largely responsible. Part of the funds granted to Connecticut by the Hatch Act were used to organize an experiment station at Storrs, where Atwater was made director. He also became the first director of the Office of Experiment Stations of the Department of Agriculture. The studies of food consumption of both rural and urban families initiated by Atwater and his associates in the various State experiment stations have had far-reaching consequences for the health of the American people. Many of these studies include no figures on total family income or total expenditures and so do not come within the scope of this publication, but the ones that present data on family income are included in the annotated bibliography. The technics used by Atwater were developed in the laboratories of the experiment stations, of the Department of Agriculture, and of a number of universities. They were the first step in establishing

standards for food consumption and data on food composition, which make it possible to determine whether or not the food consumption of an individual, a family, or a group of families is nutritionally adequate. The inclusion of data on the nutritional content of the diet with material on other aspects of family living now appears frequently in studies of family living in the United States and adds materially to their value.

#### STUDIES OF FAMILY LIVING EMPHASIZING HOUSING

The interest of the early investigators working with the State departments of labor in the subject of housing has already been commented on. Most of the early studies included descriptive material on housing facilities but very few accurate measurements. More recent investigations of family living which have emphasized the housing situation have secured, in addition to statistics on rents paid by urban families and the rental value of farm homes, data on the type of housing and other facilities. Among the urban investigations the study of the living of the minimum-wage employees of the Ford Motor Co. resident in Detroit (395) presents considerable detail on the type of housing. The Heller Committee for Research in Social Economics presents a fair but much less complete description of the house obtained for \$357 a year in the East Bay district in San Francisco in 1924-25 (375). The type of housing afforded by the average yearly expenditure by the workingman in Middletown is very vividly described (372).

Among students of farm family living there has long been a keen interest in housing, and many of the studies reviewed in the annotated bibliography present a good deal of material on the subject of the housing of farm families.<sup>17</sup>

#### CONCLUSION

A review of the studies of family living made in the United States in the last 70 years shows that there has never been a comprehensive study of the living of all the groups in the population. More than that, there has never been an adequate study of the living of all the social and economic groups in any one State or in any one city. The studies made by the United States Department of Labor have been confined to the wage-earning and low-salaried groups. A comparison of census statistics with the figures on the groups covered in the largest studies by that Department shows that even they have not given adequate representation to all the important wage-earning groups.

Studies of farm family living in certain counties in the United States have received a more adequate representation of all the social and economic groups in the community than have any of the urban studies. There has never been, however, a study of farm family living which included enough communities to give an adequate picture of the level of living of all the important farm groups in the country. The material so far gathered can be used with the aid of census statistics only to sketch, in very broad outlines, the conditions of living and the consumption habits of the farm population.

Studies of family living in Canada are still too few and too small in scope to give any indication of living conditions and consumption habits within the Dominion.

<sup>17</sup> See the reviews of the material available on the housing of families in the United States published by the President's Conference on Home Building and Home Ownership in 1933.



OTHER COUNTRIES <sup>18</sup>

By CARLE C. ZIMMERMAN

There are various types of studies of family living which give expenditures for consumption purposes. One is an analysis of old household accounts or records, which furnish a picture of family living for periods in which other data are negligible or entirely lacking. A second type is a budget reconstructed from scattered information about prices, wages, profits, taxes, and consumption. In this kind of study, information gathered here and there for a particular period is fused into a hypothetical budget for a typical representative of a given social class of the time.

Prior to the seventeenth century in Europe there were, as far as can be ascertained, no studies of family living other than the above-mentioned types. What we know of the earlier periods comes almost entirely from tedious sifting of scattered reports. Although the Romans kept household account books, none of these records (*codex accepti et expensi*) are available to us.<sup>19</sup> Consequently, our knowledge of the ancient world is at present limited to a few observations by contemporaries, to reconstructions made from a study of pictures and sculpture, to the finds of excavations, and to vestiges of sumptuary legislation. From these inadequate sources and scattered bits of evidence several pictures such as these have been assembled of the life of the times.<sup>20</sup> Concerning the early Middle Ages even less is known. Much opinion concerning the period is deduced from comparing the twelfth century, when more records become available, with classical times.<sup>21</sup>

## INDIVIDUAL RECORDS OF FAMILY LIVING FROM THE EARLIEST MIDDLE AGES TO THE MIDDLE OF THE EIGHTEENTH CENTURY

It is from the twelfth century in western Europe that records become more and more plentiful, and analyses for the later centuries are more numerous. Rogers (925, 944) and D'Avenel (581, 610, 611) must have gone through literally thousands of documents before presenting their detailed conclusions. An illustration of the estimated budgets is that given by Rogers for the typical small landowner in the thirteenth century (925, pp. 176-177). D'Avenel's data concern chiefly prices and wages, but he constructs hypothetical budgets from time to time based chiefly on a predetermined distribution of expenditure rather than upon an assumed physical need of the people. His study of the level of pleasure (611) covers France by periods from 1200

<sup>18</sup> The writer is indebted to the Committee on Research in the Social Sciences of Harvard University for a grant of money to carry on this research, and for laboratory assistance in the translation of Russian documents. E. F. Gay of Harvard University read part of the manuscript and gave invaluable help. For many of the critical notes concerning earlier studies the writer is indebted to Professor Gay. P. A. Sorokin and W. W. Leontieff read the Russian section and supplied much valuable assistance. J. W. Boldyreff, tutor in sociology at Harvard, and Mary Sulloway, of the Harvard Committee on Research in the Social Sciences, were also of great assistance. Professor Zimmerman wishes to express especial thanks to the officials of Widener Library of Harvard University for their continuous aid to him in this project.

<sup>19</sup> See the following publication: BEIGEL, R. RECHNUNGSWESEN UND BUCHFÜHRUNG DER RÖMER. KARLSRUHE. 1904.

<sup>20</sup> FRANK, T. AN ECONOMIC HISTORY OF ROME. 1920.

ASPECTS OF SOCIAL BEHAVIOR IN ROME. 1932.

ROSTOVITZ, M. A HISTORY OF THE ANCIENT WORLD. Transl. by Duff. v. 2. Rome. 1927.

SOCIAL AND ECONOMIC HISTORY OF THE ROMAN EMPIRE. Oxford. 1926.

DAVIS, W. S. THE INFLUENCE OF WEALTH IN IMPERIAL ROME. New York. 1910.

<sup>21</sup> See the following:

BOISSONADE, P. LIFE AND WORK IN MEDIEVAL EUROPE FROM THE FIFTH TO THE FIFTEENTH CENTURIES. Transl. by E. Power. New York, 1927.

HEITLAND, W. E. AGRICOLA. 1921.

SOMBART, W. DER MODERNE KAPITALISMUS. v. 1. Leipzig. 1902.

NUSSBAUM, F. L. A HISTORY OF THE ECONOMIC INSTITUTIONS OF MODERN EUROPE. New York. 1933. (An adaptation from Sombart.)

to 1914. The work has a critical note concerning the cost of living of the household of Charles d'Aubigné for 1679, which is oftentimes quoted as typical of the expenses of maintaining a French noble family in the seventeenth century.

Most families of wealth at this period had stewards who kept their household accounts with more or less accuracy, and the annotated bibliography included a number of such accounts. Gilboy has compiled a number of unpublished records of the family expenditures of farmers in the eighteenth century.<sup>22</sup> While not all the studies for this period are listed here, a fair sample is presented.

#### STATISTICAL STUDIES OF THE SEVENTEENTH AND EIGHTEENTH CENTURIES

Beginning in the seventeenth century, another type of study comes to the fore: The investigation made by contemporaries, in which the observer attempts by intimate knowledge to estimate the expenditures of families and classes. Some of these are merely systematic observations taken from a distance; whereas others involved contact between the observer and the family reported through a third person. The studies were initiated by a group of writers in England and on the Continent known as "political arithmeticians" or "physiocrats." Their most common motive can be given by quoting one of the introductory statements made by Charles Davenant: "By Political Arithmetick, we mean the Art of Reasoning, by Figures, upon Things relating to Government."<sup>23</sup> These men were nearly all governmental employees or, following the pattern laid down by Plato, Aristotle, and Machiavelli, were attempting to promote themselves in the favor of some ruler.

In an effort to ascertain Ireland's capacity for trade, Petty (946), one of the first members of the Royal Society, estimated the total population, the nature of consumption, the value of the goods consumed, and the amount that the country could produce, using the same method as that followed by King and Dunning. Food, clothing, and shelter were all reduced to a statistical basis and compared to French and English conditions. This survey of Ireland entitles Petty along with Dunning and King, to be considered one of the early pioneers of modern comparative statistics. He was much concerned with fixing a measure of value, and finally accepted for this purpose "the day's food for adult man, at a medium", which he maintained was as constant as the value of silver. This was the lowest level to which the standard of living could be reduced. In Petty's estimate, the mass of the people in Ireland were living at just about this subsistence level.

Dunning (945), analyzing the condition of the English laborer, found that the day laborer in husbandry was incapable of supporting himself, his wife, and three children without the additional earning power of his wife. Dunning estimated expenditures for such a family at 2s. 5d. per week, and the combined income of husband and wife at but 1d. more each week. This surplus was the only allowance for emergencies. Dunning considered this to be the minimum level of living. His analysis shows from its plain facts that the laborer's conditions should be bettered if possible.

<sup>22</sup> GILBOY, E. *WAGES IN EIGHTEENTH CENTURY ENGLAND*. Harvard University Press. 1934.

<sup>23</sup> DAVENANT, C. *DISCOURSES ON THE PUBLIC REVENUES AND ON THE TRADE OF ENGLAND*. p. 2. London. 1698.



Although A. Young (926, 927) dealt mainly with the theoretical and practical aspects of agriculture, he presented data on prices of necessities and the constitution of a cheap diet. He not only analyzed the existing agricultural level of living by a statistical method but also computed "a minimum standard" of living.

It was Gregory King, however, who gave the most systematic early profile of the economic level of living in western countries.<sup>24</sup> " \* \* \* Gregory King has rarely, even in modern times, been surpassed in the special and very exceptional power of understanding what is meant by statistical figures" (943, p. 465). His work preceded that of all the political arithmeticians named, save Petty. He made a comparative analysis of the national income and its disbursement in England, France, and Holland for the years 1688 and 1695. King divided the population of England into 511,000 families "increasing the wealth of the kingdom" and 849,000 "decreasing it." The difference was that those families increasing the income had an average income of £12 18s. as against £12 expenditure for consumption and 18s. saved, whereas the 50,000 families of common seamen, 364,000 of laborers and servants, 400,000 of cottagers and paupers, and 35,000 of common soldiers had an average income of £3 5s. per head per year as against expenditures of £3 9s. This left a deficit of 4s. per head per year which was accounted for by charitable gifts from the employers, the upper-class families, and the church. He did not imply that all the laboring families produced less than they consumed, but rather that these classes were the ones representing the most of the recipients of public charity. He estimated that 440,000 families received public or private charity in one form or another during the year. The families "increasing the wealth of the kingdom," included the nobility, the gentlemen, the civil servants, the merchants, the professional classes, the landowners, the shopkeepers, the artisans, and the military and naval officers.

An outstanding writer at the end of the eighteenth century was David Davies. In 1795 he published data on the living of the families of 137 agricultural laborers from various sections of England, Wales, and Scotland (928). The figures were collected by Davies and by fellow pastors who sent them to him by mail at his request. Many of the families studied by Davies were very poor, as a result of the high prices prevailing in England at that time.

Two years later Eden published his report on the state of the poor (957). His results were based upon his experiences in traveling throughout England between 1792 and 1796. He presented a table drawn up by the British magistrates in 1795 for the relief of the poor, giving the cost of maintaining various units, ranging from a single person to a family with 7 children, according to variations in the price of the gallon loaf. For instance, when the gallon loaf was selling for 1s., a family with 7 children should have 15s. weekly as contrasted with 3s. for a single man. When the loaf rose to 2s., a family with 7 children should have 25s. weekly as contrasted with 5s. for a man. In his diet section typical weekly menus are given for the poor in various workhouses of the county. His statistics are not summarized, but are in such shape that they may be. They were tabulated by Engel

<sup>24</sup> KING, G. NATURAL AND POLITICAL OBSERVATIONS AND CONCLUSIONS UPON THE STATE AND CONDITION OF ENGLAND, 1698. In Chalmers, G., An Estimate of the Comparative Strength of Great Britain. London. 1802.

to prove his law (527, pp. 1-124) and by Zimmerman to show that Engel's law did not apply to the lowest income groups (1487, p. 92).

Although the more important statistical studies made during the seventeenth and eighteenth centuries were exceedingly scattered, they give a fairly comprehensive picture of family living in western Europe during the period.<sup>25</sup>

#### FROM THE POLITICAL ARITHMETICIANS TO DUCPÉTIAUX, LE PLAY, AND ENGEL

For the period intervening between the political arithmeticians and the modern schools, important studies of family living are not numerous. Theoretical economics was flowering during this period, particularly in the work of the classical school, but more concrete studies seemed to languish. Political and economic conditions combined to stimulate interest in consumption, however, and there were three important studies of the subject at this time based primarily on production and on trade figures.<sup>26</sup> These studies were supplemented by a comprehensive report by Biollay (583, 613), which gives the cost of provisions and of merchandise for France in 1790, as well as the salaries of all classes of the people.

The studies of Frédéric Le Play, begun in 1830, did not result in publications of importance until after 1850. In 1834 Alban de Villeneuve-Bargement, who was attached to the Christian-socialist movement, published, as a footnote to his three-volume study on the causes of pauperism in France and in Europe, estimated expense accounts for a French family in a large city and one in the country. Finally, first-hand studies in France for this transitional period were completed by a study by Villermé (616) in 1840 and Blanqui (617) in 1849, each of which presented an average budget somewhat comparable in composition to the earlier ones just discussed. These earlier French studies may be supplemented by a study of rural conditions since the French Revolution which gives the prices of the important agricultural products and the incomes of the laborers.<sup>27</sup>

In 1848 the Prussian Königlichches Landwirtschaftsinstitut made an analysis of 185 estimates of expenditures from the provincial districts of that section of Germany. A questionnaire was mailed to agricultural organizations and unions all over Prussia, attempting to determine among others, the following points: (1) The income of the average rural laboring family needed to maintain the customary living standards of the people of that class in that vicinity; and (2) the ability of the laborer, in the existing local situation, to maintain a lasting standard and to satisfy his desires by means of his (monetary and natural) income (527, p. 18).

The results of this investigation were compiled by Von Lengerke (710) and also by the Prussian Statistisches Amt. Particular attention should be called to the British investigations of the village and

<sup>25</sup> See also the following: GILBOY, E. W. *LABOUR AT THORNBOROUGH: AN EIGHTEENTH-CENTURY ESTATE*. Econ. Hist. Rev. 1931: 388-398.

ARBUTHNOT, J. *AN INQUIRY INTO THE CONNECTION BETWEEN THE PRESENT PRICES OF PROVISIONS AND THE SIZE OF FARMS*. London. 1773.

<sup>26</sup> LAVOISIER, A. L. *DE LA RICHESSE TERRITORIALE DU ROYAUME DE FRANCE*. In *Mélanges d'économie politique*, pp. 283-607. Paris. 1847.

LAGRANGE, J. L. *ESSAI D'ARITHMÉTIQUE POLITIQUE SUR LES PREMIERS BESOINS DE L'ANTÉRIEUR DE LA RÉPUBLIQUE*. In *Mélanges d'économie politique*, pp. 608-618. Paris. 1847.

CHATEAUNEUF, BENOISTON DE. *RECHERCHES SUR LES CONSOMMATIONS DE TOUT GENRE DE LA VILLE DE PARIS EN 1817*. Ed. 2. Paris. 1821.

<sup>27</sup> See the following publication: LAVERGNE, L. DE. *ÉCONOMIE RURALE DE LA FRANCE DEPUIS 1789*. Ed. 4. Paris. 1877.



the town laborers for 1760-1832 by the Hammonds (929, 961), to Neumann's study (709) of wages and prices in Prussia for the period between 1780 and 1850, to Kollman's study (903) of a budget of an official's family in Germany during 1850 and 1875, and to Henri Sée's analysis of agrarian conditions in France during this period.<sup>28</sup>

#### THE FOUNDERS OF THE MODERN SCHOOL

The work of Ducpétiaux, Le Play, and Engel appeared after 1850. The first to publish his studies was Ducpétiaux (1804-68) (507). His major contributions were in the technics of gathering information and in his practical use of Quételet's suggested classification of expenditures. He did not merely estimate expenditures but proceeded in 1853, under the guidance of Quételet and the International Statistical Congress, to secure information directly from 153 Belgian families of three social classes—those in need, those whose incomes just sufficed to cover their current expenditures, and those who made savings during the year. Ducpétiaux attempted to study only families with both parents living and with 3 or 4 children under the age of 17. His chief followers included Ernst Engel and other writers associated with the International Statistical Society.

Frédéric Le Play (1806-82) was a student in the school of mines at L'École Polytechnique at Paris in 1829 when he was sent to northern Germany on a field trip. At this time he became interested in studying social conditions through studying family living. The suffering entailed upon the French people by the uprisings in the July Revolution in 1830 fixed his mind on the problem of continuing his investigations over a period of years. In 1855 the first edition of *Les Ouvriers Européens* appeared. This was a large volume containing only such statistical results of his family investigations as he considered especially worthy of publication. At the same time, he founded the *Société d'Économie Sociale*, which commenced a publication presenting family case studies known as "*Les Ouvriers des Deux Mondes*", still issued periodically. In 1864 some theoretical conclusions based on his work were published in three volumes entitled "*La Réforme Sociale en France*." In 1879 he revised his *Les Ouvriers Européens*, adding many more monographs and the theoretical implications that had been omitted from the 1855 edition.

Christian Lorenz Ernst Engel (1821-96) was also a mining engineer who visited most of the districts of Europe. He was a student under Le Play in Paris and was also influenced by Quételet, who turned his interest toward the application of statistics to social science. While director of the *Sächsisches Statistisches Amt* from 1850 to 1858, he analyzed the distribution of family income among disbursements of various types as shown by the published studies of Ducpétiaux and Le Play, and formulated his theory of the relationship between income and proportionate expenditures for food and the necessities of life. His study of levels of living among Belgian workingmen's families was published in 1895.

The first part of this work consisted of a brief description of the studies made before 1890 with which he was acquainted. The second part is a reanalysis of the 1853 study by Ducpétiaux in which the

<sup>28</sup> SÉE, HENRI. *LA VIE ÉCONOMIQUE DE LA FRANCE SOUS LA MONARCHIE CENSITAIRE (1815-48)*. Paris. 1927.

data are given in terms of expenditure per quet.<sup>29</sup> These 1853 data are compared with studies made in Belgium in 1886 and in 1891 and with the American studies by C. D. Wright. A comparison of living in the city and the country, as well as of consumption among the various social classes in a suburb of Brussels, is made, and a division according to the occupation of the head of the household. Data concerning the protein, fat, and carbohydrate composition of typical diets are analyzed.

The conclusion is reached that, up to a certain degree, the living expenditures are influenced both by the kind of occupation, and by residence in a rural or an urban environment. The real purchasing power of the Belgian worker increased between 1853 and 1891 in spite of similar increase in the prices of the commodities consumed. Free income and saving power, however, grew very little since the increased income of all social classes was largely, in fact almost exclusively, used for the purpose of bettering physical living conditions, and in 1891, much more than previously, more alcoholic beverages were consumed in the home and at restaurants and saloons.

This led Engel to the theory that an increase in the incomes of those who have suffered material suppression and dissatisfaction is usually followed not by approved and reasonable actions but by an extreme and unbalanced reaction in the direction of lack of control. Engel was convinced of the truth of this theory and also of another that, where conditions better themselves gradually, the laborers learn to raise their level of living without succumbing to dissipation and extravagance.

Engel developed a suggestion made by Le Play that economic progress could be measured by the relative change in the proportion of food expenditures allotted to food of animal origin as distinguished from food of vegetable origin, increased income being associated with increased consumption of meat. He also developed a theory that—

The proportion of the outgo used for food, other things being equal, is the best measure of the level of living of a population.

He developed the idea further to state:

The poorer an individual, a family, or a people, the greater must be the percentage of the income necessary for the maintenance of physical sustenance, and again of this a greater portion must be allowed for food.

Thus, Ducpétiaux, Le Play, and Engel, with somewhat different points of view, each made a contribution to the methods and conclusions derived from a study of expenditures for family living. Each made studies in the same general environment, each used his own methods and reached somewhat different conclusions from the others, and each stimulated a group of followers who carried on his work. Ducpétiaux and Engel resembled one another more than either resembled Le Play. They all believed that the material welfare of society could be promoted by studying family living. However, Ducpétiaux emphasized poor relief, Engel emphasized legal measures brought about through the solidarity of the laboring classes, whereas Le Play emphasized the preservation of lines of attachment between the worker and employer. Engel and Ducpétiaux emphasized the material conditions of life, whereas Le Play held that the social organization was primary in that it guaranteed the material conditions. These three laid the foundation for the modern studies of family living.

<sup>29</sup> See appendix 1.

## EUROPEAN STUDIES IN THE MODERN PERIOD

European studies of family living during the period since 1850 have several characteristics in common: They are numerous, they emphasize international comparisons, and they are becoming statistically elaborate, even abstruse.

For Great Britain during this period there are about 75 studies; for France, over 100; for Russia, about 160; and for Germany, 200 studies. Even some of the smaller countries such as Switzerland and Belgium are represented by from 25 to 40 studies of family living. In almost every country some studies of family living have been made, many inspired recently by the coordinating work of the International Bureau of Labour Statistics.<sup>30</sup>

## GREAT BRITAIN

Many of the important British studies are characterized by an emphasis on food or food and rent expenditures, oftentimes to the neglect of the enumeration of other types of expenditure. A typical study of this nature gives wages, rent, and food expenditures, great attention being paid to diet. The other expenses are grouped. Another characteristic is preoccupation with poverty, disease, and slum conditions which were caused by the high degree of urbanization in England.

A number of Le Play investigations in England should not be neglected by the careful student. These cover the period from about 1840 to the end of the century. Along with them should be considered the Board of Trade's publication of complete income and expenditures of a London cabinetmaker's family for the 38-year period, 1850-87 (976).

Between 1891 and 1894 the Economic Club collected data on the living of both urban and rural families in England and Scotland. This organization attempted to apply the Le Play technic to Great Britain, but even a casual study of their report indicates that they either did not understand Le Play's methods or revised them so radically that the resemblance was lost.

The emphasis upon poverty in studies of the family living of the laboring classes in England is very striking. In the volumes of *Les Ouvriers Européens* published in 1879, Le Play repeatedly referred to the poverty in Great Britain as an illustration of the demoralizing effect of industrial development and the free contract system upon the workers in western countries. Booth's study of London (975) also emphasizes the life of the city's poor. Rowntree began in 1889 his investigations which led to the theory of the fluctuations of the condition of the laborer's family about the poverty line.

This preoccupation of the British investigations with poverty is reflected in the numerous studies of the level of living among families in poor conditions of hygiene or health. Attention may be called especially to a 1914 study by A. E. Carver correlating dietaries with tuberculosis in Birmingham; to a study of 40 families of miners by the Medical Research Council in 1922-23; to the 1923 diet study for

<sup>30</sup> See the following publications:  
INTERNATIONAL LABOUR OFFICE. METHODS OF CONDUCTING FAMILY BUDGET ENQUIRIES. Ser. N, 9. Geneva. 1926.  
NATIONAL INDUSTRIAL CONFERENCE BOARD. THE COST OF LIVING IN FOREIGN COUNTRIES. New York. 1927.



rural and urban laborers by Hill (1019). In 1930 C. T. Edgar made an analysis of the contribution of "social services" to the real incomes of British laborers.

The chief studies for other than the lower classes in modern England are those by E. Warren for 1866 (964), the report of the Working Classes Cost-of-Living Committee for 1914-18 (1005), Masterman for 1918 (1012), and Jones' study for 1926 (1022).

## FRANCE

France, with its contribution of the Le Play-Durkheim approach to studies of family living, offers a contrast to the "pauper" note in Great Britain, the statistical tomes of the Germans, and the mathematical approach in Italy. French scholars have also supplied some historical surveys, perhaps not so fundamental in character as those by Rogers (925, 944) but at the same time extremely valuable in their own way. Among them are the works of D'Avenel (581, 610, 611), and the Baudrillarts (580) particularly.

The Le Play school has continued its studies to the present day, though with no worker so indefatigable or so productive as the founder. Among the outstanding French followers of Le Play should be mentioned Urbain Guérin, A. Saint-Léger, Pierre du Maroussen, A. Focillon, René Lavolée, E. Delbet, and E. Landsberg; in America, Louise Bolard More should not be omitted; and in Italy, Maria Pasolini.

As so frequently happens with the passing of time, the Le Play school has divided into two branches, one publishing its results chiefly in *La Réforme Sociale*, the other, led by E. Demolins and the Abbé de Tourville, having as an organ *La Science Sociale*.<sup>31</sup> Neither school follows the basic hypotheses or the spirit of Le Play himself.

As a result of the work of the Le Play school, studies for France are available for practically every year since 1848.

The French scholar Halbwachs<sup>32</sup> has also given us several monographs. One is based chiefly on the German official study of 1907-8 and another on the official study in the same country, 1927-28. In these essays Halbwachs shows how the problems of family expenditures lead the student directly into social psychology.

## GERMANY

Care in collecting materials and statistical elaboration are outstanding characteristics of the German studies. Investigators there have not used correlation methods to any great extent, but by cross tabulation they have furnished a meticulous analysis of most of the economic details of family expenditure. The country which produced Engel, Schwabe, and Laspeyres has also given us some of the most elaborate modern investigations of family living. A monograph by Albrecht (867), in 1912, gives a bibliography of about 300 titles. Since that time, investigations in Germany have been as numerous as in other countries. Only the more important of these studies can be mentioned here.

<sup>31</sup> GIDE, C. *POLITICAL ECONOMY*. Transl. from ed. 3 of *Cours d'Économie Politique*, p. 31. n. p. 1914.

<sup>32</sup> HALBWACHS, M. *LA CLASSE OUVRIÈRE ET LES NIVEAUX DE VIE*. Paris. 1913. ———. *L'ÉVOLUTION DES BESOINS DANS LES CLASSES OUVRIÈRES*. Paris, 1934.



A number of investigations were made in Germany by Le Play, beginning with the miner of Hartz studied continuously from 1829 to 1845, and including others covering most of the nineteenth century. Gottlieb Schnapper-Arndt attempted to improve Le Play's method, but his work finally developed into an elaborate system of domestic accounting. However, his historical studies on the documents of the early Frankfurt burghers (724) entitle him to special mention.

Modern German investigations of family living began on a broad and analytical scale. Flor (730) attempted in 1847 to study laborers in agriculture and industry, as well as the teachers and clergy, in lower Bavaria. Expenditures were estimated by observation, but they were related to a minimum standard of living based upon costs of charity families. At about the same time, Von Lengerke (710) dealt with the same subject in more detail for the agricultural workers in various Prussian States.

Approximately 50 other studies worthy of consideration were published before 1895. Hampke (767) summarized their conclusions and presented most of their important tables in 1888. Particular attention should be called to a series of studies by Dehn published in the early eighties (733, 738, 744, 764). Their importance lies not so much in the original materials presented as in the ability of the author to bring together from varied sources German household accounts for the different territories and social classes.

During this period, Schwabe (745) developed his law of rent paralleling Engel's food law. His methods were similar to those used in investigations of family living today, except that he gathered information only about income and rent. In 1868, on the basis of data collected from numerous sources, he maintained that the real law of rent paralleled Engel's law for food—the lower the income is, the higher is the proportion for rent and vice versa. In 1867 surveys were undertaken in Berlin by the Statistisches Reichsamt to determine the connection between incomes and the amounts paid for rent. From the tabulated results Schwabe claimed that: "Je ärmer Jemand ist, einen desto grösseren Teil seines Einkommens muss er für Wohnung verausgeben, mathematisch dargestellt." Thus, Schwabe's law held that proportionate expenditures for rent decreased with increasing incomes without regard to the social class of the renter. A workingman with an income of \$700 per year would spend the same proportions for rent as a clerk with the same income and would tend to receive about the same type of housing accommodations. In proof of this, Schwabe cited data from many cities other than Berlin and particularly Von Bruch's analysis of rentals in Hamburg.

Hasse (751) secured corroborative material from the income-tax data of Saxony. Laspeyres (753), however, who somewhat earlier had published a monograph on the correlation between housing conditions in Paris and the moral and criminal behavior of the people, attempted to show that Schwabe's law was valid only within social classes. Among the clerical workers, lower incomes would be associated with higher proportions for rent and higher incomes with lower proportions. Similarly, among the laborers, the proportions used for rent declined with increases in the amounts of income. But on account of class standards of living, one could not compare a clerical worker and a laborer of the same income group. Each class had its own standards, but within these standards the same general

principle of declining proportions for rent with higher incomes held true.

Von der Goltz (711, 712) was interested in the living conditions of agricultural laborers with particular reference to changes since 1865 and the growing migration to urban districts. Incidentally, he furnished materials which show that Engel's law of expenditures for food is not applicable under conditions in which peasants are changing from a customary cereal diet toward a market-chosen diet similar to that found in the industrial districts or in all districts with increasing urbanization.

The works by Hampke and Engel saw the end of a distinct period in German investigations, though later studies were very numerous. Labor unions, social-work organizations, governmental bureaus, city statistical offices, professors, scientific organizations, and private individuals published studies. Estimates of expenditures were made for typical families, social classes, the rich and the poor, the worker and the poverty case, the peasant and the urbanite.

After the death of Engel in 1896 to the time of the World War there was a further development of technic and the refinement of method in mass statistical studies. The first large governmental study appeared during this period, that by the Kaiserliches Statistisches Amt in 1907-8 (850). Albrecht's monograph (867) appeared in 1912, at a time when constructive and original work, even that of refinement, had almost ceased.

The important studies of this period may be classified into eight groups. One of these may be called official investigations, of which examples are furnished by the reports of the statistical offices of Berlin and Dresden (747, 820, 826).

Another group of studies deals with particular industries. The first of importance was the study published in 1896 by Feig (788) for the linen industry of Berlin. In 1900 there was published a similar study of German printers (794). Likewise the jewelry makers (807), the transportation workers (797), the watchmakers in the Black Forest of Baden (835), home workers in Prussia (837), elementary-school teachers (914), workers in the metal trades (856), and miners in the Saar Valley (864), were studied on the basis of household accounts; sometimes as many as 600 families were investigated.

A third group comprises international comparisons. The first of these compared the glass workers of the United States and Germany (790). In 1903 a general comparison was made, on the basis of materials already collected, of the proletariat in the two countries (842). The British Board of Trade study (836), made in 1905 and published in English in 1908, summarized relative conditions for rents, housing, prices, and wages on the basis of an analysis of 5,000 weekly records from 33 German industrial towns. In 1906 the Gainsborough commission of British workmen (843) attempted the same thing on the basis of three typical records made after an observational tour.

Rural-urban comparisons constitute the fourth type of investigation. An important example of this type is the 14-year study (1888-1902) which attempted to analyze the influence and the causes of the migration of population to the cities from the country districts of East Prussia (779).

Detailed investigations were made of food consumption, and the social workers also had their day. Fürth (795, 848, 849), Kriegel



(798), Frau Hartwig (822), and Tugendhat (833) each published important studies concerning household expense accounts and their significance for family welfare work among the poor.

A number of accounts were also presented attempting to show changes in family living with the passing of time—the seventh type of investigation. One study follows a family from 1876 to 1906 (907), another presents records for a Hessian farm from 1888 to 1909 (717), a third deals with conditions in Lübeck from 1891 to 1912 (784). Two high German officials furnished records from 1894 to 1910 (910) and several families of school teachers, bankers, and skilled laborers furnished records for shorter periods (743, 912, 913).

Finally, theoretical and methodological studies of German families were published by Bücher (841), Gerloff (857), Günther (870), G. Albrecht (867), and Halbwachs (871).

Studies of family living during the World War were made in Germany as elsewhere, both to aid in the conduct of the war, and to determine its influence in later years. Many of the early investigators who were still living participated in these investigations. The three most important studies made during the war were the official ones undertaken in 1916, 1917, and 1918 (876, 878, 879). These cover wages, cost of living, the needs of the consumer, and the effects of rationing of food and clothing. These studies supply more concrete data for Germany during the war years than are to be found for most of the other warring nations.

During the period of inflation investigations practically ceased, as during those years they could have had no particular value unless results were recorded in physical rather than in monetary terms. Following the stabilization of the mark, new investigations were undertaken, similar in motive and scope to those undertaken before the war. Trade-union investigations are represented by studies carried on by the metal workers (880), the building trades (893), and the organization of railway employees (894). The building workers made their study as a protest against attempts to lower wages, whereas the railway employees believed that the official study of 1927–28 was misrepresentative and indicated that people of their class were more highly paid and were economically better off than they were in reality.

Official studies were represented by continuous investigations carried on by the Hamburg Statistisches Amt after the period of inflation. Preliminary data were published in 1926 and in 1931 (881, 883). The most comprehensive investigation was that of the Statistisches Reichsamt for 1927–28 (886, 889). This study was published in two volumes, one of which is a summary, the other gives data for each case. Three groups were considered, the laboring classes, the white-collared employees, and the officials, each group being analyzed in detail according to income and distribution of expenditures. In many respects, this is the most careful, detailed study of industrial workers in existence. The results are presented in statistical tables and graphs. The chief theoretical conclusions of the analysis were published in a series of articles by Lütge (895).

#### ITALY

The first Italian studies in the modern period were carried out by members of the Le Play school. Almost without exception these Le

Play investigations, which number about a dozen and cover a period from about 1850 to 1900, deal with agricultural families or with miners or weavers living in rural communities where part-time farming was possible.

Countess Maria Pasolini, one of Le Play's Italian followers, studied the living of one family on her estate in the commune of Ravenna for the years 1859-94.

Studies of the living of Italian peasants are illustrated by investigations undertaken by Albertoni and Novi (1061), Mantovani (1062), Mase-Dari (1066), Lorenzoni (1070), Chessa (1065), and Albertoni and Rossi (1071). In general, these studies include careful descriptions of the content of living and meticulous analysis of the diet rather than emphasis on the economic distribution of expenditures. They usually analyze typical cases instead of summarizing data for a large number of cases.

Studies of laborers were made by Lombrosa (1063) and the Società Umanitaria of Milan (1069, 1073, 1081), and of housing costs by Dalla Volta (1475). Orano (1072) made a study between 1906 and 1910 of living conditions of the people in Rome, dealing particularly with laborers in the modern section of the city. In addition to the records of expenditures of 35 families, he describes the living conditions of the laborers.

In most cases studies of the influence of the World War on living conditions in Italy have been based upon data already collected, supplemented by a few more records gathered by the investigators.

The analysis of economic theories concerning family living is illustrated by investigations carried on by Gini (1075) and Del Vecchio (1480), who made use of mathematical technics in measuring expenditures for various items, especially for food, in relation to total expenditures.

The Fascist studies are connected with the attempts of the Government to create a sustaining culture. In Italy a number of studies of the balance between consumption and production have been started under the direction of Gini.

#### RUSSIA 33

The first attempts in Russia to make studies of family living date from the end of the eighteenth century and were due largely to a developing interest in commercialized agriculture. Many agricultural studies outlined new economic projects for the peasants. These plans were supported by family budgets which were often based on actual observation.

In 1894 at the session of the statistical division of the ninth meeting of the Russian Naturalists' and Physicians' Society, the problems of family-living studies were discussed. L. N. Marees presented a paper entitled "The Monographic Method of Investigation as Applied to

<sup>33</sup> This section is compiled on the basis of the following publications:

The Le Play studies on Russia to be found in his *Les Ouvriers Européens*, ed. 2, v. 2, pp. 1-231, and in *Les Ouvriers des Deux Mondes*, series 2, v. 1, pp. 56-132.

SLOSSE, A., and WAXWEILER, E. *ENQUÊTE SUR LE RÉGIME ALIMENTAIRE DE 1065 OUVRIERS BELGES*. Bruxelles. 1910.

TSCHAJANOW, A. *DIE LEHRE VON DER BAUERLICHEN WIRTSCHAFT*. 1923.

TSCHAJANOW, A. *RUSSIAN BUDGET STUDIES: HISTORY AND METHODS*. Moscow. 1929. [In Russian.]

TURINE, S. P. *WORKERS' FAMILY BUDGET ENQUIRIES IN SOVIET RUSSIA*. Internat. Labour Rev.: 20 568-573. 1929.

Seventeen recent tables on Russian family-living studies furnished by the Amtorg of New York.

All Russian studies published in other languages than Russian have been consulted as far as possible, as well as the analysis given in the following: SOROKIN, P. A., ZIMMERMAN, C. C., and GALPIN, C. J. *SYSTEMATIC SOURCE BOOK IN RURAL SOCIOLOGY*. v. 2-3. 1931-32. For particular points, many other works have been used.

Nutrition," emphasizing the need for investigations of the customary nutrition of the people. He said that general statistical surveys would not do for this purpose as they were too extensive and did not treat the question with adequate penetration. Marees declared that while the usual census of farmsteads made possible the differentiation of various types of peasant households according to the composition of the family and amount of land and cattle owned, a monographic description of a small number of examples of these types would give a basis for judging the consumption habits of the great mass of peasants. He suggested the following topics: (1) Quantities of resources available for satisfying the family's wants; (2) relative roles of industrial and agricultural income for different groups of families; (3) what foods are used and how much does a family use per capita; (4) what is the economic value of the goods and money which the family has for its different wants; and (5) what is the relative expenditure for food.

Shcherbina (1168), who had had some experience in studies of family living, raised the question of methods of calculating norms of consumption of grain and emphasized the desirability of securing complete income and expenditure records. Otherwise, he said, a great deal would be omitted when there was no check on the total. In general, Marees, as well as his opponents, treated investigations of family living as a means for studying mass consumption.

The discussion of these questions by the national meeting stimulated further development. In the next few years, mass statistical data were emphasized in the family investigations. The most important, which created a turning point in Russian statistics on family living, were made by the Voronezh and Kaluga Statistical Bureaus.

Table 1 gives the fundamental elements that were fairly well developed in Russian studies of family living by the opening of the twentieth century, according to Tschajanow.

TABLE 1.—*Russian studies of family living at the end of the nineteenth century*

Elements considered in the investigation	Zakharov Moscow Guberniya	Semionov Kisgan Guberniya	Pokrovski Tver Guberniya	Sheshunov Yeniseisk Guberniya	Shcherbina		Peshekhonov Kaluga Guberniya
					Voronezh 176,821 cases	Voronezh 230 cases	
Establishment of an understanding of a typical expenditure record.....	—	+	+	+	×	+	+
Division of program into very minute details, scope including all income and expenditure, individual as well as household.....	—	—	—	+	—	+	—
Inventory of property:							
Household.....	+	+	+	+	+	+	+
Individual.....	—	—	+	+	—	+	—
Receipt of all data from concrete investigations relating to the household described.....	—	—	—	+	+	+	—
Accounts of goods on hand.....	—	—	—	+	+	+	+
Account of credit relations.....	—	—	—	+	+	+	+
Yearly balance.....	+	—	+	+	+	+	+
Account of labor.....	—	—	—	—	—	—	+
Norms of nutrition.....	—	—	—	+	—	+	+
Expression of all amounts not only in units of value but also in units of weight or volume.....	—	—	+	+	—	+	—
Division of income and expenditures into money and kind.....	+	—	+	+	×**	+	+
Tabular form of working up data.....	—	—	—	+	+	+	+
Treatment of data by the method of cross tabulation.....	—	—	—	+	+	+	+

—=no treatment.

+ =adequate treatment.

×=partly treated.

\* Obtained by calculation.

\*\* Most important items are calculated.



The level of living of the population was the center of interest. Careful examination of the expenditure tables of the Voronezh type (1162), however, shows that, along with the data characterizing the economic and social organization of the farmstead itself, there were accounts of seed used, and of the kinds and cost of fodder, together with some of the features of economic organization. In the expenditure division there was a combination of family consumption with the expenditures for running a household, a domestic industry, or a farm as an economic enterprise. As content and aims developed further in later studies of family life in Russia, attention turned gradually from the level of living to the sociological and economic factors in production.

The tendency of Russian studies of family living toward production analysis.—At the end of the first decade of the twentieth century there was observed a considerable revival in Russian agricultural life, the peasant household having outlived the old forms of three-field cultivation. As new economic problems appeared the administrative institutions increased their activities for study and established a number of agencies to help the villages. Former studies no longer applied to this changing agriculture, as was noted in a discussion at the eleventh meeting of the Russian Naturalists' and Physicians' Society in 1909–10. In his address to the Agricultural Society in 1910, K. Å. Matseevich pointed out that investigations of family living should emphasize the economic organization of peasant households.

In the same year a committee of the Russian National Conference of Linen Producers organized a special investigation in the Volokolamski Uyezd to learn the significance of flax in the organization of the peasant household. The following specific problems were studied: (1) Calculation of net and gross return from flax and other crops; (2) detailed account of the organization of labor of the family and especially an account of the distribution of labor in time; and (3) study of the money income of the family and of returns from flax (and linen).

Finally, at the meeting of the Moscow Oblast Agriculturist Aid Society of 1911, it was clearly stated that in planning rural household economy the best source of accurate information was data on family expenditures. From the time of this meeting, the question of utilizing such data for purposes of production economics was frequently dealt with in agricultural publications, and a number of agricultural organizations (Chernigov, Moscow, Lebedin) included inquiries on expenditures in their programs. Among these was one by Tschaianow (1188), which was made for the association of linen producers.

Development of record keeping and of studies of family living to 1914.—The first Russian attempt to use actual income and expenditure accounts was apparently the publication by Shcherbina (1168) of the account book of a peasant of the Zadonski Uyezd, Voronezh Guberniya, in which monetary transfers were entered monthly. The next was in the account book of Moscow Guberniya, published by Annenski (1170). Then there was the work of Pervushin (1186), containing two peasant income-expenditure accounts for a number of years, carefully worked out by the author. However, the three works mentioned appear to have utilized accounts accidentally found by the investigators. At the meeting of Moscow agriculturists in 1911, Pervushin pointed out the unreliability of schedules filled out during

interviews and suggested making connections with a number of correspondents who would keep accounts throughout the year.

With the growth of marketing, the peasant household, which earlier was concerned only with the problem of supplying its own needs from its own produce and with making certain that this supply was adequate, became interested in the commercial aspect of production, since the more that was produced, the greater was the amount marketed. With the growth of monetary exchanges this emphasis on quantity was changed to one on economic value. Under these new conditions, accounting for household transfers was necessary in order to determine the most valuable part of household activity, so that more time could be devoted to it. Two problems were involved: (1) Finding a method of accounting suitable to a household whose aim was not a maximum return on capital invested but an optimum return for the yearly labor of the family; and (2) working out simple methods readily understandable by a peasant with average education. A beginning was made by introducing the methods of Ernst F. Laur, of Switzerland, whose work had achieved great popularity among Russian agricultural economists.<sup>34</sup>

In 1912 a group of Moscow economists tried to work out a uniform type of account for peasant households, to be kept under the supervision of statisticians or agriculturists.

In January 1912, Pervushin put forward this project at the meeting of the Independent Economic Society, and the society unanimously passed a resolution on the desirability of the use of such records. In 1913 Chelintsev (1189) recommended the same thing. In 1914 Ober-Taller (1193), under the influence of E. Laur, offered a simplified form of peasant accounts, arranged for Poltava households, which had been tried out, and which could be understood by the more intelligent classes of peasants.

Finally, immediately before the war, A. Pedashenko, of the division of rural economy and agricultural statistics of the Central Department of Land Cultivation and Organization, became interested in these types of records and published under the editorship of N. Kajhanov, a two-volume compilation and analysis of all western European forms of accounting statistics (1190). His bureau also called a meeting in 1914 at St. Petersburg to formulate a plan for large-scale account keeping. The outbreak of the war, however, postponed wide-spread organization of the work.

At this time another aspect of consumption was studied by Kuzminikh-Lanin, in his investigations of artel<sup>35</sup> feeding of the factory workers (1191, 1192) in which he pursued a method first suggested by Professor Erisman in 1894. He collected income and expenditure accounts over several years for factory eating houses run by artels. On the basis of this extensive material on consumption he derived stable norms and studied the influence on consumption of seasons and other factors.

<sup>34</sup> Laur's methods and results are summarized in the following publication: SWISS AGRICULTURAL SECRETARIAT. RECHERCHES RELATIVES À LA RENTABILITÉ DE L'AGRICULTURE. Rept., pts. 1-2. Bern. 1926. This summarizes his studies from 1901 to 1926.

See also SOROKIN, P. A., ZIMMERMAN, C. C., and GALPIN, C. J. SYSTEMATIC SOURCE BOOK IN RURAL SOCIOLOGY. v. 3, ch. 21. 1932.

<sup>35</sup> In general, an artel is a cooperative organization for the purpose of joint ownership of machines or tools, joint contracting for work, joint purchase of raw material or sale of output. See the article by Sorokin in Encyclopedia of the Social Sciences, v. 2, pp. 260-261.



So many new methodological ideas were advanced at this period that it seemed highly desirable to systematize them and give them a theoretical foundation. The A. I. Tchuprow Society for the Study of the Social Sciences took this task upon itself and discussed it at the annual meetings the last 3 years before the revolution. What was brought out concerning methods used may be summarized under four headings: (1) Selection of households; (2) criticism of materials and the use of interpolation; (3) evaluation of items in kind, distinguishing (a) produce having market price but for some reason not sold, (b) produce whose finished form had a market price but which at the time of investigation was in process of production and had no market price, (c) produce which was not marketed (manure, etc.), (d) buildings, production equipment, etc; and (4) methods of balancing incomes and expenditures, accounting for labor, classification of items, etc. No final decisions were reached. Two ideas were suggested: (1) Accounts should be published individually, not in groups; and (2) investigators should pay special attention to monetary means, savings, and the condition of productive equipment at the beginning and end of the year.

Soviet studies.—The World War made systematic gathering of data impossible and broke the trend in development of methods. During the period 1913–22, in the majority of cases, old studies were completed, and texts were written for tables made before the war. Only the studies by Kostrov in Chernigov (1199), and by Chelintsev in Tambov (1194, 1200) showed any considerable advances in method.

Studies of family living began once more in 1919, when the Central Statistical Bureau carried on a wide-spread study in accordance with the suggestions of the statistical conference. The method followed included an introductory analysis of the history of the household, aiming to determine the most important changes in the household during the war and revolution, and also the causes of such changes. Comparisons were drawn between 1914 and 1919 as to population, land utilization, sowing, garden areas, occupations, commercial and industrial enterprises, cattle ownership, and inventories (61 items). Then several hundred items were allocated to the economic factors in production. Included among these were numerous details of time distribution, but most of them applied to the farm and not to the household. The study was concluded by an analysis of food consumption, money income, value income (in kind), savings in money and kind, and debts. The major emphasis was on the factors of production.

Adequate investigations could be conducted, of course, only after the establishment of a constant unit of exchange (the chervonetz). Once this had been achieved, the most important developments in method were the following: (1) The idea of collection and treatment of data on family living to facilitate study of the national economic balance, as well as the analysis of merchandising, purchasing activity, and other economic properties of peasants' and laborers' households; and (2) the idea of utilizing such data for studying reciprocal social relations within the village, its form of social-economic differentiation and expressions of the productive characteristics of different social groups of the village.

The first of these tendencies is seen in the works of A. E. Lositski on grain, meat, and other economic balances, and in the works of the Central Statistical Bureau, division of budgets, at the time of L. N.



Litoshenko. Statistics of national economic balances have as their foundation data on actual consumption, and on norms of consumption. Beginning with 1919 a whole series of scientific organizations made the determination of norms their goal. In this connection the monthly questionnaires used at the time of the food institute of the Supreme Economic Council of the United Socialist Soviet Republics may be noted. These questionnaires gave very detailed and interesting observations on the consumption of laborers and salaried workers in Moscow for nearly a year. Similar studies were undertaken by the Saratov and other guberniyas, and statistical bureaus; the most significant were the statistical studies made by the consumption division of the Central Statistical Bureau, under the direction of A. E. Lositski. These works, relying on two observations during a year, aimed to give average daily quantity consumption of various food products and the calorie total, with a separate account of the grams of fats, carbohydrates, and proteins.

Somewhat different in composition and history but similar in aim were the studies of Litoshenko (1202, 1210, 1282). The attempt was to determine the amount and composition of goods exchanged in peasant households, the norms of consumption of industrial commodities, and the capital turn-over account. It was hoped that indexes could be constructed for calculating the changes in national economy and the separation of norms of production and personal consumption in order to construct a general balance.

Most of the Soviet studies of consumption may be placed in 1 of 4 categories: (1) Investigations of national norms of consumption, market turn-over, expenditures, or other aspects of family living which throw light on national economic questions; (2) statistical works presenting local problems peculiar to limited areas; (3) monographic works by central or local institutions, which studied family living in order to clarify the organization of peasant households and of agricultural production; and (4) studies of family living as an explanation of the social structure of the village and the economic structure of households of different social types.

As compared with pre-war works the technic of supplementing average expenditures by a detailed analysis of the organization of a typical household and of its possible reorganization, as developed by Studenski in his Penza study (1286), was a real contribution. The most important contribution of post-war times, however, was without doubt the detailed utilization of data on family expenditures in the analysis of the social relations within the contemporary village. The works of L. N. Kritzman, W. S. Nemchinov, S. G. Ujhanski, Anisimov (1279), Vermenichev (1279), Nahumov (1279), G. I. Raevich, and others all come in this category. They also tried to analyze the organization of the households for production, differentiating them into social groups and studying each group separately. For this purpose they rejected the grouping according to area of sowings and turned directly to social relations in the village, as V. G. Groman did in the Penza study. They developed in great detail a technic which took account of relations established not only in the hiring of labor, but also in equipment and work animals, and in the renting of land. They thus worked out statistical relationships between the household labor and its own means of production and also that owned by others.

A number of studies were also made on questions of production by investigators connected with the Scientific Research Institute of Agricultural Economics. Tschajanow studied the cost of production of cotton, sugar beets, and flax, and Makarov studied grains—both on the basis of expenditure data. Tschajanow has also made intensive analyses of the relation of consumers to workers in the family at different periods in the family cycle. No less interesting are the works of A. A. Kotov and others on the economic bases of the peasant agricultural technic; the work of Tzilko (1289) on the influence of cooperation on peasant household economy; and the studies of N. P. Makarov, G. P. Chubakov, I. A. Borodin, and V. V. Kavtorin on the circulation of small loans.

#### OTHER EUROPEAN COUNTRIES

Only a few of the studies which have appeared in a number of other European countries can be noted. There have been investigations by members of the Le Play school in all the countries in Europe and in other sections of the globe where French influence has penetrated. The chief exception seems to be South America, for which apparently no such investigations have been published to the present time. Edward Young and the United States consular agents presented data in the last quarter of the nineteenth century for many of these countries.

In view of the relations between Germany and the former Austria-Hungary, it is but natural that there was a considerable similarity between the studies of family living in the two countries. Early investigations by Von Wahlberg and Gruber (495) dealt with the households of the laboring classes in the 1880's. A similar investigation by Lavollée (492) about the same period gives an analysis from the French point of view. Since the World War, investigations stimulated by the International Bureau of Labour and following somewhat the international pattern, have been made of several hundred families. The peasant movements in these countries of central Europe since the World War have stimulated certain special types of investigations concerning agrarian conditions, but the detailed results have not yet been made available to the foreign public.

Belgium has a long history of studies of family living, due in large part to the stimulus furnished by early industrialization, the consequent pauperization of the industrial workers, the early works by Ducloux and Engel, and the important work done later at the Solvay Institute. Recent Belgian studies have been summarized by the Solvay Institute in the writings of Gottschalk (547, 548). Rowntree (537), in his attempts to understand the poverty of Great Britain, turned to Belgium between 1906 and 1908. Finally, attention should be called to the study published by Slosse and Waxweiler (540) in 1910, which gives summary tables for most of the existing European and American investigations of food conditions up to that time.

In Czechoslovakia, studies of the peasants and the workers show the standardizing influence of the International Bureau of Labour. Most of the investigations are available in French as well as in the native language.

The members of the seminar under Adolf Jensen at the University of Copenhagen made preliminary investigations of family living in

the cities and provincial districts of Denmark in 1894 (566), but Denmark received its primary impetus to studies of family living through the work of Rubin (568), who collected data from 251 families between 1896 and 1898. The results of this investigation, one of the most careful of all the early studies, are available in French. Later official studies of importance were published in 1914 (571) and in 1926 (574). These investigations have been linked together by summary observations for the intermediate years. In general, the Danish studies follow a pattern characteristic of all the Scandinavian studies, which connect data on income, taxation, and distribution of wealth with statistics on family living.

Estonia has one study (576) covering 283 working families in Tallinn and Narva who kept records for a month in 1925. It combines the methodology standardized by the International Labour Office with certain methods of computing adult consumption units used by the Russians.

For Finland there are three studies of importance—two made in 1908 or 1909, and another since the World War. The early one by Sundstroem (in German) is an analysis of food consumption in 18 rural households. About the same time, Hjelt (578), a factory inspector, made a study of a number of working families. The methodology of the post-war governmental study (579) is similar to that of the International Labour Office. Most of the Finnish studies give résumés and table headings in French.

Norway has a number of excellent studies beginning with one about 1906 (1101), the purpose of which was to discover a basis for levying taxes. The data are thus representative of the masses of the people throughout the Kingdom.

In Sweden also the statistical type of inquiry has developed. The first official study was made in 1907–8 and covered 150 working families in Stockholm (1293). A more comprehensive investigation was that of 1913–14, which dealt with 1,355 families (1294).

An investigation of family living in the Netherlands by Moquette (1087) in 1905, while directed mainly at food consumption, also gives figures on income and expenditures for representative groups of poor, middle-class, and wealthy families. At intervals since 1911 the Amsterdam statistical office has collected and analyzed household account books kept by different social classes (1091, 1092, 1093, 1094). As an appendix to its study of 1923–24, data were analyzed from 19 rural and agricultural laborers' families from the country districts around Amsterdam (1098). A number of studies have been made recently in the Netherlands in connection with an investigation of the unemployment problem.

In addition to the investigations carried out in Poland since the World War, a number of studies for the same territory were published earlier in Russia, Germany, Austria, and by the Le Play school.

Switzerland has numerous investigations, due primarily to the activities of Stephen Bauer, a coworker of Engel; Landolt (1312, 1313, 1314, 1317), who was interested in this problem in the early nineties; Emil Laur, who investigated farm and peasant enterprises; and Ackermann (1310, 1315, 1325), an economist of a later period. Landolt published in 1894 a book on methods in the keeping of household statistics which summarized his work in and around Basel during the early nineties. Bauer was assisted in his investigations



by a number of coworkers. Laur's works are summarized in the annotated bibliography under the reports of the Secretariat des Paysans Suisses (1330). In 1901 he developed a volunteer system of farm accounting, and he has since analyzed several hundred such records each year. These not only give farm-management information, but also a great deal about consumption and family living. The general influence of Laur's work in studies of farm family living in Europe is recognized in all countries.

The statistical offices of Basel and Zurich have been active in receiving and analyzing household accounts (1323, 1324, 1326). Long-time records for Switzerland include those from four families for a 19-year period following 1896, summarized by Krommelbein (1318); a clerk and a teacher whose records of expenditure, 1866-85, were analyzed by E. Hofmann (1304); and that of a governmental official, 1883-1910, presented by Duttweiler (1307). There are a number of other such records available for Switzerland. For no other country is there as much similar information kept over such a long period by individual households.

A number of other countries in Europe, such as Portugal, Rumania, Greece, Turkey, Spain, Latvia, and Iceland are represented by a few investigations of family living. The survey shows clearly that the type and value of such investigations depends primarily not upon the size of the country but upon the institutions established for research and the capabilities of the scholars interested in the subject.

#### NON-EUROPEAN COUNTRIES

Among other countries, India and China have been most prolific in studies of family living. There are a few studies in other Asiatic countries, Africa, Australia, and the smaller islands of the Pacific, and in the Latin-American countries.

Africa is represented by a few Le Play studies, the early investigations by Edward Young, some British studies in the Union of South Africa, and some governmental studies and others in Egypt. Those interested in historical investigations should not overlook Brugsch's attempt (1339) to summarize material for early Egypt on a basis of inscriptions and historical records. The most important study of contemporary Africa is a statistical analysis of the standard type of 594 records kept in the urban districts of Egypt in 1920 (1342).

A number of important recent studies have been made by the Dutch in Java, the results of which are also available in English. The Philippine studies refer chiefly to the peasant, with emphasis upon his diet conditions. Some studies have been made of tropical diet, including the food values of various items used in the islands (1441, 1444). The only other study of importance is one by the Philippine Bureau of Labor dealing with the cost of living of government employees (1446).

In Hawaii, a number of studies have been made under the auspices of the United States Bureau of Labor from 1905 on (460, 461). Attention should be called particularly to the study published in 1911 covering 363 families (461).

In Australia and New Zealand, excellent studies are available, chiefly because of the interest in minimum-wage legislation and the scientific zeal of Knibbs, Collins, and others (1452, 1453, 1455,

1456, 1457, 1462, 1465, 1466). Data collected on the aboriginals, combined with ethnological investigations, have made possible publications by B. Malinowski, Richard Thurnwald, and others, giving a clear picture of living conditions among these people.

In Siam, family-living studies have been used as a basis for the development of social policy by the Government. This work, begun as a cooperative venture by a number of Americans and the Siamese Government, is now being continued as a series of general investigations in the social sciences, through cooperation between Harvard University and the Siamese Government. The early investigation included 2,000 village and farm families distributed through 40 villages (1451). It used an approach developed by the present author in studies at Minnesota, combining sociological, economic, and physical inquiries. In form it parallels some of the early investigations of the political arithmeticians and those of the Le Play school. The whole structure of family living is thus made clear, together with suggested reforms for improving the economic conditions of the people without disturbing the nonmaterial phases of their standards of living.

#### INDIA

Several types of investigation have been carried out in India. One is the statistical study of standard type, illustrated by investigations in Bombay by Shirras (1401, 1412), and by the Labour Gazette (1415), in Sholapur City and Ahmedabad by the Labour Office (1416, 1420) and in Rangoon, Burma, under the direction of Bennison (1425). A somewhat similar investigation of six families was carried on privately in Bihar by Horne (1405) in 1916. The Bombay studies applied first to the poverty-stricken laborer in industry and later to conditions among the middle class. Bennison, on the other hand, includes a more representative group in his study and attempts to give the records a partial and multiple-correlation analysis, following the example set by Ogburn in the United States. All these studies furnish results comparable with those of similar investigations in other countries.

A second type of Indian study may be called the village type. It attempts to compute incomes and expenditures for entire villages, after which the members of the village are divided into several social classes and typical representatives of each class are compared. Illustrations of this type are Mukhtyar's study of a south Gujarat village, published in 1930 (1427); Panadikar's investigations of the Bengal delta in 1926 (1413); and a series of investigations of Punjab villages commenced by the Board of Economic Enquiry in the Amritsar district in 1926 (1424). These studies give detailed analyses of food, housing, water supply, health, land tenure, or other phases of family living, according to the particular interest of the investigator.

The political-arithmetician type of investigation is illustrated by the work of Mukerjee (1404, 1430) and others, in which the wealth, the taxable capacity, the general food requirements, and other conditions of the people are summarized on a national scale. Gupta's study (1409) deals with the relationship of house rent to income; the investigations by Burnett-Hurst (1408) deal with the problem of the poverty of the urban tenement dwellers. Finally, the correlation between social organization and the content and standard of living is



analyzed by Nehru (1431) on caste and credit in the rural area, which correlates caste and social class with occupational, social, economic, religious, and other factors in the totality of family living. A variety of local conditions, problems, and influences has given investigations of family living in India a unique character.

## CHINA

The hundred or so studies that have been made in China range from the Cornell type of farm-management study, which Buck (1363, 1364) has adapted to Chinese conditions, to urban investigations of the standard statistical type. Tao has summarized many of these for the Institute of Pacific Relations (1391).

Buck's farm-economy study covers several thousand families in the north and east-central agrarian districts, by means of materials secured by his students. In most cases, the students were members of the families reporting, so that the information was drawn from intimate knowledge. In addition to the farm-management information, expenditures for consumers' goods are presented. Further investigations of rural economy dealing with incomes, expenditures, land tenure, and other phases of family living were made by Tayler (1365) and Mao Young (1372).

These studies of farm economy are supplemented by village studies, somewhat similar to those developed in India, but with more emphasis on the individual in the village family. An illustration is the study of a village near Peiping by Lee and Chin (1377). After summarizing the individual families, a great deal of information is included for the village as a whole. This study is a good corrective for many of our western opinions about Chinese villages, which are based chiefly on presuppositions and a knowledge of theoretical schemes of social organization outlined in some of the Chinese classics.

Statistical investigations of groups of urban families are numerous. Information on living conditions in Shanghai, Peiping, Hanchow, and 30 other cities is comparable with that for other Asiatic and western cities. Of most interest, however, are the studies of types of social groups, such as studies of college employees, for example, that by Chen (1368); of student homes (1366) and of middle-class families by Milam (1367); of factory workers in Tangku by Lin (1374) and the same in Shanghai by Lamson (1382) and others (1378); of hosiery knitters and carpet weavers in Tientsin by Fong (1380, 1381); and of jinrikisha pullers in Peiping by the governmental bureau of economic information (1369). One of the most interesting of this group is an analysis made of 285 families in Shanghai, published under the name of Fu-an (1386). In some cases, actual records were kept; in others, the expenditures are estimated.

Urban surveys are illustrated by those for Peiping made by Gamble and Burgess (1358) and by Tao (1375). Tao places chief emphasis on the direct family expenditures. This information, along with the social survey by the other two investigators, gives an excellent picture of conditions in that city. Records kept over a period of years by a particular family are represented in a study by Gamble (1361), which covers two families in Peiping, for several years each. One belonged to the middle class, the other possessed considerable property. The records cover from 3 to 5 years for each family. A recent



study by Gamble (1392) gives detailed records of the expenditures of 20 families in Peiping, as well as a good deal of analytical information on general living conditions there.

The political arithmeticians are exemplified by Sarvis (1371), Lamson (1360, 1382), and Dittmer (1357, 1359). All these writers stress food consumption, population density, and the low level of living, dealing chiefly with the districts of China where such conditions are characteristic. None of them see in China the factors which Le Play recognized in the early investigations of various families for that country made by members of his school.

The Chinese studies have in general no unique characteristics. Perhaps this is due in part to the influence of standardized western education on most of the investigators.

#### JAPAN

Japan, like many other countries, first became engrossed in studies of family living through interest in food-consumption needs and the productivity of agriculture. In 1905 at the inspiration of W. O. Atwater, K. Oshima published through the Office of Experiment Stations, the results of 360 dietary studies made in that country between 1882 and 1902.<sup>36</sup> Since the first study began within a decade and a half after the Meiji restoration opened the country to intercourse with the rest of the world, there is reason to believe that Oshima's résumé makes available in English most of the studies in existence at that time. The emphasis, of course, is on food consumption, but since the chief item in family living which enters into commerce in that country is food, the picture given is a good index of the whole complex of living conditions.

Other summary reports in English upon investigations in Japan appeared in 1918, 1921, 1926, and 1931. Morimoto (1432) in 1918 summarized the general details of a number of investigations and presented results of a fresh study of 217 farm families. Ta Chen (1436) summarized a study of school teachers in Tokyo made toward the end of 1920 and also presented a minimum budget for a Japanese family with two children. In 1926 the United States Bureau of Labor Statistics (1437) translated and summarized a Japanese report on labor conditions among the textile workers in India, China, and Japan. In 1931 Morimoto (1433) again published a summary study for the Japan Council of the Institute of Pacific Relations, giving the chief data of 12 early studies but drawing primarily upon an investigation made by the Japanese Bureau of Statistics in 1926-27.

Takano (1434) published a résumé of the important urban investigations carried on in Japan prior to the 1926-27 study. In 1929 one of the outstanding Japanese agricultural economists, Nasu, gave in his study of land utilization in Japan (1439) the chief results of investigations of peasant family living appearing in that country following the period summarized in the first monograph by Morimoto. Matsuda prepared a résumé in English of the comprehensive governmental inquiry of 1926-27 (1438).

Along with Japanese studies should be considered the investigation in Korea on family living in a number of villages by Brunner (1393). This study utilizes American methodology.

<sup>36</sup> OSHIMA, K. A DIGEST OF JAPANESE INVESTIGATIONS ON THE NUTRITION OF MEN. U. S. Dept. Agr., Off. Expt. Stas. Bull. 159, 224 pp., illus. 1905.

## WEST INDIES

The Escuela del Hogar at Habana and the Cuban Department of Labor at Habana have some unpublished data on a few typical families of the wage-earning groups. In the summer of 1934 Zimmerman made a study of family living in Cuba under the auspices of the Cuban Government and the United States Foreign Policy Association. He used the Le Play and statistical methods. His data include complete income and expense records for 113 families chosen as representative of all classes, and real-income statements concerning several thousand families of workers on sugar estates, and coffee and tobacco plantations. The results of this study are published in "The New Cuba", Foreign Policy Association, New York, 1934.

## SOUTH AMERICA

No studies were located for Brazil or for any of the other northern countries of South America except Peru. For Peru, Hernando Lavalle y García (484) prepared a study of 17 lower middle-class families in Lima and its environs in 1918. There may be others by the Seminario de la Facultad de Ciencias Económicas, but they were not found. Uruguay furnishes a study for 1920 concerning the wages and cost of living of agricultural laborers (487). For the same country there are also figures on the typical expenditures of a married and an unmarried day laborer for the years between 1913 and 1919 (485). The same investigation is carried further by the ministry of industry for a married workingman with no children and a public employee for the years 1914-26 (486). In general, the results are differentiated so as to apply to nine economic groups.

There have been more studies of family living in Argentina than in any other South American country. Preliminary studies, made for the 10-year period 1886-95, covering both rural and urban families, were based upon observations and upon family account books (474). Between 1905 and 1912 a public investigation was made of the cost of living in the municipal districts which supplies a few important details concerning family living (475), and between 1919 and 1928, the national department of labor investigated a large number of families in Buenos Aires by means of schedules (478, 481, 482, 483). The general description of social life which supplies a background for all these studies is furnished in such works as those by Bunge (476, 477) and the rural investigations now under way by M. Perez Catán, one of the agricultural economists of the country.

In an attempt to supplement the scanty material available from library research on family living in South America, a questionnaire was sent to all Latin-American countries by the Harvard Bureau for Economic Research in Latin America asking specifically about studies of family living. Additional studies are, however, apparently few. One of the fruitful fields for further investigation is certainly the securing of additional data on family living for this part of the world.

## METHODS USED IN STUDIES OF FAMILY LIVING

## THE LE PLAY SCHOOL

By CARLE C. ZIMMERMAN

The methodology of the Le Play school is so unique and the writings of its members are so numerous that a separate nontabular

statement is necessary to explain their work. In one respect, practically all studies of family living form a dichotomy, the Le Play school representing most of one type and the statistical studies representing most of the other. The statistical studies are partly of a sociological nature and partly belong among the other social sciences. The same may be said for those made by the Le Play school, with the exception, as will be evident from the analysis, that they are more concerned with the concepts and problems of pure sociology than are the studies of the statistical schools.

The period covered by the Le Play school is the century following 1829, though not all years are equally represented. The countries included in the investigations are world-wide; in the annotated bibliography will be found 75 Le Play studies for France, 61 for the rest of Europe (most of them for Belgium and Italy), 6 for Asia, 9 for Africa, and 3 for North America. Of these, Le Play himself wrote or helped to write 24, and doubtless played a large part in the preparation of many others.

Each of the Le Play case studies attempts to gather a great deal of information about a representative family. The analysis was limited to people who worked, it being considered that this class included 95 percent of the population of the world and the welfare of this 95 percent explained the welfare of the other 5 percent. This limitation of the analysis did not exclude small capitalists, such as proprietary farmers or the owners of other kinds of property (boatmen or tailors) who also worked themselves.

Le Play's method of investigation was highly intensive. In each district studied, the investigator made careful preliminary inquiries of clergy, teachers, and others to guide his choice of a family for detailed investigation. He then lived with the family selected for some days or weeks, collecting the data for an exhaustive schedule by careful questions and observations. Le Play laid considerable stress on securing the interested cooperation of the family, using tact in dealing with different personalities and in working up to the more intimate questions, making small gifts to each member of the family, and rewarding the time consumed in furnishing information.

The material he collected was very detailed, including odd centimes in the case of monetary sums. Elaborate notes were made, as a basis for the later monograph. He used double-entry bookkeeping, which of course gave more accurate results than the recording of either income or expenditures alone. During his investigations Le Play visited England 7 times, Germany almost as often, Russia and Italy 3 times, Spain and western Asia twice.

Each study included at least 16 different sections, but a number of others were frequently added in the notes, varying according to the characteristics of the group under investigation. The sections may be enumerated as follows:

1. *Place*.—This included the geographical location of the family, the type of industry which it followed, and a discussion of the type of family. In this section were given the reasons for choosing this particular family and some discussion of its representativeness.

2. *Civil state of the family*.—The members of the household were listed by age and sex, the age of the parents at marriage was given, and any details about dead children. In this section were also described any sexual irregularities of the members of the family.

3. *Religion and moral habits*.—The formal religion of the family was given, and the actual adherence to the forms and tenets of the religion were discussed.



4. *Hygiene and health service.*—In this section were discussed the physical condition and health history of the family, their recourse to medical treatment, and its costs.

5. *Rank of the family.*—This section dealt with the position of the family in the social hierarchy and whether or not the social standing of the family tended to improve or degrade its occupational economic status.

6, 7, 8. *Means of existence.*—The section on property (6) described the real property, domestic animals, and tools or working equipment of the family and gave a money value to each item. Section 7 discussed and evaluated subventions, the rights which the individual had against the property and services of the community, the employer, or the government. In the term "subventions" Le Play included all those payments in kind made to workers' families, not commensurate with the work performed, but based largely upon the consumption needs of the family, and often varying with those needs; for example, rights of pasturage and of cutting fuel. They may be partly accounted for as the survivals of the responsibilities of the feudal lord to his serfs. Section 8 included the work and the industries carried on by the families and described the work of the husband, the wife, the children, and the other members of the family. If the family carried on any industry, such as the keeping of a cow or a garden, this was described in detail.

9, 10, 11. *Mode of existence.*—Section 9 included data on food consumption, the number of meals taken each day, the chief menus of typical meals, and the time of eating. Section 10 furnished a physical description of the house followed by a list and evaluation of the important items of furniture and equipment and the clothing for each member. Section 11 described the most important forms of recreation for each member of the family.

12, 13. *Family history.*—Section 12 furnished a discussion of the principal phases of the existence of the family from the birth of the parents until the time of the study. It generally furnished data concerning the social status and occupation of the past generation of the family. In section 13 an attempt was made to characterize the family according to the mores and institutions which seemed to assure the physical and moral well-being of the family. For instance, it might be pointed out that religious teachings had so ordered the character of the members that the employer had great confidence and interest in them, which would affect his attitude in case of family illness or economic depression. The family might be described as very thrifty and saving, the property which they had accumulated serving as a guaranty against unusual circumstances, or it might be pointed out that the particular family spent its income each year but had certain lands or other property which could be hypothecated. The essence of the Le Play system is usually to be found in the analysis in this section, all of the other parts of each monograph being built around this one.

14. *Analysis of income for the year.*—The analysis of income was always made under 4 headings, each of the 4 subsections always being divided into 2 parts. The first subsection concerned property. In one part the property was listed and valued at local prices; in the other, the income imputed for each unit of property was given under two categories—the value of receipts in nature (goods and services) and in money. Receipts in goods and in money were always kept separate. Each was returned as money values in terms of local retail prices. The second subsection dealt with labor, each member of the family being listed and the number of days of work of a primary or secondary nature, either in or out of the home being given. ("Primary" work was defined as work for a "money return", "secondary" work as that concerned with exploitation of family property or subvention privileges, or with household industry.) Anything which might be considered as relating to family industries was not entered here, but in the subsection relating to those industries. The working time for the family industries was given in the third subsection, while the fourth subsection included the value of receipts imputed for these industries. The receipts (in money and in kind) were added and this amount balanced against the total expenses.

15. *The expenses.*—Expenses were divided into five subsections, with a separate statement for savings of the year. In each subsection was listed the expenditures in money or the value of the goods consumed if they were not purchased. The first subsection dealt with food consumption, giving food consumed at home and away from home, the age and sex of those who ate at home, and the number of meals taken there during the year. The quantity and value of the food consumed were given in great detail. The subsection on the household (interpreted as including the upkeep of the house, and the provision of water for family use) includes lodging, furniture, heat, and light. The rent given was either the actual

amount paid or an imputed percentage on the basis of the value of the house, the rate depending upon the interest rates in the country. Furniture costs were divided into repairs and the purchase of new articles. The type of heating was specified, and the type and amount of fuel consumed given, with its value. Lighting equipment was specified and valued in the same way. The subsection on clothing gave a combined family bill for laundry and detailed clothing expenses for each person, divided into those representing money expense, and those representing the value of household labor at local market prices. In the subsection concerning moral, recreative, and health needs, were given details as to expenditures for religious purposes, for the education of children, for charity and alms giving, for recreation and ceremonies, and for medicine and medical treatment. Subsection 5 concerned industrial costs, debts, taxes, and insurance. Expenses for industries having already been subtracted in order to secure the net income, no detailed figures were carried into expenditures for these items. Interest and repayment on debts, taxes, and insurance, however, were itemized in detail. At the end of the account the expenses were balanced against income by a separate item called savings of the year, which were discussed in detail. Finally, total receipts and total disbursements were balanced.

16. *Accounts annexed to the record.*—These accounts included itemized details explaining the net income in the previous paragraphs. Their interest is chiefly in the details given concerning the clothing worn by the members of the household, and the quantitative information concerning household industry. The price and description of each item of clothing were supplied, together with a statement as to how long it was worn before being discarded. A net expense for the year was thus computed.

Since the data were case materials, no method of measuring family size was used. Statistical studies of the results obtained by the Le Play group have been made by Engel and by Cheysson and Toqué. The studies of this school are the most complete descriptions of family living in existence, and any student of the living conditions of the working population of a particular country should be familiar with them. In spite of criticisms which were developed later the original Le Play cases must be considered as models in methodology today. Le Play's work has international significance also through the influence which he exercised on later investigators in his own and in other countries.

#### DESCRIPTION OF RESULTS

Le Play borrowed from ordinary usage many phrases which are easily misunderstood. He also frequently made use of rather figurative language which requires careful interpretation. Fortunately, in his later works he defined the 300 important terms which he used. Most important, perhaps, was his concept of the essential needs of man (*besoins essentiels de l'homme*). In his estimation, these needs were twofold, comprising the mores and the daily bread (*la connaissance de la loi morale et la possession du pain quotidien*). In other words, the system of living as he defined it, included both material items and psychosocial behavior. The latter he often called the decalogue or the moral law. His concept of family living thus borrows from the fields of both sociology and consumption economics.

According to Le Play, the essential needs may become stabilized at any one of 4 or 5 different levels, depending on what he called the social constitution or social structure. The elements of the social structure are 7 in number. Two of these, which he called the foundation, include the mores and family authority. Two of them he called cements; these are religious institutions and governmental authority. The purpose of these cements is to bind the other elements together. The other 3 elements are economic goods, which are held by 3 groups—the individual, the employer (or feudal patron), and the community.



Le Play, as an engineer, in concrete terms tried to picture the individual as suspended in a social space composed of different levels of living, determined by these 7 "elements."

Le Play was impressed by cyclical fluctuations in the economic and social prosperity of peoples and tried to use his analyses of family living to explain these fluctuations, attributing them mainly to alterations in the social structure. He early came to the belief that if one knew the total money value and the content of living of a family one could tell the type of family concerned. Built upon this idea was another: If one knew the type of family, one understood the total social structure of which it was a part. Thus, he found a triple parallelism between type of content of living, type of family, and type of society or social structure.

This analysis led to a much deeper penetration of the problems of family living than is to be found in most statistical studies. He combined his data with the historical process, as he saw it, his results thus uniting two approaches.

On the basis of his studies of the living of individual families, Le Play developed a system of sociology which is very close to that of some of the early Chinese social theorists.<sup>37</sup> He made a threefold classification of social life, bringing out the parallelism between types of family organization, types of social structure, and types of employer-employee relationship. Of these the most important in Le Play's thinking was the type of family, for he considered the family the primary social unit, which reflected all the important characteristics of a society.

The first major type of family organization which he defined was the patriarchal—the family faithful to traditions, organizing its economic activities as a unit, and including several generations among its members. The social structure associated with this type of family was characterized by what Le Play called simple prosperity, agriculture and fishing being the predominate economic activities. The consumption of material goods was not large, but social organization was stable, well-being was relatively permanent, and the nonmaterial aspects of the standard of living were highly developed. Privation, if it occurred, was relatively temporary, the elements of stability in the social structure serving to restore and preserve well-being. In such families which Le Play found characteristic of most of eastern Europe and Russia, the workers were permanently attached to their jobs or their patrons either by custom or by written law.

Le Play's second type of family organization was the *famille-souche*, or stem family. "Souche" is a French term often applied to vines which have a stem or trunk from which cuttings may be taken each year, the trunk or stem furnishing new growth the next year. In Le Play's usage, the stem family kept up the traditions and preserved a homestead for its members, who went freely into industry and other employment. This type of family was associated with societies which were complex but also prosperous. The level of material living was high, but at the same time the social structure depended on stable family relationships, which helped to preserve and give it permanence. In such a society permanent-voluntary engagements prevailed between

<sup>37</sup> See THE COUNSELS OF K'AO-YAO. In the Shu King, Sacred Books of the East. Transl. by J. Legge. v. 3. Oxford. 1879.



employer and employee, the relationship being terminable by either party, but as a matter of actual practice being relatively permanent. This type of social organization Le Play found predominant in northern Europe during his time.

The third major type of family organization which Le Play defined was the unstable one, which included only the parents and young children; traditions and family history had but little meaning for it. With this family organization was associated an employer-employee relationship based on momentary, free, and changing labor contracts. The individual was free, but his welfare depended upon himself alone. Strife between employers and workers often threatened social peace and stability. The elements of stability were not sufficient to restore well-being if the complex economic balance was disturbed. Le Play believed that this type of social structure was developing in France at his time and was threatening the continued welfare of society.

Le Play's belief in the association of definite types of family with each important stage of the whole economic cycle—i. e., patriarchal, stem, and individualist families—was so strong that he found differences in families associated with differences in social conditions which are not readily apparent to other observers. A careful study of his cases indicates differences in prosperity and privation for the same type of families, and different types of families on similar economic levels. It seems that Le Play confused relative degrees of strength and weakness within the same general type of family with variations in types of families. Furthermore, he seemed to fail to appreciate that any social system has many compensating factors.

The leading criticisms which have been made of the Le Play school relate in part to method, in part to results. Among the former belongs the argument that his cases were not always chosen objectively, and that they were not representative—that, indeed, one family cannot represent a whole society. It has also been maintained that he was too meticulous in the collection of details that did not relate directly to his conclusions, and that few investigators can use such an intensive technic. Finally, it has been pointed out that Le Play did not maintain a clear distinction between an average family, a typical family, and a typological family.

It is worth pointing out that Engel, one of Le Play's outstanding successors, readily acknowledged the great contributions of Le Play, while himself making a different approach to the problem.

These chief contributions lay in the fields not only of methods but also of analysis and implications of the social as well as the economic phases of levels of living.

## THE STATISTICAL SCHOOLS

By FAITH M. WILLIAMS

The students of family living who have been characterized as members of the statistical schools have neither the unanimity of purpose nor the unanimity of method characteristic of the Le Play school. They resemble the political arithmeticians in having heterogeneous and specialized interests which have motivated studies of many different types. As suggested in the previous section, very few of the statistical groups have had the interest in the development of a theory of society which absorbed Le Play and his followers.

Some have been concerned primarily with levels of living as they are dependent on the relations between capital and labor, others with the condition of agriculture, others with the tariff and foreign trade, or the effects of long-time changes in production on levels of living, or the effect of education on consumption, and so on through a wide range of particular interests. They agree, however, in a mistrust of generalizations about living conditions of large groups derived from intensive studies of a few families selected as typical. They have preferred to collect data from many cases within each group under investigation and in general have confined themselves to material susceptible of statistical treatment. Their methods have been extensive rather than intensive.

#### THE CHOICE OF FAMILIES FOR STUDY

The members of the Le Play school have frequently been criticized as being unsystematic in their choice of (supposedly) typical families for study. Unfortunately, a large proportion of the reports by the statistical group give little evidence of precision either in selecting communities to be studied or in securing an adequate sample of each community. Some have limited their information to data from families with whom they were somewhat acquainted, without taking into account the bias introduced by such a procedure. Others speak of securing data from those willing to cooperate without giving any information about the families that refused to cooperate. Furthermore, there has been relatively little use of census data to show the relation of samples to total population.

More systematic methods of selecting the families to be investigated appear in many recent studies, and data on size of farm, rental value of house, or composition of family in the samples studied have been presented in relation to census data on comparable items for the county or State concerned. Figures on income have likewise been related to statistics on the national income and to wage and salary rates in large groups.

In some studies data have been secured for every family in the communities visited. Such a procedure, even when heavily subsidized, has necessarily been limited to small communities or restricted to the collection of a few specific items. In several studies of farm family living in the United States detailed information has been collected from every family in districts with 200 to 300 families. Rowntree's study of poverty in York, England (1897), is a good example of an extensive study covering every family in a large wage-earning community, but limited in content. In this case data were collected on these items: street and number of house; the economic status of the family (expressed in letter grades *a* through *g*, according to a scheme which related money income to size of family); rent; number of inmates; number of rooms; number of houses having 1 yard; number of houses sharing 1 water tap; number of houses sharing 1 closet; whether the houses were back to back or had no yards; age of householder; occupation of head of family; age, sex, and occupation of supplementary earners; number and sex of lodgers. Other information was collected only incidentally under the heading Remarks.

Systematic random sampling has been used increasingly in family-living studies of recent years to secure data which will be representative of a large population without visiting every household in the

community. In the introduction to *Livelihood and Poverty*, Tawney attributed to Bowley "the method of the inquiry, that of taking a random sample of roughly 1 in 20 working-class households. [It] was first employed by him in his investigations in Reading [in 1912]." Valuable material on the representative method and random sampling appears in reports submitted to the sixteenth session of the International Institute of Statistics.<sup>38</sup>

Another procedure commonly used is the systematic selection of certain definite types of families, as representative of large groups in the population or as representative of groups to which special interest is attached for one reason or another. The earlier procedure of some statistical bureaus in the United States and abroad of collecting data from a large number of families without regard to composition and then limiting any extensive analysis to families selected as "normal" very naturally led to efforts to economize time and expense by defining the types of family to be studied in advance, and by collecting data from such families only. This procedure has frequently been handicapped by the lack of adequate information on the distribution, as regards size and age composition, of families in the population of the nation and in particular localities. The more detailed data on the family recently supplied by the United States census makes possible a much more systematic selection of family types than could be made in this country heretofore.

The selection of particular types of families in studying family expenditures is illustrated by a recent investigation of the expenditures of Federal employees in the District of Columbia (419) in which the salary level, the living arrangements, and the family composition of the entire group were ascertained by means of a questionnaire before the sample was chosen. Among employees earning less than \$2,500 it was found that family types differed greatly from one civil-service classification to another. To obtain an adequate random sample from so heterogeneous a group as the Federal employees in Washington would have cost much more than the available funds or the time would allow. It was accordingly decided to investigate the expenditures of the chief types of family organization and civil-service classification within the important salary groups, selecting individual cases by lot from within these representative groups.<sup>39</sup>

#### METHODS OF COLLECTING DATA

The methods utilized in collecting data on family living for statistical analysis have varied all the way from a brief questionnaire asking for estimates of expenditures for food, clothing, shelter, and other items purchased, to detailed records of food consumption kept by investigators living with the families. The majority of studies in the United States have utilized the schedule method, in which a field agent obtained the information from each family in 1 or 2 personal

<sup>38</sup> JENSEN, A. REPORT ON THE REPRESENTATIVE METHOD IN STATISTICS. Bull. Inst. Internatl. Statist. 22: 359-380. 1926.

THE REPRESENTATIVE METHOD IN PRACTICE. Bull. Inst. Internatl. Statist. 22: 381-439. 1926.

STUART, C. A. V. NOTE SUR L'APPLICATION DE LA MÉTHODE REPRÉSENTATIVE. Bull. Inst. Internatl. Statist. 22: 440-451. 1926.

BOWLEY, A. L. RÉSUMÉ DU MÉMORANDUM SUR L'ÉVALUATION DE LA PRÉCISION OBTENUE PAR LE CHOIX D'UN ÉCHANTILLON. Bull. Inst. Internatl. Statist. 22 (1): [1]-[5]. 1926. [English summary, pp. [4]-[5].]

MEASUREMENT OF THE PRECISION ATTAINED IN SAMPLING. Bull. Inst. Internatl. Statist. 22 (1): [6]-[62]. 1926.

<sup>39</sup> WILLIAMS, F. M. MEASURING CHANGES IN THE COST OF LIVING OF FEDERAL EMPLOYEES LIVING IN WASHINGTON. Amer. Statist. Assoc. Jour. (Sup. Papers and Proc. Amer. Statist. Assoc. Ann. Meeting 95) 29 (n. s. 185A): 125-130. 1934.



interviews and entered it on the schedule. A considerable number of studies in the United States have, however, been made by the account method, the one most generally used abroad. German investigators have been particularly successful in collecting large numbers of household account books kept for an entire year.

Each method has its advantages and disadvantages. The questionnaire method has been found the least satisfactory. It was used by a number of the State departments of labor in early investigations in this country, but its use in the United States in recent years has been restricted to studies of professional groups (450, 451). It has not been employed extensively in important studies abroad. It is natural that the questionnaire should be more successful with the professionally trained than with others, but even with such groups it has serious limitations. The most carefully framed questions convey different meanings to different persons; and when there is no interviewer to explain the terms used, to check hasty entries, or to point out questions left unanswered, the returns are often incomplete, confused, or unreliable. In addition there is the problem of obtaining a representative sample by this method. The usual experience has been that only a very small fraction of the questionnaires sent out are returned, and there is no way of knowing whether or not the group replying is typical of the group being investigated.

When the group consists of the families of members of trade unions or other organizations and the cooperation of these organizations is secured in the distribution and collection of the questionnaires, it is possible to obtain a somewhat larger proportion of replies, and perhaps a more representative sample. In a study made by the Berlin Bureau of Statistics in 1903, thousands of questionnaires were sent out through trade unions, guilds, and their organizations for sick funds (820). Of the 1,155 returned, 908 could be used. In an investigation conducted under the auspices of the Portuguese Minister of Labor and Social Welfare in 1916, circulars were addressed to the various workmen's associations of Portugal enclosing questionnaires to be distributed to the heads of workmen's families, requesting information in regard to family income and expenditures. Of the 7,500 questionnaires distributed by means of 350 associations, 756 were returned, of which 538 were found to furnish sufficient data to be of use (1119, p. 137).

The household-account method of obtaining data on consumption would seem to be the logical one to use, as a record of events made day by day as they occur should be more accurate than a report of these same events from memory several months later, whether made on a questionnaire or to an interviewer filling out a schedule. When the record is kept by an investigator rather than by a member of the family, the cost of securing the data from each family is very high, as the investigator must either live with the family throughout the period of the study or make daily visits. This is the method of the Le Play school. It has also been employed by some investigators not connected with the Le Play group in securing data from families in which the keeping of household accounts is particularly difficult, and by others in securing data on food consumption for nutritional analysis where the accuracy of the record was of very great importance.

One of the most remarkable of recent account-book studies was completed in China in 1928, under the auspices of the social research department of the China Foundation for the Promotion of Education

and Culture. L. K. Tao, with the assistance of 2 women investigators who visited the families every day except Sunday, obtained 288 weekly accounts from 48 families in Peiping, where "the account book of the workmen's household is something quite novel and had been hitherto unheard of" (1375).

When household accounts are kept by a member of the family, the cost of securing the records depends upon the amount of paid supervision given to each family. In some studies the accounts have been kept without supervision for the entire period of the investigation; in others they have been mailed at regular intervals to an investigator who has sought to remedy obvious omissions and the inconsistencies by letter, and in still others an investigator has visited each family at more or less frequent intervals. For example, in the Japanese inquiry of 1926-27, the Bureau of Statistics was assisted by numerous volunteer agents, about 1 for every 25 households of wage earners or low-salaried workers, and 1 for approximately every 13 households in the farming regions; these agents kept in touch with the families and assisted them in keeping the accounts (1438). In this investigation the account books were turned in monthly, and records for an entire year were secured from 6,505 families. In most investigations where supervised household accounts have been secured, the supervision has been furnished by salaried, trained field workers rather than by volunteer workers.

Experience with the account-book method in the United States and abroad indicates that the accounts must be supervised at frequent intervals if complete and accurate data are to be obtained. A detailed comparison of unsupervised accounts of family expenditures and of goods furnished them by their farms for 1 year kept by farm families living in Vermont with schedule data obtained from the same families for the same period showed that the accounts omitted many items of importance (82).

The cost of editing and summarizing data obtained by the account method is much greater than that of editing and summarizing the data obtained by either the questionnaire or the schedule method. There are fewer entries to edit and tabulate in the average schedule or questionnaire covering consumption over a 12-month period than in the average record of family consumption kept for even a few weeks.

There is also the problem of securing account books from a large number of representative families. There is grave question as to whether the families who are willing to cooperate with research workers in keeping full and accurate household records for even a few weeks, to say nothing of 12 months, are not exceptional.

The schedule method in collecting data on family living has obvious advantages. It is comparatively easy to secure an adequate random sample by using this method. Experience has shown that there are relatively few homemakers who refuse to cooperate to the best of their ability in giving the information requested. If the visits are well planned, an experienced field worker can obtain under ordinary circumstances detailed figures on family living for a year from 1 to 2 families in a day in an urban community, and sometimes more than 1 a day in a rural community. The field worker can explain the purpose of the investigation to each person interviewed and can thus secure the cooperation of many who would not answer a mailed questionnaire. The meaning of terms which seem ambiguous to the person



interviewed can be explained, and inconsistencies in the replies can be remedied.

If trustworthy results are to be obtained by the schedule method, the interviewers must be tactful and well trained, and the schedule must be prepared with great care. Even under the most favorable circumstances, data on the quantities and money value of the items entering into the family living which are secured from any one family by the schedule method will be inaccurate in some items. The investigators who have used this method have assumed that the overestimates of some families would be compensated by the underestimates of others and that the averages would thus present a true picture.

#### COMBINATION OF THE SCHEDULE AND ACCOUNT METHODS

The question of method in studies of family living was considered by the Third International Conference of Labour Statisticians in 1926.<sup>40</sup> For the use of this conference, J. H. Richardson of the International Labour Office, prepared a monograph on methods of conducting family-budget inquiries. The conference distinguished between the methods to be used in determining the levels at which various classes in the community are actually living, and those to be used in establishing weights for the calculation of cost-of-living index numbers. There was no suggestion on the part of the conference that a study based on schedule estimates would provide figures of any value for either of these purposes unless it was supplemented by accounts kept for at least 4 weeks at different seasons of the year. The conference adopted the following resolutions on method:

In order that the results of the inquiries may be as complete and comparable as possible, information should be based on daily records of income and expenditure kept by a member of the family for a period of 12 months.

Where it would be impracticable to obtain annual records, every effort should be made to secure from as large a number of families as possible budgets covering at least four periods of not less than a week, one in each quarter, or two periods of at least a fortnight in different seasons of the year. These records would supply adequate information regarding items of expenditure which recur daily. In the case of items of income and expenditure (clothing, furniture, etc.) which recur only at considerable intervals, annual records kept from a smaller number of families or information on which annual estimates could be based should be sufficient.<sup>41</sup>

A somewhat different combination of methods was recommended by the United States Bureau of Home Economics. The Bureau had analyzed household accounts submitted weekly and promptly edited from 19 farm families and 24 families of the professional group, and schedules from the same families for the same period. The conclusions reached after this analysis are stated as follows:

The results from the small samples of families included in this study indicate that with families similar in education and in purchasing procedures to the professional group cooperating in the present study, the schedule apparently can be made a satisfactory method of securing data on family expenditures and savings. If an analysis of the nutritional content of the diet of such a group is to be made a part of the project, the results of this investigation indicate that the schedules should be supplemented by records of food consumption. With farm families similar to those cooperating in this study, the schedule could perhaps be made a satisfactory method of securing data on family expenditures

<sup>40</sup> INTERNATIONAL LABOUR OFFICE (GENEVA). THE THIRD INTERNATIONAL CONFERENCE OF LABOUR STATISTICIANS . . . Internatl. Labour Off. (Geneva), Studies and Repts., ser. N (Statistics), no. 12, 122 pp., 1926.

<sup>41</sup> INTERNATIONAL LABOUR OFFICE. See footnote 40, appendix II, p. 110.



and savings. However, for the purpose of obtaining satisfactory data on the value of family living furnished by the farm, and on the quantities of foods consumed by farm families, it is apparent that accounts kept for short periods at different seasons in the year should be used to check the accuracy of the schedule data (83).

#### STATISTICAL TECHNIQS USED IN GENERALIZING FROM THE DATA COLLECTED

Since the appearance of *Die Produktions und Konsumtions-Verhältnisse des Königreichs Sachsen in 1857*, many, if not all, of the persons who have used statistical technics in analyzing data on family living have been influenced to a greater or less degree by the work of Engel. Most of them have presented the results of their investigations in terms of arithmetical averages for different economic levels. A large number have used, in addition, other criteria in sorting their cases and have presented arithmetic averages for groupings of several types, economic and social. In some investigations there has been a supplementary analysis of the data for the modal group more elaborate than that given the rest of the data secured in the investigations.

In view of their potential value in studies descriptive of levels of living, it is surprising that the median and the quartile, quintile, or decile ranges have not been more often used in this field. Bowley suggests the use of such measures as the only valid method of making international comparisons. He advocates ranking the families of two nations according to income and selecting a family in each nation one-tenth of the way up the scale, typical of families at that level, placing side by side descriptions of their living and repeating the process at each tenth of the scale.<sup>42</sup> Such a procedure would be quite as useful in comparing the living of families residing in the same nation, but in communities of different types or at different times. Bowley and Hogg (1021) present all tables which concern money in terms of medians, quartiles, and deciles.

Jones (1022), in studying the expenditures of a sample of middle-class families, has used the median and quintiles very extensively in the analysis of size of family, salary, and expenditures.

Measures of dispersion have not been employed very frequently in the analysis of data on family living. The general usefulness of many of the reports would have been greatly increased if figures had been supplied to indicate the degree of homogeneity of the group studied. The various "laws" of consumption which begin, "As income increases \* \* \* ", might have been considerably refined if the arithmetic averages on which they are based had been accompanied by coefficients of variability.

There are, however, a number of investigators who have used measures of dispersion in their analysis of data on family living. Bowley and Burnett-Hurst (1002, p. 180 ff.) supply such measures, and Anderson (79, p. 6) follows Bowley. The effectiveness of the standard deviation and the coefficient of variability in analyzing data on housing and household size is illustrated in Canon's study (94, pp. 59-60). The mean, the standard deviation, and the coefficient of variability are given for the number of persons in the household, the number of rooms available, and the number of rooms used in houses of different size and in all the houses studied.

<sup>42</sup> BOWLEY, A. L. *THE NATURE AND PURPOSE OF THE MEASUREMENT OF SOCIAL PHENOMENA*. 241 pp. London. 1915.

The use of the standard deviation of the differences between schedule and account data, on the living of the same families for the same year, proved a very useful technic in comparing the schedule and account methods of collecting data on family living (83; 435, pp. 11 ff.). The significance of the differences between the two sets of figures was evaluated by means of the *t* formula originated by Student and developed by Fisher.<sup>43</sup>

The use of correlation analysis in analyzing data on family expenditures by Ogburn (339, 348, 349, 358), Kirkpatrick (112, 113, 136), Peixotto (432), Anderson (71, 78, 79), Lively (65, 84, 85, 89), Canon (94), Zimmerman (66, 72, 75, 101, 381), and Bennison (1425), is discussed in a recent article by Zimmerman.<sup>44</sup> He points out that the correlation technic has frequently been used to verify conclusions reached previously by the analysis of cross tabulations, but that it has also been fruitful in the discovery of relationships which had not been previously explored by means of cross tabulations. It has also been of value in discovering what factors are not significantly related. The report on farm family living in Vermont by Muse (102), published since Zimmerman's article was written, uses simple correlations to measure the relationship between the total value of family living and the age of the farm operator, the age of the homemaker, the years of schooling of the operator, and the years of schooling of the homemaker. The analysis showed no significant relationship between total value of living and any of these factors.

Perhaps the most valuable of the contributions made so far by correlation analysis to information on family living are those reported by Ogburn (358). On the basis of data received from 200 families with incomes between \$800 and \$2,000, living in Philadelphia in 1918, regression equations were computed which made it possible to calculate the cost, at the 1918 price level and in accordance with behavior patterns like those of the Philadelphia families studied, of rearing a child for his first 16 years.

#### METHOD OF MEASURING SIZE OF FAMILY OR HOUSEHOLD

The difficulties involved in comparing the expenditures of families of different size, age, and sex composition are obvious. Some students believe that these difficulties could be resolved with sufficient accuracy by computing per capita expenditures. Many others, not content with this method, have constructed scales for measuring the relative demand of persons of different age, sex, and occupation, for commodities of different kinds.

#### THE MEASUREMENT OF THE DEMAND FOR FOOD

Most of the scales for the measurement of demand have been constructed to measure the demand for food, and most of the food scales have been expressed in terms of the energy requirements of persons of different age and sex. However, the first scale attempting to measure the demand for food was apparently the food-cost scale constructed by Young (926). Shortly after 1750 he calculated the

<sup>43</sup> FISHER, R. A. STATISTICAL METHODS FOR RESEARCH WORKERS. Ed. 3., rev. and enl., 283 pp., illus. Edinburgh and London. 1930.

<sup>44</sup> ZIMMERMAN, C. C. MATHEMATICAL CORRELATION IN THE HOUSEHOLD BUDGET. Sociologus 8: 145-166. [1931.]

cost of "seven day's messes for a stout man," his wife, and three children varying in age from an infant to a child of 15 years (926, v. 1, pp. 196-198).

The development of the science of nutrition has resulted in the computation of a number of different scales of relative energy requirements. Table 2 presents the most important of these scales. The earliest is credited to König, the German biochemist (1096, pp. 10-11). König, Voit, and Rubner were among the biochemists with whom W. O. Atwater worked in Germany before returning to independent work in this country. In the 1886 report of the Massachusetts Bureau of Statistics of Labor, Atwater published a scale for measuring the relative energy requirements of persons of different age and sex, which he used in the analysis of the data on food consumption and food expenditures presented in that report (203, p. 267). He continued to refine his work on energy requirements and in 1902 published a revision of the energy requirement per man per day and of the scale given in the 1886 report.<sup>45</sup>

About the same time a scale for family measurement based on energy requirements as estimated by Rubner, was used in the analysis of the expenditure figures collected by the Danish Department of Statistics in 1897 and 1909.<sup>46</sup>

The influence of Atwater's work was great, and his scale has been widely used in analyzing family-living data in the United States and in other countries. The Atwater scale of energy requirements has frequently been used by social agencies in calculating food allowances for dependent families of different composition. This practice inspired H. C. Sherman and Lucy Gillett in 1917 to summarize the results of all the dietary investigations which had been conducted in the preceding 25 years, and to publish new figures on the calories required per day by children of different age and sex.<sup>47</sup> An energy-requirement scale from the Sherman-Gillett data has been used to measure family size in several studies of family living in the United States.

The Interallied Scientific Food Commission, meeting in Paris in 1918, instructed an American biochemist, Graham Lusk, to draw up a new scale to use in calculating the energy requirements of large groups. In reporting the new scale Lusk says: "The older standards of food for children had been found to be much too low." It has been used in analyzing the data gathered in the study of the cost of living of the working classes in Great Britain in 1918 (1005, p. 5), and in a number of other important inquiries abroad.<sup>48</sup> The Lusk scale is expressed in relation to the age groups usually given in census statistics, as is natural, since it was drawn up to use in computing food requirements for national groups. It is, therefore, not adapted to accurate studies of small groups since the distribution of persons of different age in small samples is likely to differ from the distribution in the entire population.

<sup>45</sup> ATWATER, W. O. PRINCIPLES OF NUTRITION AND NUTRITIVE VALUE OF FOOD. U. S. Dept. Agr. Farmers' Bull. 48 pp. 142., illus. 1902. (See pp. 33-34.)

<sup>46</sup> RUBIN, M. CONSOMMATION DE FAMILLES D'OUVRIERS DANOIS. Bull. Inst. Internatl. Statis. v. 13, no. 1, 84 pp. 1902. (See p. 7.)

<sup>47</sup> GILLETT, L. FOOD ALLOWANCES FOR HEALTHY CHILDREN. New York Assoc. for Improving the Condition of the Poor, Pub. 115, 24 pp. New York. 1917.

<sup>48</sup> LUSK, G. THE ELEMENTS OF THE SCIENCE OF NUTRITION. 844 pp., illus. Philadelphia. 1923. (See p. 757.)



In 1921 S. Emmett Holt, who with H. S. Fales had been conducting metabolism experiments with growing children at the Babies Hospital in New York City, published a new table of energy requirements<sup>49</sup> materially increasing the estimated energy requirements of adolescents, as compared with earlier scales. This table was condensed by Nickell into a relatively brief scale for measuring family size, for use by Zimmerman and Black (75).

In 1927 Hawley published a scale of energy requirements based on a combination of Lusk's and Holt's scale, and an entirely new scale intended to measure the protein-mineral requirements of family groups.<sup>50</sup> The Hawley energy scale has been used in a number of investigations of the food consumption of farm families in the United States, and the protein-mineral scale in a few such studies. The latter scale has not, however, been found satisfactory for the purpose for which it was intended. Separate scales for the various nutrients are necessary since the requirements of children and adolescents are larger in relation to the requirements of the adult men for some nutrients than for others.

A recent publication of the Bureau of Home Economics includes a table<sup>51</sup> showing the quantities of each of several nutrients which may well appear in nutritionally adequate diets for individuals in different age, sex, and activity groups. The figures are approximations, based on the researches of many scientists. They were compiled to indicate the adequacy of the four sets of diet plans presented in this publication. Translated into scales these data can be used to measure the relative need of family groups for energy, protein, calcium, phosphorus, iron, vitamin A, and vitamin C.

An international standard of "family coefficients" or "man values" was adopted at a conference in Rome in 1932 in order to facilitate comparisons between one dietary investigation and another.<sup>52</sup> The conference was of the opinion that no scale can be formulated which will correspond exactly to the relative food consumption of family members in all countries and in all circumstances of life. It was therefore agreed that in putting forward an international scale no pretense of absolute accuracy could be made. Though research workers may prefer to use other scales in making their particular dietary studies, it is hoped that they will also calculate food intake per consumption unit in terms of the international scale. It is obvious from table 2 that there are either important differences of opinion in regard to energy requirements of children in relation to those of their parents (perhaps partly explained by differences in the value of unity), or else that there are important differences in activity between European and American children.

<sup>49</sup> HOLT, S. E., and FALES, H. S. THE FOOD REQUIREMENTS OF CHILDREN. I. TOTAL CALORIC REQUIREMENTS. *Amer. Jour. Diseases Children* 21: 17-28, illus. (See p. 18.)

<sup>50</sup> HAWLEY, E. DIETARY SCALES AND STANDARDS FOR MEASURING A FAMILY'S NUTRITIVE NEEDS. U. S. Dept. Agr. Tech. Bull. 8, 32 pp., illus. 1927.

<sup>51</sup> STIEBELING, H. K., and WARD, M. M. DIETS AT FOUR LEVELS OF NUTRITIVE CONTENT AND COST. U. S. Dept. Agr. Circ. 296, 59 pp., illus. 1933. (See p. 26.)

<sup>52</sup> CATHCART, E. P. CONFERENCE OF EXPERTS FOR THE STANDARDIZATION OF CERTAIN METHODS USED IN MAKING DIETARY STUDIES. League of Nations Quart. Bull. Health Organization 1: 477-483. 1932.

TABLE 2.—Scales for measuring relative demand for food

Energy-requirement scales										Food-cost scales					
Activity of persons of different sex and age	Massachusetts Bureau of Statistics of Labor <sup>1</sup> of Labor <sup>2</sup> (Albany) 1886	Danish Bureau of Statistics of Labor <sup>3</sup> (Ruhner) 1897	United States Department of Agriculture, Office of Experiment Stations <sup>4</sup> (Albany) 1902	New York Association for Improving the Condition of the Poor <sup>5</sup> (Sherman and Gillett) 1917	Inter-allied Food Commission <sup>6</sup> (Lusk) 1918	Rockefeller Institute for Medical Research and Babies Hospital <sup>7</sup> (Holt and Fales) 1921	International Conference of Experts <sup>8</sup> 1932	United States Department of Agriculture, Bureau of Home Economics <sup>9</sup> (Stiebeling) 1933	United States Public Health Service <sup>10</sup> (Sydenhacker and King) 1916	Cornell University Agricultural Experiment Station <sup>11</sup> (Wilkins and Lockwood) 1925-27	Statistics Reichsamt <sup>12</sup> 1927-28	Ad-quate diet for min-imum cost 1933	Ad-quate diet at mod-erate cost 1933	Liberal diet 1933	
	Per-cent 100	Per-cent 100	Per-cent 100	Per-cent 100	Per-cent 100	Per-cent 100	Per-cent 100	Per-cent 100	Per-cent 100	Per-cent 100	Per-cent 100	Per-cent 100	Per-cent 100	Per-cent 100	
	Percent 100	Percent 100	Percent 100	Percent 100	Percent 100	Percent 100	Percent 100	Percent 100	Percent 100	Percent 100	Percent 100	Percent 100	Percent 100	Percent 100	Percent 100
Moderately active man	25	22	30	35	50	29	20	40	28	37	50	61	71	53	47
Boys:															
Age in years:															
Less than 1	20	22	30	35	50	29	20	40	28	37	50	61	71	53	47
1	20	25	30	35	50	35	30	40	35	42	50	61	71	53	47
2	40	30	40	38	50	39	30	40	38	47	50	61	71	53	47
3	40	36	40	42	50	40	40	50	41	50	50	72	78	61	56
4	40	39	40	45	50	46	40	50	44	52	50	72	78	61	56
5	40	43	40	48	50	49	50	50	46	55	50	86	83	74	71
6	50	40	40	52	70	53	50	70	48	57	50	86	83	74	71
7	50	45	50	55	70	59	60	80	51	60	50	92	91	83	77
8	60	47	50	58	70	65	60	80	53	63	50	92	91	83	77
9	60	48	50	62	70	65	60	80	56	71	50	96	89	85	85
10	60	50	60	68	83	71	70	80	59	78	75	97	96	89	85
11	60	55	60	75	83	77	70	83	64	80	75	113	110	109	104
12	60	60	70	83	83	84	80	100	69	82	75	113	110	109	104
13	60	66	80	90	83	93	80	100	77	85	75	113	110	109	104
14	60	71	80	95	100	104	100	100	84	88	100	113	110	109	104
15	60	74	90	100	100	118	100	100	87	90	100	117	117	117	113
16	80	76	90	102	100	125	100	117	90	103	100	124	117	117	113
(15)	(15)	(15)	120	(15)	(15)	(15)	(15)	150	(15)	125	100	128	122	118	117
Very active man	25	18	30	35	50	29	20	40	27	37	50	61	71	53	47
Girls:															
Age in years:															
Less than 1	20	18	30	35	50	29	20	40	29	37	50	61	71	53	47
1	20	25	30	35	50	34	30	40	29	37	50	61	71	53	47
2	40	24	40	38	50	38	30	40	34	40	50	61	71	53	47
3	40	29	40	40	50	38	30	40	37	42	50	61	71	53	47





Scales measuring relative food costs for persons of different age and sex have been developed by several different methods. Sydenstricker while studying economic conditions in cotton-mill villages of South Carolina in 1916 began work on a scale that would measure for each sex relative expense of total maintenance for persons at different ages. In his scale measuring relative food expenditures the unit, the "family", was defined as "a demand for food of a money value equal to that demanded by the average male in the given class when the expense for his food reaches a maximum."<sup>53</sup> This report gives in detail the methods used in deriving this scale from the data on actual food expenditures secured from 1,500 mill-village families.

An economic study of the food consumption of farm and village families in central New York State in 1925-27 resulted in the development of another food-cost scale, in this instance based on the money value of the food consumed by families whose diets were nutritionally adequate as regards their intake of energy, protein, calcium, phosphorus, and iron.<sup>54</sup>

In connection with the German investigations of family expenditures of 1927-28 (886), the data on food expenditures were analyzed by means of a scale measuring the demand for food of persons of different age and sex in relation to that of a "full person." The scale was developed in conferences between the Statistisches Reichsamt and the Reichsgesundheitsamt in which Professors Grotian, Hahn, Rubner, and Shutz participated. The accounts of this scale available to the writer do not give in detail the method by which it was derived.

In 1933 Stiebeling and Ward<sup>55</sup> presented relative food costs for individuals of different age, sex, and occupation according to diet plans at four different levels of nutritive content and cost.

The difference between the food-cost scales presented in table 2 is partly a matter of the fineness of the steps in which the scales are expressed. The scale for New York State farm and village families is similar to the scale of the Statistisches Reichsamt and of the Bureau of Home Economics adequate diet at moderate cost when summarized to fit the age groups in which they are given. The differences between these scales and the scale representing the food expenditures of the South Carolina mill-village families is probably due in part to the fact that in deriving the latter scale Sydenstricker and King used Atwater's scale of energy requirements. It doubtless also reflects the fact that the mill-village families are not in a position to provide their children with the relatively expensive foods needed to provide an adequate diet for a growing child. The differences between the four Bureau of Home Economics scales are to be accounted for by the fact that well-planned diets for young children differ less from one cost level to another than do those of their elders, and that as the family diet becomes more expensive, expenditures for the children's food do not increase so rapidly as do those for the adults.

The food-demand scale developed by Wright in connection with the investigations of the United States Department of Labor in 1888-90 has been widely used both in the United States and abroad. When it was first published it was presented with the following comment:

<sup>53</sup> SYDENSTRICKER, E., and KING, W. I. THE MEASUREMENT OF THE RELATIVE ECONOMIC STATUS OF FAMILIES. *Quart. Pub. Amer. Statis. Assoc.* 17: 842-857. 1921.

<sup>54</sup> WILLIAMS, F. M., and LOCKWOOD, J. E. AN ECONOMIC STUDY OF FOOD CONSUMED BY FARM AND VILLAGE FAMILIES IN CENTRAL NEW YORK. N. Y. (Cornell) *Agr. Expt. Sta. Bull.* 502, 52 pp. 1930.

<sup>55</sup> STIEBELING, H. K., and WARD, M. M. See footnote 51.

The plan of the Department has been to reduce the comparisons relative to the consumption of food to an exact basis, and after much consideration and study of the question, a method on the basis of units of consumption has been adopted, and while the basis is arbitrary, for the purposes of comparison it furnishes a method more satisfactory than any other yet suggested.

It has never been made clear whether Wright thought of the scale as expressing the relative cost of food for persons of different age and sex or their relative energy requirements.<sup>56</sup>

The scale developed by Knibbs, statistician of the Commonwealth of Australia (1452), in 1911 has also been used in a number of studies abroad. Knibbs reports that he used "weights applied to each age and sex group selected after careful study of reports and other available information bearing on the matter, both from a physiological, economic, and anthropometric standpoint" (1452, p. 18).

#### THE MEASUREMENT OF THE DEMAND FOR CLOTHING

In the development of clothing scales the student of family living has not had the aid of the biologists. There is, as yet, no scientific basis for determining exactly what articles of clothing are needed for health. The clothing scales which have been used in the analysis of figures on clothing expenditures have, therefore, been based on actual expenditures for clothing rather than on the cost of the clothing required by persons of different age, sex, and activity. The social workers who have calculated clothing budgets to use in making allowances to dependent families have been obliged to depend on their personal observation of the clothing worn by persons in straitened circumstances who were able to maintain health and self-respect. It would be possible to use the allowances from one of the "standard" clothing budgets in computing a scale for measuring the relative demand for clothing, but no study has been located where such a procedure has been followed. Most of the reports on family living which present expenditures in detail give the average clothing expenditures for persons of different age, sex, and marital status. In a study of prosperous farm families in west-central New York in 1920-21, Kirkpatrick developed a scale for measuring family size in terms of adult clothing equivalents based on the data on individual clothing expenditures gathered in the course of the investigation (26, p. 44). This scale gave separate figures for persons of different age, but did not distinguish between the relative expenditures of persons of different sex at the same age. A similar, but not identical, clothing-cost scale was used by Thaden in an investigation in Iowa (47).

The report by Muse (102) on family living on Vermont farms in 1927-30 presents a much more detailed scale of clothing expenditures based on the data secured from the accounts kept by the 95 families cooperating in this investigation. This scale also takes account of sex differences in clothing expenditures for persons of the same age.

Dickins (105, p. 13) uses the clothing scale for rural families developed by Cowles,<sup>57</sup> which also takes account of sex differences in clothing expenditures for persons of the same age.

<sup>56</sup> WILLIAMS, F. M. THE MEASUREMENT OF THE DEMAND FOR FOOD. Jour. Amer. Statis. Assoc. 24: 295. 1929.

<sup>57</sup> COWLES, M. L. VARIATIONS IN DEMAND FOR CLOTHING AT DIFFERENT INCOME LEVELS. (Unpublished doctor's thesis, University of Chicago.)

## THE MEASUREMENT OF THE DEMAND FOR HOUSING

In investigations conducted in the United States it has usually been assumed that a standard for adequate housing would require one room for each person in the household. Statistics on the housing expenditures of families living in this country have therefore usually been stated either in terms of rent per family or per room, or, as in the case of Ogburn's analysis (349), of the rents paid by wage-earners' families in 1917-19, in terms of houses and of apartments with the same number of rooms and similar facilities.

A new scale for measuring the demand for housing based on the relative housing needs of persons of different age and sex was developed by Bowley in his investigation in Reading, England, in 1912 and is discussed as follows:

The official definition of overcrowding is the occupation of a tenement by more than 2 persons per room. This pays no attention to the different requirements of young and old, and the detail obtained in our enquiries makes a more precise measurement possible. We counted an adult, (including boys over 18 and girls over 16 years) as one; other boys and girls over 14 years as  $\frac{3}{4}$ ; children from 5 to 14 as  $\frac{1}{2}$ ; and children under 5 as  $\frac{1}{4}$ . The household is then reckoned as containing so many "equivalent adults." On this basis an average of one person or less per room is regarded as sufficiency of accommodation, and an average of more than one person per room as implying overcrowding (1002, p. 22).

In analyzing data on farm family living in northwestern New York Kirkpatrick used the Bowley scale to develop a scale based on actual practice. Kirkpatrick (26, p. 44) reports that the records were sorted by number of children per family, no allowance being made for hired help and others, and by size of household (including hired men and others) in terms of adult males according to a tentative scale of age units adapted from Bowley. The average rental value of the houses occupied by families of different size was then computed according to the two different methods. The increase in the rental value of the house with increase in the size of family was very irregular according to either method. The increase shown by the equivalent adult scales was taken as the more representative.

In connection with a study in Liverpool, England, Jones and Clark<sup>58</sup> used two housing scales, one based on a "capacity standard" and the other on a more elaborate "full standard."

## THE MEASUREMENT OF THE DEMAND FOR OTHER COMMODITIES

In their development of a scale in terms of an "ammain," a unit defining—

for any given class of people, a gross demand for articles of consumption having a total money value equal to that demanded by the average male in that class at the age when his total requirements for expense of maintenance reach a maximum

Sydenstricker and King<sup>59</sup> computed two sets of scales. One was the fammain scale (the food-cost scale) already discussed, and the other a scale giving "relative expenditures for persons of different age and sex for articles purchased for use by a specific individual."

<sup>58</sup> JONES, D. C., and CLARK, C. G. HOUSING IN LIVERPOOL—A SURVEY BY SAMPLE OF PRESENT CONDITIONS. Roy. Statist. Soc. 93: 489-521. 1930.

<sup>59</sup> SYDENSTRICKER, E., and KING, W. I. See p. 852 of reference cited in footnote 53.



This second set of relatives was based on expenditure figures from 140 families in South Carolina cotton-mill villages in 1917. It includes individual expenditures for all of the principal family expenditures, except food, rent (a small expense in mill villages), fuel and light, and furniture. It varies from 0.11 for children under 1 year to 1.00 for men 24 and 25 years old, to 0.43 for men 80 years old, and 0.25 for women 80 years old.

The cost-consumption scales developed by Kirkpatrick (26) to measure relative demand for fuel and light, other operating costs, maintenance of health, advancement, personal costs, and incidentals were computed on the basis of the actual expenditures of the New York State farm families studied in 1920-21 by methods similar to those used in computing the cost-consumption scale for housing.

In the Statistisches Reichsamt investigation of 1927-28, expenditures for items other than food were analyzed by means of a scale—estimated on various bases \* \* \* and verified with the materials of the new investigation which were supplemented for the purpose by a number of families, especially for this purpose, for example, by material on the relationship of the needs of husband and wife.

The scale for measuring family size in terms of the demand for goods and services essential for living other than food thus developed varied from 0.20 for children under 6 years old to 0.90 for women over 19 and 1.00 for men over 19.

#### SCALES FOR MEASURING THE DEMAND FOR ALL GOODS AND SERVICES

The most famous of the scales for measuring relative demands for all goods and services was originated by two of the founders of the statistical school, Quételet and Engel. The idea apparently originated with Quételet, and Engel used a good deal of ingenuity in carrying it out. Engel first published his scale in 1882 (765) and revised it the next year using the expenditure records of 20 working-class families with an average annual income per person which was within a few marks the same as that shown by the income-tax figures of 1881 for 62 percent of the Prussian population, and 5 records from middle-class families with an income per person representative of about 7 percent of the population. To these expenditure statistics he fitted a scale of relative annual expenditure per person. Engel used this unit, which he had named a *quet*, in the analysis of the expenditures of Belgian families published in 1895 (527), and it has been used very frequently by other investigators. In the 1895 report Engel did not give the methods he had used in calculating the unit, but he published a table showing side by side his expenditure scale and some figures from Quételet and others giving human growth in body weight per centimeter of height. Apparently he made this comparison because he found that about 62 percent of working-class family expenditures were devoted to food purchases. He commented on the fact that the expenditure scale did not proceed at exactly the same rate as the weight table but that there was a close correspondence between them. The comparison has led many students to believe that Engel based the *quet* scale on food consumption alone.

In the Statistisches Reichsamt investigation of 1907 a new all-commodities scale was presented for use in the analyses of the expenditures of "normal" families. "Normal families" was defined to

exclude persons over 14 years old except the parents, and this scale is therefore confined to figures for children from birth through 14 years of age and for an adult man and woman. In presenting it, the Reichsamt report states two reasons for departing from the Engel scale: (1) The Engel scale gave a different figure for each year, and this attempt at accuracy is not warranted by the character of the data on which the scale is based "which must be a very rough approach to reality" (850, p. 66); and (2) the figures for young children in the Engel scale seem too high. With additional figures for persons aged 15, 16, 17, and 18, the German scale of 1907 has been used in analyzing data on family expenditures in a number of important European investigations.

The Bureau of Statistics of Amsterdam also has an all-commodities scale used first in its investigation of wage-earners' expenditures during the crisis of 1917.

Sydenstricker and King computed their scale for measuring the relationship of all expenditures for persons of different age and sex in a given class to those for the average adult male in that class when his total expense for maintenance reaches a maximum, by combining the two scales already discussed (the fammain scale and the scale of relative expenditures for articles purchased for use by a specific individual), weighting them in proportion to the average money expended for all individuals for food and for other articles, respectively. The combined index takes into account 89 percent of the total family expenditures.

The method used by Kirkpatrick in applying his specific cost-consumption scales to family expenditures allows the addition of expenditures for food, clothing, and other items per cost-consumption unit to obtain figures on total expenditures per cost-consumption unit. Since relative expenditures for persons of different age and sex differ from one type of commodity to another, Kirkpatrick's procedure seems preferable to the use of an all-commodity scale, if the analysis is to proceed beyond figures on total expenditures per adult-male equivalent.

Scales measuring relative expenditures for persons of different age and sex must constantly be revised to take account of changes in price and in consumption habits. Since such scales cannot be transferred, without considerable error, from one social group to another and since the evolution of a new scale that will conform to the behavior of a given group at a given time is an expensive process, an evaluation of the usefulness of such scales in analyzing data on family living is clearly a question of some importance.

In an analysis of the value of the ammain scale developed by Sydenstricker and King, Ogburn used a sample of 151 families with incomes ranging from \$1,890 to \$1,015 a year and varying in size from husband and wife without children to husband and wife with eight children. He measured size of family for families with incomes under \$1,400 a year, and with incomes over \$1,400, by the measures of the United States Department of Labor (Wright) scale, the Atwater scale, and the Sydenstricker and King scale. He found that the average size of the families with incomes under \$1,400 on the basis of the Department of Labor scale was 11.5 percent larger than the average size on the ammain scale, and on the basis of the Atwater scale 8 percent larger. The average size of the families with incomes under

\$1,400 was 71 percent of that of the average size of families with incomes over \$1,400 according to the Department of Labor scale; 74 percent according to the Atwater scale; 77 percent according to the ammain scale. The probable improvement of the ammain scale over the other scales seems to be about 10 percent, the Department of Labor scale being somewhat greater in error than the Atwater. This estimate is based on averages for a group. For smaller samples the difference may be greater.<sup>60</sup>

In a study of levels of living on certain owner-operated farms in Vermont in 1927-30 (102), Muse used simple correlation analysis to ascertain the relationship between the value of all living and the cost per individual in family, cost per adult-male energy unit in household, and cost per cost-consumption unit in household. (The cost-consumption unit scales used in this report are either identical with, or similar to, those used by Kirkpatrick (26).) By far the highest of the four coefficients of correlation ( $0.85 \pm 0.0185$ ) was obtained between value of all living and costs per cost-consumption unit. Accordingly, the value of living for all the records obtained in the investigation was tabulated according to value of living per cost-consumption unit.

Tough and Kirkpatrick have compared the results obtained by using a scale of adult-male equivalents based on Holt's estimates of the energy requirements of persons of different age and sex, the ammain scale, and the Kirkpatrick cost-consumption units in a revised form from that first used in New York State.<sup>61</sup> They used data obtained from 900 Wisconsin farm families. Average expenditure per adult-male energy unit was \$406, per ammain \$471, and per cost-consumption unit \$489. Simple correlations between family size figures calculated in terms of the three scales indicated that they are closely related. However, when family size in terms of these different scales were correlated separately with total cost of living and net cash family income as variables, the three scales appeared to be less consistent. The correlations were higher for the cost-consumption unit.

The Third International Conference of Labour Statisticians discussed at some length the problems involved in attempting to compare the average consumption of groups of families of differing composition, and the difficulty of interpreting averages per family when no account has been taken of differences in size and composition of family. The conference finally adopted the following resolution:

In addition to averages per family and for families classified according to size the data expressed in terms of some more precise unit of consumption, for example, the consumption of an adult male, should be given. For reducing data for families of different size to terms of a common unit, it is desirable, where suitable scales showing relative consumption of persons of different age and sex are available, to apply one scale to food commodities and a second scale to other items.<sup>62</sup>

#### CLASSIFICATION OF THE ITEMS ENTERING INTO FAMILY LIVING

The classification of the items entering into the living of the families has depended in large part upon the purpose for which the study was made. The early studies, which were undertaken primarily to find

<sup>60</sup> OGBURN, W. F. A DEVICE FOR MEASURING THE SIZE OF FAMILIES, INVENTED BY EDGAR SYDENSTRICKER AND W. I. KING. In Social Science Research Council, *Methods in Social Science*, pp. 210-219. Chicago. 1931.

<sup>61</sup> TOUGH, E. G., and KIRKPATRICK, E. L. SCALES FOR MEASURING THE STANDARD OF LIVING. *Jour. Amer. Statist. Assoc.* 28: 55-63. 1933.

<sup>62</sup> INTERNATIONAL LABOUR OFFICE (GENEVA). See footnote 40.



the total expenditures of given groups, were content with very general classifications. A. Young (926) gives the "medium" of four families from whom he has secured expenditure figures under the following headings: Bread and cheese, beer, soap and candles, rent, clothes, fuel, illness, etc., and infant.

Engel's classification (527, p. 30) was hardly longer than Young's, but it covered a wider range of goods and services. It read as follows: Food, clothing, dwelling, heat and light, education, public security, health, and personal. It was much copied by later investigators who were interested not only in the average amount spent by different groups but also in the division of the total between these groups. Influenced by Engel and Wright, they interpreted the proportions spent for these groups of goods and services as indexes of the level of living.

The International Statistical Congress of 1853 adopted a classification including 29 items which Ducpétiaux (507) used in the presentation of his material in 1855—a classification based primarily on the uses to which the goods and services purchased were put and not on the nature of the goods themselves. For example, expenditures for food, drink, and tobacco consumed at home were given under one heading and those for drink and tobacco consumed abroad under another.

Technological improvements in production with the consequent complexity of consumption among most population groups have materially increased the number of headings used in the classification of the items entering into family living. Contemporary students who are not at all interested in the consumption of particular commodities are rarely content to use as short a list as Engel's in classifying the data of their researches. With the growth in the number of items used in the presentation, uniformity of presentation has steadily diminished.

Halbwachs (871) devotes an entire chapter to the essentially social character of demand and of the classification of consumers' goods in studies of consumption. He concludes that the classification of consumer purchases as shown by family-expenditure studies should be made primarily according to differences in the frequency of the rhythm of purchase and in the sources from which the goods are purchased. He finds that the fundamental classification into expenditures for food, clothing, housing, and other needs, corresponds to differences in the rhythm of purchases among the working population of large cities. It should not be understood, however, that Halbwachs would be satisfied with figures on total expenditures for the goods and services included in each of these four categories. In his most recent book<sup>63</sup> he utilizes figures on the quantity and cost of individual commodities purchased by families studied in a number of different countries.

The emphasis on classification by use has persisted until very recently when a recognition of the need of using statistics on consumption in planning production has stimulated an interest in classification by source. For example, expenditures for transportation, which were once concealed in the totals for household operation, recreation, health, and education, are now being assembled and given separately with subheads for expenditures for transportation of differ-

<sup>63</sup> HALBWACHS, M. *L'ÉVOLUTION DES BESOINS DANS LES CLASSES OUVRIÈRES*. Paris. 1934.

ent types. The classification could be carried further to show a distribution by the purpose of travel, for the sake of the student of human behavior who wishes to know the reason for the expense.

Some students in the field have grouped their data to distinguish between physiological and nonphysiological purposes in an attempt to measure levels of consumption, for example, Zimmerman and Black (75), Zimmerman (101), and Lively (84). Zimmerman and Black (75, p. 27) have grouped as physiological expenditures for food, clothing, fuel, light, repairs to house, service equipment for home, cleansers, and health expenditures. Other students have been particularly interested in the proportion of the current income devoted to savings, and in recent studies of family living it has become customary to give separate totals for current expenditures as distinguished from savings and investments. Much has been written recently on the advantages of distinguishing between expenditures for relatively durable consumption goods and for goods used up in current consumption, but the writer has found no study in which the distinction has been consistently maintained.

The first group to be so interested in the details of consumption as to publish averages for individual goods consumed were the students of nutrition. In many countries they painstakingly collected and averaged figures on patterns of food consumption and connected them with data on physical growth and physical health.

The makers of index numbers of cost of living are equally interested in detail. They must know the relative importance of individual commodities in the living of the group to which the index is to apply in order to know what commodities to price and how to weight them. They have therefore been responsible for some of the most elaborate of the publications giving data on the items included in family living.

Table 3 gives the classifications used in three studies of family living made during 1927 to 1928 in Germany, Japan, and the United States.

TABLE 3.—*Main headings in the classification of the money value of the living of urban families, as used in studies made in the United States, Japan, and Germany*

United States Department of Agriculture, Bureau of Home Economics, 1926-27 (435, p. 30) <sup>1</sup>	Japanese Bureau of Statistics of the Cabinet, 1926-27 (1438, p. 395)	German Statistisches Reichsamt, 1927-28 (387, p. 824)
<p>Money expenditures:</p> <p>Food.</p> <p>Clothing.</p> <p>Housing.</p> <p>Household operation.</p> <p>Furnishings and equipment.</p> <p>Automobile.</p> <p>Personal items.</p> <p>Medical care.</p> <p>Recreation.</p> <p>Formal education.</p> <p>Vocation.</p> <p>Community welfare.</p> <p>Gifts to persons outside the family.</p> <p>Miscellaneous items.</p> <p>Total money expenditures.</p>	<p>Food, drink, and tobacco.</p> <p>Housing (including expenditures on repairs, furniture, etc.).</p> <p>Fuel and light.</p> <p>Clothing.</p> <p>Health and sanitation.</p> <p>Education.</p> <p>Daily journeys.</p> <p>Correspondence and transportation.</p> <p>Stationery.</p> <p>Taxes, rates, and other duties.</p> <p>Companionship (presents, parties, etc.).</p> <p>Culture and recreation.</p> <p>Travel.</p> <p>Hired labor.</p> <p>Other expenditures.</p>	<p>Food, drink, and tobacco.</p> <p>Rent of dwelling.</p> <p>Furnishings and repair of dwelling.</p> <p>Heat and light.</p> <p>Clothing and laundry.</p> <p>Care of the body.</p> <p>Care of health.</p> <p>Education.</p> <p>Amusements and other social affairs.</p> <p>Vacation.</p> <p>Transportation.</p> <p>Association dues.</p> <p>Interest.</p> <p>Losses from one's own business.</p> <p>Contributions and gifts to persons outside the family.</p>

<sup>1</sup> In a publication in course of preparation by the Bureau of Home Economics, expenditures for the purchase of automobiles and for automobile operation and upkeep will be presented under a main heading "Transportation." This will also include expenditures for railroad, bus, trolley, taxi, boat, and airplane fares. For the heading "Personal items" will be substituted "Personal care", which will include expenditures for barber, hair dresser, beauty-parlor services, and toilet preparations and articles.

TABLE 3.—*Main headings in the classification of the money value of the living of urban families, as used in studies made in the United States, Japan, and Germany—Continued.*

United States Department of Agriculture, Bureau of Home Economics, 1926-27 (435, p. 30)	Japanese Bureau of Statistics of the cabinet, 1926-27 (1438, p. 395)	German Statistisches Reichsam, 1927-28 (887, p. 824)
Interest on equity in owned homes.	Not defined.	Miscellaneous.
Savings:	Total money expenditures.	Contributions and taxes.
Life insurance.	Income compared with expenditure:	Total consumption expenses.
Payments on principal of mortgage.	Surplus.	Savings.
Other savings.	Deficit.	Loans made.
Total savings.		Total capital outlays.
Total money value of family living.		Repayment of wage and salary advances.
		Repayment of chattel mortgages.
		Repayment of other loans.
		Total debt repayment.
		Expenses not specified.
		Total outgo.

#### METHODS OF VALUING IN MONEY GOODS AND SERVICES RECEIVED WITHOUT DIRECT MONEY PAYMENT

##### FARM-FURNISHED GOODS

The problems involved in obtaining accurate figures on the goods which farm families produce for their own use has already been mentioned. Further problems await the investigator who wishes to evaluate these goods in monetary units. The difficulty of securing a satisfactory monetary evaluation is so great that data on the quantities of farm-furnished goods used by the families have been allowed in some investigations to speak for themselves without being translated into monetary units. The many advantages of being able to compare the money value of goods furnished by the farm with that of goods purchased has, however, led many other investigators to place a money value on the furnished items.

Obviously a number of different methods may be employed in making these evaluations, depending on the purpose of the investigation. The prices that the family would have paid had they purchased the farm-furnished goods may be used, or the prices the family would have received had the goods been sold; the cost of production may be computed in terms of the alternative-use value of the land, labor, and capital which went into their production; or the farm-furnished goods may be evaluated in terms of retail prices in an urban center. The first and second methods of evaluation have been those most used in the studies reviewed. The third method is difficult to apply, and the fourth applies only to a rather specialized problem.

According to the first method, the commodities of which the community does not produce enough to supply its own needs are evaluated at retail-store prices of the nearest trading center, and other commodities, customarily purchased by farmers from other farmers, are evaluated at farm prices to family purchasers. This method will be used, in the opinion of the writer, by students of consumption who wish to compare the consumption of different families in the same community.<sup>64</sup> In farm communities where money incomes are very

<sup>64</sup> J. D. Black disagrees with the writer on this point. See the following publication: BLACK, J. D. RESEARCH IN FARM FAMILY LIVING: SCOPE AND METHOD. Social Sci. Research Council Bull. 11: 164-174. 1933.



low and retail stores are small and scattered, and where production varies little from farm to farm, it is likely that sale prices to family buyers and to commercial buyers are the same for all the foods produced by farm families for their own use. In more prosperous farm communities, however, there is great variety in production-consumption habits, even of farm families living as near neighbors. If the fruits and vegetables consumed by one family are valued at sale prices to commercial buyers, and those consumed by another at family-purchase prices, because one family grew its own fruits and vegetables and the other bought them, it becomes difficult to compare the money value of the living of the two families.

Investigators primarily interested in production economics find the second and third methods most valuable for their purposes. They are interested in knowing how much the money income of the farm families studied would have been enhanced if certain foods consumed at home had been sold, or if products for sale had been grown instead of the foods produced for home use. In farm communities where there is a marked difference between the prices paid by family purchasers and by commercial buyers, there is a distinct value in computing the value of farm-furnished food in terms of both family-purchase and farm-sale prices.

Investigators primarily interested in rural-urban comparisons have used the method of evaluating farm-produced goods at city prices, in order to place farm incomes on a parity with urban incomes. It seems to the present writer that an accurate comparison of levels of living in rural and urban communities requires the evaluation on the basis of urban prices of all the goods consumed by the farm families in question and not merely the farm-furnished goods consumed, since distribution costs in rural centers differ materially from those in urban centers. Such a procedure has been followed by Rubin (568, pp. 76-77) in comparing the food consumption of urban and rural workers in Denmark. The quantities of food consumed by the families of workers living in provincial cities who had kept household accounts were valued at the prices prevailing in rural communities, as well as in provincial cities, and those consumed by the families of workers living in rural communities were valued at prices prevailing in provincial cities as well as in rural communities. The comparison shows food costs to be about 5 percent higher in the provincial cities than in the rural communities and the food consumption of the rural workers to be larger than that of the urban workers.

For 50 well-to-do farm families Black and Zimmerman estimated the cost of food furnished by the farm at Minneapolis, Minn., prices, the rental value of the farmhouses at Minneapolis rent rates, and additional costs accordingly, which would have been met if these families had lived in the city and had lived as well as on their farms. The estimate included "the total of \$800 which the city family must put aside as savings each year if they are to be as well provided for as these 50 successful families" (72, p. 14). Lively (84, p. 22) priced farm products furnished 117 farm families at farm prices, and at prices of Columbus, Ohio, and found the grand total at farm prices to be only 61 percent of the total at Columbus prices.

It is obviously impossible to evaluate the total rural environment in terms of urban prices, or the total urban environment in terms of rural prices. Many of the satisfactions most important in each

environment cannot be secured in the other at any price, and others cannot be evaluated in terms of price. An evaluation of all the goods consumed by one group which can be valued in terms of the prices paid by another would make, however, a valuable contribution to the study of comparative levels of living.

#### THE RENTAL VALUE OF THE HOUSE

Early studies of family living were content to ignore the income accruing from home ownership, and the income accruing to farm families who received housing with the rent of the farm.

As studies of family living became more complicated, rental values were assigned to owned homes and in some cases these values were simply averaged with the figures on rent actually paid. For example, in its investigation of the expenditures in 1927-28 of Federal employees earning salaries less than \$2,500 the Bureau of Labor Statistics (419, pp. 48-49), adjusted the items of expense so as to charge families living in owned homes with the rental value of such homes. Any payment on an owned home above the rental value was considered a saving; and where the payment was below the rental value, the difference was considered an item of deficit. In a study of the expenditures of urban families of a professional group made by the Bureau of Home Economics (435), the annual value of the equity in owned homes was computed by taking 6 percent of the estimated value of each house and subtracting from it the interest paid on the mortgage if the house were mortgaged. The annual value of the equity in the house was given separately, and current expenses of the upkeep of the house (including interest on the mortgage, if any) were tabulated under the heading of housing, along with other current expenditures; whereas payments on the principal of mortgages were tabulated along with other savings and investments.

Figures are much more difficult to obtain on the current rental value of farmhouses than on the rental value of village and city houses, since farmhouses are in most cases not rented separately from the farm. In many investigations the rental value of the farmhouse has been estimated in terms of the current cost of replacement, taking account of depreciation. When expenditures for the farmhouse have been treated as farm expense and not included with family expenditures, the rental value of the house has frequently been calculated at 10 percent of the estimated capital value of the house and included in the total money value of family living. When expenditures for housing (repairs, fire insurance, taxes, and interest on mortgage, if any) have been included with family expenditures, the value of the family's equity in the house (calculated at 6 percent of the depreciated replacement value of the house) has frequently been included with goods furnished without direct money payment.

#### THE RENTAL VALUE OF OTHER DURABLE CONSUMPTION GOODS

Le Play and his followers took a great deal of trouble to obtain inventories of the durable consumption goods owned by the families they studied. The difficulty of accurately interpreting figures on current expenditures for housefurnishings and equipment by a given family, or a group of families, without inventory figures is very great.

However, most of the investigators of the statistical school have considered the difficulty of securing such figures greater. Many of the reports reviewed have analyzed information in regard to the number of families having certain pieces of household equipment, and depreciation of the automobile has often been taken into account in calculating annual transportation costs. Complete inventories, however, have been secured in very few investigations. The studies by Kirkpatrick and Sanders (23) and Von Tungeln, Thaden, and Kirkpatrick (42) give figures on the total inventory value of furnishings and equipment. Hayball and Thomas (135) give in a single figure depreciation and interest on investment in furnishings. In none of these reports is the method of evaluation given.

#### VALUATION OF UNPAID FAMILY LABOR IN THE SERVICE OF THE HOUSEHOLD

Many students of farm family living in the United States have secured data on the number of hours of labor contributed by members of the family to the service of the household. Few of them have, however, followed the example of Funk<sup>65</sup> in attempting to place a money value on that labor. The difficulty as well as the usefulness of such valuation has been discussed by Kneeland.<sup>66</sup> The transfer of many tasks formerly done in the household to outside agencies where the workers are paid in money makes an economic evaluation of unpaid household labor a problem of considerable interest.

#### THE EVALUATION OF THE COMMUNITY FACILITIES CONTRIBUTING TO FAMILY LIVING

The collection of statistical data in regard to the community facilities supplementing without direct money payment family living purchased has not been extensively refined. It has long been recognized that such facilities play an important part in determining the level of living. Le Play and his followers were meticulous in obtaining information on community institutions and their influence on the life of the families whom they studied. Some members of the statistical schools have collected data on the number of the families using free schools, free libraries, free medical clinics, and free playgrounds. There is much to be done, however, in measuring the quantity and the quality of the services rendered by the community to families at different income levels and in different localities. The variation in these services from place to place is in some instances so great that comparisons of average money expenditures from one locality to another may be quite meaningless without such information.

#### METHODS OF EVALUATING THE LEVEL OF LIVING OF THE GROUPS STUDIED

A large number of the studies of family living reviewed in this publication have been concerned with an evaluation of the level of the living of the group. Various methods of evaluation have been used. In general, however, they fall into four groups: (1) The studies which compare percentage distribution of value of living by one group with that of other groups or with that of a standard budget; (2) those in

<sup>65</sup> FUNK, W. C. See p. 18 of reference cited in footnote 16.

<sup>66</sup> KNEELAND, H. WOMAN'S ECONOMIC CONTRIBUTION TO THE HOME. *Ann. Amer. Acad. Social and Polit. Sci.* 143 (232): 33-40. 1929.



which actual money expenditures are compared with the expenditures necessary to purchase in the given situation a given level of living; (3) those in which the quantities of goods and services consumed are compared with those included in a given standard; and (4) those in which family and community adjustments are used as an indication of the level of living.

The first method is the easiest to carry out but it is also the least satisfactory. Differences between the percentage distribution of expenditures by two family groups may indicate differences in price level, or in size and age composition of family, as well as differences in levels of living.

A more satisfactory method of evaluating levels of living is to compare either total expenditure or total income with the cost of some definite standard. Rowntree's experiment with this method in York, England, in 1899 has influenced a number of other investigations. He computed the sum of money needed to support persons of different age and sex at the poverty line. Using Atwater's standards of minimum nutritional requirements and his figures on the nutritive value of different foods, Rowntree calculated the cost of the cheapest diet which would, at the prices then prevailing, meet the dietary requirements of men, women, and children in different age groups. (He used no meat in calculating costs, not regarding it as a dietary necessity and finding that a diet which met the Atwater standard could be secured more cheaply without meat.) In view of the difficulty of estimating minimum expenditure for rent, actual sums paid for rent by each family were taken as the minimum necessary expenditures. The estimates of minimum expenditure for "household sundries (clothing, light, fuel, etc.)" were based upon information gathered from a large number of working people who "know what poverty meant and had learnt by hard experience what could be 'done without' " (1897, *p.* 139).

A number of European investigators have evaluated Rowntree's poverty-line budget (either unmodified or with certain modifications) and have used it in judging the adequacy of family incomes. A number of other quite different budgets have been used for the same purpose. In the United States the budgets used most frequently in evaluating family incomes and expenditures are the minimum quantity budget of the Bureau of Labor Statistics<sup>67</sup> and the standard budget of the Chicago Council of Social Agencies,<sup>68</sup> both far above Rowntree's budget.

Some investigators have disregarded money costs entirely and have compared the content of the living of the families studied with the content of some accepted standard. The early investigations, which included detailed figures on food consumption, compared the protein, fat, and carbohydrate content of the diets of the families with the standards of the biochemists of the time. With the development of the science of nutrition, standards and methods of analysis have changed. A recent study by Gillett and Rice (389) includes data on the calorie, protein, calcium, phosphorus, iron, vitamin A, and vitamin C content of the diets analyzed.

<sup>67</sup> UNITED STATES DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS. MINIMUM QUANTITY BUDGET NECESSARY TO MAINTAIN A WORKER'S FAMILY OF FIVE IN HEALTH AND DECENCY. U. S. Dept. Labor, Bur. Labor Statis., Monthly Labor Rev. 10(6): 1-18. 1920.

<sup>68</sup> NESBITT, F. THE CHICAGO STANDARD BUDGET FOR DEPENDENT FAMILIES. Rev. ed. 4, 52 pp Chicago. 1932.

There have also been careful evaluations of the housing accommodations of the families, although most of the statistical studies of family living have not gone very far beyond studying overcrowding. Certain investigators have set up standards for toilet facilities, and the direct access of each room to outside light and air, and have evaluated each dwelling according to these criteria. For example, Chapin (297, pp. 91-108) presents data on number of rooms, dark rooms, bath-rooms, and private toilets per family; number of overcrowded families, i. e., families reporting less than 4 rooms, and more than 1½ persons per room. Wright in her study of children of railroad workers living in both urban and rural communities (385, p. 90) says:

The dwellings of these families were graded as follows: The standard for overcrowding combined that of the United States Bureau of Labor Statistics, one person to a room, and that of the Chicago standard budget, which requires no more than two persons to a sleeping room and enough rooms for sleeping to permit segregation of the sexes. For cities the standard for sanitary conveniences was generally accepted one of sink, bath, and inside private toilet. For country districts a somewhat lower standard was arbitrarily adopted—water on the premises and a private toilet not obviously in insanitary condition.

An evaluation of the adequacy of stocks of clothing has very seldom been made. However, in this study by Wright, just mentioned, an evaluation of clothing was undertaken (385, p. 81).

The analysis was made of the children's clothing, based not on the articles bought during the year but on an inventory of the articles they had at the time the schedule was taken. The object was to see how many children actually had the articles of clothing included in the list of the Chicago standard budget.

A fundamentally different approach in the evaluation of levels of living is represented by the attempt to discover the physiological, psychological, and social consequences of various levels of living. Le Play and his followers were in the habit of evaluating the ways of living of each family they studied with a nonquantitative description of the health of the members of the family and of their adjustment to the community and to one another. The development of this approach by members of the statistical schools has necessarily awaited the evolution of scientific methods of physiological, psychological, and social measurement. The report by the Lynds on Middletown (372) and a recent investigation of the Milbank memorial fund illustrate the possibilities of this type of evaluation.

The study by the Milbank memorial fund illustrates the use of a physical examination for the children of the family to assist in the evaluation of the family well-being. This study was made in New York City in cooperation with the United States Public Health Service. During April 1933 enumerators visited about 1,200 families in the poorer sections of the city and obtained data on family income, occupation, and employment for each year from 1929 to 1932; nativity, racial stock, and education of husband and wife; a complete census of the household; illness of each member during the 3 months prior to the enumerator's visit, together with the extent of the medical, hospital, nursing, and dental care received by the family. Families drawn at random from each broad income class were interviewed as to their food consumption in the week preceding the interview, and the food-consumption data were analyzed for nutritional adequacy. Five hundred and fourteen of the children in the 1,200 families surveyed were given health examinations by qualified physicians. The analysis shows the relationship between adequacy of diet and amount



and source of income, taking into account whether relief was given entirely in money or partly in food, and between the observed physical health of the children, amount and source of income, and the duration of a low-income status.<sup>69</sup>

In the report on life in Middletown, figures on family income and expenditures from working-class and business-class families are accompanied by data from the same families on occupational adjustment, mobility, traits stressed in rearing children, plans for the children's future, the hours spent by the mother in different kinds of housework, the use which the housewife would make of an extra hour in the day, the housewife's friendships and how they were made, types of recreation for all the family, contacts between parents and children, Sunday observances, relationships with community organizations, and the housewife's opinions about community problems. Intelligence test scores of the children in similar families were secured from the public-school system. All these materials were used with data from other sources to evaluate levels of living in families of different types.

A review of the studies which are included in this report emphasizes both the difficulty and the value of perfecting the measures which have been used in the past for evaluating the level of living of the families studied, and of developing new methods of evaluation.

## ANNOTATED BIBLIOGRAPHY

### NORTH AMERICA

#### UNITED STATES (CONTINENTAL)

##### FARM FAMILIES

MASSACHUSETTS BUREAU OF STATISTICS OF LABOR. (1)  
FOURTH ANNUAL REPORT. Mass. Bur. Statist. Labor Ann. Rept. (1872/73)  
4 (pt. 1): 109-128. 1873. ([Mass.] House [Doc.] 173.)

Assistants of the Massachusetts Bureau of Labor Statistics obtained from 5 farm families, with whose circumstances they were somewhat acquainted, data on family expenditures in 1872, and from 4 of these families data on quantities of food consumed. Three of the families are given as those of farmers, two of farm laborers. One of the farmers came from Ireland, and the rest were of American stock. Aggregate expense varied from \$343 for the family of 1 of the farm laborers to \$885 for 1 of the farmers. No mention is made of the money value of products furnished these families by their farms. A note in regard to one of the farm laborers indicates that the money value of board received while working has been included with expenses. No correct estimate could be made of annual earnings. However, two of the farm families "would appear to save something," while the others "would appear to lose in about the same ratio" (p. 116).

JANNET, CLAUDIO (2)  
MÉTAYER DE L'OUEST DU TEXAS (ÉTATS-UNIS D'AMÉRIQUE). CULTIVATEUR  
PROPRIÉTAIRE ET CHEF D'INDUSTRIE-TENANCIER, DANS LE SYSTÈME DES  
ENGAGEMENTS MOMENTANÉS, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS  
SUR LES LIEUX, EN AOÛT ET SEPTEMBRE 1891. Les Ouvriers des Deux  
Mondes (2) 4:101-172. 1895.

This family was fairly typical of Texas; there were larger owners or ranchers above them, and renters and day laborers below them. The worker found it profitable to rent his own farm (160 acres) to a tenant who owned no property, reserving a small section for his own cultivation, and for himself to rent and cultivate a larger and more productive farm of 180 acres. The arrangement was only temporary. In 1891, when the study was made, the family consisted of the head (32), his wife (30), 2 daughters (10 and 8), and 3 sons (5, 3, and 15 months). The mother of the wife was a welcome member of the household during the third

<sup>69</sup> See also the following publication: KISER, C. V., and STIX, R. K. NUTRITION AND THE DEPRESSION. Milbank Memorial Fund Quart. Bull. 11: 299-307. 1933.



of the year which she spent with them. Morals were exemplary. Although lacking elementary instruction himself, the father was most anxious to have his children well educated. The fact that he had paid for some lessons in writing showed the importance which he attached to education. Both husband and wife could read and write. Health conditions were excellent; the family had no recourse to a physician or veterinary. In his work of mixed farming the man was aided in time of need by day laborers. The wife spent her entire time in the care of the house and children. Recreation consisted in rare visits to or from relatives and neighbors, religious gatherings, Sunday rest, and for the man chewing tobacco. The well-being of the family was assured by the natural wealth of the land, by the high price of labor compared with living, and by the increasing value of the land. A large number of children was not dreaded because the sons could make their own living at an early age, and there was plenty of land farther west, south, or north. Property consisted of dwelling, stables, land, animals, tools, and money valued at 14,807 francs, and furniture and clothing valued at 652 francs. Net income was valued at 6,445 francs, of which 4,241 francs was in money. Property was credited with 1,121 francs income, subventions with 1,578 francs, work with 2,003 francs, and family industries with 6,445 francs. Food cost 1,661 francs; the household, 453 francs; clothing, 436 francs; moral, recreational, and health needs 181 francs; and all else, 132 francs. Savings amounted to 3,583 francs. Notes are given on the colonization of the west of Texas; on the character and social aspirations of the farmers of the West; on the administration of the counties in the State of Texas; and on the respective advantages which the cold and the temperate climates in North America offer to European immigrants.

MICHIGAN BUREAU OF LABOR AND INDUSTRIAL STATISTICS. (3)

TWELFTH ANNUAL REPORT. Mich. Bur. Labor and Indus. Statis. Ann. Rept. 12 (pt. 1): 1-236. 1895.

To ascertain the living standards of farm laborers in 1894 the Bureau of Labor and Industrial Statistics of Michigan studied farm laborers scattered throughout the Lower Peninsula. Enumerators in every county canvassed, with a schedule, a total of 5,600 farm laborers, of whom 2,488 lived in family groups. Fifty-seven percent of these laborers were American; 13 percent German; less than 8 percent were English; a similar proportion were Canadian; and 3 percent were Irish. A little more than half the number were unmarried. Of the families, 1,945 had children, and the average number of children in families with children was 2.6. The average wage by the day was \$0.92, by the month \$18. The average yearly earnings were \$182. One thousand and five farm laborers reported owning their own homes; 806 reported renting their homes at an average monthly rent of \$2.59. Approximately one-fifth reported that home rent, fuel, and garden were furnished. More than half the number reported that they could earn more than enough to support their families. The average savings of each person who saved money was \$78. A very small number had life insurance or carried such benefits in connection with a fraternal organization. The study presents in full the schedule data for each of the 5,600 farm laborers.

GOSS, ARTHUR

DIETARY STUDIES IN NEW MEXICO IN 1895. U. S. Dept. Agr., Off. Expt. Stas. Bull. 40, 23 pp. 1897. (4)

This report presents the dietaries of three Mexican families, with chemical analyses of 63 samples of foods used in these diets and commonly used by large numbers of people in the southwestern part of the United States. The data were collected in 1896, with the cooperation of the New Mexico Agricultural Experiment Station. The 3 families selected included 1 family in moderate circumstances living in Las Cruces and 2 poor families living on a ranch 4 miles south of Las Cruces. The families were visited each day for a period of 2 weeks, and personal attention was given to inventories of food and collection of samples and statistics. The samples as collected were analyzed. Summary tables give food consumed per man per day, fuel value of food consumed per family, and the equivalent fuel value per man per day. The annual family incomes were estimated as \$50 to \$100, \$100 to \$150, and \$200 to \$300, respectively. The average food cost per man per day was less than 10 cents. The Mexican dietary contained too much carbohydrates and fats in proportion to the amount of protein consumed. There is a brief description of the habits of living of the Mexican population. (5)

NUTRITION INVESTIGATIONS IN NEW MEXICO IN 1897. U. S. Dept. Agr., Off. Expt. Stas. Bull. 54, 20 pp., illus. 1898.

The dietary of a poor Mexican family previously studied and reported (4) was studied again in 1897, to gain some idea of the difference in amounts of

various nutrients consumed at different times by the same people. The family consisted of a father, mother, and 3-year-old son, living under the most primitive conditions in a colony of similar families attached to a large ranch near Las Cruces. The total family income did not exceed \$100 per year. The study covered a period of 14 days. Exact account was kept of the food consumed and wasted and of the number of meals taken by the family and by visitors. Composition of food was calculated from analyses of New Mexico foods reported in the previous bulletin. Factors used in calculating meals consumed were 0.8 for the woman, and 0.5 for the child. The diet was analyzed for materials used, waste, composition, cost, and weight. The amount of food consumed was found to be somewhat less than when the family was previously studied. The fuel value was reduced by the use of smaller amounts of protein and carbohydrates. The amount of fat was exactly the same. The nutritive rates remained practically unchanged. When results were compared with dietary studies of Negroes in Alabama, the Mexican family was found to receive more protein, carbohydrates, and greater fuel value for a daily cost per man of \$0.07 than the Negro family received for \$0.08. Both Mexican and Negro diets were compared with the proposed dietary standard for a man at moderately muscular work and were found to be deficient in protein and fuel ingredients.

FRISSELL, HOLLIS B., and BEVIER, ISABEL

DIETARY STUDIES OF NEGROES IN EASTERN VIRGINIA IN 1897 AND 1898. U. S. Dept. Agr., Off. Expt. Stas. Bull. 71, 45 pp., illus. 1899. (6)

Nineteen dietary studies of Negro families living in the section bordering the Dismal Swamp near Franklin, Va. and near Hampton, Va. in the years 1897 and 1898 are presented for the purpose of obtaining some definite information concerning the actual food consumption of the Negroes in this section. Most of the families studied earned their living by farming but had other sources of money income. Complete figures on money income are given for some families and not for others. Their social and economic status varied widely—some were ignorant and very poor, others well-educated and comfortably situated. The average cost of food per man per day for the 19 families was 11 cents. Fish was a very important source of protein for many of these Negro families. The average amount of protein in their dietaries was "as large or larger than the average amount found in the daily diet of white persons in moderately comfortable circumstances" (p. 40) and very nearly as large as that called for in the tentative American standard, namely, 125 g per man per day.

THOM, WILLIAM T.

THE NEGROES OF SANDY SPRING, MARYLAND; A SOCIAL STUDY. U. S. Dept. Labor Bull. 32: 43-102. 1901. (7)

Data were collected in 1899-1900, under the direction of the United States Commissioner of Labor as one "of a series of investigations of small well-defined groups of Negroes in various parts of the country" (p. 43). The area was located in Montgomery County, Md., about 9 miles north of the District of Columbia. It was a community which at the time of this study, had been for 150 years under the influence and control of the Society of Friends. Because of the attitude of the Quakers toward slavery, the Negro population included many descendants of families that had been free for several generations. The methods and presentation of the study followed closely those by DuBois (8) and the findings of the two studies are compared throughout. Reports were obtained from 960 individuals approximating the entire Negro population of the locality studied and representing 165 "economic" families. The average size of an economic family was 4.29 persons. Of 683 persons 10 years of age or more, 484 could read and write. In the same age group, occupations were reported as follows: professional (including 5 monthly nurses) 12, domestic (including housewives) 228, commercial 6, agricultural 190, industrial 25, not engaged in gainful occupations 174, not reported 49. Farmers and farm laborers were reported as 125 in number. Of 164 families, 9 made incomes not exceeding \$100, 100 families made between \$100 and \$250, 55 families made between \$250 and \$750. These estimates apparently did not include goods furnished. Mothers, daughters, and brothers, chiefly in domestic service, received an aggregate of about \$3,462 in wages. Personal property and real estate assessed at \$21,590 was reported. One hundred and thirty-five individual depositors had \$15,881 in the savings bank. Deposited funds of "beneficial societies", paying burial expenses and in some cases sick benefits, amounted to \$5,099.



DU BOIS, W. E. BURGHARDT

(8)

THE NEGRO IN THE BLACK BELT: SOME SOCIAL SKETCHES. U. S. Dept. Labor  
Bull. 22: 401-417. 1899.

Six sketches of Negro life in the late nineteenth century were made to represent "the development of the Negro from country to city life" (p. 401) in the Black Belt. The notes for each sketch were made by a student of Atlanta University who was thoroughly familiar with that locality. Five of the sketches represented Negroes in village or town. The sketch discussed here was representative of the great masses of Negroes in country districts of Georgia. Eleven rural families are described who lived in a district of DeKalb County, east and southeast of Atlanta, Ga. The average number of persons per family was 11.9. Only four of the heads of families and about two-thirds of their children could read and write. Child labor prevailed. Five families owned their own homes; the farms varied from 1 to 11 acres and were worth from \$100 to \$400. Six families rented farms on shares, paying one-half the crop. They cleared annually from \$5 to \$10. Poultry and eggs passed for currency in the local store. These families raised nearly all they ate.

KELSEY, CARL

(9)

THE NEGRO FARMER. 75 pp. Chicago. 1903.

This report deals with the diversifying effect which various geographic environments have upon the Negro population of the South. The attempt is made to describe the situation of the average man as it appeared in each of several typical localities, at the beginning of this century. The socio-economic importance of the African and slavery heritage of the Negro is discussed, and the areas of concentration of Negro population are mapped before the author deals in detail with a series of typical localities. A very primitive life and a very low money income were everywhere found to be typical of the rural Negro. In tidewater Virginia, many Negroes supplemented their living from fishing or from the oyster business, and some families actually earned from \$250 to \$400 per year in the oyster business. Farm hands earned \$10 a month plus two meals a day, and day laborers earned from 50 to 75 cents a day. In central Virginia near Farmville, the Negroes raising tobacco were usually paid in the form of advances made during the summer and estimated at \$50 to \$75 a year. In Beaufort County, S. C., where the Negroes formed 90 percent of the total population, a livelihood was easily gained. The staple crop for the small farmer was the sea-island cotton. In the central district of Alabama, the farmer was paid for the crop by advances over about 6 months, averaging probably not far from \$50 per year. Analysis of the expense accounts with the landlords of three families for 1900 and 1901 showed that \$6 to \$10 a year was spent for clothing and about \$20 to \$25 for provisions. Plantation accounts for three families working in the cotton fields near the mouth of the Mississippi River showed gross incomes from \$577 to \$1,035. Expenses for "rations" and clothes combined varied from \$113 to \$284. In the sugar area at the mouth of the Mississippi, earnings for two families considered typical were \$383 and \$666, respectively. The study ends with a brief discussion of the Negro home, school, and church, and of the possibilities which he has for agricultural training.

HILLS, JOSEPH L., WAIT, CHARLES E., and WHITE, H. C.

(10)

DIETARY STUDIES IN RURAL REGIONS IN VERMONT, TENNESSEE, AND GEORGIA.  
U. S. Dept. Agr., Off. Expt. Stas. Bull. 221, 142 pp., illus. 1909.

In this bulletin reporting three separate investigations of food consumption conducted from 1900 to 1904, 37 of the 82 dietaries analyzed deal with food consumption of farm families. The purpose was to determine, as far as possible, the adequacy and cost of the average diets in the localities studied.

Of the 37 dietaries from 36 farm families, 3 were secured in Vermont, 12 in Georgia, and the remainder in Tennessee. The Georgia families lived in isolated mountain regions in the northeastern part of the State. Most of the Tennessee farm families lived in a remote and sparsely settled part of the Chilhowie Mountains, called Crooked Creek, about 8 miles from Maryville. The average number of persons in all these farm families was 5.1. Dwellings are described in some cases, but information regarding them is incomplete. For a number of families, total earnings were given, and in some cases the size and the rents paid per month were included.

The data for all the dietaries were collected and analyzed by methods described in previous publications of the United States Department of Agriculture, Office of Experiment Stations. Analyses of the nutritive content of food consumed and



wasted are published separately for each case. Each record was kept for at least a week, and most of them were kept for 2 weeks. An inventory of all food on hand was made at the beginning and at the end of the period of study. The average nutritive content of all types of food consumed was established by using published data on the composition of food materials and by making new chemical analyses.

The age, sex, and weight of each member of the family, and the number of meals served to each were recorded; and the total number converted into the number of adult-male equivalent meals by using the Atwater scale. The nutritive content per day per man of each diet was given in terms of grams of protein, fat, and carbohydrates, and the energy value in calories; also the cost per day in cents. In the Vermont and the Tennessee studies all food consumed was valued at market prices of the community at the time the record was made. In the Georgia studies this cost was reckoned on the basis of actual expenditures when food was purchased; for goods produced on the farm, market prices were used. In the mountain districts these estimates varied considerably because of the lack of nearby markets. Each study treated differently its discussion of the economic and social status of the families from whom food consumption records were obtained.

The diets of the Vermont farm families (a moderately well-to-do group) were found to "agree surprisingly closely with the accepted standard for persons at moderate muscular work, both in the amount of protein supplied and in fuel value" (p. 138). Among the farm families in the Tennessee and Georgia mountains corn meal, wheat flour, and fat cured pork were the principal foods consumed, the Georgia diets being somewhat more varied than those in Tennessee. They represented as much energy as is usual, but smaller amounts of protein than those indicated by the standards as desirable. In Tennessee there was found "little connection between the size of the income and the amount spent for food \* \* \*. In many cases the families in the best financial condition spent very little for food, while those of very poor means often spent more than the average. \* \* \*. These facts are especially noticeable in the studies made in the remote districts \* \* \*. There is a decided tendency in the dietaries to show more protein and energy where more money is expended" (p. 106).

In most cases the diet is confined to a few articles of food. More variety could have been had in many instances but seemed not to be desired. "The people of whom these mountain families are typical are in that region considered fairly strong and well developed physically \* \* \*. On the other hand, visitors are almost invariably struck by the quickness with which these mountaineers, especially the women, lose the appearance of youth; judged by ordinary standards, girls of 22 or 23 would be called 30 or more, while women of 40 look as old as those of 55 or 60. Tuberculosis is common and the rate of mortality is rather high" (p. 114).

BRÜERE, MARTHA B., and BRÜERE, ROBERT W. (11)  
INCREASING HOME EFFICIENCY. 318 pp. New York. 1912.

This book was written to show how the middle-class families handle problems of family living. During a period of 4 years, 1906-10, the authors collected data on income and expenditures from 200 families. These families were widely scattered throughout the United States and represented farmers, salaried workers, small business men and professional people, with incomes not over \$5,000 a year. Of the 76 accounts given, 5 are for farm families; about 20 are for families of wage earners, low-salaried workers, or business proprietors with incomes under \$2,500; the remainder represent families with an income of \$2,500 or more a year. Suggested minimum budgets are included, based on data in the 200 records.

THOMPSON, SAMUEL H. (12)  
THE HIGHLANDERS OF THE SOUTH. 86 pp. New York. [1910.]

In this description of the characteristics and living conditions of the southern mountaineers are noted the average economic conditions of 83 families living in an isolated township in a border county of the southern Appalachians in 1908. The great poverty and extreme isolation of the mountain people led the author to plead for better educational facilities and for missionary efforts on their behalf. Among those selected for special study the average size of family was 5.5 persons, the average size of farm was 27 acres, and the average net money income from crops was \$161. The average expenditure per family for food was \$53, for clothing \$35. In addition to crop raising 56 men from these families did road work. They all lived in overcrowded houses, and on the average  $4\frac{1}{2}$  persons slept in one room. Tuberculosis, venereal disease, and hookworm were found to be prevalent.

WARREN, GEORGE F.

(13)

FARM MANAGEMENT. pp. 21-26. New York. 1914.

A section on cost of living on farms is included to show the average level of living and average family expenditures in a prosperous farm community. A study of 106 farm families was made in 1909 in Livingston County, N. Y. "This is one of the most diversified farming sections in the United States as well as one of the most prosperous" (p. 23). The average size family on these farms was 4.2 persons. The average total value of living was \$915; the average money value of food furnished by the farm was \$249; of housing furnished, \$126; and of fuel furnished, \$41. Expenditures for current living averaged \$499; for food, \$152; for housing repairs, \$52; for clothing and household operations combined, \$93. The rental value of the house was estimated at 8 percent of its value. Data are also given for two studies by the Minnesota Agricultural Experiment Station, on the home consumption of food furnished by the farm. The material taken from these studies includes the quantities of 9 articles of food consumed by 2 groups of families, one of 15 families studied in 1906 and the other of 22 families studied in 1907.

JOHNSON, OLIVER R.

(14)

COSTS OF FAMILY LIVING ON THE FARM. Mo. Agr. Expt. Sta. Bull. 213, 20 pp., illus. Columbia. 1924.

One hundred and fifty-six annual records kept by 20 to 30 farm families during the period 1912 to 1922 are analyzed to show the cost of maintaining the farm home. Labor records for the period 1912 to 1915 were secured from 8 farms located in 5 different counties and 1 city home to show the labor involved in the maintenance of the home. A description of the population and location of these farms is given in Missouri Agricultural Experiment Station Bulletin 190. The average size of family was 4.24 adult cost units. The average annual labor income over the whole period of 11 years was \$886 but varied greatly from year to year. This figure, together with figures for average cost of family living, is given for each year covered by the study. The average annual money value for all the years combined of produce furnished by the farm was \$228, and of housing furnished \$174. Total expenditures for current living averaged \$1,047, for food \$173, for clothing \$125, and for household supplies and repairs \$76. To compute the value of housing, "the upkeep of buildings cost was prorated to all the farm buildings on the basis of relative value, and to this [value for home] was added insurance on the house, its proportion of the total taxes, a depreciation charge of 2 percent and interest on investment at 5 percent" (p. 3). From the family living study the author concludes that the cost of family living does not vary as farm labor income varies but is more closely related to the movement of retail prices. Part of this bulletin deals with a study of the labor cost of maintaining the farm home. For 8 farm homes and 1 urban wage-earner's home the labor hours of the homemaker are analyzed.

PARK, ROBERT E.

(15)

NEGRO HOME LIFE AND STANDARDS OF LIVING. Ann. Amer. Acad. Polit. and Social Sci. 49 (whole no. 138): 147-163. 1913.

In this discussion of the Negro since the Civil War, an estimated budget of an "average" Negro tenant farmer on the upper reaches of the Alabama River is presented. The author does not state his method of arriving at this average. The expenditures for the year 1913 were estimated at \$600, of which the total expenditure for current living was \$381, for food \$125, for clothing "for a family of six" (p. 152) \$77. Rent, estimated at 2 bales of cotton and seed, was \$150. The author points out that the income varies according to season and price of cotton. "The average tenant farmer will spend as much money during the cropping season as the grocer or the banker who is advancing him will permit" (p. 152).

BITTING, SAMUEL T.

(16)

RURAL LAND OWNERSHIP AMONG NEGROES OF VIRGINIA, WITH SPECIAL REFERENCE TO ALBERMARLE COUNTY. Va. Univ. Pubs., Phelps-Stokes Fellowship Paper 2, 110 pp. University, Va. [1916.]

The purpose of this study was to increase the knowledge of Negro life in order to furnish an intelligent basis for action, and to suggest the differences in economic condition between urban and rural Negroes as possibly preliminary to a more exhaustive study. The investigation was made in 1914-15 in a diversified farming section of central Virginia, the Rivanna district of rural Albermarle County, with especial emphasis on 103 landowning families. The leading agricultural products were vegetables and mixed crops.



These 103 homes, representing about one-third of those in the district, were chosen on the basis of including some in each economic group. All but 4 percent owned their land free from debt, but agriculture was the primary occupation of only 52 percent of the Negroes in these families. Domestic and personal service was the chief source of income of 23 percent, and trade, transportation, manufacturing, and professional service of the remainder. Cash income of families ranged from less than \$100 a year for 14 families, to over \$450, where a trade or storekeeping was combined with farming. Teachers' salaries averaged \$26.87 a month. Laborers were of three classes: 41 farm laborers making about \$0.75 a day for 9 months or throughout the year, 20 railway and road laborers making \$1.50 a day, and 21 workers at odd jobs, \$0.75 and \$1 a day, the last class making practically nothing from the farm but living from hand to mouth, with the women in the families in most cases taking in washing or working as house servants. Families averaged 4.7 persons. About 68 percent of the Negroes in the county were literate.

Comparison of percentage distribution of expenditures among the 20 Rivanna families whose accounts were believed likely to be most accurate with those among Negro families studied by T. J. Woofter in Athens, Ga., leads to the conclusion that the rural Negroes are more thrifty than those in the cities, a larger amount going for necessities and less for incidentals. A majority carry insurance, and about two-thirds of those interviewed showed evidence of a conscious effort to improve their conditions.

In addition to the family living data, the report sketches the historical background of the Virginia Negro, reviews the rapidity with which Negroes are acquiring property in Virginia, describes conditions among the Negro rural population in typical sections of the State, and discusses the biologic, social, educational, and economic problems of the Negro, in general, and with special reference to the area surveyed.

BAILEY, ILENA M., and SNYDER, MELISSA F.

(17)

A SURVEY OF FARM HOMES. Jour. Home Econ. 13: 346-356. 1921.

A survey was made in 1917 of 91 farm families (72 owners, 19 tenants) in St. Joseph County, Mich., a diversified farming region chosen as typical of the agricultural districts of the 12 North Central States, in order to help in "developing methods of extension work in the North and West" (p. 346). All the women interviewed spoke English easily, and were native born (with the possible exception of two). About a third were of German descent. The average size of farm was 115 acres, and the principal crops were corn, wheat, oats, rye, and beans. The family averaged 4.1 persons. "In 90 percent of the farms of the present study which reported on the sale of eggs, poultry, and dairy products, the income from these sources was considered as belonging distinctly to the home", and averaged \$240 a year (p. 355). Total family expenditures averaged about \$300, of which food averaged \$105 and clothing \$115. These figures indicated the large contribution made by the housewives to the economic support of the family, since only about \$60 of the expenses had to be met from the proceeds of the principal products of the farm.

HAWTHORNE, HARVEY W.

(18)

THE FAMILY LIVING FROM THE FARM: DATA FROM 30 FARMING LOCALITIES IN 21 STATES FOR THE YEARS 1918 TO 1922. U. S. Dept. Agr. Bull. 1338, 30 pp., illus. 1925.

Information obtained in farm business surveys made by the United States Department of Agriculture and the State agricultural colleges and experiment stations, is utilized in this bulletin to show the significance of the family living furnished by the farm (1) in relation to cost of living of farm families, and farm receipts, and to farm labor and family income, (2) in relation to size of farm and size of family, and (3) in comparison with the cash returns from the farm business in times of agricultural depression and prosperity. The records here assembled comprise 30 localities in 21 States, number 7,738, and represent varying types of crops, farming and marketing conditions, as well as a period of general prosperity among farmers (1918-19) and a period of general depression (1921-22). Farm owners represented 76 percent of the farms included; tenants, 24 percent. The families averaged 4.1 adult units estimated so that each person under 16 years of age represented two-thirds of a unit, and each person over 16 years of age, 1 unit. The average value of the family income during the 4 years was \$1,967 which varied from \$2,653 during 1918-19, to \$1,253 during 1921-22. The average money value of all foods furnished by the farms during the 4 years was \$518, which also varied from \$554 during 1918-19, to \$484 during the years



1921-22. The average money value of the food furnished was \$320, of the housing furnished \$184. The importance to the farmer of the family living from the farm in years of depression in contrast to years of prosperity was brought out.

GILLETTE, J. M.

(19)

STANDARDS OF LIVING ON THE FARM. N. Dak. Univ. Quart. Jour. 17: 350-364. 1927.

The author uses data from various studies, especially Kirkpatrick's study of 861 farm families in Kentucky, Tennessee, and Texas in 1919, upon which to base a discussion of variations in farm standards, the influences differentiating rural standards, the influence toward uniform standards, and the methods of formulating minimum standards. The data from Kirkpatrick's study is compared with that concerning 402 farm families of Livingston County, N. Y., 1921 (26), and 12,096 white families in 92 industrial centers of the United States, 1919 (351). The 861 farm families were classified according to tenure as follows: Owner 411, tenant 521, and cropper 129. For the 861 farm families of Kentucky, Tennessee, and Texas, the total money value of living averaged \$1,436, of food consumed \$632, of housing (10 percent of the value of the home) \$139, of clothing \$254, and of operating goods \$172. Life and health insurance averaged \$37. The author concluded that to support an appropriate standard of living for a farmer an income of \$2,000 or more is needed.

SANDERS, JESSE T.

(20)

FARM OWNERSHIP AND TENANCY IN THE BLACK PRAIRIE OF TEXAS. U. S. Dept. Agr. Bull. 1068, 60 pp., illus. 1922.

In 1919, 368 farmers living in 6 counties of the Texas black-land prairie were selected at random for study. Of these farmers, 65 were share croppers, 194 share tenants, and 109 owners. For each respective group, the average value of family living was \$965, \$1,243, and \$1,742; of food furnished by the farm \$184, \$338, and \$450; and of other goods furnished \$78, \$86, and \$125. Total expenditures for current living averaged \$704, \$824, and \$1,167; for food \$310, \$296, and \$294; and for clothing \$201, \$259, and \$358.

The report is divided into four sections, dealing with the development of tenure problems in the black land, with the economic aspects of the forms of tenure, with the agricultural history of farm operators, and finally with the domestic, social, and educational conditions in relation to tenure. Tables giving children's school attendance and promotion show that the records of owners' children were better than those of tenants'. On the basis of the 1919 average net accumulation of wealth and average value of farms, it would take a tenant about 28 years to pay for his farm. Those who accumulated wealth fastest farmed the most consistently, had a variety of farm enterprises, raised most of their food, and moved least often.

KIRKPATRICK, ELLIS L., and SANDERS, JESSE T.

(21)

THE COST OF LIVING AMONG COLORED FARM FAMILIES OF SELECTED LOCALITIES OF KENTUCKY, TENNESSEE, AND TEXAS. A PRELIMINARY REPORT. U. S. Dept. Agr., Bur. Agr. Econ. 13 pp. 1925. [Mimeographed.]

The content of living of 154 colored families in 1919-20 was studied in selected localities in Kentucky, Tennessee, and Texas. All families for whom complete data were obtainable and who were represented by a male adult farm operator and a female adult homemaker were used in the tabulations. Seventy-two of the families were classed as croppers, 47 as tenants, and 35 as owners. The average size of a family was 4.8 persons. The average total money value of family living was \$611. The money value of food furnished by the farm and evaluated at farm prices was \$179, of housing (estimated as 10 percent of the value of the house) \$41, and of fuel \$20. Total expenditures for current living averaged \$357, for food \$148, for clothing \$107, and for household operation \$35. Insurance premiums averaged \$14. Comparisons are made with white families in the same localities.

— and SANDERS, JESSE T.

(22)

COST OF LIVING IN FARM HOMES IN SEVERAL AREAS OF KENTUCKY, TENNESSEE, AND TEXAS. A PRELIMINARY REPORT. U. S. Dept. Agr., Bur. Agr. Econ. 14 pp. 1924. [Mimeographed.]

The authors give in this preliminary report data on farm living in 1919-20 which are not published in United States Department of Agriculture Bulletin 1382, The Relation Between the Ability to Pay and the Standard of Living Among Farmers. For each tenure group in each of the three States, averages

are presented on the size of household, the age of the various members of the family, the distribution of expenditures, the size of house, and the value of furnishings and equipment.

KIRKPATRICK, ELLIS L., and SANDERS, JESSE T.

(23)

THE RELATION BETWEEN THE ABILITY TO PAY AND THE STANDARD OF LIVING AMONG FARMERS; A SOCIO-ECONOMIC STUDY OF 861 WHITE FARM FAMILIES OF KENTUCKY, TENNESSEE, AND TEXAS. U. S. Dept. Agr. Bull 1382, 32 pp. 1926.

Localities were surveyed in the following 21 counties: 8 from the bluegrass tobacco area of Kentucky, 10 from the "black prairie" cotton area of Texas, and 3 from Tennessee representing diversified farming, cotton, and tobacco sections. The study is based upon the 1919 receipts and expenditures of 861 white farm families, of whom 411 were owners, 321 tenants, and 129 croppers. The method of selecting the families is not given. Of 825 of these operators, 676 had attained the eighth grade or less, and 40 had attained more than the twelfth grade. For the 861 families, family size averaged 4.6 persons. The net disposable income averaged \$2,178. The average money value of living was \$1,436, of food furnished by the farm \$384, of housing furnished \$138, and of fuel and other items furnished \$15. Total cash expenditures for current living averaged \$862, for food \$248, for clothing \$255, for housing \$2, and for household operation (including use of car for household purposes) \$158. The average cost of life- and health-insurance premiums was \$37. Housing furnished was taken to be 10 percent of the value of the house, and foods furnished were "valued \* \* \* at prices half way between what would have been received had they been sold, and what would have been paid had they been bought" (p. 6). The cost-consumption unit and household-size index are used in this study to measure the money value of current consumption.

The ability of the farmer to pay (as measured by net worth, annual rate of accumulation, and years since the farmer began work for self) is related to the level of living, "measured in terms of the sum of expenditures for all purposes per family [and] per cost-consumption unit, and in the percentage that the expenditures for advancement are of the sum of all expenditures per cost-consumption unit" (p. 22). The second measure of expenditure seemed to be the most satisfactory. The following factors influence the desires of the family and hence the demands on funds available for living: Size of family, family living cycles or periods of growth and development, and schooling of parents. The relation of these factors to the level of living is discussed. The relation of the criteria of the ability to pay and of the factors influencing the desires or demands of the family to the level of living is shown by gross correlation. By multiple correlation, using first value of living per family, then value of living per cost-consumption unit, and thirdly using percentage of expenditures per cost-consumption unit for advancement as the dependent variable, it was found that the ability to pay had more effect upon the total variation than had the factors indicative of the desires of the family.

GRAY, LEWIS C., STEWART, CHARLES L., TURNER, HOWARD A., and SANDERS, W. J.

(24)

FARM OWNERSHIP AND TENANCY. U. S. Dept. Agr. Yearbook 1923: 576-582. 1924.

This report covers the extent and geographical distribution of different classes of tenure in the United States, the trend in relative importance of the tenure classes, the causes of the development of tenant farming, and the principal kinds of contracts between landlords and tenants. A section on mobility describes the extent of shifting, the relation of color to shifting, and its causes and significance. The interrelation of form of tenure with progress in accumulation, education, and level of living is also included and is taken from various farm studies covering the years 1919 to 1921. The table on expenditures for family living combines data from New York (1921), Kentucky (1919), Texas (1919), and Tennessee (1919-20), listed according to tenure status. The average total value of family living ranged from \$591 for Tennessee cropper families to \$2,098 for New York owner families. The percentage of all family living furnished by the farm varied from 30 for Texas cropper families to 44 each for Tennessee cropper and tenant families. Average value of food consumed ranged from \$341 for Tennessee croppers to \$840 for Kentucky owners. The percentage furnished by the farm ranged from 42 for Kentucky croppers to 70 for Tennessee owners. Average clothing expenditures ranged from \$98 for Tennessee croppers to \$381 for Texas owners.



## NATIONAL CHILD LABOR COMMITTEE.

(25)

RURAL CHILD WELFARE; AN INQUIRY BY THE NATIONAL CHILD LABOR COMMITTEE BASED UPON CONDITIONS IN WEST VIRGINIA. 355 pp., illus. New York. 1922.

"It is the object of this volume to point out some of the needs of rural children" (p. 4). In addition to chapters on child labor on farms, school attendance, recreation, and delinquency, a chapter on the rural home by Charles E. Gibbons is included, which is based on the results of a survey made in 1920 in West Virginia of 657 homes in 11 communities each in a different county. The communities were so selected that each would represent some particular phase of agriculture. For the State as a whole general grain farming was the most important type, and corn the chief crop. The families were divided according to tenure as follows: Owners 486, tenants 75, and laborers 96. The average number of children at home per family for each group was 2.87 (owner), 3.71 (tenant), and 2.71 (laborer).

The average net income for owner families was \$1,000, for laborer families \$756, and for tenant families \$736. A substantial fraction of this income was derived from wages for labor away from the farm. "In summing up the findings in reference to the houses and their outward equipment it is evident that owner children, taken as a whole, have the best homes, tenant children probably the next, and laborer children worst, but there is no strikingly great difference between the best and the worst. The difference seems to be about what the difference in their incomes would lead one to expect" (p. 31). Of all parents visited, nearly 63 percent of the fathers and 60 percent of the mothers had no schooling beyond the fifth grade; 14 or 15 percent of them were illiterate. Reasons given for children leaving the farms were (1) to make a better living, (2) dissatisfaction with unattractive surroundings, (3) to escape unsanitary conditions, (4) to obtain better educational opportunities, and (5) to have a better time.

## KIRKPATRICK, ELLIS L.

(26)

THE STANDARD OF LIFE IN A TYPICAL SECTION OF DIVERSIFIED FARMING. N. Y. (Cornell) Agr. Expt. Sta. Bull. 423, 133 pp., illus. Ithaca. 1923.

This study was made in an attempt to devise means whereby the level of living on the farm might be measured and to determine to what extent it is affected by the farm business, the distribution of income, the education of the parents and children, the physical environment of the farmhouse and its furnishings, and the social contacts of the family. Data were secured during 1920-21 from 295 owner families and 107 tenant families living in five townships in Livingston County in west-central New York. These families were chosen from a group that had furnished farm business records in 1918-19. The average size family was 4.9 persons for 396 families. Forty-five of the husbands and 59 of the wives were born in Europe. Education of both the parents amounted to 8 grades or less in 46 percent of the families. The average value of family living was \$2,012. The average money value of all food furnished by the farm was \$399, of rent \$234, and of fuel \$59. The average expenditure for family use was \$1,283, of which \$395 was for food, \$273 for clothing, and \$91 for household operation. Food furnished by the farm was valued at farm prices. The rental value of the house was estimated at 10 percent of its valuation. Household labor by members of the family was valued at 20 cents an hour for women doing outside work and 25 cents an hour for men helping with heavy inside work. The household help from extra adult female members of the household was valued at \$3 per week in addition to their room and board.

To determine the household size index for each family, a separate scale of cost-consumption units was worked out for food, clothing, rent, and other items in family living, using the adult male as the base. To compare the level of living in different homes a rating scale of 1,000 points was developed covering expenditure distribution, education of children, the home and its surroundings, use of time, social participation, and general outlook. Correlations indicated that size of business, education of parents, and value and condition of farmhouse were most closely related to level of living and that farm tenancy did not seriously menace the level of living in these farm homes.

## ATWATER, HELEN W., and BAILEY, ILENA M.

(27)

FAMILY LIVING IN FARM HOMES; AN ECONOMIC STUDY OF 492 FARM FAMILIES IN LIVINGSTON COUNTY, N. Y. U. S. Dept. Agr. Bull. 1214, 36 pp. 1924.

This bulletin presents a further analysis of the material collected for the years 1920-21, and published in New York (Cornell) Agricultural Experiment Station Bulletin 423. Comparison with other studies indicated "that the area



studied represented conditions above the average, whether this is measured by the total value of the goods consumed, by facilities and comforts provided, or by the importance placed on the less material and essential goods" (p. 35).

POND, GEORGE A.

(28)

TYPES OF AGRICULTURAL PRODUCTION AFFECTING EXPENDITURE AND CULTURE; OBSERVATIONS OF FARM FAMILIES IN TWO AREAS IN MINNESOTA REPRESENTING TWO IMPORTANT TYPES OF FARMING. *In* American Country Life Association. Farm Income and Farm Life; A Symposium on the Relation of the Social and Economic Factors in Rural Progress, pp. 197-205. New York. 1927.

The purpose of this study was to determine whether certain rather intensive types of farming such as dairying are characterized by exploitation of family labor and "whether the regular and fairly full employment of the family robs them of leisure time for recreation and self improvement to the extent that an inferior order of culture or lower standard of living results" (p. 198). The dairy farms selected were located in Steele County, Minn., representative of the dairying section of southeastern and east-central Minnesota. For purposes of comparison a group of farms were chosen in Cottonwood and Jackson Counties "where corn dominates the farming and beef or dual purpose cattle and hogs determine the type of farming" (p. 198). These farms were representative of the type of farming general in southwestern Minnesota, northwestern Iowa, and eastern South Dakota which is a less intensive type from the standpoint of labor than dairy farming. "Complete detailed farm accounting records on an average of 22 farms each year for the 5-year period 1920-24 in each locality are available for this study \* \* \*. The farms included in this study were quite similar in soil type, topography, climate and other physical features. They averaged approximately 180 acres in size in each group" (p. 198). "The average size of family in the dairy group was 4.06 man-equivalent units and 3.88 man-equivalent units in the other group. There was little difference in the age of settlement or in the education, intelligence, nationality, or economic and social status of the original settlers" (p. 198).

The average annual net income for the dairy group for the 5 years was \$1,931 and for the other group \$1,506. The total value of food consumed by the dairy group was \$149, of which \$75 was furnished by the farm. The total value of food consumed by the other group was \$140, of which \$68 was furnished by the farm. Food furnished was valued at farm prices. The dairy group, in spite of slightly longer hours of labor, not only ranked higher in educational attainment, but also did more reading than the other group, participated to a greater extent in social and business organizations, and found time to attend livestock shows, fairs, and meetings of breed associations and marketing organizations. The conclusion was that "the size of income produced by a type of farming or system of production is a much more important factor in determining the type of family expenditures and the culture of the farm family than any characteristic of the type or system such as labor intensity or opportunity for the utilization of family labor." (p. 205).

STUDLEY, LUCY A.

(29)

RELATIONSHIP OF THE FARM HOME TO THE FARM BUSINESS; A STUDY IN COTTONWOOD AND STEELE COUNTIES, MINNESOTA. Minn. Agr. Expt. Sta. Bull. 279, 24 pp., illus. University Farm, St. Paul. 1931.

The quantity consumed by the family of certain foods produced on the farm, and the number of hours of labor spent upon the farm enterprise by members of the family other than the farm operator were studied in order to show the influence of the farm on the management of the home and family life. Information was secured from records kept on two routes maintained by the experiment station to help the farmers operate their farms economically. An average of 22 families cooperated on each route for each year from 1920 to 1924. Those in Steele County were engaged in dairying and those in Cottonwood and Jackson Counties in livestock and grain farming. There is detailed analysis of the amounts consumed per adult-male unit and per family of farm-produced foods and of the amount consumed of the same articles when purchased. The adult-male unit is defined as that adopted by the Division of Farm Management and Agricultural Economics of the University of Minnesota. The average size of family measured in adult-male units was 3.97. The average net cash income for the 5-year period was about \$1,600. The average value of the food furnished by the farm was \$208 for Steele County and \$243 for Cottonwood and Jackson

Counties. The work done by members of the family on the farm was tabulated by sex and age distribution for various types of work.

SCARBOROUGH, WILLIAM S.

(30)

TENANCY AND OWNERSHIP AMONG NEGRO FARMERS IN SOUTHAMPTON COUNTY, VIRGINIA. U. S. Dept. Agr. Bull. 1404, 26 pp., illus. 1926.

The purpose of this study was "to determine the extent or lack of progress with particular reference \* \* \* to tenure \* \* \* among Negro farmers in a selected district of Virginia, a region where plantation organization has largely disappeared and where Negro farmers \* \* \* enjoy a large measure of independence." (p. 2). The 1921 level of living for 261 farm families (112 tenants and 149 owners) of Southampton County in southeastern Virginia is described. These farmers had attained 4.1 to 5.2 grades in school. The average size of family was 6.4 persons. The average money value of family living was \$584, of food furnished by the farm \$161, and of other items furnished \$233. Total expenditures for current living averaged \$277, for food \$92, and for clothing \$81. "Progress in accumulation is closely related to reliance on the farm as a source of food supplies. Although the best accumulators made the largest use of home-grown foods, this reliance did not greatly reduce the dependence on store purchases, but rather tended to amplify the standard of living" (p. 25).

HUDGINS, MARTHA

(31)

DISTRIBUTION OF HOUSEHOLD CASH EXPENDITURES. N. Y. Agr. Col. (Cornell), Farm Econ. 58: 1092-1093. Ithaca. 1929.

This study deals with the relation of income and family expenditures on 56 dairy farms in Chenango Valley, N. Y., for the period 1921-25. Average income was \$1,602, and average expenditures, \$774. Expenditures for food averaged \$367, and for clothing \$194. Analysis of the percentages of total income devoted to food and clothing indicated that "the percentage that food was of the total expenditures varied widely from farm to farm \* \* \* [and that] as income increased more money was spent for goods and services other than food, but not in proportion to income. Capital and income bear a negative relation to the percentage of household expenditures for food \* \* \*. Total expenditure and percentage of income spent for clothing varied directly."

(32)

INCOME, COST OF LIVING, AND SAVINGS. N. Y. Agr. Col. (Cornell), Farm Econ. 55: 977-978. Ithaca. 1928.

Two summaries by the same author deal with dairy farms in Chenango Valley, N. Y. The first covered 270 dairy farms, and the figures given represent averages for the 5-year period, 1921-25. This summary divided the farms into income groups and gave for each group the average income, average "cash cost of living," average capital investment, and the average amount it would be necessary to pay annually in order to pay off in 11 years a mortgage on half the value of the capital invested. The average income for all but 34 cases with a minus income, was \$1,602 and the average expenditures for family living exclusive of savings was \$774.

KIRKPATRICK, ELLIS L., and McNALL, PRESTON E.

(33)

SOME WISCONSIN FAMILY LIVING DATA. Jour. Farm. Econ. 13 (1): 168-169. 1931.

Summary data are given for 140 records "obtained in connection with route records on three small groups of Wisconsin farms as indicated \* \* \*. The 56 Fond du Lac records were kept by 24 families in the years 1923-24, 1924-25, and 1925-26. The 21 Barron County records are for the year 1927-28 only. The Walworth records were kept by 24 families in the years 1921-22, 1922-23, and 1923-24. The 143 records (results of only 140 were tabulated) represent 69 different families" (p. 168). The sample represented better than average conditions; five-sixths of the families were owners. The average size of family was 4.6 and the average cash income from the farm was \$1,363. The average money value of food furnished by the farm was \$186, of housing furnished \$270, and of fuel furnished \$40. The total expenditures for current living averaged \$1,016, of which \$317 was for food. The authors conclude with this suggestion: "The analysis of items of farm family expenditure can be more complete than the above if families keeping such records will report the goods and services by name rather than group them as personal. The different items can then be classified as desired by those having to do with summary and analysis of data" (p. 169).



GABBARD, LETCHER P.

(34)

AN AGRICULTURAL ECONOMIC SURVEY OF ROCKWALL COUNTY, TEXAS, A TYPICAL BLACK-LAND COTTON FARMING AREA. Tex. Agr. Expt. Sta. Bull. 327, 161 pp., illus. College Station. 1925.

As a pioneer economic survey of 500 farms in Rockwall County, Tex., this study dealt purposely with the farm as a business unit as the basis for securing a better living for the farm family. In 1920, 25 percent of the population were Negroes. The average net income for the 500 farms studied in 1922 was \$752. There is a careful analysis of size of farms, type of soil, roads, labor conditions, capital investment in farms, farm credit, farm income and expenditures, marketing, and land tenure. The final chapter deals with the farm home and surroundings, life insurance, and the rural social organizations of school and church.

GIBBONS, CHARLES E., assisted by ARMENTROUT, CLARA B.

(35)

CHILD LABOR AMONG COTTON GROWERS OF TEXAS: A STUDY OF CHILDREN LIVING IN RURAL COMMUNITIES IN SIX COUNTIES IN TEXAS. 124 pp. New York. 1925.

The National Child Labor Committee in pursuance of its policy of publishing accurate information on the employment of children undertook this study of child life in the cotton fields. Communities in six Texas counties typical of the several types of cotton growing were selected; within the section chosen, "practically all families living in a contiguous territory were visited" (p. 16) and insofar as possible the information was secured from both the father and the mother. For this report 998 family schedules covering the year 1922 were tabulated. About 20 percent of the families were Negro. Of the families, 405 were land-owners, 144 croppers, and 449 renters; the average size of family was 5.1; 10 percent of all parents were illiterate. The average education of the group was low but varied greatly. Cotton was the main crop, and corn held second place. Cotton culture requires much hand labor; this work can be done by children. "Children are the backbone of the labor supply. They are not just temporary or emergency workers, but are regular hands, and in a large measure determine the extent of the cotton crop" (p. 30). About 45 percent of all workers are children. "Children who work in the cotton fields are young \* \* \* the median age of all child workers was only 11 years, 5 months" (p. 30). Form of tenure and race had practically no influence in determining whether or not children worked. Over three-fourths of all children in families who raised cotton worked in the fields. "Children in these rural communities in Texas are not getting the schooling to which they are entitled" (p. 45). Work was not the only cause of children being out of school, but it was by all odds the most important cause. In addition to the work of the children, over half of all the mothers worked in the fields to help produce cotton. Even with all this labor the incomes were low. For white owners \$1,648 represented the average net income, for Negro croppers \$626, and for all families \$1,362. The study includes material on the need for credit and customs regarding credit, on the content of the diet, on the ages and hours of working children, and on the physical and social conditions of the families.

TAYLOR, CARL C., and ZIMMERMAN CARLE C.

(36)

ECONOMIC AND SOCIAL CONDITIONS OF NORTH CAROLINA FARMERS, BASED ON A SURVEY OF 1,000 NORTH CAROLINA FARMERS IN THREE TYPICAL COUNTIES OF THE STATE. N. C. Dept. of Agr., Tenancy Com. 87 pp. [n. p.] [1923.]

In order to investigate the problem of tenancy, a survey of 1,014 white and colored farm families was undertaken in representative areas in 3 typical counties in the 3 major geographical sections (mountain, piedmont, and coastal plain) of North Carolina. This survey covered the year 1922. Of the total number of families, 490 were landed and 524 landless, 733 were white, and 281 were colored. The average number of persons living at home was 5.05. Of all the families surveyed, 20.3 percent of the parents never attended school. Children of land-owners between 6 and 15 years of age, inclusive, could read and write in 60.5 percent of the cases as compared with 57.2 percent for the children of the landless, and 58.5 percent for all the children surveyed. It was found that 74.5 percent of all parents were church members. The average value of food raised was \$382 per family, of food bought \$78. The percentage of food produced at home was higher for landowning families than for landless families and higher for white families than for Negro families. The annual cash income per family varied from \$2,386 for white coastal plain operator landowners to \$156 for white mountain croppers. It was found that the cash income was higher among landowners than among landless and "from three to five times as high in the coastal plain county as in



the mountain county" (p. 28). "The cash income of the white tenants and croppers of the mountain county is less than 10 cents per day per individual" (p. 6). The level of living among the landless families was very low; 15.1 percent of them lived in houses of only 2 rooms, 2.5 percent in houses of 1 room; none of them had either indoor toilet or bathtub; 65 percent of them took no papers or magazines whatsoever; and "the average landless family for all surveyed attended less than two recreational events during the year of 1922" (p. 7).

CLARK, EDNA L., and KIRKPATRICK, ELLIS L. (37)

THE AVERAGE QUANTITIES AND COSTS OF CLOTHING PURCHASED BY FARM FAMILIES IN ONE YEAR; 1,337 FARM FAMILIES OF SELECTED LOCALITIES OF OHIO, KENTUCKY, MISSOURI, AND KANSAS, 1922-23. A PRELIMINARY REPORT. U. S. Dept. Agr., Bur. Home Econ. and Agr. Econ. 24 pp. 1925. [Mineographed.]

This report presents in detail the number, kinds, and costs of articles of clothing purchased in the year 1922-23 by individuals in 1,337 farm families living in selected localities of Ohio, Kentucky, Missouri, and Kansas. The data were collected by the schedule method in connection with a larger study of farm family living made by the Bureaus of Agricultural Economics and of Home Economics of the Department of Agriculture, in cooperation with State universities, colleges, and experiment stations. The figures in this report were summarized in part with clothing expenditure figures from other States in a bulletin on The Farmer's Standard of Living. The average size of family is given as 4.2 persons, and the average value of all family living as \$1,559. The average cost of clothing per family was \$225.

HAWLEY, EDITH (38)

AVERAGE QUANTITY, COST, AND NUTRITIVE VALUE OF FOOD CONSUMED BY FARM FAMILIES: FOOD CONSUMED DURING ONE YEAR BY 1,331 FARM FAMILIES OF SELECTED LOCALITIES IN KANSAS, KENTUCKY, MISSOURI, AND OHIO. A PRELIMINARY REPORT. U. S. Dept. Agr., Bur. Home Econ. 29 pp. 1926. [Mineographed.]

This report presents in detail the kinds, quantities, and nutritive content of the foods consumed by 1,331 farm families in selected localities of Kansas, Kentucky, Missouri, and Ohio. The data were collected by the schedule method in connection with a larger study of farm family living (1922-23) made by the Bureaus of Agricultural Economics and of Home Economics of the Department of Agriculture in cooperation with State universities, colleges, and experiment stations. The figures on total food expenditures and money value of food furnished by the farm are presented along with similar figures from other States in the bulletin on The Farmer's Standard of Living. The families from whom data were secured were chosen as typical of farm families with an adult male acting as farm operator and an adult female as farm homemaker. Average size of family was 4.4 persons.

Average value of all living is given as \$1,559, and of all food consumed as \$616. The money value of purchased food amounted to 33 percent of the total value of food consumed. Money value of food furnished by the farm was estimated on the basis of prices, "somewhere between what would have been received had they been sold and what would have been paid had they been purchased in the local market" (p. 14). Food consumption per adult-male equivalent was computed according to the Hawley energy and protein-mineral scales. The adequacy of the diet was estimated by calculating the total energy, protein, calcium, phosphorus, and iron furnished by the diet, and reducing the figures to a per-man-per-day basis and comparing the result with H. C. Sherman's standards for adequate food consumption. The comparison shows that "the food reported as consumed on the farm furnishes considerably more nutrients than are estimated as needed" (p. 6). However "before concluding that these figures give a true picture of the average farm diet it is necessary to consider the errors which they may be concealing" (p. 6). Sources of error considered are the uncertainty of the weight of food purchased in baskets, boxes, bushels; the lack of figures on waste and spoilage; the housewife's difficulty in estimating accurately quantities of food furnished the family by the farm; and the quantities of food brought into the house but actually used for farm animals. A comparison of the figures on the food consumption of farm families collected in this investigation with those on the food consumption of workingmen's families collected by the United States Bureau of Labor Statistics for 1918 lead to the tentative conclusion that "the farmer has a distinct economic advantage over the city working-man in his food supply" (p. 19).

KIRKPATRICK, ELLIS L.

(39)

AVERAGE EXPENDITURES FOR HOUSEHOLD FURNISHINGS AND EQUIPMENT PURCHASED BY FARM FAMILIES; HOUSEHOLD FURNISHINGS AND EQUIPMENT PURCHASED IN ONE YEAR BY 1,299 FARM FAMILIES OF SELECTED LOCALITIES OF OHIO, KENTUCKY, MISSOURI, AND KANSAS. A PRELIMINARY REPORT. U. S. Dept. Agr., Bur. Agr. Econ. and Home Econ. 14 pp. 1926. [Mimeographed.]

As part of a larger study of farm standards of living, figures were collected on the average expenditure for the different kinds of household furnishings and equipment purchased during 1922-23 by 1,299 farm families in selected localities (Ohio, 383 families; Kentucky, 370; Missouri, 178; and Kansas, 368). Typical farm homes were chosen to represent families of different size and levels of living within the locality. Of these families 872 were farm owners, 388 tenants, and 39 hired men. The homes averaged 4.2 persons per family. The value of family living for all groups averaged \$1,564, family expenditures \$904, and expenditures for furnishings and equipment \$44. The author concludes "that as more 'dollars' worth' of goods are provided for use during the year about the same proportion of the value of these goods is furnishing and equipment, on an average" (p. 6).

(40)

THE AVERAGE QUANTITIES AND VALUES OF FUEL AND OTHER HOUSEHOLD SUPPLIES USED BY FARM FAMILIES; FUEL AND OTHER HOUSEHOLD SUPPLIES FURNISHED BY THE FARM AND PURCHASED IN ONE YEAR FOR FAMILY LIVING PURPOSES BY 1337 FARM FAMILIES OF SELECTED LOCALITIES OF OHIO, KENTUCKY, MISSOURI, AND KANSAS. A PRELIMINARY REPORT. U. S. Dept. Agr., Bur. Agr. Econ. and Home Econ. 13 pp. 1926. [Mimeographed.]

This report presents the quantity and kind of fuel and of other household supplies purchased and secured directly from their own farms by 1,337 farm families living in selected localities of Kansas, Kentucky, Missouri, and Ohio. The data were collected by the schedule method in connection with a larger study of farm family living (1922-23) made by the Bureau of Agricultural Economics and of Home Economics of the Department of Agriculture in cooperation with State universities, colleges, and experiment stations. The figures in this report were summarized in part with similar figures from other States in a bulletin on The Farmer's Standard of Living. Average size of family was 4.2 persons. The average money value of all family living is given as \$1,560, of family living purchased as \$902, and of fuel and other household supplies as \$96. The money value of fuel furnished by the farm averaged \$31; fuel purchased, \$55; and other household supplies, \$10. Detailed figures are given on the quantity and cost of household supplies including laundry and toilet soap, cleaning powders, lye, laundry starch and bluing, and of wood, coal, kerosene, gasoline, electricity, matches, and "other fuel" purchased. "Other fuel" comprises acetylene-plant supplies, and, in a few cases, gas for lighting purposes. Detailed figures are also given on the quantity and money value of wood furnished by the farm, evaluated at the prices of cord-wood ready for household use, using prices half-way between what it would have brought had it been sold, and what it would have cost had it been purchased on the local market.

SCARBOROUGH, DONALD D.

(41)

AN ECONOMIC STUDY OF NEGRO FARMERS AS OWNERS, TENANTS, AND CROPPERS. Ga. Univ. Bull., v. 25, no. 2a, 37 pp., illus. Athens. 1924. (Phelps-Stokes Fellowship Studies no. 7.)

Data secured from 87 Negro families in Clark, Oconee, Wilkes, and Cobb Counties, Ga., were analyzed and compared to show differences in economic condition between owners, tenants, and croppers. The data were gathered in 1922-23, a period when the region was suffering from the post-war depression and when a condition of great unrest prevailed. The areas visited were selected rather than the Black Belt, because conditions had not been so completely demoralized by the bollweevil and because no similar study had been made there. The population was 46 percent colored. An attempt was made to get 25 typical families in each area. It was hoped that the data presented would help to show the degree to which the Negro farmer is or is not able to tide his business over a period of depression, and to give a better understanding of the conditions leading to the migration of 1922-23. Influence of tenure upon crop yield, diversity of crops, capital, and distribution of family living expenditures are considered. Size of family averaged 5.0. Total family earnings averaged \$431, and total value of



family living \$447. Size of farm averaged 76 acres, of which about half was cultivated. Money value of food furnished by the farm was \$155, of housing furnished \$32, of fuel furnished \$33. The average expenditure for clothing was \$60. On cropper farms 40 percent of the family living came from the farms; on owner farms, 54 percent. "It cannot be denied that white supervision increases the yields made by Negro farmers \* \* \* At present, the Negro landowners in this section seem to have little advantage over tenants and croppers, unless permanent residence can be counted an advantage. It is true that the owners spend more money for food and clothing, and live in better houses, but the home life seems to be about the same, and just as many of the young people seek employment elsewhere" (pp. 35-36).

VON TUNGELN, GEORGE H., THADEN, JOHN F., and KIRKPATRICK, ELLIS L. (42)  
COST OF LIVING ON IOWA FARMS. Iowa Agr. Expt. Sta. Bull. 237 (revised),  
62 pp., illus. Ames. 1928.

The Iowa farms study is one of a series in which the United States Department of Agriculture cooperated with State agricultural experiment stations to determine the cost of farm living in certain sections of the United States. This study covers four counties typical of the areas of diversified farming in the State. All farm families in these counties having an adult male acting as farm operator and an adult female acting as homemaker were studied. The population was predominantly of native American stock. There were 21 hired-man families, and only the more important categories of information are given also for them. The average size of families for owners was 4.8 and for tenants, 4.0. The tenants generally represented a younger and better educated group than the owners; 45.6 percent of the former and only 26.4 percent of the latter had had high school or college training. The owners held farms of an average size of 148.8 acres, their houses averaged \$3,043 in value, while the tenants lived on farms of 166.3 acres average size and lived in houses of \$2,206 average value. In 1922-23 the average total money value of family living for owners was \$1,876, of which \$757 represented goods furnished by the farm; for the tenants these figures were \$1,506 for value of living and \$645 for value of goods furnished. For the 451 owner and tenant families the value of food furnished by the farm averaged \$401, the value of houses occupied \$260, and of fuel furnished by the farm \$37. Total expenditures for family use averaged \$924, for food \$223, for clothing \$245, for operating expenses \$201. Payments on life and health insurance averaged \$59. Food was valued at farm prices. Ten percent of the value of the house was used as rental value. Considerable space is devoted to the size and equipment of homes and to the expenditures for recreation and advancement. The theoretical conclusions may be summarized as follows: As the family expenditure increases there is a tendency for the percentage expended on the following items to increase: Furniture and furnishings, maintenance of health, cultural wants and advancement, personal items (slowly), life insurance (slowly). The percentage expended upon the following items tends to decrease: Food, rent, operating expenses. For clothing the percentage first increases, then decreases.

KIRKPATRICK, ELLIS L. (43)  
THE FARMER'S STANDARD OF LIVING; A SOCIO-ECONOMIC STUDY OF 2,886  
WHITE FARM FAMILIES OF SELECTED LOCALITIES IN 11 STATES. U. S. Dept.  
Agr. Bull. 1466, 63 pp., illus. 1926.

The study of the level of living of 2,886 white farm families in 11 States (New Hampshire, Vermont, Massachusetts, Connecticut, Kentucky, South Carolina, Alabama, Missouri, Kansas, Iowa, and Ohio) during the years 1922, 1923, and 1924 was made possible by the cooperation of 12 colleges or universities with the United States Department of Agriculture. Of the 2,886 farmers, 1,950 were owners, 867 cash and share tenants including croppers, and 69 were hired men or managers. The families studied averaged 4.4 persons. The money value of family living averaged \$1,598. The average money value of food furnished by the farm was \$441, of housing furnished \$200, and of fuel furnished \$43. Foods furnished by the farm were valued at the average of farm and retail prices. The value of housing furnished was calculated at 10 percent of the total value of the house. Gifts of clothing were valued in comparison with new garments of similar kinds. Total expenditures for current living averaged \$873, for food \$218, for clothing \$235, and for operation goods \$170 (including transportation). Premiums for life and health insurance averaged \$41. Comparisons are made between the families of owners, tenants, and hired men of this study, and between these families and other farmers' and workingmen's families. Tentative conclusions reached are: The level of living as measured in terms of the money value



of goods used was significantly related to the number and the age of children per family, to the formal schooling of the operator and homemaker (particularly the latter), to the size of the farm operated, to the number of years the operator has been a farm owner, and to income from sources other than the farm business.

KYRK, HAZEL

COST OF LIVING ON IOWA FARMS; HOUSEHOLD EXPENDITURES. Iowa Agr. Expt. Sta. Bull. 237 (pt. 2): [58]-79. Ames. 1926. (44)

In the three years 1922, 1923, and 1924 the home management specialist in the extension service of Iowa State College persuaded 50 farm women to keep records of the cash expenditures of their families in order to improve the management of their finances. This report utilized 14 of these account books, kept by 10 families; 2 families lived in small towns and 8 on farms. The average size of the families was 3.5 persons. The average total expenditure for family living was \$927. The average money value of food furnished by the farm was \$242 according to farm prices. The average expenditure for food was \$201, for clothing \$177, and for household operation about \$121. Comparison was made of the expenditures of Iowa farm families with figures for 102 Des Moines wage-earners' families collected by the United States Bureau of Labor in 1918-19 and with the expenditures of 125 Story County families studied by the United States Bureau of Agricultural Economics. On this basis of slight comparison "the farmers' level of expenditures seems to be higher than the wage earners" (p. 77). The data given indicate that as income increases, the percentage spent for food decreases.

WILLIAMS, FAITH M.

CLOTHING COSTS AMONG 1,425 FARM FAMILIES REPORTED IN SURVEY. U. S. Dept. Agr. Yearbook 1931: 146-149. (45)

A detailed analysis was made of the yearly clothing purchases of 1,425 farm families in 11 States from data collected in 1922-24. Total expenditures for current living averaged about \$888, and for clothing \$222. Conclusions are that with an increase in size of family, the proportion of the family funds going for clothes increased. As the income increased, the clothing ratio decreased. Few garments were made at home for men and older boys. Most of the clothing for babies and small children and much for the women was home-made.

BROWN, SARA A., and SARGENT, ROBIE O.

CHILDREN WORKING IN THE SUGAR BEET FIELDS OF THE NORTH PLATTE VALLEY OF NEBRASKA. Natl. Child Labor Com. Pub. 318, 106 pp., illus. New York. 1924. (46)

The 995 children under 16 years of age of 355 families (297 contract laborers and 58 growers) working in the sugar-beet fields within the North Platte Valley of Nebraska in 1923 were studied in order to determine the conditions under which children worked, lived, and went or failed to go to school; and to obtain information which would help in formulating practical means for adjusting the kind and amount of work to each child according to his age, right to education, play, and freedom from responsibility for the support of his family. Families who had children under 16 years of age doing hand work in beets were selected. Practically all of the families were foreign, the largest number (222 contract and 48 grower) being Russian-German. There were 304 foreign-born mothers in the group and 323 foreign-born fathers. The number of children living at home in the 355 beet-working families average 5.8 per family.

Contract-labor fathers were paid \$21 and \$22 per acre per season. Children were not contracted to do hand work but worked for their fathers without pay. The 297 contract-labor families averaged an income of \$1,062 per family for the beet season, the 568 child workers between 10 and 15 years of age contributing to the family earnings an average of \$194 per person and the 247 child workers under 10 contributing an average of \$128 per child. Of the 297 contract-labor families all but 5 had houses furnished. It was estimated that of the 297 families, 32 produced the major part of their food and the rest did not. Fresh milk was available for 72 percent. There was little participation in community life on the part of contract-labor families. Nationality seemed to be the principal factor determining neighborliness. "The children of the contract-labor family are on a social level with those of their employer of the same nationality. This is not true of the children of Mexican contract-labor families. They are always employed by other nationalities \* \* \*. Even the children of the groups do not mingle" (p. 57). Tables made from the school records show the number of days attended and lost by the children of four family groups of contract laborers and growers. The 712 children of the 297 contract-labor families lost an average of 42.6 days.

THADEN, JOHN F.

(47)

STANDARD OF LIVING ON IOWA FARMS. Iowa Agr. Expt. Sta. Bull. 238 (revised), pp. [82]-136, illus. Ames. 1928.

This study was made among 451 farm families (212 owners and 239 tenants) in certain areas of Boone, Story, and Sac Counties, Iowa, during the year ended July 1, 1923. "All families within the areas surveyed were interviewed and their expenditures and activities were listed and analyzed in order to note the forces and factors that control or influence living on the farm" (p. 85). Families were reduced to a comparable basis by use of household-size indexes. The scales used in computing these household-size indexes were developed from the material gathered in this survey to represent the relative money values of food, clothing, rent, furnishings and equipment, operating, health, advancement, personal, insurance, and unclassified goods consumed by persons of different age and sex. Average size of family was 4.4 persons. The total value of family living was \$1,680. The average money value of food furnished by the farm was \$401, of housing furnished, \$260, and of other goods furnished, \$37. Total expenditures for current living averaged \$923, for food \$223, for clothing \$245, and for household operations \$201. Life and health insurance averaged \$59.

CLARK, EDNA L.

(48)

AVERAGE CLOTHING EXPENDITURES OF 86 FARM FAMILIES OF FRANKLIN COUNTY, VERMONT, DURING 1923-24. A PRELIMINARY REPORT. U. S. Dept. Agr., Bur. Home Econ. 53 pp. 1927. [Mimeographed.]

Detailed figures on clothing expenditures in the year 1923-24 were obtained by the schedule method from 86 English-speaking white families, chosen as representative of Enosburg Township, Franklin County, Vt. Money value of all living averaged \$1,546, and average size of family 4.8 persons. Expenditures for clothing averaged \$178. A comparison of the proportion of the money value of living represented by expenditures for clothing among these Vermont families with the proportion among other farm families studied just before this investigation led to the conclusion that the Vermont families had lower clothing standards than those studied in Kentucky, Ohio, and Alabama. An analysis of the expenditures for clothing of 1,337 farm families in 6 States by value of living groups shows a steady increase in the proportion of value of living represented by clothing with increases in the value of living. A detailed analysis of expenditures by the Vermont families for ready-to-wear garments, and for materials for making garments at home shows that very few garments for sons over 9 years of age or for husbands were home-made. "An analysis of the average number of home-made and purchased garments per person for each sex and age group table 14 \* \* \* indicates that for most of the garments included in the table daughters between 6 and 21 years of age average a somewhat larger number of the home-made than of the purchased, whereas daughters under 6 years and wives 26 to 59 years average for most of the articles of clothing a larger number of the purchased than of the home-made [garments]" (pp. 28-29).

HAWLEY, EDITH

(49)

THE QUANTITY, MONEY VALUE, AND NUTRITIVE VALUE OF FOOD CONSUMED BY 86 FARM FAMILIES IN FRANKLIN COUNTY, VERMONT, IN 1923-24. A PRELIMINARY REPORT. U. S. Dept. Agr., Bur. Home Econ. 25 pp. 1927. [Mimeographed.]

The 86 families included in this study were representative of the English-speaking white farm families with an adult male acting as farm operator and an adult female acting as farm homemaker in Franklin County, Vt., in 1923-24. Average size of household was 4.8 adult-male energy units. Average value of all living is given as \$1,546, and of all food consumed as \$672. The money value of purchased food amounted to 42 percent of the total value of all food consumed. Food furnished by the farm was valued at prices which would have been received had they been sold at the local market. Food consumption per adult-male equivalent was computed according to the Hawley energy and protein-mineral scales. The adequacy of the diet was estimated by calculating the total energy, protein, calcium, phosphorus, and iron furnished by all food consumed, reducing the figures to a per-man-per-day basis, and comparing the results with H. C. Sherman's standards for adequate food consumption. The comparison shows that, according to the figures given the field investigators, these Vermont families were more than adequately fed. "Before concluding that these figures give a true picture of the average diet of these 86 families, however, it is necessary to consider the errors which they may be concealing" (p. 9). Sources of error considered are the uncertainty of the weight of food purchased in baskets, boxes,



bushels, and other volumetric measures; the lack of figures on waste and spoilage; the farm housewife's difficulty in estimating accurately quantities of food furnished the family by the farm; and the quantities of food brought into the house but actually used for farm animals. A comparison of the figures on the average food consumption of these Vermont farm families with those on the food consumption of workingmen's families collected by the United States Bureau of Labor Statistics in 1918 led to the tentative conclusion that "the farmer has a distinct economic advantage over the city workingman in his food supply" (p. 19).

KIRKPATRICK, ELLIS L., and DICKEY, JAMES A. (50)

LIVING CONDITIONS AND FAMILY LIVING IN FARM HOMES OF SCHOHARIE COUNTY, NEW YORK. A PRELIMINARY REPORT. U. S. Dept. Agr., Bur. Agr. Econ. 22 pp. 1925. [Mimeographed.]

This study covered 432 owner and 66 tenant farm families in the southern part of Schoharie County, N. Y., during 1923-24. All typical farm homes within the localities selected were visited, that is, those with an adult farm operator and adult homemaker. Much of the land was marginal; dairying was the main enterprise. The average size of family was 3.6 persons with an average value of family living of \$1,078. The value of food furnished by the farm averaged \$224, of housing furnished \$95, and of other goods furnished \$109. The average expenditure for family use was \$633, for food \$253, for clothing \$156, and for household operation \$78. Life- and health-insurance premiums averaged \$17. Foods furnished by the farm were valued according to farm prices. Housing was estimated at 10 percent of the value of the house.

MAUTNER, BERTRAM H., and ABBOTT, W. LEWIS, assisted by BELL, HAROLD W., and BISPHAM, ANNE (51)

CHILD LABOR IN AGRICULTURE AND FARM LIFE IN THE ARKANSAS VALLEY OF COLORADO. Natl. Child Labor Com. Pub. 359, 158 pp., illus. New York. 1929.

"The problem of children in agriculture is one upon which there are many opinions current. \* \* \* There is need, therefore, for accurate and impartial studies of the problem, for only in this way can an informed and intelligent opinion and an adequate program of action be developed" (p. 10). The study was carried out in 1924 in the Arkansas Valley of Colorado, "a narrow strip of fertile land running through more or less barren country. \* \* \* The principal crops grown in the valley are sugar beets, cantaloupes, cucumbers for seed, beans, alfalfa, corn, and small grains. \* \* \* It is thus an area of general farming" (p. 9). "In the school districts selected every rural family was visited, and information was collected from every family having children under 16 years of age who worked, no matter how little, on the farm" (p. 10). Information was secured from 329 families. The community contained three economic groups—owners and owner renters, renters or tenants, and contract and wage laborers. The average number of persons per household for all groups was 6.6. The nationality of the group was as follows: "43.2 percent of the parents were foreign born; 57 percent of the foreign-born parents came from Mexico and 36 percent from Russia" (p. 73). Nearly all contract workers were Spanish-American or Mexican; nearly all Russian-Germans were owners or renters. Aside from these two groups the remainder were nearly all Americans.

"Nearly 70 percent of the parents were citizens; \* \* \* 13.4 percent were unable to speak English \* \* \* [and] nearly half of the parents were unable to read and write English; \* \* \* 17.3 percent of the parents were illiterate. Of the 618 parents, 21.2 percent had had no schooling whatever, one-third had attended school from one to five years, another third had attended from six to eight years" (pp. 73-74).

The average combined income for beet work, other summer work, and winter work was \$800 for 125 families of the contract- and wage-labor group. The living conditions of the other two groups were distinctly better than for the wage-earner-contract group. The study contains detailed material on the ages and occupations of the working children, on their hours per day and the total number of working days per year, and on the variation in child labor among the three economic groups; also material on school attendance and grade standing of the children.

RANKIN, JOHN O. (52)

THE COST OF CLOTHING THE NEBRASKA FARM FAMILY. Nebr. Agr. Expt. Sta. Bull. 248, 22 pp., illus. Lincoln. 1930.

Statements of a year's clothing purchases were secured from 328 farm families included in the 1924 survey described in *Cost of Feeding the Nebraska Farm*



Family (53). Of these 328 families, 107 were owners, 58 were part owners, 156 were tenants, and 7 were hired men. Total money expenditures for family living averaged \$428 per person for owners and part owners, and \$367 for tenants. Clothing costs per person averaged \$49. The average number of persons for whom clothing was purchased was 3.99 per family. Nebraska farm families spend less for clothing than farm families in 13 out of 14 other States where similar studies had been made.

RANKIN, JOHN O.

(53)

COST OF FEEDING THE NEBRASKA FARM FAMILY. Nebr. Agr. Expt. Sta. Bull. 219, 36 pp., illus. [Lincoln.] 1927.

This survey of 342 farm homes located near four towns in eastern, northeastern, and western Nebraska for 1923-24 was undertaken to find out "what and how much the Nebraska farm family eats", how much is farm produced, how their food consumption compares with that of other States, nations, and industries, and how it is changing. Every farm was visited in each area selected. The families consisted of 114 owners, 60 part owners, 160 tenants, and 8 hired men, and comparisons between these groups are made. Family size averaged 4.4 persons. About one-third of the value of family living was represented by food. Food furnished by the farm averaged \$505, and food purchased \$230. Food furnished was valued at farm prices. Detailed figures are given by tenure groups for the quantities and costs of meats, groceries, fruits, vegetables, and dairy products consumed per family and per adult equivalent. "The number of adult equivalents was computed by adding to the number of individuals over 12 years of age half the number under that age" (p. 13).

(54)

HOUSING AND HOUSE OPERATION COSTS ON NEBRASKA FARMS. Nebr. Agr. Expt. Sta. Bull. 264, 41 pp., illus. Lincoln. 1931.

This bulletin deals with size of house and household, household conveniences, and costs of housing and house operation, based primarily on a survey of 342 unselected farm families in four Nebraska counties in 1924. For comparative purposes material from these three sources appears: (1) Data from 343 Nebraska crop-reporting correspondents whose wives answered a questionnaire mailed them in 1919 by the Office of Cooperative Extension Work of the United States Department of Agriculture; (2) data on size of house and household obtained in 1920 in cooperation with the United States Bureau of Agricultural Economics from a survey of 1,141 farm homes in 11 counties of Nebraska; (3) data on home equipment from a survey in 1926 of 3,477 farm homes of Nebraska, members of home demonstration clubs. Of the 342 farm families, 114 were owners, 60 part owners, 160 tenants, and 8 hired men. For the 340 homes which completely reported living expenditures for the year ended June 1924, the average money value of family living was \$1,681, of housing furnished \$204 (10 percent of the value of the house), of fuel furnished \$47, and of household operation purchased \$122. The Nebraska farm homes studied ranked distinctly below Nebraska town and city homes in modern home conveniences. The houses of owners and part owners were larger, more valuable, and better furnished and equipped than the houses of tenants.

— and HINMAN, ELEANOR H.

(55)

A SUMMARY OF THE STANDARD OF LIVING IN NEBRASKA FARM HOMES. Nebr. Agr. Expt. Sta. Bull. 267, 36 pp., illus. Lincoln. 1932.

These data, collected by field workers from 342 unselected farm homes in four counties of Nebraska, cover the 12 months from June 1923 to June 1924. Family size averaged 4.3 persons. Of the 340 families who fully reported the money value of their family living, 113 were owners, 60 part owners, 159 tenants, and 8 hired men. The average value of family living was \$1,681, of food furnished about \$484, of housing furnished about \$204, and of fuel and other items furnished about \$62. Housing furnished was 10 percent of the value of the house. Food furnished was valued at farm prices. Total expenditures for current living averaged \$931, for food about \$242, and for clothing \$202. Life- and accident-insurance premiums averaged \$50. The level of living was relatively high in value of food and operation goods consumed and relatively low in value of clothing, education, and recreation, as compared with the level in comparable American homes. Size of household appeared to have more effect upon the level of living than did tenure, amount of expenditure, age of operator, locality, or value of farm.

SANDERSON, DWIGHT

(56)

A STUDY OF SICKNESS IN RURAL AREAS IN CORTLAND COUNTY, NEW YORK. N. Y. (Cornell) Agr. Expt. Sta. Mem. 112, 27 pp., illus. Ithaca. 1928.

A comparative study was made in 1923-24 of families in the three towns of Willet, Virgil, and Harford in Cortland County, N. Y., in order to determine the effect of sickness on the life of the farm family. Cortland County was chosen because of its convenience to Ithaca and because its conditions were fairly typical of central New York. Practically all the inhabitants were of native white stock; only 2.3 percent were aliens. Value-of-living data were obtained from 142 farm-families in the towns of Willet and Virgil, and from 31 families in the village of Willet. The farm families had an average total value of living of \$1,069 (of which goods furnished by the farm totaled \$361), as compared with \$974 for the village families (of which goods furnished totaled \$119). Expenditures for health comprised 6 percent of the cash expenditures for the farm group and 8 percent for the village group. The total direct expenditures for health by families in the three towns were \$22,978, an average of \$41 per family as compared with \$42 for the 142 farm families in Willet and Virgil and \$69 for the 31 village families. The material covers the costs to families in Willet, Virgil, and Harford of local doctors, nonlocal doctors, dentists, oculists, nurses, extra help in house during sickness, hospital care, and medicines. On the average, sicknesses in the villages were of longer duration than in the country. The percentage of families in which some sickness occurred during the year was about 47 percent for both farm and village families.

KIRKPATRICK, ELLIS L.

(57)

ANNUAL FAMILY LIVING IN SELECTED FARM HOMES OF NORTH DAKOTA. A PRELIMINARY REPORT. U. S. Dept. Agr., Bur. Agr. Econ. 17 pp. 1928. [Mimeographed.]

Sixty-five farm management-cost accounts kept by 56 families covering variously the calendar years 1923, 1924, and 1925 were collected by the North Dakota Agricultural Experiment Station in cooperation with the Bureau of Agricultural Economics, United States Department of Agriculture. The average size of household is given as 5.1 persons. The average size of the farms operated by the groups reporting in the different years ranged from 394 to 491 acres. The annual money value of food furnished by the farm as shown by the 65 accounts averaged \$363, of fuel furnished by the farm \$11, and of the use of the farmhouse \$190. Money expenditures for current living averaged \$892; for food, \$286; for clothing, \$173; and for household operation, \$218. The average cost of life, endowment, health, and accident insurance is given as \$52. The annual rental value of the houses occupied was calculated at 10 percent of the value of the house "insofar as this value could be determined by the field agent. This rental value is intended to cover taxes, insurance, and repairs on the house, and to pay 6 percent interest on the investment" (p. 6). Separate averages for each of the 3 years covered in the report show that expenditures for family use varied less widely than farm income.

BROWN, SARA A., assisted by SARGENT, ROBIE O., and ARMENTROUT, CLARA B.

(58)

CHILDREN WORKING IN THE SUGAR BEET FIELDS OF CERTAIN DISTRICTS OF THE SOUTH PLATTE VALLEY, COLORADO. Natl. Child Labor Com. Pub. 333, 167 pp., illus. New York. 1925.

During 1924 a study was made of 1,081 children under 16 years of age in 434 families (271 contract-labor families and 163 grower families) in the sugar-beet fields of the South Platte Valley of Colorado. The survey was made to determine "what children worked, the kind of work they did, how long they worked and with what remuneration, under what conditions they lived, their attendance upon school and their grade standing" (p. 17). School districts in which children were known to work in the field were selected. Within each district all families who had children under 16 years of age working in the beet district were selected.

Of the 163 grower families, 119 were tenant farmers and 44 were farm owners. The average yearly income of the contract-labor families was \$1,163. It was estimated that grower families received on the average \$2,638 gross income from the beet crops. Of the 1,081 children doing handwork, 223 were under 10 years of age, and 559 were from 10 to 13. The parents of most of the child workers were foreign born. More than one-half (54 percent) of the contract-labor families, 74 percent of the tenant growers, and 73 percent of the owner growers were Russian-German. The second largest nationality group were Mexicans or Spanish-



Americans; none of this group were owners. The average size of households was 8.2 persons for all families. Only 16 percent of the families raised the major part of their food. Of the 434 families, 47 percent had no reading matter of any kind in any language. Church attendance was reported by 77 percent of the contract-labor, 89 percent of the tenant, and 93 percent of the owner families. There was little participation in social activities. Neighborly relationship was determined largely by nationality.

The last part of the report is devoted to child workers and the school. Factors affecting attendance varied widely for children of contract-labor families as compared with farm families, tenants, and owners. The authors found that—"Children of compulsory school age belonging to beet-working farm families had one chance in three for perfect school attendance during harvest, as against those of nonbeet-working farm families" (p. 123).

GIBBONS, CHARLES E., and BELL, HOWARD M.

(59)

CHILDREN WORKING ON FARMS IN CERTAIN SECTIONS OF THE WESTERN SLOPE OF COLORADO. Natl. Child Labor Com. Pub. 327, 112 pp. New York. 1925.

Investigators of the National Child Labor Committee visited every family in selected school districts of Mesa, Montrose, and Delta Counties, Colo., in the summer of 1924. From those families in which there were children between the ages of 6 and 16 that did any farm work, data were obtained to show "the conditions under which children worked, lived, and went, or failed to go to school" (p. 17). The area is entirely dependent upon irrigation for its water supply. Sugar beets are the chief cash crop. Of the 330 families having children between 6 and 16 years old who were doing farm work, 147 owned their own farms, 103 rented them, 57 were contract workers, and 23 wage workers. One-fifth of all the parents were of Mexican descent, the contract workers being predominantly of this lineage. The average size of family was 6.08 persons. Income figures are given for the contract families only. Money income averaged \$743 for the year.

It was found that "taking the houses as a whole for the owner, renter, and wage families, the situation may be said to be fairly typical of the average American rural community. It is perhaps, no better, no worse. \* \* \* The average run of them (the houses) for these tenure groups may be said to meet the conditions necessary for reasonable family living. On the other hand, the living quarters provided for the contract families are almost universally bad. Generally speaking the poorest dwellings of the community are occupied by families of Mexican descent" (pp. 70-71). The contract workers have never known anything but poverty, they are ignorant and have a low standard of living. Nevertheless many bitter complaints were heard against the housing situation.

School records for the first 2 months of the school year were secured for 1,714 children in the selected school districts. Of these children, 614 came from the 330 families visited in the family-living study. More than one-third of the 1,714 children had missed school for work. Those who were out for work missed an average of 18.6 days out of a possible 47.6 days. One-third of the children were retarded. "Contract children were not expected \* \* \* to go to school until after the beets were cut. In fact the local school districts in which these families are living while working the beets are assuming practically no responsibility for the schooling of the Mexican children; they simply do not want them in their schools" (p. 111).

McCORMICK, THOMAS C.

(60)

FARM STANDARDS OF LIVING IN FAULKNER COUNTY, ARKANSAS. Ark. Agr. Expt. Sta. Bull. 279, 39 pp. Fayetteville. 1932.

Three hundred and eighty-five white farm owners and tenant families were selected for this study in a foothills county of Arkansas, a county typical perhaps of one-third of the State. The data applied to the year 1924. "Three-fourths of the farmers and wives visited were natives of Arkansas \* \* \* The average household contained between five and six persons \* \* \* Both men and women as a rule had about a sixth-grade education" (p. 153). Some had a high-school training, and a few had been to college. Their average value of current living was \$1,085. The average money value of food furnished by the farm was \$433; of housing furnished, \$108; and of fuel and light, \$42. Total expenditures for current living averaged \$1,070; for food, \$567; for clothing, \$135; and for fuel, light, and miscellaneous household expenses, \$73. Life- and accident-insurance premiums averaged \$15. The author concludes: "that owners had a third more net cash income and a standard of consumption higher by nearly a fifth, enjoyed living surroundings and home equipment at least one-half better,



and participated at least two-fifths more in the activities and support of community organizations. The typical tenant family was sacrificing the aesthetic, religious, social, and intellectual aspects of life in the effort to supply physical necessities" (p. 156). Multiple and partial correlation ratios were worked out for relations between total value of living and ages of operators and wives, net cash income, the distance in miles of the farm from the village, and the education of operators and wives.

NICHOLLS, WILLIAM D.

(61)

FARM TENANCY IN CENTRAL KENTUCKY. Ky. Agr. Expt. Sta. Bull. 303: 123-185, illus. Lexington. 1930.

This study is devoted to the problems of tenancy and tenant farming in the bluegrass sections of Kentucky. A general study was made of all farms in 33 counties and a more detailed study made of 176 farms in the 6 central counties which were best adapted to tobacco raising. Of the farmers in the area about 55 percent were full owners, 7 percent part owners, and 37 percent tenants. In the 33 counties there were 23,000 tenants, about 6 percent of whom were cash tenants. The richer the tobacco land, the higher the proportion of tenant operators. On the average tenants had reached the sixth grade in school and some had been to college. The average number of persons on the farms in the 6 inner counties was 4.3. The data apply chiefly to the year 1924, but are compared with additional data for 1926 and 1927. Great variation in income during these years was the result of wide differences in the price of raw tobacco which ranged from 13.2 to 28.2 cents per pound. The figures for income and expenses are averages of the 3 years. The average money value of the tenant family's income was \$1,080 of which \$391 worth represented goods furnished by the farm. The value of the food furnished was \$280, and of housing \$111. The cash expenditures for current living averaged \$577. The net receipts to the landlord per farm were \$1,257, or an average return for the 3 years of \$1,290 on his investment. The study includes material on detailed farm expenses to tenant and landlord, an analysis of the types of tenure, on relation of size of farm to income, and other aspects of tenant farming.

RANKIN, JOHN O.

(62)

THE USE OF TIME IN FARM HOMES. Nebr. Agr. Expt. Sta. Bull. 230, 50 pp., illus. Lincoln. 1928.

To find out how Nebraska farm operators, homemakers, and children use their time, material from three sources was brought together in this bulletin. The basic source is a survey, made in the summer of 1924, of 342 unselected Nebraska farm families in representative areas of 4 counties. Additional data are used from a questionnaire filled in by 343 crop reporters' wives in 1919. The source for data on musical instruments and community library facilities is a survey of 3,449 farm club women's homes, studied by home demonstration agents in 1926. The average expenditure for family living for the 342 families was \$1,681. Of these families 114 were owners, 8 were hired men, and the rest part owners or tenants. Not all the records used were complete and the figures presented are based on samples of varying size.

SANDERS, JESSE T.

(63)

THE ECONOMIC AND SOCIAL ASPECTS OF MOBILITY OF OKLAHOMA FARMERS. Okla. Agr. Expt. Sta. Bull. 195, 71 pp., illus. Stillwater. 1929.

This study of mobility of farmers in 1924 includes tables on the family living of 542 owner families and 818 tenant families. The data are classified according to stability of tenure. The area includes 4 Oklahoma districts, comprising 8 counties. The average number of persons in the owner families ranged from 4.4 to 5.3 and in the tenant families from 3.4 to 5.4. The average spent per person for all family living ranged from \$158 to \$407 for owner families and from \$124 to \$594 for tenant families. The amount per person from the farm ranged from \$43 to \$78 for owner families and from \$34 to \$64 for tenant families. A table showing the relation between farm stability and periodical reading matter of 1,477 cases is included. The author concludes that "there is a fairly well-defined relationship between the larger amounts of moving and the lower amount of net wealth which tenants have \* \* \* This does not hold true with owners, however" (p. 61). Also, it is possible that "about one-fourth of all farmers normally move from one farm to another each year and approximately 8 to 9 percent of all farmers retire or quit farming, and new ones take their places each year" (p. 9).

TURNER, HOWARD A., and HOWELL, LEANDER D.

(64)

CONDITION OF FARMERS IN A WHITE-FARMER AREA OF THE COTTON PIEDMONT.  
1924-26. U. S. Dept. Agr. Circ. 78, 48 pp., illus. 1929.

"The study was made for the purpose of ascertaining, for a representative white-farmer locality of the piedmont, how the farmers live, what their sources of wealth and income are and what they have been, why it is that so many are tenants in a section in which farms have so low a value, what effect the boom and the subsequent slump in farm-land values had on them; and how they are adjusting themselves to bollweevil conditions and to the fact that their main source of income, cotton, is relatively low.

"Records usable in all tabulations were secured from 288 of the farmers who had farmed in Gwinnett County in both 1924 and 1925" (p. 14). Of these farmers, 94 were owners, 122 renters, and 72 croppers. Nine-tenths of these farmers had been reared in Gwinnett or an adjoining county. The average size of family was 5.02. In the year 1924, the average value of family living was \$687; of food furnished by the farm \$317; of housing furnished, \$53; and of fuel furnished \$27. Housing furnished was "calculated at \$12 per year for houses valued at less than \$100; \$18 per year for houses valued at \$100 to \$180; and 10 percent of the value for houses valued at \$180 or more" (p. 41). Total expenditures for current living averaged \$291, for food \$107, for clothing \$83.

Some conclusions are that some of the farmers "prefer to be tenants because it relieves them of the necessity of accumulation through self-denial and relieves them of the problems of ownership. They have become accustomed to working for someone who is interested enough in the products of their industry to provide for them" (p. 45). "The 1924 crop of cotton occupied only 27,115 acres whereas the 1919 crop occupied 57,457 acres \* \* \*. The readjustment in the cotton acreage was made as a result of the \* \* \* bollweevil, markedly lower cotton prices, and a restriction of credit for cotton production \* \* \*. In 1924 for the first time in a census year, corn occupied over half of the crop acreage" (p. 5).

LIVELY, CHARLES E.

(65)

COST OF FAMILY LIVING ON THE FARM; REPORT OF COST OF LIVING STUDIES ON  
26 OHIO FARM FAMILIES, APRIL 1, 1924 TO APRIL 1, 1925. Ohio State Univ.,  
Dept. Rural Econ. [22] pp. [Columbus.] [n. d.] [Mimeographed.]

"This report covers detailed household accounts kept throughout the 12 months ending April 1, 1925, by 26 farm families located in 9 Ohio counties" (p. 1). The families were selected by the home demonstration or county agricultural agent in each county on the basis of "the homemaker's interest in household accounts and her ability to keep and report a satisfactory record" (p. 1). It was believed that these families ranked above the average of Ohio farm families though adequate proof was not at hand. The average family numbered 4.5 persons. The average total value of family living (less transportation and rent, for which complete figures were not obtained) was \$1,425. The average money value of food furnished was \$400; of operating goods furnished \$27. The average expenditure for food was \$226, for clothing \$201, for household operation \$152. Savings and investments averaged \$98. A comparison of the value of products furnished by the home farm figured at farm sale prices and at Columbus, Ohio, retail prices revealed that the retail price and the farm price of the same farm products differed to such an extent that a farmer moving to a city such as Columbus would have to figure "not only on purchasing that percentage of family living previously obtained from the farm, but he must figure on paying 50 percent more for it than when same is obtained from the farm" (p. 8).

ZIMMERMAN, CARLE C., and BLACK, JOHN D.

(66)

HOW MINNESOTA FARM FAMILY INCOMES ARE SPENT; AN INTERPRETATION OF  
A ONE YEAR'S STUDY, 1924-25. Minn. Agr. Expt. Sta. Bull. 234, 49 pp.,  
illus. University Farm, St. Paul. 1927.

This survey covered 357 families during the fall of 1925. Investigators visited about 50 contiguous farm families in 7 different counties. Typical communities were picked by use of census data. Twenty-nine percent of the farm operators visited were foreign born, the majority being of Scandinavian and German origin. The number in the family averaged 4.9 persons. Two types of schedules were used, one a short schedule giving data on family living expenditures only, and one a long schedule giving more complete information. The investigators secured 157 long schedules and 200 short schedules. In order to show the representative character of the data, figures are presented for each county visited, on the average size of all farms and of those surveyed, and on the percentage of all farms, and of



farms surveyed which are rented. One-third of the cash receipts of the farmers in the communities studied came from livestock, and almost one-third from grain and other crops.

Total money expenditures for the family averaged \$939, for food \$324, for clothing \$231, and for household operation \$91. In addition expenditures for automobiles for farm and family use averaged \$212. Savings averaged \$319, of which life insurance accounted for \$38. Data on the housing and household equipment of families in different cash receipts groups lead the authors to conclude that an increase in farm income is not the only prerequisite to the improvement of rural living. "Steps must be taken to bring about a change in the attitude of farmers regarding the importance of the home and the necessity of mechanical aids for the household" (p. 24). Data on food expenditures and the consumption of home-produced food show that farmers with larger incomes produce larger quantities of food for home use. The figures on savings show that "the farm groups studied spent nearly three dollars out of every ten in such a way as to increase future wealth rather than to improve present living" (p. 45). Some figures were also collected on population trends which show that family size in this area was declining at the time the study was made, and that the larger families were in the lower income groups.

JOHNSON, OLIVER R., and FRAME, BENJAMIN H. (67)  
COST OF FAMILY LIVING ON THE FARM. Mo. Agr. Expt. Sta. Bull. 256, 38 pp.  
Columbia. 1927.

Figures are given for the value of current living for 14 Missouri farm families in 1924, 16 in 1925, and 14 in 1926. Total money value of living averaged in 1926, \$1,370. Expenditures for groceries averaged \$207, for miscellaneous household \$98, and for dry goods \$165. Products from the farm were valued at \$535, including food, housing, and fuel.

DENUNE, PERRY P. (68)  
FARM LABORER'S PLIGHT. Survey 61 (2): 70-71. 1928.

This article on the farm laborer's plight was provoked by a previous article on the plight of the city laborer. The writer interviewed 167 farm families chosen at random in Pickaway County, a rich agricultural section of Ohio, and studied the level of living standards of the 25 farm-laborers' families included in the group for the year 1925. The wage received by the heads of these laborers' families was either \$1.25 or \$1.50 a day depending upon the "accommodations" furnished by the farmer. "If the 'tenant-house' was in fair condition and a garden and cow or horse pasturage was furnished, the usual wage was \$1.25 a day" (p. 71). During short special seasons, such as harvesting, the usual wage was \$2.50 a day. The average expenditure of these families for groceries was \$265, which amounted to more than 50 percent of their cash income. The average expenditure for clothing was \$138. "The two items of food and clothing consume 80 percent of the cash incomes of these laborers' families" (p. 71).

DUNCAN, OTIS D., and SANDERS, JESSE T. (69)  
A STUDY OF CERTAIN ECONOMIC FACTORS IN RELATION TO SOCIAL LIFE AMONG  
OKLAHOMA COTTON FARMERS. Okla. Agr. Expt. Sta. Bull. 211, 36 pp.,  
illus. Stillwater. 1933.

A representative sample of 1,362 cotton farmers from 11 counties of Oklahoma in 1925 was studied to find out how "the economic status of various classes of cotton farmers in Oklahoma was related to their social behavior." The average number of adult units per family was 3.3 by Zimmerman's scale. The average value of family living was \$975. Food furnished and purchased averaged \$476, clothing \$186, household operation \$126, and savings \$32. Goods furnished were valued at farm prices. The principal disagreements with Engel's laws in Wright's version were (1) "The percentage of the total expenditure that goes for clothing declines and (2) the percentage for household operation rises in passing from the low to the high economic and social groups" (p. 10).

KIRKPATRICK, ELLIS L., and HOVERSTAD, TORGER A. (70)  
FAMILY LIVING IN 25 FARM HOMES OF ASKOV, PINE COUNTY, MINNESOTA, FOR  
THE YEAR ENDING DECEMBER 31, 1925. A PRELIMINARY REPORT. U. S.  
Dept. Agr., Bur. Agr. Econ. 16 pp. 1927. [Mimeographed.]

The money value of current living on the farm in the year 1925 is the subject of this study of 25 farm homes in an exclusively Danish community. Askov is located in cut-over pine country suited only to intensive farming and dairying. The community is self-contained in its civic interest. There is marked satisfac-



tion among its people, and the aim of its population is to live well rather than to make money. Surplus earnings normally go back into the farm. The average size of the families studied was 5.6 persons, and the average family money income was \$892. The average value of the farms including land improvements, equipment, and livestock was \$13,966. The average money value of food furnished these families by their farms was \$245, and of housing \$230. Total expenditures for current living averaged \$806, for food \$359, for clothing \$141, and for operation goods \$35. Life and health insurance amounted to \$. Food furnished by the farm was valued at farm prices. Housing furnished was recorded as 10 percent of the estimated value of the house. The results of this study were compared with several others which jointly substantiate the statement that as the level of income rises a larger proportion of the total is used for clothing, for furniture and furnishings, for health maintenance, and for general advancement.

ANDERSON, WALFRED A.

(71)

LIVING CONDITIONS AMONG WHITE LAND OWNER OPERATORS IN WAKE COUNTY.

N. C. Agr. Expt. Sta. Bull. 258, 49 pp., illus. Raleigh. 1928.

This survey of cash receipts and expenditures and of products raised on the farm and their disposal by 294 white farm landowners and operators was undertaken by the State experiment station in cooperation with the State department of agriculture to determine living conditions among this group in Wake County in the piedmont section of east-central North Carolina. The sample represented 14.2 percent of all white owner operators in the county and covered all 18 townships. The data apply to 1925-26. The average size of family was 4.6 persons, and average gross cash income per farm \$2,505, chiefly from cash crops, among which cotton, corn, and tobacco predominated. The average cash expenditure for family living, exclusive of savings, was \$1,056. Food and fuel furnished by the farm are valued at what they would have cost if purchased for cash. Eighty-seven percent of the farm operators averaged 6.7 years in school. The rest gave no report of extent of education. Church membership was reported by 91 percent of the families. Farm expenditures were found to correlate negatively with investment expenditures, the coefficient being  $-0.8169$ . The value of this bulletin is somewhat lessened by the fact that there were a number of misprints in some of the important tables.

BLACK, JOHN D., and ZIMMERMAN, CARLE C.

(72)

FAMILY LIVING ON SUCCESSFUL MINNESOTA FARMS. Minn. Agr. Expt. Sta.

Bull. 240, 25 pp., illus. University Farm, St. Paul. 1927.

For this study of family living of successful Minnesota farm families, 50 owner and 15 tenant families were chosen, from the 477 owner and 217 tenant families surveyed in 1925 and 1926, as the most successful as regards both size of income and quality of living. The 694 families were from 13 communities selected to represent "as accurately as possible all the different kinds of farming and living conditions in the State \* \* \*. In each community the 694 farmers were taken at random in order to be representative" (p. 4). The survey included areas specializing in dairy, small-grain, and livestock production, and combinations of two of these enterprises.

Average expenditures for family living and savings were \$1,811 for the year for the 50 owner families and \$1,605 for the 15 tenants, exclusive of the cost of the automobile for farm and family use, which averaged \$319 for tenant families and \$265 for owner families. The value of living furnished by the farm was estimated for owner families at \$1,692, housing at \$900, food at \$742, and fuel at \$50. Food and fuel furnished by the farm were evaluated at city prices and rental value of the house at what comparable quarters would rent for in the city. Based upon estimates of city equivalents of the real incomes received by the 50 successful owner families, it is concluded that "a city family, in order to live as well and be as well provided for in the future as these fifty farm families, would need an annual income of approximately \$4,300." The "successful tenant families were living only a little less well than the successful owner families" (p. 23). Average money expenditures for family use for the 50 owner families were \$344 for food, \$272 for clothing, and \$249 for house furnishings and household operation. Savings averaged \$580, of which \$77 represented life-insurance premiums. The average money expenditure for family use for the 15 owner families included \$265 for food, \$228 for clothing, \$188 for house furnishings and household operation. Savings for this group averaged \$696, of which \$46 represented life insurance. Data are included for owner families on quantities of seven different kinds of food furnished by the farm, total cash receipts, sources

of income, and distribution of expenditures, and a comparison of their expenditures and savings with the averages for the larger group of 157 families (figures for whom are analyzed in Minnesota Agricultural Experiment Station Bulletin 234), with those for 30 farm families living less well, and with the budget figured in 1926 for the families of Minneapolis teachers.

FOLSOM, JOSIAH C.

(73)

PERQUISITES AND WAGES OF HIRED FARM LABORERS. U. S. Dept. Agr. Tech. Bull. 213, 58 pp., illus. 1931.

Data from 3,536 noncasual hired farm laborers (1925) and 5,330 casual hired farm laborers (1926) located throughout the United States were analyzed to secure information concerning actual cash wages received and the nature and value of perquisites received. Not all the questionnaires used were complete and the figures presented are based on samples of varying sizes. "Perquisites or privileges of value are given to 97.5 percent of the noncasual hired farm laborers, but are given to only 85.5 percent of the casual farm laborers. In the former case perquisite values reported in this study formed 39.5 percent and in the latter, 23.3 percent. \* \* \* The data presented \* \* \* demonstrate that the simple quoting of wage rates with or without board does not tell the whole story of total values of remuneration of farm laborers. \* \* \* The study also shows that real wages of American farm laborers are higher than are commonly quoted or believed, even when perquisites are reckoned at farm values. Real farm wages are here shown to equal or to exceed the average full-time and actual earnings of common laborers in some representative industries. If, in reckoning their value the farm perquisites were to be assigned city values, the comparative showing of real farm wages would be decidedly better" (pp. 52, 55).

HOWELL, LEANDER D.

(74)

THE RELATIONS OF ECONOMIC, SOCIAL, AND EDUCATIONAL ADVANCEMENT OF FARMERS TO THEIR MEMBERSHIP IN ORGANIZATIONS. Okla. Agr. Sta. Bull. 185, 54 pp. illus. Stillwater. 1929.

The object of this survey in 1925-26 of 852 farm families living in eight Oklahoma Cotton Belt counties was to determine the relation of the economic, social, and educational advancement of farmers in this area to their membership in economic, social, and religious organizations. Of the total number of farmers, 518 (251 owners and 267 tenants) were members of the Oklahoma Cotton Growers' Association and 334 (85 owners and 249 tenants) were nonmembers. Of the farmers belonging to the cotton-growing association, 24 percent had not gone beyond the fourth grade in school, 13 percent had gone to high school, and 2 percent to college or a university; 13 percent of their wives had had less than a fifth-grade education, 20 percent had gone to high school, and 2 percent to college or a university. Four percent of their children who had left school had not gone beyond the fourth grade, 26 percent had gone to high school, and 5.3 percent to college or a university. Of the farmers who were nonmembers, 29 percent had not gone beyond the fourth grade, 11 percent had gone to high school, and 2 percent to college or a university; 16 percent of their wives had had less than a fifth-grade education, 16 percent had gone to high school, and 3.5 percent to college or a university; 13 percent of their children who had left school had not gone beyond the fourth grade in school, 24 percent had gone to high school, and 3.5 percent to college or a university.

The average money value of family living in 1925 for members was \$1,187, for nonmembers \$1,052. The cost of housing was estimated to be the rental value of the house. The money value of individual items furnished and purchased is not given, but to eliminate differences in individual demands due to age and sex, the ammain unit (scale developed by Sydenstricker and King) is used as a basis for comparing the expenditures of members and nonmembers. Members spent more than nonmembers for all items except clothing and personal. The conclusion is that there is a greater relationship between membership in the Oklahoma Cotton Growers' Association and the economic, social, and educational advancement of farmers, than there is between church membership or lodge membership.

ZIMMERMAN, CARLE C., and BLACK, JOHN D.

(75)

FACTORS AFFECTING EXPENDITURES OF FARM FAMILY INCOMES IN MINNESOTA. Minn. Agr. Expt. Sta. Bull. 246, 31 pp., illus. University Farm, St. Paul. 1928.

Part of this material was gathered in 1925 and was first presented in Minnesota Agricultural Experiment Station Bulletin 234, and part was gathered in the fall



of 1926 and presented in this bulletin for the first time. The new material was secured from 334 farm families living in 6 different communities. The chief sources of their incomes were livestock and livestock products. The farms studied were larger than average farms throughout the State. Twenty-eight percent of the farmers included in the investigation were foreign born, about 7 percent more than in the State at the time of the 1920 census. The sample included 45 percent owners, 19 percent part owners, and 36 percent tenants; a smaller proportion of owners, and a larger proportion of tenants than in the State as a whole.

Averages by communities on sources of money income, cash receipts, and expenditures, and distribution of cash expenditures between farm, investment, automobile, food, clothing, household, health, advancement, personal, and total living are given for these 334 families. The figures for these families are given separately and are then combined with those from the 157 families from whom data were secured in 1925, in a detailed analysis of distribution of gross cash receipts by cash-receipts groups. The average "net spendable" income for the entire group of 488 families was \$1,737. Average expenditures for family use were \$867; for food, \$279; for clothing, \$198; and for household operation, \$169. In addition \$208 was spent for the automobile for both farm and family use. Savings and investments averaged \$438. Food furnished by the farm was valued at \$267, using average farm prices for the 2-year period 1925-26.

The conclusions drawn from this detailed analysis are as follows: "The major competing factors in the farmer's budget are investments (in the home, farm, payments on mortgages, etc.) and living" (p. 20). "With an increase of cash receipts, the percentage of living expenditures used for food declined, that spent for clothing was constant, that for household declined at first, and then increased (its movement is erratic), that for health and advancement increased somewhat and that for personal uses was constant" (p. 22). A comparison with the expenditures of urban families gathered from a number of different published sources resulted in the conclusion that "in the urban family expenditures, the primary competition is between physiological and nonphysiological expenditure," and "that for these primary types of economic behavior, farmers as a class are distinctly different from the wage and salary earning classes" (p. 28).

WILLSON, EDWIN A.

(76)

THE EFFECT OF INCOME ON FARM STANDARDS OF LIVING. N. Dak. Agr. Expt. Sta. Bull. 256: 46-47. Fargo. 1932.

The purpose of this project, which was made with the cooperation of the Division of Farm Population and Rural Life, United States Bureau of Agricultural Economics, was to determine the factors responsible for the success or failure of rural community clubs in North Dakota. Farm records and family surveys were obtained for 154 farm families for the 5 years, 1925-29. The total value of current family living was \$1,022, of which 64 percent was purchased and 36 percent was furnished by the farm. The percentage of total cash expenditure for food was 26 percent, for clothing 18 percent. It was found that the "total cash expenditures for family living tend to fluctuate directly with changes in the net cash farm receipts, but they tend to lag 1 year behind changes in total cash receipts from all sources. Expenditures for family living fluctuate much less than do net farm receipts or total cash receipts" (p. 46). "The most significant tendency disclosed in the family living expenditures during the 5 years was a decrease in the cash outlay for food and an increase for advancement goods. Advancement goods include education, recreation, entertainment, church and philanthropy, and organization dues" (p. 47).

(77)

INCOMES AND COST OF LIVING OF FARM FAMILIES IN NORTH DAKOTA, 1923-31. N. Dak. Agr. Expt. Sta. Bull. 271, 31 pp., illus. Fargo. 1933.

The purpose of this report is to show the influence of income upon the content of living of North Dakota farm families, the content of living being measured in terms of the money value of the goods used and their distribution among different groups of goods. In the years 1925-31, 296 annual records of family living were obtained from 139 different farm families scattered throughout the State. The cooperating families were "undoubtedly above the average for the State with respect to ability as farm operators" and the average size of their farms (546 acres) was 50 acres larger than the 1930 average for the State. Eighty-eight percent of operators were full or part owners of their farms as compared with 65 percent for the State in 1931. Gross cash farm receipts averaged \$3,613 in the period 1923-31. The influence of the price changes during the 9-year period was reduced by adjusting values to the price level of 1926. Average annual figures for each of 6 consecutive years (1926-31) are given for 5 identical families.



Figures for 29 individual families are given on expenditures for 1 year for food, clothing, furniture and furnishings, family share of automobile, advancement, personal items, insurance, and unclassified items. Food and fuel furnished by the farm were valued at local farm prices. The rental value of the house was computed by taking 10 percent of the value of the house after deducting cash expenditures for repairs. Sources of cash receipts are given under the following headings: Livestock and livestock products, crops, other farm receipts, sale of equipment, outside income, money borrowed. Conclusions reached by the author are as follows:

There is a direct relationship between cash income and size of farm. As the income increases, the proportion of all expenditures used for farm operation, farm automobile, and interest remain constant; the proportions for farm investments, reduction of indebtedness, and savings increase, while the proportion for family living decreases. The level of living of farm families is affected by changes in income but is more stable than income. Farm families in the Eastern and Central States produce a higher percentage of the value of their living from the farm than do North Dakota families, but at least part of the difference is due to price differences between the two areas. The level of living of North Dakota families has declined as a result of decreases in income since 1928. A marked increase in incomes will be necessary to prevent a further decline.

ANDERSON, W. A.

(78)

FACTORS INFLUENCING LIVING CONDITIONS OF WHITE OWNER AND TENANT FARMERS IN WAKE COUNTY. N. C. Agr. Expt. Sta. Tech. Bull. 37, 58 pp. Raleigh. 1930.

This study was undertaken to determine the effect upon living conditions among white farm owner and tenant families of variation in some of the factors affecting expenditures for certain budgetary items. Some of the same data presented in North Carolina Agricultural Experiment Station Bulletin 269 (79) are used, but subjected to different methods of analysis. All families included in Bulletin 269 whose gross cash income exceeded \$5,000 were eliminated. Of the 574 remaining, 278 were owner and 296 tenant families. The average owner family represented 3.9 adult energv units, and the average tenant family 3.8. Owners averaged 5.7 years in school and the tenants 3.5 years. The data apply to the year 1926.

Each type of expenditure was reduced to a proportion of the total expenditure of each family. The items of expenditure for family living studied are those for food and fuel, clothing, automobile, personal items, home and household, and advancement. The chief question studied is "how are these items of family expenditure affected by the gross cash income of the family, the size of the farms operated, the size of the families, the educational status of the family head, the proportion of the family budget which is devoted to the farm business and farm investments, the value of food and fuel produced on the farm for family use, and by the interrelationships existing between the items of expenditure themselves" (p. 6). Gross, partial, and multiple correlations with the accompanying percentage determinations and percentage changes were employed. Food and fuel, clothing, and automobile expenditures were found most responsive to differences in gross cash income and in the proportion of expenditures used for these items and for farm and investment. Among owner families the proportion of expenditures used for farm and investment has most influence upon the various items of expenditure studied; among tenant families, the proportion of expenditures used for the automobile. All the factors considered, however, accounted for only 43 to 72 percent of the factors determining expenditures for family living.

(79)

FARM FAMILY LIVING AMONG WHITE OWNER AND TENANT OPERATORS IN WAKE COUNTY. 1926. N. C. Agr. Expt. Sta. Bull. 269, 101 pp., illus. Raleigh. 1929.

The purpose of this survey, in which the State department of agriculture cooperated with the State agricultural experiment station, was to make a statistical comparison of farm living conditions among white owner and tenant families of the same area of the piedmont section as the preceding study. A random sample was obtained by having the field men take from the farms "just as they came to them" the number of records allotted to each township on the basis of white owner and tenant population as shown by the census. The sample totaled 294 owner and 300 tenant families, or 14.2 and 15.4 percent, respectively, of white owner and tenant operators in the county. Absentee-landowner and farm-manager families were excluded. The data apply to the year 1926.

The average gross income of owners was \$2,505 and of tenants \$980, while the median was \$1,788 and \$825, respectively. Goods furnished were valued at the price which would have been paid if they had been bought. Owners' families averaged 4.6 and tenants' families 4.8 persons. Eighty-six percent of owner operators and 78 percent of tenant operators reported school attendance, averaging 6.7 years for owners and 4.2 years for tenants. Church membership was reported by 91 percent of owners and 14 percent of tenants. Money expenditures for current living for owner families averaged \$1,108, including \$162 for food, \$3 for fuel, \$293 for clothing, and \$174 for home and household. For tenant families money expenditures for current living averaged \$509, including \$135 for food, \$165 for clothing, and \$25 for home and household. The value of home-produced food averaged \$657 for owners and \$193 for tenants, of home-produced fuel \$81 for owners and \$48 for tenants. Life-insurance premiums cost owner families \$34 on the average and tenant families \$23. Owners' level of living was found much higher than that of tenants. "In every item of family living except personal items, owners' expenditures indicate a larger quantity and a superior quality of goods and services available. \* \* \* The owners spent twice as many dollars as the tenants on the average for living, but these dollars represented a much smaller proportion of the total dollars spent for all purposes than in the case of tenants" (p. 51).

DICKINS, DOROTHY

(80)

A STUDY OF FOOD HABITS OF PEOPLE IN TWO CONTRASTING AREAS OF MISSISSIPPI.

Miss. Agr. Expt. Sta. Bull. 245, 52 pp., illus. A. and M. College. 1927.

This study, intended to show relation of dietary conditions to health, was made in 1926 in typical counties and among representative families in the brown loam and the shortleaf pine areas of Mississippi. In the first area 53 families and in the second 47 families kept daily records of food furnished from the farm, purchased and wasted, over a period of 2 weeks for each of the 4 seasons. Only 75 complete records were secured. Average family size for the brown-loam area was 5.4 persons with a gross income of \$1,808; for the shortleaf pine area, 5.1 persons with a gross income of \$1,195. The money value of all food consumed per family was \$644. Seventy-four percent of the food was furnished by the farm. Food furnished was valued at local retail prices when possible; otherwise at mail-order cost. Medical examinations, questionnaires, and records kept by the family were used to secure data on physical defects, general health, and illness, which were studied with reference to adequacy of diet.

KIRKPATRICK, ELLIS L., and HAWTHORNE, HARVEY W.

(81)

SOURCES AND USES OF INCOME AMONG 300 FARM FAMILIES OF VINTON, JACKSON, AND MEIGS COUNTIES, OHIO, 1926. A PRELIMINARY REPORT. U. S. Dept. Agr., Bur. Agr. Econ. 28 pp. 1926. [Mimeographed.]

The sources and uses of income of 300 farm families in 3 Ohio counties in 1926 are presented in order to throw some light on the contribution of these families to commercial agriculture and to citizenry and on the kind of living they got from farming and from other sources. These counties were typical of the farming region drained by the Ohio River and were so similar that they may be regarded as one area. The average size of the 300 farm families was 3.9 persons. They had an average net income of \$528. The average value of family living was \$893. The average money value of food furnished by the farm was \$322, of housing \$67, and of other items \$12. Total average expenditures for family use were \$532; for food, \$135; for clothing and gifts, \$156; and for household operation, \$86. Life- and health-insurance premiums cost \$13. Food and fuel were evaluated at farm prices, and the house rent at 10 percent of the value of the house. Detailed information on crops, expenditures, and income is given for three of the farms with highest incomes in the group of farmers who devoted practically all their time to farming. The authors suggest that "the first step in the improvement of family living is for each family to set up its own goal for a more rational standard of living. This can be based on the actual family living expenditures for one or more preceding years as well as on the averages of expenditures of other groups or families" (p. 12).

MUSE, MARIANNE, and BROOKS, CHARLOTTE P.

(82)

COMPARATIVE STUDY OF DATA ON FARM HOUSEHOLD EXPENDITURES OBTAINED BY HOUSEHOLD ACCOUNTS AND BY A SURVEY. Vt. Agr. Expt. Sta. Bull. 294, 32 pp., illus. Burlington. 1929.

The purpose of this study was to compare figures on family living obtained from farm families both by the household-account and by the schedule method.



Thirteen native-born Vermont homemakers in four counties in the western and north-central sections of the State kept account of their household expenditures and of all farm products used by the family for the year commencing with October 1926. At the end of that time the same information was obtained from the same families by the schedule method. For checking purposes the household expenditures of 13 other families of comparable economic status, who had not kept accounts during the year, were obtained by the schedule method.

In the first group, 12 of the homes were owned by the operator, and 1 by the operator's father who lived with the operator. The average education in this group was 2 years of high school for the farm operators and 3 years of high school for the homemakers. The average size of family was 4.5 persons. The average money value of food furnished (estimated at low retail prices) was \$401 according to accounts, which was \$65 less than according to the schedules. The average rental value of the house (10 percent of operator's valuation of house) was recorded in the accounts at \$342. The value of the operating goods furnished averaged \$108 according to the accounts and \$118 according to the schedules. The total money value of living according to the accounts averaged \$1,931, and according to the schedules \$2,712. The average money expenditure per family was \$1,004 according to accounts, and \$1,581 according to the schedules. The average expenditure for food purchased was \$390 according to the accounts, and \$448 according to the schedules. For clothing, the average expenditure according to the accounts was \$147, while according to the schedules it was \$299. For household operation, the average expenditure was \$59 according to the accounts, \$92 according to the schedules. Savings according to the accounts averaged \$76, while according to the schedules they averaged \$204.

Details of the money value of living of the 13 Vermont families from whom data were obtained by schedules only are presented. Comparison of the two groups seemed to indicate that the estimates of the families who kept accounts, which were as a whole higher than the figures from their own accounts, were lower than the estimates of the families who did not keep accounts and therefore were not gross overstatements. The writers were inclined to feel that the data by the survey method were more accurate than that secured through the accounts. If accurate data are to be secured by means of household accounts, regular supervision and simplified forms seem necessary.

WOODHOUSE, CHASE G., and WILLIAMS, FAITH M.

(83)

COMPARISON OF SCHEDULE AND ACCOUNT METHODS OF COLLECTING DATA ON FAMILY LIVING. U. S. Dept. Agr. Tech. Bull. 386, 42 pp. 1933.

Data from 40 farm families in rural sections of Vermont (13), Ohio (5), Illinois (3), and Maryland (19) formed the basis on which this study of the comparative value of the schedule and account methods in determining money value of family living was made. For 12 consecutive months in 1926-27 day-by-day records were kept by each of these families and at the end of the year schedule estimates were secured from them for the same period before they had received summaries of their accounts. In order to discover whether the keeping of accounts had improved the homemakers' ability to give the schedule estimates, additional information was secured from the farm families in Maryland. Schedules covering their family living for the 12 months previous to their daily record keeping were obtained and compared with the schedules taken after accounts had been kept for a year. As a further check, schedule estimates were also secured for the same 2 years from comparable Maryland farm families who had not kept household accounts. The educational background of the families was above average. Three-fourths of the farm operators and homemakers had gone beyond the eighth grade; more than one-fourth of either the operators or homemakers had gone to college, normal, or technical schools after completing high school. Most of the families were without young children, and 10 of the 40 households had no children at all. The average size of the families was 4.2 persons. According to the data from the household accounts, the money value of family living among these 40 families averaged \$2,564. The average money value of goods furnished by the farm was \$882, including food \$543, fuel, ice, and soap \$55, and housing \$284. The average money expenditures for family use was \$1,484 according to the accounts; the average expenditure for food, \$315; for clothing, \$234; for housing, \$142; and for household operation, \$216. Total savings averaged for the group



\$198. Average quantities of 19 foods purchased and 16 foods furnished by the farm are given by 21 of the 40 families.

The significance of the differences between the account and the schedule figures and the schedule figures for successive years was calculated by the use of the *t* measure originated by Student and developed by Fisher, of the Rothamsted Experimental Station. For those Maryland families who did not keep accounts, the differences in the average schedule figures for the 2 years were relatively small, the greatest persistent differences occurring in the average amounts estimated as spent for gifts and for medical care. But there were important differences between the schedule figures for these 2 years secured from the families who kept accounts. A detailed comparison of the figures secured from the two groups seems to warrant the conclusion that the effect of keeping the accounts was to increase the accuracy with which the homemaker was able to give schedule estimates of food furnished by the farm, and of clothing and household operation. The analysis of the data from the accounts and schedules for the same period shows that with farm families comparable to those cooperating in this study, the schedule can be made a satisfactory method of securing data on family expenditures and savings, but that for the purpose of obtaining satisfactory data on the value of family living furnished by the farm, and on the quantities of foods consumed by farm families, regularly supervised accounts kept for short periods at different seasons in the year should be used to check the accuracy of the schedule data.

LIVELY, CHARLES E.

(84)

FAMILY LIVING EXPENDITURES ON OHIO FARMS. Ohio Agr. Expt. Sta. Bull. 468, 36 pp., illus. Wooster. 1930.

For the calendar years 1926-28, 117 families scattered throughout Ohio furnished a total of 187 yearly income and expenditure records which were analyzed for amount and source of income, expenditure for family living, variations in family-living factors, yearly and seasonal, and the relation of expenditures for family living to other factors such as total receipts, goods furnished, and size of family. The families were of native American stock. Both operators and homemakers had, on the average, schooling equivalent to 11 school grades, and many had completed high school or college. Seventy-eight percent of these families owned their farms. The average size of the household was 4.5 persons. The average net cash receipts per family, as shown by 176 records, was \$2,134. The average money value of food furnished by the farm was \$291, of other items \$15. The value of housing, if estimated according to rents in Columbus, Ohio, would have amounted to \$600 a year. Total expenditures for current living averaged \$1,042, for food \$228, for clothing \$197, for household operation \$124. Life-insurance premiums averaged \$84. The value of the goods furnished, other than housing, was estimated at the seasonal prices for which they would have sold at the farm. The food and fuel furnished would have cost 64 percent more if purchased in Columbus, Ohio. The records kept by the same families from year to year showed that total cash receipts varied more than expenditures for living. Decided seasonal variations in expenditures were apparent. Total cash expenditure for living increased as total cash receipts increased but much more slowly, and investment funds tended to become equal to living expenditures as cash receipts mounted. The living improvements desired by the families are tabulated.

(85)

SOME RELATIONSHIPS OF THE VARIABLE, CASH EXPENDITURE FOR FARM FAMILY LIVING. Ohio State Univ. and Ohio Agr. Expt. Sta. Mimeograph Bull. 36, 22 pp. Columbus. 1931.

"The major objective of this analysis was that of locating a sufficient number of significant variables outside the cash expenditure budget itself to enable one to predict with some degree of accuracy the total amount of cash which the farm family will spend for living purposes" (p. 17). The summary of method and background data are published in Ohio Agricultural Experiment Station Bulletin 468 (84). The data apply to the years 1926-28, and to 179 cases, but interyearly variations for 47 families who kept continuous records are given. The more significant variables were combined into a multiple correlation analysis. These variables were (1) cash expenditure for living per adult-male equivalent, (2) total cash receipts per adult-male equivalent, (3) average schooling of homemaker and operator, (4) number of conveniences possessed, and (5) index of organization relationships. The size of the family was held constant by means of adult-male equivalent scales for food. The multiple correlation coefficient obtained was

equal to 0.70. Family living expenditures tend to become constant after total cash receipts reach the neighborhood of \$5,000. This budget behavior reveals the upper limits of conventional class standards of rural living and the consumption limitations of the rural environment. The relation of food and fuel furnished and cash expenditure for living per adult-male equivalent resulted in virtually a zero correlation. This analysis indicated that "the schooling of operator and homemaker was significantly related to both receipts and expenditure for living, though the correlation was not high in either case" (p. 10). "Apparently the cash expended for family living was influenced by a considerable number and variety of factors" (p. 19).

HOYT, ELIZABETH E., with the assistance of MORGAN, ETHYL C. (86)  
VALUE OF FAMILY LIVING ON IOWA FARMS. Iowa Agr. Expt. Sta. Bull. 281:  
[187]-239, illus. Ames. 1931.

The consumption of 147 farm families in three representative farming sections of Iowa was studied for the years 1926-29. The families included 84 farm owners, 62 tenants, and 1 hired-man family. All families on roads leading from the villages selected as centers were visited. In 23 of the 147 families at least 1 of the partners had attended college. In 62 families, at least 1 of the couples had attended high school, but neither had gone further. In another 62 families neither husband nor wife had gone beyond grammar school. The average size of family in terms of all who ate at the family table was 4.8 persons. The average total value of living was \$1,625. The value of the amount of food provided by the farm averaged \$400, of housing \$267, and of fuel \$26. Of the expenditures for family use, the average value of food purchased was \$241, of clothing \$154, and of fuel \$58. The average amount of savings and insurance amounted to \$83. Goods and services received without direct money payment were evaluated at the price the family would have to pay for them in the neighborhood. Nutritional content and adequacy of diet were evaluated according to a scale worked out by the Iowa Agricultural Experiment Station, by Sherman's standards and other standard tests. The study demonstrated that as a whole Iowa farm families were satisfactorily fed and not overcrowded in their houses but were not sufficiently prompt in securing medical care.

BRINTON, GRACE (87)  
A STUDY OF CERTAIN CASH EXPENDITURES OF OHIO FARM FAMILIES. Ohio Agr. Expt. Sta. Bull. 474, 51 pp. Wooster. 1931.

This study analyzes in detail the expenditures of farm families for operating expense, furniture, furnishing, and equipment, and indications of comfort, as a key to the desires and ambitions of the people, and "as a rough basis for the comparison of levels of living of different rural communities" (p. 3). Seventy homemakers living in 17 different counties kept household accounts for 1927. The training and the interests of these farm families indicated they were above the average in intelligence. The average size of family was 4.7 persons. Total expenditures for current living averaged \$1,028, for food \$228, for clothing \$182, and for household operation \$142. Payments on insurance averaged \$95. Fuel furnished by the farm averaged \$14, and food \$289, both valued at local prices. "The primary competition in the household budgets of these farm families was between 'investment' or 'savings' and all expenditures for current consumption. Moreover the data show that the competition expressed by Engel in his 'laws' is secondary to the primary relationships between present and future expenditures" (p. 16).

DICKINS, DOROTHY (88)  
A NUTRITION INVESTIGATION OF NEGRO TENANTS IN THE YAZOO MISSISSIPPI DELTA. Miss. Agr. Expt. Sta. Bull. 254, 52 pp., illus. A. and M. College. 1928.

The food consumption among 80 Negro families including 78 croppers and 2 renters living in the Yazoo-Mississippi Delta was studied for a period of 1 month beginning February 1927. The section is one of cotton plantations, 85 percent of the farm population being Negro. The studies were located in 4 counties on the plantations where the 8 Negro women supervisors of the study lived. Ten families having at least one member who could read and write were chosen from each plantation after the purpose of the study was explained in a mass meeting. The size of families on the average, was 4.5 persons, and each family had a house, 24 acres of land, the privilege of raising a large part of their foodstuff on the farm, fuel furnished, and an average gross income of \$579 per year. The average money value of food consumed was \$330 per family. Home-raised products were valued



at average retail selling cost in the local stores, or, if not offered for sale there, according to the selling cost in mail-order catalogs. The energy and nutritive values of food consumed were calculated by Sherman's scale and the food requirements for each family by Hawley's double scale. The average energy and nutritive value of foods consumed were below standard in protein, calcium, phosphorus, iron, and vitamins. Part of this was due to inadequate incomes and lack of knowledge of how to purchase and prepare foods. The dietaries offered one explanation for high death rate, frequent illness, and lowered resistance among the Negroes in Mississippi.

LIVELY, CHARLES E.

(89)

RELATION OF NET CASH RECEIPTS AND EXPENDITURE FOR FAMILY LIVING.

Ohio Agr. Expt. Sta. Bimo. Bull. 140: 174-175. Wooster. 1929.

Account records kept by 66 Ohio farm families in 1927 were analyzed to show the relation of income and certain aspects of family living. The average size of household was 4.6 persons, including "all regular members of the family plus hired help which was kept for half of the year or more" (p. 174). Average total net cash receipts were \$2,133. The average value of all food furnished was \$290. Average total expenditures for family use were \$1,165, for food \$227. Net cash receipts showed a direct correlation with total expenditures for living but no significant relation with food expenditures or with the value of food furnished by the farm.

McKINLEY, BRUCE

(90)

AN ECONOMIC STUDY OF 249 DAIRY FARMS IN FLORIDA. Fla. Agr. Expt. Sta. Bull. 246, 119 pp., illus. Gainesville. 1932.

This study emphasizes the business of dairy farming, but some valuable material on the content and value of family living is included. From 6 leading dairy districts of Florida all the farms listed as dairy farms by the State milk inspection division and having at least 6 cows were used. Complete data are given for 247 farms for the year 1927. Nine percent of the operators had attended college, 31 percent finished the eighth grade, and only 2 of them had had no education. The average value of money income per family was \$2,579. The average value of all goods furnished by the farm was \$528, of which food furnished was \$331, and housing \$181. Estimates were given of the money value of family labor going into the farm. Attention was given to utilization of farm land for crops, crop yields, use of fertilizer, costs of operating trucks and farm machinery, capital invested on the farm, a detailed analysis of farm expenses, variations in farm-labor income, and a special study of dairying. This latter included analysis of the costs of breeding, raising, and maintaining dairy cattle in the various localities studied, of marketing the milk, and of total returns from dairying. The importance of education to successful dairying was demonstrated, and the relation of size of herd, size of farm, and of total amount of milk produced was discussed in relation to unit cost and total returns.

McKITTRICK, ELIZABETH J.

(91)

DIETARY STUDIES OF FARM FAMILIES IN ALBANY AND LINCOLN COUNTIES, WYOMING. Wyo. Agr. Expt. Sta. Bull. 165: 133-148. Laramie. 1929.

This study was undertaken to determine the adequacy in nutritive value of the diets of rural Wyoming families as compared with those accepted as standard requirements and to compare the costs with those obtained in other parts of the country. Data were obtained from 19 records covering 2-week periods in 1927, and representing 14 households; 5 of the families furnished records for a 2-week period in both summer and winter; 12 records were from Albany County, chosen for its accessibility, and 7 were from the Star Valley in Lincoln County, chosen for its isolation. Adequacy of the dietaries was computed by means of the double dietary scale of the United States Bureau of Home Economics. Fourteen were more than adequate in every respect. The average cost for the 12 dietaries from Albany County per adult-male unit for the 2-week period was \$5.77; for the 7 dietaries from Lincoln County, \$3.40. The difference between the two Wyoming counties was probably due to the fact that dietaries in Albany County contained a larger variety and a greater proportion of foodstuffs not produced on the farm. Meagerness and inaccuracy of data furnished made it impossible to calculate percentage of total income spent for food or the adequacy of the diets for the different seasons. The author suggests that in order to get results of value, records should be kept under direct and continued supervision of a field worker.



WOOFTER, THOMAS J., JR.

(92)

BLACK YEOMANRY; LIFE ON ST. HELENA ISLAND. 291 pp., illus. New York. 1930.

The aim of this work was "complete and logical description of those customs and conditions which have made the community what it is today" (p. 5). St. Helena Island, off the coast and yet a part of Beaufort County, S. C., was selected for study because the author "felt \* \* \* that this island was a test tube for the observation of the action of constructive forces on an isolated negro group of as pure African descent as could be found in the country" (p. 6). "Here land and home ownership, education, and a strong religious institution have been at work" (p. 6). "The boll weevil has changed the Sea Islands from communities in which farming predominated to communities in which it holds merely a secondary position. The majority shift from farming to fishing, work in the oyster canneries, or work on the public roads" (p. 114). "The people of St. Helena can hardly be said to conduct their affairs in conformity with a money economy" (p. 117).

For 796 enumerated families (out of a total number of 1,200 living on St. Helena) the average value of family living in 1927 was \$420, of food furnished by the farm \$73, and of housing furnished \$72. Food furnished was valued at farm prices. The annual value of furnished housing was estimated at 6 percent of the value of the house. The average money income was \$275 per family. The history of the island is sketched. The author regards the development of St. Helena as an experiment valuable to all governments having to deal with masses of backward people.

An account of the health, education, religion, homes, play, songs, and stories of the islanders is given. There is also discussion of heavy taxation and the small returns in Government benefits, and of agriculture and other means of livelihood. The author finds "three main points at which the islanders have not adapted to American standards; they are contented with less than would satisfy the average American family, they fail to accumulate the surplus necessary for progress, and their sex morals are relatively lax. Migration disrupts the family, leaving the women to bear the brunt of the job of rearing the children" (p. 252).

WORKS, GEORGE A.

(93)

SCHOOLING AND ECONOMIC RETURNS IN FARMING. *In* American Country Life Association. Farm Income and Farm Life; A Symposium on the Relation of the Social and Economic Factors in Rural Progress, pp. 258-278. New York. 1927.

This article, published in 1927, summarizes material from several studies covering about 3,000 families, to show that farmers having more than district-school education receive a higher labor income than those having only district-school education. Many of the authors quoted conclude that there is a direct causal relationship existing between education and income. Further studies are quoted to show that the school retains longer those students who have ability, that the school gives mental training rather than a body of applied knowledge, and that distance from high school influences attendance. The chapter concluded with the following summary: "\* \* \* evidence in hand indicates the existence of at least three factors other than schooling that would tend to show a large labor income for farmers who have had high school training, as contrasted with those who have attended the elementary school only \* \* \* (1) the tendency for the school to select and retain for a longer time those of the greatest mental ability \* \* \* (2) the tendency for those who have the opportunity to attend high school to come from families having a financial status would make it possible for the home to give them an initial financial advantage; (3) the selection by proximity to high school of those from farms in which nearness to markets gives a financial advantage" (p. 277).

CANON, HELEN

(94)

THE FAMILY FINANCES OF 195 FARM FAMILIES IN TOMPKINS COUNTY, NEW YORK, 1927-28. N. Y. (Cornell) Agr. Expt. Sta. Bull. 522, 84 pp., illus. Ithaca. 1931.

The management of finances, food, and clothing was studied among 195 farm families for 1927-28 in two townships of Tompkins County, N. Y., in one of which the chief occupation was dairy farming and in the other grain and fruit farming. Twenty-nine of the farmers were tenants, the rest owners. About two-thirds of the farm operators and one-half of the homemakers had attended district school only; one-fourth of the operators and a slightly higher proportion

of homemakers had attended high school. The average size of family was 3.6 persons. The average family cash receipts were \$2,296. The value of gifts was \$36. The value of goods furnished by the farm was \$389, of which food furnished was \$279, valued at farm prices. Total expenditures for current living averaged about \$831; for food, \$260; for clothing, \$163; for housing, \$53; and for operation, \$107. Savings averaged \$194, of which \$22 represented life-insurance premiums.

The study showed that "for families with the lowest cash receipts, 54 percent of the total cash expenses were for the household, as compared to 29 percent in the case of families with the highest receipts. \* \* \* The percentage of household expenses used for food, clothing, 'other' housekeeping expenses, miscellaneous expenses, health and personal expenses, did not increase as the cash receipts of the family increased; the percentage for food and for personal expenses decreased; at least a slight tendency to increase was apparent in the percentages used for transportation, housing, and furnishings" (p. 80). "The expenditures per family for coal, laundry done away from home, gas, and telephone for household purposes, increased rapidly with increasing cash receipts. Expenditures for health were about twice as high for families with high receipts as for those with low receipts" (p. 81).

GEE, WILSON, and STAUFFER, WILLIAM H.

(95)

RURAL AND URBAN LIVING STANDARDS IN VIRGINIA. Va. Univ. Inst. for Research in the Social Sciences, Inst. Monog. 6, 133 pp. University, Va. 1929.

Schedules of the value of living in 1927-28 were obtained from farm and rural families in Bedford and Culpeper Counties and the city of Lynchburg, Va., with the idea of testing out certain new methods of measuring levels of living and of comparing the level of living of three groups of white families. On the basis of typicality from an index constructed especially for that purpose, Culpeper County in the piedmont section of northern Virginia, and Bedford County in the same section of the southwest-central part of the State were selected for study. Cattle, hogs, and dairying are among the important agricultural interests in the former county; grain, tobacco, and tomatoes in the latter. All, or practically all, of the families within the selected areas were canvassed and grouped for tabulation mainly according to expenditure. County agents and "key" farmers assisted in the classification of families studied. "\* \* \* both the country and city samples were selected according to three somewhat arbitrarily but fairly well-defined classes" (pp. 8-9). Group designations are given as "poor", "intermediate", and "prosperous." The study was limited to 137 rural white families, 40 of whom fell in the poor group, 85 in the intermediate and 12 in the prosperous. All tables give separate figures for each economic class.

The average number of individuals per family at home was 4.1 in the case of the poor families, and 4.7 in the case of both the intermediate and prosperous classes. The formal schooling of the husbands in these groups averaged 5, 6.3, and 8.7 years, respectively; of the wives 5.9, 6.9, and 8.5 years. The children in the three groups were getting from one-third to one-half more schooling than either of their parents had received. The annual value of living of the poor group averaged \$892, of the intermediate group \$1,723, and of the prosperous group \$4,084. Life and health insurance of the poor group averaged \$3 per year, of the intermediate group \$25, and of the prosperous group \$182. The value of food consumed per year was \$435 for the poor families, \$678 for the intermediate, and \$995 for the prosperous ones. On the average the farms of the poor group supplied 79 percent of the total value of the food consumed during the year, of the intermediate group 84 percent, and of the prosperous group 72 percent. Clothing expenditures for the year averaged \$113 for the poor, \$235 for the intermediate, and \$669 for the prosperous families. The rental value of houses (determined on the basis of size, construction, age, and location as 10 percent of the value of the dwelling), was \$131 for the poor families, \$269 for the intermediate, and \$679 for the prosperous. Household operating expenses averaged \$97 for the poor, \$159 for the intermediate, and \$403 for the prosperous families.

Facts relating to the goods satisfying primary wants (food, clothing, and housing) showed that in the satisfaction of these wants the Virginia farmer of the poor group paid a substantially greater proportion of his total available funds than did the intermediate and prosperous groups and, measured by dollar expenditures, the intermediate and prosperous groups enjoyed a higher order of living in respect to such wants. An analysis of the nutritive value of the foods consumed by the 137 farm families made by Edith Hawley of the United States Bureau of



Home Economics, indicated a consumption of foods yielding more energy, protein, calcium, phosphorus, and iron than was actually needed. In calculating the nutritive value of the diet, size of family was measured according to the Hawley energy and protein-mineral scales. The economy of the different diets was also measured by comparing the distribution of energy among the various food groups in the diets studied with that recommended by C. L. Hunt in United States Department of Agriculture Farmers' Bulletin 1313, Good Proportions in the Diet. Comparison is made by groups of farm and city family living expenditures and a short discussion given of other investigations of living expenditures in America and in Europe, including a presentation of Engel's laws (Wright's version).

HILL, RANDALL C., MORGAN, EZRA L., CAMPBELL, MABEL V., and JOHNSON, OLIVER R. (96)

SOCIAL, ECONOMIC, AND HOMEMAKING FACTORS IN FARM LIVING. Mo. Agr. Expt. Sta. Research Bull. 148, 90 pp., illus. Columbia. 1930.

Several important factors in farm family living such as social participation, farm business, recreation, and diet are analyzed for 70 farm families in Boone County, Mo., in 1927-28 in order to show the relationship among the various factors and to demonstrate a method for the study of the farm family. This community of diversified farming in central Missouri was chosen in order to supplement data already collected there. The group comprised 34 owners, 19 owner renters, and 17 renters. The number of persons per family ranged from 2 to 8, the largest number of families having 3 to 5 persons. The average net total money income was \$624. The nutritional value of the diet was estimated by the total caloric intake per adult-male unit according to the Hawley scale, and the adequacy of various items in the diet was judged by their proportion of the total diet. The procedure consisted of analyzing each type of data as to the highest, medium, and lowest one-third of the families for each factor and of relating the various factors and groups of factors to each other. The general conclusion was "that there is no single determinant for the superior standard of farm life, but that all factors contribute to the standard and that the improvement in any one factor and especially for any group of factors, tends to improve the others" (p. 76).

LANE, FRANK P. (97)

AN AGRICULTURAL PROGRAM FOR THE SHOSHONE PROJECT OF WYOMING. Wyo. Agr. Ext. Serv. Circ. 25: 29-36. 1928.

A survey of 213 rural homes in the Garland division of the Shoshone irrigation project in Wyoming was undertaken under the direction of the Wyoming Agricultural Extension Service in order to obtain facts upon which to base recommendations. Data from 40 farms showed that in 1927-28 current expenditures for family living averaged \$789. Average expenditures for food were \$250, for clothing \$155, for household operation \$80. Savings and insurance cost on the average \$100. Budget recommendations were made on the basis of a 5-person family. The recommended budget with details called for a minimum of \$1,190, exclusive of savings. The recommended minimum for savings, insurance, or reduction of mortgage was \$350, for groceries \$360, clothing \$360, fuel and light \$90, recreation \$55, education \$110, operating expense and furniture \$100, church and charity \$55, and health \$60.

OYLER, MERTON (98)

COST OF LIVING AND POPULATION TRENDS IN LAUREL COUNTY, KENTUCKY. Ky. Agr. Expt. Sta. Bull. 301: [67]-90, illus. Lexington. 1930.

This study of 203 mountain farm families living on marginal farm land, in 1927-28, includes 83 families in one section and 120 families in another section of Laurel County, both near the county seat. The average size of family was 4.8 persons. Children away from home averaged 7.8 grades of school education, as compared with 8.7 grades for those at home. The average value of family living was \$689. Furnished food and other goods were valued at farm prices. The average annual money value of food furnished by the farm was \$308; of housing, \$44 (estimated at 10 percent of value of house); and other goods, \$13. Total expenditures for current living averaged \$321; food, \$114; clothing, \$93; and operation goods, \$36. Life and health insurance premiums averaged \$3. Increase in size of crop acreage was accompanied by increase in the income of the families and by increase in the money value of family living. As the total value of living increased, the percentage furnished by the farm and that going for food and for operation goods decreased, while the percentage going for clothing, for



advancement, and for life insurance increased. Size of family had no apparent effect upon the percentage distribution of family living, but increased all expenditures. Data on changes in the composition of the population of Laurel County from 1850 to 1920, on the age distribution by sex in 1918 and 1928, and on the kinship of new operators to former ones are included.

ROZMAN, DAVID

(99)

PART-TIME FARMING IN MASSACHUSETTS. Mass. Agr. Expt. Sta. Bull. 266: 104-146, illus. Amherst. 1930.

This investigation in the areas around Holden, Lowell, and Taunton, Mass., was undertaken for the purpose of determining the place and development of "part-time farming in Massachusetts agriculture and its effect on land utilization and food supply" (p. 103). Data on family living in 1927-28 were secured for 115 families in the Lowell area and 84 in the Taunton area. Families were selected in which each operator had spent 2 or more months a year in some outside work in addition to his agricultural activities. Office workers and professional business men were excluded, the majority of operators in both areas being skilled or unskilled workers. Only those farms whose agricultural output amounted to at least \$100 were included. About one-third of the operators were born in North America. The number of persons per household averaged 5.5 in the Lowell area and 4.6 in Taunton, with an average income of \$1,696 and \$1,827, respectively. The average net farm income from regular part-time farming enterprises was \$313 in the Lowell area and \$454 in the Taunton area. The families in the Lowell area consumed 64 percent of the total value of their products and in Taunton 45 percent. The value of the home-grown products consumed in the former area averaged \$296; in the latter \$300. The average annual cost of housing (including homes rented and owned) in the Lowell area was \$201; in the Taunton area \$239. The investigation indicated, among other facts, that "part-time farming secures a certain economic stability for the wage earner and provides better food and housing conditions for his family" (p. 146).

WOOFER, THOMAS J., JR.

(100)

A STUDY OF THE ECONOMIC STATUS OF THE NEGRO. 58 pp., illus. [Chapel Hill, N. C.]. 1930. [Mimeographed.]

Tables showing the incomes and expenditures for 1927-28 of the average Negro rural family in Greene and Macon Counties in the Cotton Belt of Georgia are included in the appendix of this study. Greene County represents a very poor section of the Cotton Belt. The average number of persons per household was 5.2. The average gross cash income of all tenure classes was \$302 for Greene County and \$381 for Macon County. The value of provisions furnished amounted to \$88. The average expenditure for food was \$104. The yearly gross income was arrived at by entering actual money received for wages and sales of farm produce and for the local price of home-grown foods consumed. The income of Macon County owners was lower than that of Greene County owners and than that of Macon County renters and croppers. Greene County owners seem more typical of Negro owners in Georgia than do the Macon County owners.

ZIMMERMAN, CARLE C.

(101)

INCOMES AND EXPENDITURES OF MINNESOTA FARM AND CITY FAMILIES, 1927-28. Minn. Agr. Expt. Sta. Bull. 255, 50 pp., illus. University Farm, St. Paul. 1929.

This study was made to secure data for use in comparing the expenditures and manner of living of farm families with city families. Information regarding incomes and expenditures of 226 farm families in 1927-28 were secured by personal visits to inhabitants of the trade areas of two small cities. One hundred and fifty families lived in the retail trade area of a community of about 15,000 in population located in the southern dairy section of Minnesota; the other 76 lived in the retail trade area of a city of 50,000 in the small-grain and potato section in the northwestern part of the State. Fifty-one percent of the first group of farmers owned their own farms, 20 percent were part owners, and 29 percent tenants. Thirty-four percent of the latter group owned their own farms, 20 percent were part owners, and 36 percent tenants. The average size of the farms of the two groups was 209 acres. Data are presented by income groups per family and per adult unit. The adult units were measured by reducing all persons to the equivalent number of adults, according to food needs. The average size household in terms of adult units was 3.8.

Total gross cash receipts of all farmers averaged \$3,647 per family. Cash available for current living averaged \$1,122. Expenditures for food averaged \$337, for clothing \$229, and for household and operation, exclusive of the rental value of homes, \$246. Study of the distribution of expenditures showed an "increase in cash receipts is associated with declining proportions spent on living, about the same proportions spent for automobiles, and increasing proportions spent for the farm itself and for investments" (p. 6). Farmers appeared to value land ownership as one of the major values in improved living. From the past experience of these farm families it seemed apparent that not much more than a third of each dollar of increased gross income in the near future would go for improved living. A classification of the expenditures of the rural and urban families studied as expenditures "for necessities for the present", and "for investment and nonphysiological purposes" shows that the farmers were "really better off as to both incomes and standards of living than the lower two-thirds of the urban group."

MUSE, MARIANNE

(102)

THE STANDARD OF LIVING ON SPECIFIC OWNER-OPERATED VERMONT FARMS.

Vt. Agr. Expt. Sta. Bull. 340, 54 pp., illus. Burlington. 1932.

The aim as stated was "to portray the standards of living which prevail among those Vermont farm families studied and the effects of related factors on living expenses" (p. 3). Standard of living was here used to mean "the content of family living as measured by the amount, variety, and quality of the goods consumed \* \* \* in meeting the physical and psychic needs of [the household]" (p. 3). Ninety-five records from 74 households were tabulated; 14 percent of them were kept in 1927, 25 percent in 1928, 47 percent in 1929, and 14 percent in 1930. The farms studied were scattered through 10 counties of Vermont. "The median schooling of the homemakers was 4 years of high school, 45 percent having received less and 19 percent more \* \* \* " (p. 13). The operators received somewhat less education. "A majority of both farmers and homemakers were native-born Vermonters \* \* \* predominantly Anglo-Saxon \* \* \* and most of its members had always lived on farms" (p. 13). The average size of family was four persons. The average total value of living was \$1,881. The average money value of food furnished by the farm was \$372, of housing furnished \$248, and of fuel and ice furnished \$133. Total expenditures for current living averaged \$1,042, for food \$318, for clothing \$159, and for household operation \$125. The cost of life insurance premiums averaged \$86.

Farm products were valued at retail prices. Housing furnished was valued at 10 percent of the current value of the house. Economic conditions and prices in the State during the 4-year period were discussed, also factors influencing size and distribution of income. Clothing costs were analyzed in relation to size of family and costs for sex and age groups. The author constructed her own cost of consumption unit for clothing, similar to that of Kirkpatrick. The adequacy of the diet, in terms of adult-male energy units, was measured in relation to content of calcium, protein, phosphorus, energy, and iron. The relation of size of family, as measured by number of persons, male-energy units and cost-consumption units, to the total value of current living and to cash expenditures was measured. The relation of cost of living to age and education of operators and homemakers and to accessibility of the farm was found to be negative. The cost-consumption unit "was found to be by far the best of these units for measurement of household needs for all consumption goods" (p. 54).

ROUSE, WILLIAM L., HAWTHORNE, HARVEY W., and GALLOWAY, ZACHARY L. (103)

FARM ORGANIZATION AND MANAGEMENT IN GRAYSON COUNTY. Ky. Agr.

Expt. Sta. Bull. 317: [161]-215, illus. Lexington. 1931.

This study was made to obtain basic information on the organization and management of farms and to determine the factors controlling farmers' incomes. Business-analysis records were obtained from 254 farm families in Grayson County, Ky., for 1928, of which 138 furnished data on family living. The average size of the 138 families was four persons, with a total cash income of \$950. The average value of food furnished by the farm was \$244, of housing furnished \$71, and of other items \$29. Food and other items were valued at farm prices. Housing was estimated at 10 percent of the inventoried value of the house. "The cash outgo both for farm expenses and family living increased as the total cash income increased. The family living furnished from the farm also increased as the total cash income increased" (p. 168). Similar data are given for the 205 farm families, comprising about four persons, with total receipts averaging \$908 and total expenses for current living \$417. The average value of



food furnished by the farm was \$235, of housing \$69, and of fuel \$28. "The study indicates that the well-being of families in this region is dependent in a large measure upon their producing an ample supply of foods for home use" (p. 210). A condensed summary of the business of 233 Grayson County farms gives the number of persons per family, total expenses, income, and total family living.

CLAYTON, C. F., and PEET, L. J.

(104)

LAND UTILIZATION AS A BASIS OF RURAL ECONOMIC ORGANIZATION, BASED ON A STUDY OF LAND UTILIZATION AND RELATED PROBLEMS IN 13 HILL TOWNS OF VERMONT. *Vt. Agr. Expt. Sta. Bull.* 357, 144 pp., illus. Burlington. 1933.

A study of land utilization in 13 hill towns in the Green Mountains of Vermont was undertaken for the purpose of developing a feasible plan of land use which would "provide for the preservation and improvement of the social and economic life of communities in the 13 towns" (p. 5). Data on value of family living in 1928-29 on 161 farms were collected as one of the measures of the economic efficiency of the land and its operation. Average size of family on these farms was 3.9 persons, and the average age of operators 50 years. Average net money income as given for 159 families was \$567. The average money value of food furnished by the farm was \$253, of housing \$111, and of wood \$125. Money expenditures for current family living averaged \$584, for food \$276, for clothing \$80, and for fuel and light \$19. Payments on insurance policies averaged \$22, and on other savings and investments \$83.

Average value of living was computed for four groups of families, those receiving 80 percent or more of gross income from crops and livestock, those receiving over 20 percent from lumber and wood, those obtaining their net money income principally from labor and machine work off the farm, and those receiving their net money income principally from pensions, gratuities, boarders, and nonfarm capital. Except for the farms in the third group, value of family living per farm was practically the same in each group. The farms in this group were in general small and near villages, and thus favorably located to enable the operator to work off the farm. When the data on value of family living were related to number of cows kept, it was found that average value of family living increased irregularly with increases in the number of cows kept. A positive relationship appeared between distance from the railroad and value of family living, a circumstance in part, if not wholly, accounted for by the fact that the quality of the crop land within 10 miles of a railroad was distinctly superior to the crop land in farms 10 miles or more from a railroad. A financial balance sheet for 128 farms shows assets and liabilities at the beginning of the farm occupancy period, and in 1929, by the length of the occupancy period. "The challenge offered by the records of these 128 farm operators is the slender margin that even successful farmers are able to interpose between meager success and complete failure. \* \* \* There are some operated farms in the 13 towns that ought to be abandoned. There are some partially operated farms that might be occupied and operated. But the essential program for farming in the 13 towns is concentration of the farming area, not expansion" (p. 123).

DICKINS, DOROTHY

(105)

CLOTHING AND HOUSE-LINEN EXPENDITURES OF 99 RURAL FAMILIES OF MISSISSIPPI DURING 1928-29. *Miss. Agr. Expt. Sta. Bull.* 294, 39 pp., illus. A. and M. College. 1931.

To determine the time and money expenditures for clothing and house linen and for their care, and also some of the factors influencing those expenditures, data were secured for 1928-29 from 99 farm families in 10 counties. In each community, every farm family within 2 or 3 miles of the supervisor's home was visited and asked to cooperate if they did not expect to move within the year. Of the husbands, 1 had no schooling, 55 had been to grammar school, 25 to high school, and 14 to college. Of the wives, 46 had been to grammar school, 35 to high school, and 18 to college. The average size of family was 5.7 persons, with an average value of family living of \$1,763. Products furnished by the farm valued at retail prices ranged from \$291 in one county to \$456 in another, while the value of housing (taken as 10 percent of the estimated value of the house) ranged from \$61 to \$154. Expenditures averaged \$204 for clothing and \$9 for house linen. Size of family is calculated in adult-male units according to Cowles' scale of clothing expenditures. Money expenditures for clothing were affected by value of family living, composition of family, distance of family from church, and education of operator and homemaker. Linen expenditures were affected by the value of family living and the education of the homemaker.



DITTMER, WATSON E., and DOWLING, HAZEL.

(106)

REPORT OF BROWN COUNTY AGRICULTURAL ECONOMIC CONFERENCE, ABERDEEN, SOUTH DAKOTA, OCTOBER 10-11, 1929; ECONOMIC SURVEY AND COMMITTEE RECOMMENDATIONS FOR FARM AND HOME IMPROVEMENT IN BROWN COUNTY. S. Dak. State Col. Agr. and Mech. Arts, Ext. Serv. 36 pp. [Brookings]. 1929. [Mimeographed.]

The data in this report were secured for the use of the farm and home economics conference held under the auspices of the State extension service at Aberdeen, S. Dak., in October 1929. This conference was the first of a series of 10 conferences held in different counties of the State "for the purpose of laying a foundation on which to build a sound program of farm and home development, based on actual conditions in the county and by farm people themselves". In Brown County, questionnaires for the year 1928-29, asking information "in regard to present practices in the home with recommendations on living requirements deemed essential by the people" (p. 1) were sent to home extension clubs and answered by the membership of 28 clubs representing 600 women. In addition 37 half-section farms were surveyed and data secured on organization, income, and expenditures. The bulletin is devoted almost entirely to recommendations for the improvement of farming and home conditions. A recommended family budget is included which calls for an expenditure of approximately \$1,600 a year. "Results of the survey conducted on 37 half-section farms showed gross receipts to be an average of \$3,455 per year, operating expenses \$3,000, leaving a balance of \$455 to take care of this \$1,600 deemed necessary by the women for living essentials, leaving a deficit of \$1,145" (p. 2). The classification used in the recommended budget is as follows: Food, clothing, operating expense, fuel and light, recreation, education, church and charity, health and personal. The food budget provides for the production of a large part of the family food supply on the home farm.

FISH, M.

(107)

BUYING FOR THE HOUSEHOLD AS PRACTICED BY 368 FARM FAMILIES IN NEW YORK, 1928-29. N. Y. (Cornell) Agr. Expt. Sta. Bull. 561, 92 pp., illus. Ithaca. 1933.

The buying practices of 368 farm families in four counties in western New York in 1928-29 were studied to determine buying procedure, to analyze the differences in purchases of various families, and to compare the factors influencing expenditures. Families were selected who had furnished farm-business records for surveys in three counties and other families were included from a fourth county to increase the sample. Most of the farms visited were located several miles from city trading centers. In 87 percent of 346 families, both husband and wife were American born. More than one-half of these husbands and wives had attended only the district school. The average size of family was 3.4 persons. The average household expenditure for the 240 families with income records was \$927, of which \$317 went for food and \$183 for clothing. Both food and clothing expenditures varied inversely with the amount of production carried on in the home. In general the families patronized chain stores for food and supplies, relied on brand names in purchasing many articles, and purchased on cash terms.

NEVADA UNIVERSITY, [COLLEGE OF AGRICULTURE], AGRICULTURAL EXTENSION DIVISION.

(108)

WASHOE COUNTY'S FARM HOME CONFERENCE. 18 pp. Reno. [1929.] [Mimeographed.]

This report of a farm home conference includes a list of the foods necessary for health and the amounts of each required per person for an 8-month period in 1928-29. A minimum clothing budget gives the cost per garment and the number of garments required by each member of the family. There are also specifications for number of rooms and equipment for living room, kitchen, cellar, and bedroom, as well as recommendations regarding health, education, and recreation, and a reallocation of expenditures under the main headings in the general budget. Before these recommendations were made a survey was instituted "to find out just what are the present conditions affecting farm home life in Washoe County" (p. 1). An estimate of the average family expenditures was given: total expense \$1,771; for food \$641, clothing \$211, fuel and light \$98, other operating expenses \$455.

OYLER, MERTON

(109)

THE STANDARD OF LIVING OF FARM FAMILIES IN GRAYSON COUNTY, KENTUCKY.  
Ky. Agr. Expt. Sta. Bull. 316: 127-159. Lexington. 1931.

Farm families who had furnished records for farm-business analysis were selected for this study of farm family living in 1928-29 in a section of low incomes and diversified farming. There were 58 families from one area and 80 from another in Grayson County, which is located in the west-central part of Kentucky. The operators had completed 7 grades in school, the homemakers 7.5. Sons and daughters away from home had an average of 9.4 grades, as compared with 9.8 grades for those at home. The average size of family was 4.1, and the gross cash income, \$950. The average money value of food furnished by the farm was \$244, housing \$72, and operation goods \$28. Total expenditures for current living averaged \$380, for food \$89, for clothing \$140, and for operation goods \$41. Life and health insurance averaged \$12. Rent was estimated as 10 percent of the inventory value of the house. Food and operation goods were valued at farm prices.

GROSS, IRMA H., and BOSWORTH, MARGUERITE R.

(110)

INSURANCE OF FARM FAMILIES. Mich. Agr. Expt. Sta. Tech. Bull. 133,  
39 pp., illus. East Lansing. 1933.

The purpose of this survey of 100 tenant and 100 owner farm families selected at random from the Lansing area of Ingham County, Mich., was to obtain facts "on the insurance practices and attitudes of farm families, in order to judge their adequacy in promoting the economic security of farm family life" (p. 4). Of the operators 77 percent were native born of native stock, and 18 percent were native born of foreign stock; 130 had finished their schooling with grammar school, 48 with high school for 1 year or more, and 12 with other schooling after high-school graduation. Of the wives, 102 had finished their schooling with grammar school, 68 with high school for 1 year or more, and 22 with other schooling after high-school graduation. The children of both owner and tenant families were receiving more formal education than did the parents. Owner families averaged 4.3 persons, and tenant families 5.3. The net spendable cash income (obtained from a 3-year average 1928-30) of the owners averaged \$1,117; of the tenants \$798. Premiums for life insurance averaged \$79 for owners and \$75 for tenants, and for fire, tornado, and hail insurance \$34 and \$14, respectively. There was apparently no relation between income and life insurance carried, either in amount or premium. Education of the operator and the carrying of insurance by the preceding generation were associated with the carrying of life insurance. Carrying property insurance was a more stable practice than carrying personal insurance. For the farm family, especially the tenant family with its greater need of economic protection, insurance did not provide adequate economic security.

JOHNSON, LILLIAN H., and MUSE, MARIANNE

(111)

CASH CONTRIBUTION TO THE FAMILY INCOME MADE BY VERMONT FARM HOME-  
MAKERS. Vt. Agr. Expt. Sta. Bull. 355, 42 pp. Burlington. 1933.

"This study deals with the extent of the cash contributions made to the family income by Vermont farm homemakers and their methods of earning" (p. 2). The first group studied consisted of 53 homemakers selected from a larger group who had cooperated in keeping family expense records for a year. From this group 28 homemakers had average net earnings in 1928-30 of \$188 each. The second group was selected to show the importance of farm location for wives' net earnings. Seventy-five were chosen, 25 on a main road, 25 on a secondary road, and 25 on a back road. Seven to ten on each road had the same earnings in 1931. The average earnings for those living on farms on the back road were considerably lower than those of the other groups. The third group consisted of 40 homemakers scattered throughout the State and chosen because of their success in one or more lucrative enterprises. None of them had net earnings below \$100 per year in 1931, while more than 10 earned over \$500 each. Methods of earning are analyzed; one special section is devoted to the poultry business and another to boarders and tourists. Twenty-two of these successful in earning were located on back roads. For the group of 53, the average net farm income was \$1,616 and the average net worth of the farms was \$12,982. Other data for this group were given in a previous study (102). One of the greatest problems for all groups was to find a market and present to that market a standardized product. Average net farm income on the farms where the homemakers earned was lower than on those where they did not earn, but in the lowest farm income group the homemakers did not contribute to the money income.



KIRKPATRICK, ELLIS L., McNALL, PRESTON E., and COWLES, MAY L. (112)  
FARM FAMILY LIVING IN WISCONSIN. Wis. Agr. Expt. Sta. Research Bull.  
114, 48 pp., illus. Madison. 1933.

An investigation of the living of 900 Wisconsin farm families in 1928-30 was undertaken in order to determine to what extent farm family living is dependent upon income and to indicate the interrelations of income, standards of living, and the participation of members of the families in certain selected home and community activities. The 900 families represent six major type-of-farming areas in Wisconsin.

The average size of family was 4.3 persons. The average net cash income was \$1,103; the average total value of living, \$1,454. The average money value of all food furnished was \$231, of housing \$221, and of fuel \$45. Total expenditures for current living averaged \$919; for food, \$289; for clothing, \$194; and for household operation, \$176. Life and health insurance amounted to \$38. Food and fuel were valued at farm prices and house rent was charged at 10 percent of the value of the house. Total money value of living less than doubled while the net cash income increased three times. "Apparently about half of the families increase the expenditures for family living goods and services when their incomes increase, or enlarge their incomes as they have more pressing demands for family living expenditures" (p. 10). The author concludes that: "It is likely that family living and income are less closely associated with each other than each is associated with some other common factor. This common factor may be within the individual family or it may be characteristic of specific groups of families \* \* \* The many nonmonetary factors bulk large in any given family and in any community living situation" (p. 36).

— McNALL, PRESTON E., and COWLES, MAY L. (113)  
SUPPLEMENTARY TABLES FOR RESEARCH BULLETIN 114, FARM FAMILY LIVING  
IN WISCONSIN. Wis. Agr. Expt. Sta. 18 pp. Madison. 1933. [Mimeographed.]

The printed report to which these tables are supplementary covered 900 Wisconsin farm families during 1928-30, and was published in January 1933, as Farm Family Living in Wisconsin, by the same authors.

MUSE, MARIANNE, and GILLUM, ISABELLE (114)  
FOOD CONSUMPTION OF FIFTY VERMONT FARM HOUSEHOLDS. Vt. Agr. Expt.  
Sta. Bull. 327, 30 pp., illus. Burlington. 1931.

Adequacy of diet was the subject of this study of 50 records from 43 farm households. The families were widely scattered throughout Vermont and were chosen for their apparently typical nature. The 50 were taken from a large group of household records collected for the purpose of studying the level of living in Vermont. The average size of family was 3.5 adult-male energy units. The average money expenditure for current living was \$1,019. The records were collected over a period of 3 years, 1928-30. The average money value of food consumed was \$694, of which \$374 was furnished by the farm. Each household kept detailed records for a year of the amounts of food consumed. The value of the food supplied was determined by the local retail price of food of similar quality. The adequacy of the diet was determined by standards adopted by Hawley supplemented by data from Rose and included measurement of energy, protein, calcium, phosphorus, and iron. The relative amount of the total value of food consumed devoted by these families to each of the five major categories of food was compared with a standard of distribution suggested by Sherman. A fairly close correlation seemed to exist between the money value of food consumed per adult-male energy unit per day and dietary adequacy. Only 19 diets were adequate in all the nutritive factors studied. Fifty-two cents a day was the average money value for the adequate diets. There is given in the study a careful analysis of the proportion of each foodstuff supplied by the farm.

AUSMAN, LESLIE V., and KAISER, ANNA (115)  
REPORT OF BON HOMME COUNTY FARM AND HOME ECONOMIC CONFERENCE,  
TYNDALL, SOUTH DAKOTA, FEBRUARY 20-21, 1930; COMMITTEE RECOM-  
MENDATIONS AND SURVEY SUMMARIES FOR FARM AND HOME IMPROVEMENT  
IN BON HOMME COUNTY. S. Dak. State Col. Agr. and Mech. Arts, Ext.  
Serv. 37 pp. [Brookings.] [1930.] [Mimeographed.]

This survey of 120 farm homes of Bon Homme County was made by the questionnaire method, for the use of the farm and home economics conference held under the auspices of the State extension service in 1930. The manner of selecting the families studied is not reported. Total expenditures by these families



for the year 1929, excluding clothing, amounted to \$1,348. Expenditures for food averaged \$526, for clothing for a family of five \$317, and for fuel and light \$113. The detailed statistical analysis of money expenditures for the items under the headings education, recreation, personal, and health is confused, but the report contains valuable material on home equipment and production, and on the standard of living of the group meeting in conference. Other data indicate the means by which homemakers add to the family income and the percentage of families having difficulties with certain food and clothing problems. Recommendations are offered on the improvement of home plant and equipment within a 25-year period, and the annual cost of such improvement is estimated. The total cost of the recommended budget given in the report considerably exceeds the average expenditures of the families surveyed.

RICHARDSON, JESSIE E.

(116)

FARM FAMILY LIFE IN MONTANA. Jour. Home Econ. 22: 835-836. 1930.

This report is based on the records of household expenditures for 1929 of 34 Montana farm families, some of whom were engaged in dairy and truck farming, others in dry-land or irrigated general farming. The average expenditure varied from \$100 per month for February to September to \$135 during the late fall and winter. Food expenditures on dairy and truck farms amounted to 25 percent of the total expenditures and on dry land or irrigated general farms to 35 percent. Clothing expenditures for all farms were 14 percent of total expenditures. The cost of operating the household varied from \$16 to \$25 per month.

SAYRE, LAWRENCE C., and HENKES, BEATRICE

(117)

REPORT OF LINCOLN COUNTY FARM AND HOME ECONOMICS CONFERENCE, CANTON, SOUTH DAKOTA, FEBRUARY 17-18, 1930; COMMITTEE RECOMMENDATIONS AND SURVEY SUMMARIES FOR FARM AND HOME IMPROVEMENT IN LINCOLN COUNTY. S. Dak. State Col. Agr. and Mech. Arts, Ext. Serv. 40 pp. [Brookings.] [1930.] [Mimeographed.]

This summary of expenditures of 70 farm homes in Lincoln County, S. Dak., in 1929, was prepared for use of the county farm and home economics conference held in 1930 under the auspices of the State extension service. Ten homes (all the homes) in each of seven separate areas were included. The manner of selecting the families studied is not reported. Information gathered by questionnaire was used to determine minimum standards of farm life. The total expenditure for current living amounted to \$1,239, of which food amounted to \$373, clothing \$423, and fuel and light \$109. The detailed statistical analysis of money expenditures for the items included under the headings education, recreation, savings and investment, personal, and health is confused, but the report contains valuable material on home equipment and home production and on the standard of living of the group meeting in conference. Data are given on the means by which homemakers add to the family income and the percentage of families having certain difficulties with food and clothing problems. The total cost of the recommended budget given in the report considerably exceeds the average expenditures of the families surveyed.

SLOAN, SAM L., and ROCKHILL, MABEL

(118)

REPORT OF FALL RIVER COUNTY FARM AND HOME ECONOMICS CONFERENCE, HOT SPRINGS, SOUTH DAKOTA, FEBRUARY 24-25, 1930. S. Dak. State Col. Agr. and Mech. Arts, Ext. Serv. 35 pp. [Brookings.] 1930. [Mimeographed.]

This report summarizes community questionnaires obtained in Fall River County, S. Dak., from 80 homes. The method of selection is not given. The material was used by the county farm and home economics conference held under the auspices of the State extension service in 1930. Total expenditures for current living (1929) averaged \$1,756 per family, of which food amounted to \$357, clothing \$335, and fuel and light \$65. The detailed analyses of money expenditures for the items included under the headings education, personal, and health are confused, but the report contains valuable material on home equipment and production and on the standard of living of the group meeting in conference. Recommendations are offered on the improvement of the home within a 10-year period, and the annual cost of such improvement is estimated.

BOWMAN, ALBERT E.

(119)

FARM HOME MANAGEMENT. Wyo. Agr. Ext. Serv. Circ. 25: 41-57. [Laramie.] 1930.

The purpose of the conference on the farm home held in 1930, in connection with which this survey was made, was to determine the content and the cost of a satisfactory standard of living on a farm in Goshen County in southeast Wyoming, a fairly new farming country in the foothills of the Rocky Mountains.

Members of rural clubs filled out survey blanks under their presidents' supervision, and local committees made personal visits to secure information from women not club members. Sixteen communities were represented in the returns from 536 farm homes. Total expenditures for current living averaged \$997 for the 368 families furnishing estimates for the year 1929-30; for food, \$347; for clothing, \$207; and for household operation, \$89. Using the survey findings as a basis, four committees of the women at the conference prepared a budget for a family of five, containing the essentials for a satisfactory living. The recommended budget amounted to \$1,415 and covered food; clothing; household furnishing; fuel, lights, electricity, and telephone; education, health, church, and other organizations; recreation; and personal.

CRIPPS, AILEEN, and KIRKPATRICK, ELLIS L. (120)

COMPARATIVE COST OF FOOD AT FARM AND CITY PRICES. Jour. Farm Econ. 15: 395-397. 1933.

The purpose of this report was to indicate what changes would be made in the money value of the foods consumed by a group of farm families and in the total value of their living, if the money value of the food products furnished by their farms was calculated at retail city prices rather than at farm prices. Data on the living of 150 Dane County, Wis., farm families in 1929-30 used for this discussion were gathered in connection with an investigation of the living of 900 Wisconsin families in 1928-30. The report covering the 900 families was published in 1933 as *Farm Family Living in Wisconsin (112)*. The money value of food furnished by the farms in Dane County was shown to be 68 percent higher at city prices than the corresponding value at farm prices. Insurance averaged \$31. Need for further comparative studies of farm-price and city-price cost of food and other goods furnished was emphasized.

FREEMAN, RUTH C., and SOUDER, M. ATTIE (121)

LIVING EXPENDITURES OF A SELECTED GROUP OF ILLINOIS FARM AND SMALL-TOWN FAMILIES (1929-30). Ill. Agr. Expt. Sta. Bull. 372: 331-351, illus. Urbana. 1931.

This investigation was initiated among rural homemakers in Illinois to show the "desirability of making a more satisfying apportionment of total, or 'realized,' income" (p. 331). Household accounts were kept during the year 1929-30 in 18 different counties in central Illinois by 70 farm and 18 small-town homemakers, approached through the university extension service. A university representative held three group conferences in each county and conferred once with each account keeper in her home when a survey was made of factors affecting plane of living on the farm to supplement the accounts. All the cooperating families except one were American born. In 36 of the farm homes, either operator or homemaker or both had attended college. Thirty-two of the farm families were full or part owners, and 37 were tenants. The average number of persons was 3.7 per farm family.

The average realized income of these farm families was \$2,489. ("Realized income" is defined as consisting of (1) net cash from all sources after farm business expenses have been subtracted, (2) the retail market value of commodities produced on the farm and used in the home, and (3) the rental value of the house occupied by the family.) Of this total, \$932 was furnished by the farm. Their savings and investments averaged \$322. The money value of their current living averaged \$2,167. The annual value of food averaged \$636, of housing \$412, of clothing \$195, and of household operation \$189. The average value of food furnished by the farm was \$402, and of fuel \$3. The rental value of the houses of farm families was calculated as 10 percent of the estimated value of the house. In obtaining the food account for these families, the estimated cost of food for hired men was subtracted and charged to farm business and the estimated cost of meals served to household help was charged to service. The costs of food for children away at school and of meals served guests also were deducted. This study of accounts indicated that in the lowest income group of farm families the size of the family made little difference in the way in which expenditures were distributed, in the middle income group "expenditures in all divisions increased directly with the increase in size of family, except savings, which showed a decided decline" (p. 349), and in the highest income group greater variation occurred in the amounts expended for different purposes. "The most noticeable difference in the general expenditures of farm and town families was the larger amount spent by the town families for recreation" (p. 349).



LEAP, WILLIAM L.

(122)

THE STANDARD OF LIVING OF NEGRO FARM FAMILIES IN ALBEMARLE COUNTY, VIRGINIA. Social Forces 9: 258-262. 1932.

Data were secured during 1929-30 from 76 families living in the southern part of Albemarle County, Va., in the piedmont, a general-farming area. Size of family averaged 3.9 persons. The average education of the operators was 2.7 years; of the homemakers, 4.6 years. All the operators and all except two of the homemakers were born in Virginia. The average total money value of family living was \$613; of food furnished by the farm, \$177; of housing furnished, \$40; and of fuel furnished, \$5. Total expenditures for current living averaged \$373; for food, \$192; for clothing, \$97; and for household operation, including automobile expenditures, \$37. Premiums on insurance (life, health, and benefit) averaged \$17.

MAINE UNIVERSITY, COLLEGE OF AGRICULTURE, EXTENSION SERVICE. (123)

A SUMMARY OF HOME ACCOUNTS FROM EIGHTY-FOUR MAINE HOMES FOR THE YEAR APRIL 1929-APRIL 1930. 4 pp. [Orono.] [1930.] [Mimeographed.]

According to these accounts kept in 1930, of 8 counties in Maine 49 families received their entire or the largest part of their incomes from farming, and 21 from wages or salaries. A garage business furnished all the income for 2 families, and money invested for 1. Eleven families did not report source of income. The average size of the households was 4.5 persons. Their total annual cash expenditure, exclusive of rent, averaged \$645. Food expenses averaged \$252, clothing \$92, and household operation \$96. The average money value of food supplied by the farm was \$212, of fuel supplied \$52. The data refer to the year 1929-30.

MAYCOCK, RENA B.

(124)

UTAH STUDIES IN COST OF LIVING OF TOOELE COUNTY FARM FAMILIES, 1930-31.

Utah Agr. Col. Ext. Serv., Tooele Co. Farm and Home Circ. 1, 16 pp. [Logan.] 1931. [Mimeographed.]

This summary of expenditures of 52 farm homes of Tooele County was made for the use of the county conference held under the auspices of the Utah Extension Service in 1930. The purpose of the conference was to find out what farm families feel they must have in order to live satisfactorily on a minimum comfort level. Questionnaires were given to a number of women in the same locality. In 1929-30, the average money value of food furnished by the farm to the families reporting was \$250, of housing furnished \$176, and of fuel furnished \$40. Total expenditures for current living averaged \$1,323, for food \$271, for clothing \$320, and for operating expenses \$95. The cost of life-insurance premiums averaged \$119. Recommended expenditures for food, clothing, health, education, life insurance, recreation, operating expenses, additions and replacements, personal, church, civic, and automobile totaled \$1,743 for 1930, but \$1,250 for 1931. The 1930 recommendations were still the ideal, but lower incomes had necessitated the reduction of expenses.

NORTH CAROLINA STATE COLLEGE OF AGRICULTURE AND ENGINEERING, EXTENSION SERVICE. (125)

FARM HOME ECONOMIC CONFERENCE IN FRANKLIN COUNTY, NORTH CAROLINA. 9 pp. [Raleigh.] [1930.] [Mimeographed.]

The North Carolina Extension Service chose Franklin County for a trial survey because an interest in living costs and standards had already been created among the women. Home demonstration work had been carried on in the county for over 13 years. Representative women from each organized rural community were presented with questionnaires, and asked to secure answers from the occupants of 10 owner and 10 tenant homes among the white population. "A period of only 10 days was allowed for the survey. About 75 percent of 200 questionnaires sent out were filled and returned" (p. 1). The average estimated total expenditure in 1929-30 was \$773 for owners and \$492 for tenants. Estimated expenditures were as follows: For groceries, \$181 (owners) and \$203 (tenants); clothing, \$150 (owners) and \$117 (tenants); fuel and lights, \$45 (owners) and \$44 (tenants). A minimum budget of \$900 for a family of five was recommended including groceries, clothing, taxes and insurance on shelter, operating, furnishings and equipment, church and charity, recreation and personal, education, health, savings, and the household share of automobile operation.



OGREN, HERMAN, and QUARVE, GEORGE

(126)

REPORT OF MARSHALL COUNTY FARM AND HOME ECONOMIC CONFERENCE, BRITTON, SOUTH DAKOTA, NOVEMBER 18-19, 1930; COMMITTEE RECOMMENDATIONS AND SURVEY SUMMARIES FOR FARM AND HOME IMPROVEMENT IN MARSHALL COUNTY. S. Dak. State Col. Agr. and Mech. Arts, Ext. Serv. 38 pp. [Brookings.] [n. d.] [Mimeographed.]

This report summarizes a survey of 80 Marshall County farm homes made for use of the farm and home economics conference held in 1930 under the auspices of the South Dakota State extension service. The method of selecting the families is not stated. The annual money expenditures of the families for 1929-30 averaged \$1,437. Expenditures for food averaged \$347 for the year, for fuel \$288, for clothing for a family of five \$240. Insurance premiums cost \$55 on the average. Other data indicate the percentage of homes which had certain difficulties with food and clothing. The total cost of the recommended budget given in the report considerably exceeds the average expenditures of the families surveyed.

PALM, ANDREW W., and DEMPSTER, ANNA

(127)

REPORT OF CODINGTON COUNTY FARM AND HOME ECONOMIC CONFERENCE, WATERTOWN, SOUTH DAKOTA, MARCH 6-7, 1930; COMMITTEE RECOMMENDATIONS AND SURVEY SUMMARIES FOR FARM AND HOME DEVELOPMENT IN CODINGTON COUNTY. S. Dak. State Col. Agr. and Mech. Arts, Ext. Serv. 42 pp. [Brookings.] 1930. [Mimeographed.]

This report summarizes the returns from 110 community questionnaires circulated early in 1930 in Codington County, S. Dak., under the auspices of the State extension service. Total money expenditure in 1929-30, for the living of the families studied, averaged \$1,264. Expenditures for food averaged \$386; for clothing, \$257; and for fuel and light, \$126. Insurance premiums averaged \$45. The percentage of homemakers adding to the family income by raising poultry was 96; by garden and fruit, 38; and by dairy products, 91. The analysis of money expenditures for the items included under the headings education, recreation, savings and investment, personal and health is confused, but the report contains valuable material on home equipment and home production and on the standard of living of the group. The total money expenditure provided for in the recommended budget given in the report amounted to \$1,815, and provides in detail for expenditures for food, clothing, home plant and equipment, education, recreation, health, church and charity, personal expenditures, and insurance.

RICHARDSON, JESSIE E.

(128)

THE QUALITY OF LIVING IN MONTANA FARM HOMES; FROM ACCOUNTS KEPT BY FORTY FAMILIES DURING THE YEAR 1929-30. Mont. Agr. Expt. Sta. Bull. 260, 45 pp., illus. Bozeman. 1932.

Data for 1 year, 1929-30, for 40 Montana families selected as having a satisfactory standard of rural living, were studied to determine the content and value of living. The families were chosen from seven counties which typified the different agricultural sections, and included dry-land and irrigated farms. Average size of family was 4 persons. The average gross cash income, based on 36 complete reports, was \$3,503. The average money value of food furnished by the farm was \$604, and of housing furnished, \$226. Total expenditures for current living averaged \$1,089; for food, \$341; for clothing, \$189; and for household operation, \$158. Life insurance and savings averaged \$309. Food furnished by the farm was valued at local retail prices. The cost-consumption unit and household index are used for comparisons between families. Favorable comparisons are made with data on satisfactory rural living in other States.

STIEBELING, HAZEL K.

(129)

THE FOOD SUPPLY OF FAMILIES LIVING IN THE SOUTHERN APPALACHIANS. U. S. Dept. Agr. Misc. Pub. 205: 153-154. 1935.

Data on the character of and variations in the food supply of families in the southern Appalachian highlands are presented for Knott County, Ky. (1929-31), and Madison County, Va. (1930), and compared with data from other studies of families in the southern Appalachians and with quantities of foods suggested by the United States Bureau of Home Economics as a basis for adequate diets. The 41 farm families living in Knott County from whom data were received were included among the 228 families referred to in the previous report. Records were secured from 15 families in Madison County. The mountain diets were found to be deficient in protein, calcium, phosphorus, iron, and vitamins A, B, C, and G. Data showing relationship between milk supply and growth in height among school children in Knott County, Ky., and Madison County, Va.,

are given. "Educational programs are needed to spread a knowledge of food values and nutritional needs. Home food-production practices which would develop food resources to best advantage should be encouraged. Gardens, cows, poultry, and pigs are necessary to furnish the vegetables, milk, eggs, and lean meat essential to the diets of individual families" (p. 154).

NEBRASKA UNIVERSITY, [COLLEGE OF AGRICULTURE], [EXTENSION SERVICE].

THE ITEMIZED HISTORY OF YOUR HOUSEHOLD DOLLAR. Nebr. Univ., Agr. Col. Ext. Circ. 11-104, 9 pp. Lincoln. 1932. [Mimeographed.] (130)

This circular emphasizes the need of record keeping and budget making and shows how records may be kept and budgets planned. It contains a summary of records kept by Nebraska farmers—25 in 1929, 36 in 1930, and 92 in 1931. Average expenditures are given for each major item of expense for families of different size. In 1931 the total expenditures ranged from an average of \$879 for the 2-person families to an average of \$1,658 for the 7-, 8-, and 9-person families. The average value of food produced on the farm ranged from \$180 to \$386, housing for owners from \$161 to \$211 and for renters from \$59 for the smallest families through \$199 and \$70 for the middle families down to \$50 for the largest families. Average expenditures for food ranged from \$153 to \$373, for clothing from \$72 to \$207. Savings ranged from \$87 through \$129, and \$160 down to \$68 for the largest families.

WALKER, A. L., and COCKERILL, P. W. (131)

FARM ORGANIZATION PRACTICES AND COSTS OF PRODUCING CROPS IN THE MIDDLE RIO GRANDE CONSERVANCY DISTRICT OF NEW MEXICO. N. Mex. Agr. Expt. Sta. Bull. 215: 62-64. State College. 1933.

This report presents information on the organization and management in 1929-31 of 99 farms in representative irrigated farm areas in the Middle Rio Grande Valley of New Mexico and gives an analysis of consumer demand and marketing practices in the immediate trade territory of the Rio Grande Valley. This is the area of the reclamation and flood-control project of the Middle Rio Grande Conservancy District, which comprises Bernalillo, Sandoval, Socorro, and Valencia Counties. The district is approximately 150 miles long and from 1 to 5 miles wide. Of the 99 farms, 53 were general farms, 19 dairy farms, 9 vegetable farms, 12 fruit farms, and 6 poultry farms. The average net farm income per year for the 3 years was \$117 for general farms, \$340 for poultry farms, \$742 for fruit farms, \$1,256 for vegetable farms, and \$2,570 for dairy farms. The average amount available for family living per year was \$177 on general farms, \$305 on poultry farms, \$663 on fruit farms, \$1,751 on vegetable farms, and \$2,506 on dairy farms. The average total value of living furnished was \$350 for general farms, \$172 for poultry farms, \$330 for fruit farms, \$355 for vegetable farms, and \$577 for dairy farms. Total cash expenditures for family living ranged from \$433 on general farms to \$1,325 on dairy farms; for food, from \$208 to \$556; for clothing, from \$118 to \$226; and for fuel and light, from \$14 to \$81 for general farms and dairy farms, respectively. Personal insurance ranged from \$26 for general farms to \$123 for dairy farms. "The decrease in prices from 1929 to 1931 resulted in a smaller amount available for the family on all types of farms. To compensate for this, operators of all types of farms made an effort to obtain a larger portion of their food from the farm. This is evidenced by the fact that the average value of food raised on all farms studied increased from \$202 in 1929 to \$243 in 1931" (p. 65).

WILLIAMS, FAITH M. (132)

VARIATIONS IN FARM-FAMILY LIVING. U. S. Dept. Agr. Misc. Pub. 205: 137-152, illus. 1935.

This study presents data on conditions in Knott County, Ky., and in Grayson County, Va., and compares them with data from the census and from other selected southern Appalachian counties.

Knott County is situated in the northeastern Cumberland Plateau, a region with narrow ridge tops and valley floors. Data collected in this county for 1929-30, a year of relative prosperity, cover 228 families. The total value of current living averaged \$967. The average money value of food furnished by the farm was \$422; of housing furnished, \$34 (estimated as 10 percent of the depreciated replacement value of the houses occupied); of fuel and other items furnished, \$61. Total money expenditures for current living averaged \$450.

Grayson County is located on the southern border of Virginia, in the Blue Ridge Plateau. Data collected in this county for 1930-31, a year of drought



and of general depression, cover 331 farm families. The total value of current living averaged \$775. The average money value of food furnished by the farm was \$241; of housing furnished, \$93 (estimated as 10 percent of depreciated replacement value of the house); of fuel and other items furnished, \$42. Total money expenditures for current living averaged \$399.

The most important factors conditioning variations in farm family living in these counties were differences in the size, the soil, and the slope of the farms operated, in size of family, in opportunities to supplement farm income from industry, and in education and isolation. " \* \* \* at the present time it is impossible to separate the economic from the cultural factors affecting the living of families in the region."

BROOKING, H. A., and NORGAARD, U. J. (133)

REPORT OF SULLY COUNTY FARM AND HOME ECONOMIC CONFERENCE, ONIDA, SOUTH DAKOTA, DECEMBER 12-13, 1930; COMMITTEE RECOMMENDATIONS AND SURVEY SUMMARIES FOR FARM AND HOME IMPROVEMENT IN SULLY COUNTY. S. Dak. State Col. Agr. and Mech. Arts, Ext. Serv. 42 pp. [Brookings.] [1930.] [Mimeographed.]

This summary of expenditures of 50 farm homes of Sully County was made for the use of the farm and home economics conference held under the auspices of the South Dakota Extension Service in 1930. The method of selecting the homes studied is not reported. The annual family expenditures totaled \$1,409. Expenditures for food averaged \$355 for the year, for clothing for a family of five, \$345. Insurance premiums cost \$98 on the average. Other data indicate the percent of homes which had certain difficulties with food and clothing problems. The total cost of the recommended budget given in the report considerably exceeds the average expenditures of the families surveyed.

FREVERT, E. F., and CAVE, ROY A. (134)

REPORT OF BEADLE COUNTY FARM AND HOME ECONOMIC CONFERENCE, HURON, SOUTH DAKOTA, JANUARY 8-9, 1931; COMMITTEE RECOMMENDATIONS AND SURVEY SUMMARIES FOR FARM AND HOME IMPROVEMENT IN BEADLE COUNTY. S. Dak. Col. Agr. and Mech. Arts, Ext. Serv. 41 pp. [Brookings.] [1931.] [Mimeographed.]

This survey of 190 farm families of Beadle County, S. Dak., was made for the use of the farm and home economics conference held in January 1931 under the auspices of the State extension service. The conference recommendations on certain minimum standards of expenditures were based on a summary of the actual and recommended expenditures of the families studied. The manner of selecting the families is not reported.

The annual family expenditures in 1930 totaled \$1,036; expenditures for food averaged \$341, for fuel \$105, and for clothing for a family of five \$186. Insurance premiums cost \$155 on the average. Other data indicate the percent of homes which had certain difficulties with food and clothing problems.

The total cost of the recommended budget given in the report considerably exceeds the average expenditures of the families surveyed.

HAYBALL, EDITH, and THOMAS, W. PRESTON (135)

FAMILY LIVING EXPENDITURES, SUMMIT COUNTY, UTAH, 1930. Utah Agr. Expt. Sta. Bull. 232, 31 pp., illus. Logan. 1931.

The purpose of the project was to study the cost of living, the expenditure of the income, and the relationship between the farm income and family expenditures, to determine the distribution and efficiency of these expenditures in relation to the varying incomes and to determine whether or not the income on these farms is adequate to sustain a reasonable standard of living. Summit County is in a mountain valley in the north-central part of the State where farming is practiced under irrigation. Dairying is the main farming enterprise, and hay, potatoes, and canning peas are the principle crops grown. Records of the expenditures for farm living were secured from 51 homemakers for 1930 on the farms where records of the farm business for the same year had previously been taken. Of the 51 homemakers, 49 percent had received some education beyond the eighth grade, 2 percent had been to college. Of the farm operators 57 percent had received schooling beyond the eighth grade, 13 percent had had some college training. The average size of family was six persons. The average net cash income was \$1,659. The average money value of all goods furnished by the farm was \$530, of which the average money value of food furnished was \$258, and of housing \$240. The average expenditure for current family use was



\$1,059, of which the average expenditure for food was \$247, for clothing \$218, for housing \$68, and for household operation \$132. Life insurance averaged \$74. The value of food products furnished by the farm was figured on the basis of farm prices. The value of the use of the house was estimated on the basis of the taxes and insurance paid, the depreciation chargeable for 1 year and the interest on the investment.

"It was found from this study that the families with low income spent their money for necessities and had little available to spend for education, life insurance, or automobiles. It was not until the income available for family living reached \$1,000 or more that the family requirements above necessities could be provided" (p. 30).

KIRKPATRICK, ELLIS L., and TOUGH, EVELYN G.

(136)

COMPARISON OF TWO SCALES FOR MEASURING THE COST OR VALUE OF FAMILY LIVING. *Amer. Jour. Sociol.* 37: 424-434. 1931.

"Increased interest in the study of rural standards of living during the past decade has emphasized a need for satisfactory scales for measuring the cost or value of the goods and services consumed annually by the family. This paper presents the results of a limited comparison of two sets of the scales \* \* \* the adult-male-equivalent and the cost-consumption unit" (p. 424). The study was made to answer the questions: "Would the results obtained by the use of the two methods be significantly different? If so, which would prove to be the more desirable means of comparison? Would the resultant figures obtained by the use of either be more satisfactory than expenditures per family as a basis of comparison?" (p. 428). The male-equivalent unit was worked out by Carle C. Zimmerman on the basis of the relative need for energy of persons of different age and sex as computed by L. Emmett Holt. "In this scale the expenditures per family annually for all goods and services were based against the consuming power of the adult male person 19 to 60 years of age, as unity or one. The relative weights [were] allotted to other persons in the family by sex and age groups \* \* \*" (pp. 424-425).

In the cost-consumption unit scale of Kirkpatrick "the consuming power of the adult male is taken as the base for weighing family expenditures" (p. 425); however, the relative weights allotted differ for each of the principal groups of goods and services. For example a child of either sex, 6 to 11 years old, would count as 0.4 units for food, and 0.6 units for clothing expenditure. Further the fact was considered that as the total size of the family increased the added expense per person is not so great as the cost per person for the smaller size family, thus, for expenses for furnishings, household operations, etc., the operator and homemaker were each weighted as 1, the first child was weighted as 0.4 and the fourth child as 0.1. To compare these two methods a test was carried out on two groups of summaries of standard-of-living survey. One dealt with "104 family summaries obtained from a standard-of-living survey in Crozet, Va. [in] 1930. The 104 summaries represent practically all the families residing in the village. The second test covered 131 summaries—every seventh summary from a lot of 900 schedules for a study of the farmers' standard of living in Wisconsin" (p. 429). In each test the two methods were applied to each summary. "Pearsonian coefficients of correlation constituted the methods of comparison" (p. 429). The author concludes: "Simple correlations of the adult male equivalent and the cost consumption unit show the two to be closely related. However, when each is correlated separately with total expenditures and gross cash income per family as the dependent variable, the two scales appear to be less consistent. The correlation is higher for the cost consumption unit than for the adult male equivalent \* \* \*. The correlations must be viewed in the light of qualitative judgment \* \* \*" (pp. 432-434). A significant difference in the results of the two methods appeared in the fact that "The difference of the means for the cost consumption unit and adult male equivalent [was] 4.52 times its standard error" (p. 434).

The authors further believe that the greater exactness of the cost-consumption unit method in attempting to account for the variations on the basis of the separate groups of goods and services gives a feeling of more certainty as to exactness of result where this method is used.

- KRUG, HARRY A., and DEMPSTER, ANNA (137)  
 REPORT OF CLARK COUNTY FARM AND HOME ECONOMIC CONFERENCE, CLARK,  
 SOUTH DAKOTA, FEBRUARY 3-4, 1931; COMMITTEE RECOMMENDATIONS AND  
 SURVEY SUMMARIES FOR FARM AND HOME DEVELOPMENT IN CLARK COUNTY.  
 S. Dak. State Col. Agr. and Mech. Arts, Ext. Serv. 39 pp. [Brookings.]  
 1931. [Mimeographed.]

This summary based on questionnaires reporting the expenditures of 70 farm homes of Clark County, S. Dak., was made for the use of the farm and home economics conference held under the auspices of the State extension service in February 1931. The method of selection of the families studied is not given. The material was used by the conference as a basis for budget recommendations. Total annual expenditures in 1930 averaged \$1,752. Expenditures for food averaged \$470, and for clothing for a family of five \$263. Fuel and light averaged \$129. Insurance premium cost \$86 on the average. The detailed statistical analysis of money expenditures for the items included under the headings education, personal, recreation, and health is confused, but the report contains valuable material on home equipment and home production, and on the standard of living of the group meeting in conference. The percent of all homemakers who added to the family income in various ways is given, and the percent of homes having certain food problems. Quantity budget recommendations for a family of 5, including a father, mother, girl 16, boy 12, and child 2, are presented with the annual estimated costs of food, clothing, home-plant equipment and furnishings, education, recreation, health, church and charity, insurance, and personal items. The quantity food budget distinguishes between foods to be produced at home and those purchased, emphasizing home production of meat, dairy products, eggs, and vegetables. The total cost of the recommended budget considerably exceeds the average expenditures of the families surveyed.

- MANN, A. E., and SWANSON, R. O. (138)  
 REPORT OF MINER COUNTY FARM AND HOME ECONOMIC CONFERENCE, HOWARD,  
 SOUTH DAKOTA, JANUARY 6-7, 1931; COMMITTEE RECOMMENDATIONS AND  
 SURVEY SUMMARIES FOR FARM AND HOME IMPROVEMENT IN MINER COUNTY.  
 S. Dak. State Col. Agr. and Mech. Arts, Ext. Serv. 40 pp. [Brookings.]  
 1931. [Mimeographed.]

This survey covering 80 farm homes in Miner County, S. Dak., was made for the use of the farm and home economics conference held under the auspices of the State extension service in January 1931. The method of selecting the families studied is not given. The annual family expenditures in 1930 totaled \$997. Expenditures for food averaged \$265, for clothing for a family of 5, \$227, and for fuel and light \$84. Insurance premiums cost \$16 on the average. Other data indicate the percentage of homes which had certain difficulties with food and clothing problems. Quantity budget recommendations for a family of 5—father, mother, girl 16, boy 12, and child 2—are presented with the annual estimated costs of food, clothing, home equipment and furnishings, education, recreation, health, personal items, church and charity, and insurance. The quantity food budget distinguishes between foods to be produced at home and those to be purchased, emphasizing home production of meat, eggs, dairy products, and vegetables. The total cost of the recommended budget considerably exceeds the average expenditures of the families surveyed.

- REED, LEWIS S. (139)  
 THE ABILITY TO PAY FOR MEDICAL CARE. Cost Med. Care Com. Pub. 25,  
 107 pp. Chicago. 1933.

The purpose of this study was to inquire into the ability of American people to pay for medical care and to examine the living of families at different income levels. Usable schedules of living expenditures from 82 families of various income groups, living on farms or in small towns in Tennessee, were obtained in conjunction with a study of the costs of medical care to 8,788 families. Data concerning 57 of these rural families in 1930 are presented in this volume, along with material for comparable income classes taken from other family living studies. Twenty-two of the families studied included an average of 5.3 persons, incomes averaging \$703, and expenditures for current living \$936. Twelve families comprising 4.3 members had an average income of \$1,755 and total current living expenditures averaging \$1,832; 23 families comprising 43 persons had an average income of \$3,117 and current living expenditures averaging \$2,792. For the last group total expenditures for food averaged \$625; for clothing, \$333; for shelter, \$525; and for household furnishings, \$112. Insurance averaged \$232 a year. The amounts expended for medical care by the three groups of families averaged



\$45, \$103, and \$121, respectively. In the latter two cases the families expended more for such care than the amount estimated as necessary by the Chicago Council of Social Agencies in 1929 in its "minimum health and decency" standard (p. 84). The lowest income group failed to meet this requirement by \$39. The study indicated that families with incomes of over \$1,200 could possibly pay the present average costs of medical care. But "many families it may be assumed, who each year could easily pay the average cost of medical care for people of their income level, may be quite unable to pay the actual cost of necessary medical treatment in a year when much illness of great severity or long duration occurs among their members" (p. 78). Inability to pay for medical care resulted partly from inadequacy of income and partly from the unpredictable nature of illness. "The cost of modern medical treatment in severe illness is such that each year from 2 to 4 percent of families with low or moderate incomes will urgently require medical treatment the cost of which will be beyond their means or which they will be able to pay only with difficulty" (p. 95).

Material dealing with the national income and its distribution, national expenditures and the factors affecting them, and the average cost of medical care is given in addition to the analyses of living expenditures. The figures presented for costs of medical care were compiled from detailed data obtained in connection with a study of medical service received by 8,758 white families (441).

SEVERSON, J. B., and JOHNSON, JOSEPH C.

(140)

REPORT OF MINNEHAHA COUNTY FARM AND HOME ECONOMIC CONFERENCE, SIOUX FALLS, SOUTH DAKOTA, FEBRUARY 5-6, 1931; COMMITTEE RECOMMENDATIONS AND SURVEY SUMMARIES FOR FARM AND HOME IMPROVEMENT IN MINNEHAHA COUNTY. S. Dak. State Col. Agr. and Mech. Arts, Ext. Serv. 36 pp. [Brookings.] [1931.] [Mimeographed.]

This study based on questionnaires received from 130 farm families of Minnehaha County, S. Dak., and affording cost of living data for 1930, was made for the use of the Minnehaha County Farm and Home Economic Conference held under the auspices of the State extension service in February 1931. The manner of selecting the families studied is not reported.

The average money value of food furnished by the farm was \$367. Expenditures for food averaged \$287; for clothing for a family of five, \$167; and for fuel and light, \$71. Insurance premiums cost \$148 on the average. Other data indicate the percent of homes having difficulties with certain food and household problems. Quantity budget recommendations are presented for a family of 5—father, mother, girl 16, boy 12, and child 2—with the annual estimated cost of food, clothing, and household furnishings and equipment, education, recreation, health, personal items, church and benevolences, and insurance. The quantity food budget distinguishes between foods to be produced at home and those to be purchased, emphasizing home production of meat, eggs, dairy products, and vegetables. The total cost of the recommended budget considerably exceeds the average expenditures of the families surveyed.

WELLS, AVIS T.

(141)

AN ECONOMIC SURVEY OF PINAL COUNTY; HOMES OF PINAL COUNTY, ARIZONA. Ariz. Univ., Col. Agr., Ext. Serv. 24 pp. Tucson. 1931. [Mimeographed.]

Data for 1930 on annual outlay for family living were furnished by 63 homemakers in Pinal County, Ariz., one-third of whom lived on farms, the others in small towns. Representatives from the different communities met at a county conference to study the questionnaire returns with reference to the living requirements of a family of 5—father, mother, girl 16, boy 12, and child 6—and made recommendations on house and equipment, food production and preservation, clothing and textiles, and standard of living. The average size of family reported was 4.3. Total expenditures for current living were \$1,584; for food, \$556; for clothing \$232; and for household operation \$180. The budget recommended amounted to \$1,934 where there is no home production, or \$1,645 including part production of food, and covered food and groceries, clothing, operating expense, furnishings and replacement, health, education, recreation, church and charity, personal, auto, life insurance, and gifts.

WILLIAMS, JOHN R., and LINDSEY, EMMA

(142)

REPORT OF HINDS COUNTY FARM AND HOME ECONOMIC CONFERENCE, JACKSON, MISSISSIPPI, JANUARY 21-22, 1931; COMMITTEE RECOMMENDATIONS AND SURVEY SUMMARIES FOR FARM AND HOME DEVELOPMENT IN HINDS COUNTY. Miss. Agr. Col. Ext. Bull. 59, 49 pp., illus. [State College.] 1931.

This is a report of committee recommendations and survey summaries brought together for a 2-day conference in Jackson, Miss., in January 1931. The material



was collected by questionnaire, supervised by whatever local leadership came readily to hand from various local organizations. The purpose was to analyze the economic situation of the farms in the county and to find ways and means of improving the level of living. The questionnaires were sent to 900 families and complete data (relative to the year 1930) received from 812. Two hundred of the families had children completing high school or going beyond in education. The average money expenditure for family living was \$680. There is a discussion of the items of food furnished by the farm, and the range of value of food furnished was for the lowest group \$350, for the highest \$465. Of the total average current expenditure \$280 was for food, \$185 for clothing, and \$60 for household operation. The recommended budget was prepared on the basis of what might be possible for the average home if advantages were taken of all facilities for increasing the output of the farm. Included in the study are reports on farm conditions and recommendations for improvement of soil, crops, livestock, and poultry.

FREEMAN, RUTH C.

SUMMARY OF HOME ACCOUNT BOOKS, 1930-31. Univ. Ill., Col. Agr., Home Econ. Ext. Serv. [15] pp. Urbana. [1931?.] [Mimeographed.] (143)

A summary of 135 farm and small-town home-account books for 1930-31 representing 29 counties in Illinois is presented to enable account keepers to make comparisons with the accounts of families of the same approximate size and range of income as a means of checking their own expenditures for "leaks" and wiser planned spending. One hundred and eleven of the accounts are for farm families and 24 for town families. In addition to summaries for each group, the farm data is compared by income groups to show influence of size of family on character of expenditures. Size of farm families ranged from 3.3 to 4.3 persons. The total average value of farm living was \$2,190, including savings and investments. Average money value of food furnished by the farm was \$327; of housing furnished, \$296. Total cash expenditures for current living averaged \$1,236; for food, \$220; for clothing, \$175. Savings and investments averaged \$331.

HECHT, ALVAH R., and BROWN, GREETA

FINDINGS AND RECOMMENDATIONS FOR FARM AND HOME DEVELOPMENT IN BUFFALO COUNTY AS ADOPTED BY THE BUFFALO COUNTY FARM AND HOME ECONOMIC CONFERENCE AT KEARNEY, NEBRASKA, DECEMBER 15 AND 16, 1931. Nebr. Univ., Col. Agr. [Ext. Serv.] 10 pp. [Lincoln.] [n. d.] [Mimeographed.] (144)

This conference publication devotes most of its space to recommendations but contains two pages of findings upon which the recommendations for farm management and home development are based. Data on family living in 1930-31 were secured from a home survey made in Buffalo County. "Sixty homemakers cooperated in supplying this information. A family of five members was selected as the average family \* \* \*" (p. 2). The average value of goods produced on the farm was estimated as follows: Food, \$288; fuel, \$34; and housing, \$216. Both survey and farm account figures are given for each of the items under average expenditures. The figures from the latter method are somewhat higher for total expenditure, food, clothing, education, health, and recreation, and somewhat lower for operating expenses, equipment and furniture, church and charity, and personal. From the account records expenditures for family living averaged \$674; for food, \$230; for clothing, \$152; for operating, \$71. Specific recommendations for amounts to be devoted to various items of family living are given.

HOTT, NORA M., and others.

FARM HOME ECONOMICS CONFERENCE, FREMONT COUNTY, NOVEMBER, 1931, ON STANDARDS OF LIVING. Colo. Agr. Col., Ext. Serv. 15 pp. [Fort Collins.] [1931.] [Mimeographed.] (145)

This bulletin contains reports and recommendations for Fremont County, Colo., regarding the beautifying of the home, standards of nutrition, clothing, health, child development, family and social relationships. Included are the results of a survey of actual conditions among 70 families in 1930-31. The total value of family living averaged \$1,540. The average money value of food furnished by the farm was \$229, of housing furnished \$240. The total expenditures for current living averaged \$971; for food, \$258; for clothing, \$189; for household operation, \$58; and for repair, painting, and improvement of house, \$78. Life-insurance premiums averaged \$100. The rental value of the houses occupied was estimated at 10 percent of the capital value of the house. The recommended budget raised somewhat the average annual expenditures and changed the percentage of food purchased, clothing, recreation, education, and

furnishings and equipment improvement. The committee made the following specific recommendations: (1) Make a family budget, (2) keep a farm-home account, (3) make a farm-business budget, and (4) keep a farm-business account.

HOLT, NORA M. and others.

(146)

FARM HOME ECONOMICS CONFERENCE, OTERO COUNTY, NOVEMBER 1931, ON STANDARDS OF LIVING. Colo. Agr. Col., Ext. Serv. 14 pp. [Fort Collins.] [1931.] [Mimeographed.]

The major portion of this report deals with recommendations on ways to obtain a better level of living for the farm family and on ways to improve farm management. There are detailed suggestions on nutrition, clothing, health, family and community relationships, and child development. The results of a survey of 66 farm families in Otero County, Colo., is included. The total yearly value of living in 1930-31 averaged \$1,554. The average money value of food furnished by the farm was \$203 and of housing furnished \$108 (estimated at 5 percent of the valuation of the house). Total expenditures for current living averaged \$1,243; for food, \$307; for clothing, \$146; for repairs, painting, and improvement of house, \$79; for household operation, \$103. Life-insurance expenditures averaged \$140. The report shows further what percent of families kept farm and home accounts and budgets. The committee recommends that expenditures for food be reduced by raising more food on the farm. The suggested budget made little difference in the aggregate expenditures but raised the proportion to be spent upon clothing, home equipment, education, and health.

— and others.

(147)

FARM HOME ECONOMICS CONFERENCE, PROWERS COUNTY, OCTOBER 1931, ON STANDARDS OF LIVING. Colo. Agr. Col., Ext. Serv. 17 pp. [Fort Collins.] [1931.] [Mimeographed.]

This bulletin contains general reports and recommendations on foods and nutrition, clothing, farm-home plant, home and community relationships, health, and child development, as well as the results of a survey of the expenditures of 110 farm families in Prowers County, Colo., in 1930-31.

Total current expenditures averaged \$1,368, and total value of family living \$1,661. The minimum amount of cash considered necessary was placed at \$1,051. The average value of food consumed was \$445; \$152 represented food raised on the home farm, and \$293 food purchased. The rental value of the houses occupied (\$142) was estimated at 10 percent of the value of the house, clothing averaged \$174, fuel, light, and telephone \$76. Life-insurance premiums averaged \$113. A recommended budget cut the purchased food bill by \$100 and increased the amount for education from \$43 to \$100, which is supposed to provide some savings for college education and music lessons. The amount for clothing was left the same, but it was felt that this expense might be reduced by better buying, remodeling, and better care of clothing.

— and others.

(148)

FARM HOME ECONOMICS CONFERENCE, PUEBLO COUNTY, NOVEMBER 1931, ON STANDARDS OF LIVING. Colo. Agr. Col., Ext. Serv. 16 pp. [Fort Collins.] [1931.] [Mimeographed.]

In addition to reports and recommendations on the farm-home plant, nutrition, clothing, health, child development, and home and community relationships, the results of a survey of 82 farm families in Pueblo County, Colo., in 1930-31 are included in this report. The total value of family living of these families averaged \$1,960 and expenditures for current living, \$1,394. The annual rental value of the houses occupied was \$181, estimated at 10 percent of the capital value of the house. Expenditures for food averaged \$361, for clothing \$185, for operation \$109, and for life insurance \$170. The value of food furnished by the farm was \$215. The minimum amount considered necessary averaged \$1,432, but the recommended budget placed this amount at \$1,332. The recommended budget reduced the cash expenditure for food \$100, on the assumption that more might be produced on the farm. The rental value was reduced one-half of what the survey indicated.

MAINE UNIVERSITY, COLLEGE OF AGRICULTURE, EXTENSION SERVICE. (149)

A SUMMARY OF HOME ACCOUNTS FROM EIGHTY-THREE MAINE HOMES FOR THE YEAR APRIL 1930-MARCH 1931. 6 pp. [Orono.] [1931.] [Mimeographed.]

This report summarizes for the year April 1930 to March 1931, the accounts of 83 households located in 8 Maine counties.



The entire or main source of income of 34 of the families was from the farm. Twenty-six households were dependent on wages and salaries. Source of income was not recorded for 23 families. Incomes ranged from \$500 to \$6,000 per year, many more below \$2,000 than above, and several under \$1,000. The average size of the household was 4.5 persons and the total cash expenditures, exclusive of rent, averaged \$906. Food expenditures averaged \$289, clothing \$135, and household operation \$111. Food supplied by the farm (valued at retail prices) averaged \$222. Money value of food per person per day in households of 5 persons appeared to be inadequate if the minimum cost of 28 cents a day is taken as the standard—a figure in accordance with the results of "studies made in food costs and adequate diets over a period of years by authorities on the subject, and interpreted in the light of present-day food prices" (p. 4).

WASHINGTON STATE COLLEGE, [EXTENSION SERVICE]. (150)

FARM HOME ECONOMIC CONFERENCE, SNOHOMISH COUNTY, WASHINGTON; A REPORT OF SUGGESTIONS AND RECOMMENDATIONS AS PREPARED AT THE SNOHOMISH COUNTY FARM HOME ECONOMICS CONFERENCE HELD AT EVERETT, FEBRUARY 12 AND 13, 1931. 15 pp. [Pullman.] [1931.] [Mimeographed.]

This report contains figures used by the cost-of-living group of the first Snohomish County (Wash.) Farm Economic Conference held in February 1931. They are based on the experience of the group and results of a questionnaire distributed to 927 rural homes in the county. Suggestions and recommendations are given concerning food produced on the farm, life insurance, recreation, savings, personal expenditures, foods and nutrition, home management and equipment, housing, surroundings, and clothing. After due study and consideration of the figures collected, the various committees determined that the annual average expenditure per family in 1930-31, exclusive of housing, was \$1,071. Foods averaged \$417, clothing \$159, operating expenses \$103, life insurance \$39, and savings \$290. Total costs for items, excluding housing, needed for a family of five—two adults, girl 16, boy 12, and girl 5—was decided upon at \$1,370, for food (purchased and furnished) \$556, clothing \$200, and operating expenses \$100.

WHITE, M. ELMINA (151)

COST OF LIVING CONFERENCE, WALLA WALLA COUNTY, WASHINGTON, MARCH 23 AND 24, 1932; REPORT OF DISCUSSIONS. State Col., Wash. [Ext. Serv.] 22 pp. [Pullman.] [1932.] [Mimeographed.]

Four hundred and thirty-two questionnaires were mailed in advance to members of the cost-of-living conference undertaken by the Walla Walla County Home Federation and the extension service in March 1932. The purpose of the conference was to plan a more effective home-making program and stimulate interest in home economics. One hundred and seventy-seven, or 40 percent, of the questionnaires were returned. The figures obtained from the survey of these farm families along with the household accounts of seven others were used as the basis of the conference discussion. Walla Walla County is located in southeastern Washington. It is one of the largest wheat-producing sections in the State. Dairy, fruit, and truck crops also are extensive. In normal times farm living is on a high plane of economic security and permanence. Data are presented showing the provisions for food supply made by each of 30 families. A copy of the questionnaire sent out to all families is given. Suggestions and recommendations are made concerning the following: Adequate standards of nutrition, means of cutting food costs, clothing, reading matter, and household operation. The material submitted revealed that for the period of the survey (1930-31), food expenditures were high and "for the great majority of families, probably the greatest reduction in cash expenditures can be brought about by increasing the amount of food produced at home" (p. 12). A need for discriminating care in lowering costs without sacrificing health, etc., was indicated also. The account books of seven farm families which were kept under supervision showed average total household cash expenditures for current living of \$982, for an average family of 4.5 persons. Expenses for food purchased averaged \$263, for clothing \$159, for housing \$51, for operating expenses \$79, and for savings \$184. These figures are compared with the 1931 expenditures of 38 Washington farm families.

WILLEFORD, MARY B. (152)

INCOME AND HEALTH IN REMOTE RURAL AREAS; A STUDY OF 400 FAMILIES IN LESLIE COUNTY, KENTUCKY. 88 pp. New York. 1932.

The income and health of 400 families in Leslie County, Ky., were investigated in 1930-31 in order: "First, to determine the income of a group of persons living



in a remotely rural area of the Southern Appalachian Mountains; second, to relate that income to the kind and amount of medical and nursing care necessary for health; third, to consider to what extent people living under such economic and geographic conditions can obtain this care out of their own resources; and fourth, to point out the educational implications in the situation" (p. 9).

The 400 families had an average size of 5 persons. The range of family incomes (including money value of home-produced food as well as money income) was from \$32 to \$4,633. The median income for owners was \$765 and for tenants \$481. The money income per family ranged from no income to \$2,959. The total amount paid for medical care for 400 families was \$3,495, averaging almost \$10 for each family served. Comparative material from other studies of income and from the census show that the situation in Leslie County is similar to that in other remote mountain areas.

The conclusions reached by the author as a result of this investigation are as follows: (1) The economic level of the people inhabiting remote rural mountain areas is so low that they cannot provide for themselves even the minimum amount of medical, nursing, and health care requisite for the protection of the individual or of the community; (2) except in unusual circumstances they are getting a negligible amount of health protection; (3) their economic level cannot in the near future be so improved that they can provide such care for themselves; (4) therefore it should be brought to them with the aid of outside support, either public or private; (5) schools should be established in the United States for the training of graduate nurses as midwives.

"The total lack at present of such training to meet the imperative need in rural areas for those services which can be rendered by nurse midwives, under medical supervision, is a handicap in our provision for health care" (p. 80).

BEALL, THELMA, and others. (153)

ACCOUNTING FOR THE FAMILY FINANCES. Ohio State Univ., Ext. Serv.  
11 pp. [Columbus.] [1932.] [Mimeographed.]

To give home-account keepers a basis for comparing their own family expenditures, 46 Ohio farm home-account keepers lent their records of expenditures for 1931 to be summarized. Size of family averaged 4.4 persons. Food furnished by the farm averaged \$187 and fuel \$29, both valued at farm prices. Total expenditures for current living averaged \$715; for food, \$180; for clothing, \$101; for housing, \$43; and for household operation, \$119. Savings including life insurance averaged \$110. The expenditures of the 5 highest and 5 lowest expenditure groups are shown throughout the report.

MINNESOTA UNIVERSITY, DEPARTMENT OF AGRICULTURE. (154)

ANNUAL REPORT OF THE FARM MANAGEMENT SERVICE FOR FARMERS IN SOUTHEAST MINNESOTA FOR THE YEAR 1931. Minn. Univ., Dept. Agr., Div. Agr. Econ. Mimeographed Rept. 52, 24 pp. University Farm, St. Paul. 1932.

A farm-management service was organized late in 1930 in eight counties in southeast Minnesota for the purpose of assisting farmers to keep records to enable them to know the returns for labor and management, the returns to capital and family labor, and the actual earnings from the farm that the family had to spend for living and personal use. This report presents along with an analysis of farm-business statistics, a table giving household and personal expenses for 88 farm families for 1931. The average size of the family was 4.1 adult equivalents (scale not given). Total expenditures for current living for 88 families averaged \$1,010; for food, \$262; for clothing and dry goods, \$99; for fuel and light, \$53. Life insurance and investment amounted to \$91. Data on current expenditures and savings are also given for the families living on the 18 most profitable and the 18 least profitable farms.

FREEMAN, RUTH C. (155)

SUMMARY OF HOME ACCOUNT RECORDS. Univ. Ill., Col. Agr., Home Econ. Ext. Serv. 19 pp. [Urbana.] [1932.] [Mimeographed.]

This summary of household-account books based on 201 records from Illinois farm and small-town homes for a 12-month period, 1931-32, reveals the fact that, through greater utilization of home-raised foods and other adjustments, the families of this group were not forced to lower their level of living to any appreciable extent in a period of reduced money incomes. Two hundred and sixteen account books, 132 of which were from families who had cooperated for more than 1 year, were received from 30 counties. Of the 201 records used, 159 were for farm families, and 42 for small-town families. Average size of farm family was 3.9 persons. Average value of family living was \$1,791. The average money

value of food furnished by the farm was \$361, of fuel and other items furnished \$17, of housing furnished \$267. Total cash expenditures for current living averaged \$872, for food \$195, for clothing \$123, for repairs and furnishings \$68, and for household operation \$136. Savings and investments averaged \$274. Food furnished these families by their farms was valued at local market prices; housing furnished by the farm was expressed at its rental value. The Hawley scale was used in computing food costs. The summary indicates that amounts and percentages spent for clothing, household operation, and automobile expenditures were lower in 1931-32.

HOOD, KENNETH

(156)

SOME PRELIMINARY RESULTS OF A STUDY OF PART-TIME FARMS IN CHEMUNG AND TOMPKINS COUNTIES, NEW YORK, 1932. N. Y. State Col. Agr., Dept. Agr. Econ. and Farm Mangt. 33 pp. Ithaca. 1933. [Mimeographed.]

A report of part-time farming in central New York in the year ended June 1, 1932, is based on 249 schedules obtained in Chemung County and 18 obtained in Tompkins County. "Approximately every third part-time farm on a number of roads selected at random was surveyed in Chemung County. Only 6 percent of the records in Chemung County and one of the records in Tompkins County were obtained inside the corporate limits of cities or villages" (p. 1). Forty-eight of the farm operators had some high school education and 5 were college graduates; the remaining 214 had not gone beyond the eighth grade. The average net worth of the 207 part-time farmers from whom data were obtained was \$3,012. The average gross income of the 267 part-time farmers was \$1,184. Of this amount, \$135 was in the form of receipts from the farm business, and \$759 from sources other than farming. The value of privileges amounted to \$290, of which the value of food furnished was \$111, wood and other miscellaneous products \$21, and rent \$158. "Farm receipts plus the value of privileges less farm expenses averaged \$218. Interest on the capital invested in the farm business averaged \$140. The difference between these two amounts (\$78) can be considered as the operator's net income from the farm" (p. 7). Some detailed information is given on sources of income from the farm and from other sources. Material is included showing the relation between farm earnings and the value of products furnished by the farm, number of acres owned, number of livestock kept; between value of goods and services furnished and amount of relief received; and between the type of road and the cost per mile of running a passenger car and the farm-operator's earnings. Material is given on the cost of construction of new and repair of old farmhouses and on ways of financing purchases of part-time farms and buildings. A final section deals with the comparative costs and advantages of living in the country as compared with living in the city.

MAINE UNIVERSITY, COLLEGE OF AGRICULTURE, EXTENSION SERVICE.

(157)

SUMMARY OF HOME ACCOUNTS, 1931-1932. 6 pp. [Orono.] [1932.] [Mimeographed.]

This report summarizes the 1931-32 accounts of 90 households living in 10 Maine counties. The number of persons per household averaged 4.8. The money expenditures for current living averaged \$668. Expenditures for food averaged \$245, for clothing \$89, and for household operation \$83. Food furnished by the farm averaged \$214. Comparison of the average expenditures per household with the average expenses of 83 households in 1930-31 indicated a drop in expenditures for current living of 25 percent.

WHITE, M. ELMINA

(158)

COST OF LIVING CONFERENCE, WHATCOM COUNTY, WASHINGTON, AUGUST 2-3-4-5, 1932; REPORT OF DISCUSSIONS. State Col. Wash., [Ext. Serv.] 34 pp. [Pullman.] [1932.] [Mimeographed.]

In conjunction with the cost-of-living conference undertaken in August 1932, by the Whatcom County Federation of Home Demonstration Clubs and the Extension Service, 473 questionnaires were sent out. Replies of 116 rural, 77 urban, and 26 semiurban families were analyzed. The data, along with the household accounts of 10 rural and 2 urban cooperators, formed the background of the conference's discussions. The conference was held "for the purpose of projecting a more effective home-making program and stimulating additional interest in home economics" (p. 3). Eighty-five percent of the farms of the 116 families were operated by their owners.



The conference found that "as a means of keeping the family in good health, it appears that more families should be using whole-grain cereals, leafy vegetables, and drinking more water" (p. 18), and that there was need for more community organizations in many communities.

Data covering the average expenditures of 11 farm families are given. Cash expenditures for current living (3 persons) averaged \$706. Food purchased averaged \$185; clothing, \$107; housing, \$67; operating expenses, \$76; and savings, \$266.

BEALL, THELMA, and others.

(159)

FARM FAMILY LIVING COSTS. Ohio State Univ., Ext. Serv. 18 pp. [Columbus.] 1933. [Mimeographed.]

Household-account books for 1932 for 79 Ohio farm families are analyzed and the results presented to serve as a guide to future planned living. Average size of family was 4.3 persons. Average value of living (exclusive of housing) was \$813. The average money value of food furnished by the farm was \$155 and of fuel furnished \$24. The total expenditures for current living averaged \$525; for food, \$133; for clothing, \$81; and for household operation, fuel, light, and phone, \$65. Savings and insurance averaged \$109. Comparisons are made with figures for 1931 to show items of increased and decreased expenditure.

OLIVER, JONAS G.

(160)

THE EAST MIDDLE GEORGIA REGION. Ga. Agr. Col., Ext. Div. Bull., v. 21, no. 426, 18 pp. [Athens.] 1933.

Because of the effect of the bollweevil and the depression (1920-25), which caused an exodus of tenant farmers in 11 cotton counties in Georgia and a shift during the period 1925-33 from cotton production only to dairying and raising poultry and pasture and feed crops, the United States Bureau of Agricultural Economics cooperated with the Georgia Extension Service in setting up farm and home economics conferences to study local problems and promote more successful farming and happier home and community life. One hundred and seventy-one farm records for 1932 were secured from farmers in every part of Wilkes and Putnam Counties, two representative counties in the east-middle Georgia section. The average size of family was about five persons. The 171 farmers were grouped according to income into five groups. The average income available for family living was \$895 for the first group of 15 families, \$290 for the second of 14 families, \$114 for the third of 79 families, \$5 for the fourth of 54 families, and \$376 for the fifth of 9 families. For each group the average money value of food furnished was \$494, \$408, \$339, \$265, and \$503, respectively; of housing furnished, \$181, \$137, \$146, \$123, and \$176; and of fuel furnished, \$40, \$30, \$30, and \$45. Housing furnished was evaluated at the estimated rental value of the house. For each group total expenditures for food averaged \$110, \$121, \$77, \$88, and \$125, respectively; for clothing, \$76, \$73, \$76, \$58, and \$114; life-insurance premiums averaged \$76, \$40, \$37, \$31, and \$73.

Some conclusions reached are that over 80 percent of these farms failed in 1932 to provide a family of 5 with an income sufficient to meet necessary family living expenses; farmers making a plus income did dairying and raised poultry and cotton; farmers using soil improvement crops had higher yields per acre and hence higher incomes. It was recommended that budgets be planned for family and farm expenditures and that there should be organization for community marketing to nearby consuming centers.

SMITH, MURIEL

(161)

NEBRASKA SUMMARY OF HOME ACCOUNT RECORDS FOR 1932. Nebr. Univ. Agr. Col. Ext. Circ. 11-111, 11 pp. Lincoln. 1933. [Mimeographed.]

Analysis of 147 farm home account books kept in Nebraska during 1932 is given. Data are compared with the averages obtained from a smaller number of Nebraska accounts kept in 1929, 1930, and 1931. Average expenditure for the main items of family living are given for families of different size. In 1932 the lowest average value of living was recorded for the 2-person families, \$715; the highest for the 6-person families, \$1,189. For 140 families there are summaries and 4-year comparisons of goods produced and used on the farm. Quantities of farm goods given away are also presented. The report urges an increase in home production during hard times.



STRATTON, GLADYS E.

(162)

AVERAGE CLASSIFIED HOUSEHOLD EXPENDITURES FROM FORTY-EIGHT HOME ACCOUNTS, GROUPED AS AVERAGE PER CAPITA, THE TEN HIGH COST, AND TEN LOW COST PER CAPITA FAMILIES IN CONNECTICUT, 1932. [Conn. State Col., Ext. Serv.] [4] pp. [Storrs.] [1933.] [Mimeographed.]

Household accounts for 1932 from 48 farm families in Connecticut are analyzed to show average expenditures per capita for all cases and for the 10 high and the 10 low accounts. Comparisons are made with averages of 22 accounts for 1931. Average size of family was 4.6 persons. Average money value of family living was \$1,565. The average value of food furnished by the farm was \$109, of housing and fuel furnished \$42, and of other items furnished \$6. Total expenditures for current living averaged \$1,211; for food, \$367; for clothing, \$142; for housing, \$116; and for household operation, \$227. Savings averaged \$196.

WASHINGTON STATE COLLEGE, EXTENSION SERVICE.

(163)

COST OF LIVING CONFERENCE, CHELAN COUNTY, WASHINGTON, FEBRUARY 10, 1933; REPORT OF DISCUSSIONS. 11 pp. [Pullman.] [1933.] [Mimeographed.]

This report includes summaries of eight household accounts for 1932 kept by homemakers in Chelan County, Wash. The majority of the families specialize in fruit growing. The average size of family was 4.5 persons. The average total expenditure for family living was \$707, for food \$172, for housing \$85, and for clothing \$52. Savings averaged \$105 per family.

FREEMAN, RUTH C.

(164)

SUMMARY OF ILLINOIS HOME ACCOUNT RECORDS, 1932-33. Univ. Ill., Col. Agr., Home Econ. Ext. Serv. 14 pp. [Urbana.] [1933.] [Mimeographed.]

One hundred and fifty-nine farm families and 33 small-town families in Illinois kept home-account books for 12 months in 1932-33. The summary indicates the following adjustments to meet incomes 25 percent lower in 1932 than in 1931: (1) A greater proportion of the food consumed (69 percent) was furnished by the farm. The amount of milk fell below the recommended standard by a quart a day per family. Use of home-grown fruit and poultry was low; (2) operating expenses were reduced by careful expenditures and use of farm resources; (3) home sewing was mostly making over garments; (4) the greatest reductions were in automobile and cash recreation expenditures; (5) savings (11 percent of total "realized" income) were mainly life insurance (80 percent being used that way).

Average size of family was 3.6 adult-male energy units (Hawley scale). Total average money value of living was \$1,308. The average money value of food furnished by the farm was \$307, of housing furnished \$236, and of fuel and other items furnished \$17. Total expenditures for current living averaged \$609, for food \$141, for clothing \$91, and for household operation \$102. Savings averaged \$139, of which \$110 was for life insurance. Products furnished by the farm were valued at local retail prices. Housing furnished by the farm was estimated at 10 percent of its capital value. In addition to general summaries of the living of the farm and town families, the data from farm families are analyzed by income groups for distribution of general expenditures and influence of size of family on expenditure.

MAINE UNIVERSITY, COLLEGE OF AGRICULTURE, EXTENSION SERVICE.

(165)

SUMMARY OF HOME ACCOUNTS, 1932-33. 5 pp. [Orono.] [1933.] [Mimeographed.]

This summary of accounts covers the 1932-33 expenditures of 82 households in nine Maine counties. The average size of the households was 4.3 persons, and their average expenditures for current living was \$467. Expenditures for food averaged \$185, for clothing \$62, and for household operation \$74. The value of food furnished by the farm averaged \$195, of fuel furnished \$80. Comparison with the average expenditure for current living of 90 households in 1931-32 showed a reduction of about 30 percent. There appeared to be fewer entries for telephones and more for kerosene, "indicating that the use of electricity and telephones during the depression period may have been curtailed somewhat" (p. 4). Contrary to the accounts of previous years, the expenditure for "giving" was "higher on the average than either pleasure, education, or home furnishings" (p. 5). The practice of bartering or exchange was also "fairly common" (p. 5).

## FAMILIES OF WAGE-EARNERS, LOW-SALARIED WORKERS, AND SMALL PROPRIETORS

[MASSACHUSETTS] BUREAU OF STATISTICS OF LABOR. (166)  
 REPORT (AUGUST 2, 1859-MARCH 1, 1870). [Mass.] Senate [Doc.] 120, pp. 13,  
 24-34, 166, 164-185, 263, 298, 309. 1870.

In October 1869 there was published in the newspapers of Massachusetts a circular from the Massachusetts Bureau of Statistics of Labor soliciting "correspondence from any parties interested in the labor question" (p. 13) in all its phases, including the cost of living. The response to this circular was very disappointing and in December 1869, blanks containing 137 questions were mailed to workmen of various classes living in 10 counties of Massachusetts. The names of those addressed had been obtained from answers to the general circular previously placed in newspapers and from lists submitted by workingmen or parties interested in labor. Returns were received in the main from men of mature years and judgment, of varying employments, who were either Americans or had come from English-speaking countries. The answers "may be taken as a faithful picture of the life and thoughts of the more advanced and generally better paid workingmen" (p. 263). Only 33 percent of the workers, living in 8 counties, submitted data. From the replies to these questionnaires and others sent to employers, as well as from oral testimony, the Bureau of Statistics of Labor sought to learn about the real working and home life of the people in a variety of employments.

Material submitted for 35 families, covering 154 persons, indicated that in 1869 the average expense of a family of about 4 persons approximated \$701, a figure about \$17 in excess of the average earnings per family—\$684. The lowest expenditure for groceries and provisions was \$200 a year, the highest \$535. Expenditures for fuel varied from about \$28 to \$100 a year; for clothing, from \$20 to over \$200; and for rent, from \$36 to \$250. The number of rooms per family ranged from 2 to 10.

House-to-house visits in certain localities in Boston were made to obtain a picture of the actual living quarters of workingmen. The result of this investigation was to "reveal a state of things at which the people of Massachusetts will gaze with amazement, disgust, and anger" (p. 164). Other testimony gathered indicated that low-paid laborers were resigned to the idea that there was slight chance of their progressing from their own class and that they, along with the higher skilled and better paid workmen, were in debt because earnings were insufficient to meet expenses.

(167)  
 SECOND ANNUAL REPORT. [Mass.] Bur. Statis. Labor Ann. Rept. (1870-71)  
 2: 434-452, 517-531, 583-621. 1871. ([Mass.] Senate [Doc.] 150.)

Information regarding the cost of living and home life of workmen in various occupations in 42 localities of Massachusetts for the year 1870 was collected by the Massachusetts Bureau of Statistics of Labor by personal inquiries, letters addressed to workingmen, and from oral or written testimony of employers, employees, and others. The majority of replies from workers themselves were from the comparatively well-paid classes, although some responses were received from the low-wage groups. The data on the whole apply to persons who were either American born or had come from English-speaking countries.

Fifty-seven wage-earners' blanks were tabulated. Of these, 48 reported their earnings which averaged \$753 a year, while 34 reported their expenses which averaged \$720 a year. Average expenditures of 28 persons reporting their expenditures in detail was \$732. These families, ranging from 2 to 10 persons, represented an average of a little over 4 persons each. They lived in dwellings of from 3 to 8 rooms. Expenditures for groceries and provisions ranged from \$192 to \$550 a year, for rent from \$20 to \$312, for fuel and light from \$40 to \$111, and for clothing from \$20 to \$300. Seventeen families reported savings averaging \$184 for the year. A number of the men reported themselves as shareholders in cooperative stores.

A tour of inspection of tenement houses in Boston showed that little improvement had been made in the living quarters, when comparisons were made with a similar investigation of the preceding year. Filth, unsanitary conditions, and overcrowding were still noticed.

The actual facts obtained from the entire study failed "to support the commonly pronounced opinion of the pecuniary and property success of the thoughtful, temperate, and thrifty workmen" (p. 446).

Insight into how families lived and spent their free time in addition to other information regarding the habits of the workingmen can be found in the individual case studies included.



[MASSACHUSETTS] BUREAU OF STATISTICS OF LABOR—Continued. (168)  
 THIRD ANNUAL REPORT. [Mass.] Bur. Statis. Labor Ann. Rept. (1871-72)  
 3 (pt. 1): 251-292, 500-529. 1872. ([Mass.] Senate [Doc.] 180.)

This study for the year ended March 1872 was made to procure figures on the average cost of living of a workingman's family. Two sets of blanks were sent out to persons in various occupations. The first, covering eight questions, was addressed to responsible parties such as clergymen, employers, and merchants, who were requested to procure details from some wage laborer or laborers who could present vouchers for items. The other blank, made up of 28 questions, was sent to foremen, overseers, and other higher paid workingmen, as well as lower paid mechanics and laborers.

Ten of the returns from the first group of blanks were tabulated by individual cases. They covered workmen of 11 different occupations employed in the counties of Essex, Hampden, Middlesex, Norfolk, and Suffolk who were either American born or had come from England or Ireland.

In several instances, the responses to the second group of blanks came from higher paid workmen. Included in the averages were the expenditures of 4 overseers, 2 foremen, 2 salaried men, and 1 employer of 4 persons for about half of the year. In addition the data covered workers engaged in 13 different occupations who were born either in North America or had come from English-speaking nations.

A tabulation of 24 questionnaires giving total expenses showed average annual earnings of \$890 and average expenses of about \$821, leaving an average savings of about \$69. A second analysis was made of expenditures of 26 persons reporting expenditures in detail. For their families (which averaged a little over four persons), total living expenditures averaged \$796, of which \$340 went for groceries and provisions. Twenty of the families spent on an average \$116 for rent. Expenditures of 25 families for fuel and light averaged \$58, and for clothing \$87. Each of 19 families reported average savings in the year of \$241.

A short history of prices from 1630 to 1870, given along with the compilations of cost of living for the year ended March 1872, includes data on actual earnings and expenditures of two workingmen as well as a table of average expenses, for families of different size compiled for specified articles from actual returns of workmen in 1869 by E. Young, of the Federal Department of the Interior.

(169)  
 FOURTH ANNUAL REPORT. [Mass.] Bur. Statis. Labor Ann. Rept. (1872-73)  
 4 (pt. 1): 109-128. 1873. ([Mass.] House [Doc.] 173.)

Data on family expenditures were obtained through personal inquiries by assistants of the bureau in different towns or cities from families with whose circumstances they were somewhat acquainted. Nineteen returns, 3 of them from farmers, were tabulated for workers in 11 different occupations. Two of the workers had come from Ireland. Size of family ranged from 4 to 6 persons. Total expenditures for current living (1872) ranged from \$343 to \$957. Quantities consumed of 26 kinds of food, and of soap, starch, coal, and wood, are given for each family. No correct estimate could be made for average annual earnings. However, the findings indicated that "with these expenses it would seem impossible for a wage-laborer to save any desirable sum" (p. 128). A return from a ship joiner showed "the pressing demand of the time for increased means, articles that a few years ago were considered luxuries being now ordinary necessities" (p. 128). Detailed reports are given of the personal expenses of cases that had been investigated by the bureau itself, but not included in the regular system of tables. In addition, there is presented a tabulation of receipts and expenditures for the periods 1826-45 and 1851-70 by the family of a bookbinder who had for the last 2 years been engaged in a government office. Detailed expenditures by this family in the year 1837 are also presented.

(170)  
 FIFTH ANNUAL REPORT. [Mass.] Bur. Statis. Labor Ann. Rept. 5 (pt. 2):  
 260-263. 1874. ([Mass.] Pub. Doc. 31.)

This report contains a table showing the earnings and expenditures of 2 Massachusetts families living in the vicinity of Boston. Similar data (in terms of the standard United States currency for 1872) are presented for 33 families in Europe and 1 family in Africa. The entire yearly earnings of 1 of the Boston families, comprising 2 adults and 1 child, was \$1,000. Both adults were employed; the wife at preserving flowers, the husband at tobacco manufacturing. The family's entire yearly expenditures totaled \$878, leaving a savings of \$122. Weekly expenditures for groceries and provisions were \$4.58, for house rent \$4.81, and for



fuel and light \$0.90. Yearly clothing expenditures were \$170. The second Boston family, comprising 2 adults and 6 children, had entire yearly earnings of \$1,025 and expenditures totaling \$1,074. Weekly expenditures for groceries and provisions were \$9.94, for house rent \$4.96, and for fuel and light \$1.60. Yearly clothing expenditures were \$71. The father and 2 children of this family were employed as carpenter, carriage painter, and office boy.

YOUNG, EDWARD

(171)

LABOR IN EUROPE AND AMERICA; A SPECIAL REPORT ON THE RATES OF WAGES, THE COST OF SUBSISTENCE, AND THE CONDITION OF THE WORKING CLASSES IN GREAT BRITAIN, GERMANY, FRANCE, BELGIUM, AND OTHER COUNTRIES OF EUROPE, ALSO IN THE UNITED STATES AND BRITISH AMERICA. pp. 811-820. Washington, Treasury Department, Bureau of Statistics. 1875.

In the chapter on Labor in America, data on earnings and expenditures in 1874 are given for 95 families of skilled and unskilled workmen in manufacturing towns in 31 States and Territories. For those reporting, yearly earnings were \$923 and expenditures \$791. Weekly expenditures for food averaged \$8.10; for rent, \$2.92; and for fuel, oil or other light, \$1.41. Annual clothing expenditures were \$133.

[MASSACHUSETTS] BUREAU OF STATISTICS OF LABOR.

(172)

SIXTH ANNUAL REPORT. [Mass.] Bur. Statis. Labor Ann. Rept. 6 (pt. 4): 191-450. 1875. ([Mass.] Pub. Doc. 31.)

The fourth part of this report gives comprehensive and detailed data obtained by personal investigation of agents of the bureau into the living conditions of wage-earners' families. This system of obtaining data showed "plainly the superiority of personal investigation, in accuracy and uniformity of information secured, over the voluntary reply circular system" (p. 202). "The towns chosen for the investigation were those in which considerable business was carried on and wage-laborers congregated" (p. 201), and the occupations "prominent in or peculiar to certain towns were designated as proper for investigation as being the ones in which wage-laborers would do as well as in any, and as being the ones, on the other hand, in which depression in business would be most marked" (p. 201). The families considered for study were those of workers who, with comparatively few exceptions, had children dependent on them for support. Data were secured for 1874-75 from 397 families, averaging 5.14 persons, in 15 cities and 21 towns. The fathers of the greater numbers of these wage earners interviewed had been born either in Ireland, North America, or England. Others had come from Canada, Germany, and France. About equal numbers of skilled and unskilled wage earners were represented.

Individual statements from the original returns are presented to show the condition of each family. These give the occupation of the workingman and his nationality; then the earnings of all the members of the family who were at work, giving the ages of children and young persons so employed; next comes a description of the condition of the family, its size, whether both parents are living, number of children and their ages, denoting those at home, at school, and at work; the size of the tenement occupied, its interior furnishing and appearance and immediate exterior surroundings, with a statement of the character of the locality in which the house is situated as regards appearance, cleanliness, and necessary sanitary provisions; an enumeration of the articles for the saving of labor or for adding to the enjoyments of home; the dress of the family on work-days or Sundays, specifying the members of the family attending church; and, finally, such items of a personal nature as the parents chose to give, including the distance of the home from work, the amount of lost time and consequent falling off in earnings, the necessity of their children's labor in order to support the family, savings, debts, prospects and other information of similar nature. The kinds of food used at each meal are also enumerated along with the total expenditures for commodities of different types.

Total annual earnings of all members of the 397 families combined averaged \$763. Total expenditures for current living averaged \$720, for food \$422, for boots, shoes, and clothing \$83, for dry goods partly for clothing and partly for housekeeping purposes \$21, for fuel \$44. Rent for 389 families averaged \$124. Average yearly savings was \$25 a year, or about 3 percent of the average earnings. Families in large cities had the largest money surpluses and the amount of savings, with one exception, increased with the size of income. Only one instance of life insurance was reported among these families. Thirty-four of the 397 families had earnings for the year less than expenditures.

From an examination of the figures gathered, supplemented by other information, the Bureau concluded that the workmen were not able to support their families by their individual earnings alone but that fathers were dependent upon their children for from one-quarter to one-third of the family income. The amount of earnings contributed by working wives was generally so small "that they would save more by staying at home than they gain by outside labor" (p. 443). More than one-half of the families saved money, but the majority of the families would have been in poverty or debt had it not been for the assistance of the children. Data given for unskilled and skilled workers showed the former had to rely more on their children for assistance than did the latter and that skilled workers paid the greatest proportion of their earnings for rent.

Comparison of the findings with Wright's version of Engel's law indicated that "in direct accordance with the law, the greater the income the smaller the relative percentage of outlay for subsistence; and also, still in accordance, that as the income increases, the percentage of outlay for sundries becomes greater. As regards fuel, the law is quite generally verified; but its propositions as regards clothing and rents are plainly disproved" (p. 441).

[MASSACHUSETTS] BUREAU OF STATISTICS OF LABOR. (173)  
SEVENTH ANNUAL REPORT. [Mass.] Bur. Statis. Labor Ann. Rept. 7 (pt. 1):  
2-202. 1876. ([Mass.] Pub. Doc. 31.)

This study gives the results secured by the tabulation of data returned by the enumerators of the decennial census and industrial statistics of the Commonwealth of Massachusetts for the year ended May 1, 1875. Among the inquiries was an individual schedule reporting information on the cost of living, the number of dependent persons, hours employed, days employed, daily wages, yearly wages, other earnings, wife's earnings, children's earnings, ability to work, home ownership, mortgage payments, interest rate, number of rooms hired, rent paid, value of garden, and number of volumes in library. The total number of usable schedules received from wage earners came from 71,339 persons in about 950 different occupations. However, as the number of persons who gave information regarding each of the different points listed varied, the results were not averaged for the whole group. Averages according to the number of persons answering each question as well as aggregate figures are given separately for males and females according to geographic location and occupation.

Returns from male wage laborers who had wives at work, from those with minor children at work, and from those with both wives and children at work are tabulated with reference to persons dependent, yearly wages, other earnings, wife's earnings, value of garden crops, cost of housing, home ownership, number of rooms hired, rent paid. Yearly wages for the male wage laborers with working wives (4,187 reporting) averaged \$467; for those with working minor children (3,509) reporting, \$482; for those with both wives and children working (1,097 reporting), \$426. Cost of living for the male wage laborers with working wives (3,743 reporting) averaged \$440; for those with working minor children (3,162 reporting) \$643; for those with wives and children both working (977 reporting), \$550.

PENNSYLVANIA DEPARTMENT OF INTERNAL AFFAIRS. (174)  
ANNUAL REPORT OF THE SECRETARY OF INTERNAL AFFAIRS. Pa. Dept.  
Internal Affairs, Sec. Indus. Affairs Ann. Rept. 3 (pt. 3): 526-527. 1876.

A table presents the weekly and yearly expenditures and earnings in 1874-75 of 12 wage-earners' families in 10 manufacturing towns of Pennsylvania. Size of family ranged from 3 to 7 persons. Annual earnings computed from weekly earnings varied from \$491 to \$1,476, total annual expenditures from \$482 to \$1,359, and annual clothing expenditures from \$40 to \$275.

ANNUAL REPORT OF THE SECRETARY OF INTERNAL AFFAIRS. Pa. Dept. (175)  
Internal Affairs, Sec. Internal Affairs Ann. Rept. 4 (pt. 3): 820-830. 1877.

Reports on earnings, expenditures, and family conditions in 1875 are given for 22 workers in different occupations. The families varied from a car builder and his wife with an annual income of \$300 to a mining foreman, wife, and 9 children, with an income of \$1,660.

LEVASSEUR, ÉMILE (176)  
L'OUVRIER AMÉRICAIN. v. 2, pp. 1-96, 162-216. Paris. 1898.

This book deals primarily with the American worker. The sections that deal with family living conditions present an analysis of statistical material from



published American sources (1875-96), and a large quantity of descriptive material collected by the author while in the United States in 1893. Food, clothing, and lodgings of the American workers are all described in detail and compared with those of French workers. The section on income and customs discusses the interrelation of the two.

OHIO BUREAU OF LABOR STATISTICS.

(177)

FIRST ANNUAL REPORT. Ohio Bur. Labor Statis. Ann. Rept. (1877) 1: 132-148, 302-310. 1878.

Questionnaires were sent to employees throughout the State in regard to earnings and expenses. Of the 1,021 blanks issued, 405 were returned. Selected returns were tabulated to show the following information: Occupation, yearly earnings of head of family and of others in family, rent, detailed family living expenses, number in family. The figures cover the year ended July 1, 1877. Sixty-one returns are tabulated, representing the better paid mechanics of the State, in 23 occupations. The average size of family was five persons. Additional tables compare weekly wage rate with rents paid (giving number of rooms in each case) in Cincinnati, Dayton, Akron, Cleveland, and other specified cities. The Cincinnati returns show number in family, number of rooms occupied, and number of families in house. For 46 families reporting payment of rent, the average family income was \$588, total average family living expenses \$518, average payment for rent \$101. There is also material from blanks returned by 84 coal miners in 16 counties. For this group the average size of the family was 5.2. Over a 6-month period their average earnings were \$22 per month. Data are given on their monthly rent, their expenditures for groceries, whether they lived in an employer-owned house, and whether they were paid in cash or store orders.

(178)

SECOND ANNUAL REPORT. Ohio Bur. Labor. Statis. Ann. Rept. (1878) 2: 231-258. 1879.

This report presents data for the year 1877, as tabulated from 101 questionnaires returned by workers in many occupations representing 35 cities and towns in 29 counties. Wage rates and average earnings for prominent trades are compared for 1872 and 1877. Information is given on wages, time working, earnings, number in family, cost of family living, and cost of groceries. Some Ohio retail food prices are given for 1878 and comparisons made with earlier years. A separate study deals with the earnings of 43 coal miners and the detailed living expenses of 11 of them.

NEW JERSEY BUREAU OF STATISTICS OF LABOR AND INDUSTRIES.

(179)

ANNUAL REPORT, APRIL 1-OCTOBER 31, 1878. N. J. Bur. Statis. Labor and Indus. Ann. Rept. 1: 44-48, 56-58. 1878.

Individual data on annual income and expenditures in 1877-78 are given for 114 families of skilled and unskilled wage earners in New Jersey. Size of family averaged 5.71 persons. Annual average expenditures were \$302 for food, \$71 for clothing, \$95 for rent, \$27 for fuel, and \$63 for sundries. The total average earnings of the family amounted to \$514 per year.

ILLINOIS BUREAU OF LABOR STATISTICS.

(180)

BIENNIAL REPORT. Ill. Bureau Labor Statis. Bien. Rept. 1: 77-122. 1881.

Individual reports on income and expenditures for 1878-79 are presented for 529 wage earners in 37 occupations in Illinois. At least 50 workers were single. The majority were engaged as carpenters, coal miners, and laborers.

NEW JERSEY BUREAU OF STATISTICS OF LABOR AND INDUSTRIES.

(181)

ANNUAL REPORT. N. J. Bur. Statis. Labor and Indus. Ann. Rept. 2: 43-82. 1879.

Questionnaires on earnings and expenditures in 1878-79 were returned by 383 New Jersey workers; of these, 285 were heads of families, whose average yearly earnings were \$412. In many of these families expenditures were in excess of earnings.

OHIO BUREAU OF LABOR STATISTICS.

(182)

THIRD ANNUAL REPORT. Ohio Bur. Labor Statis. Ann. Rept. (1879) 3: 80-100, 208-253. 1880.

Tabulations of 223 questionnaires returned by workers in a wide variety of trades and scattered throughout the State of Ohio give material for 1878 and the



spring of 1879. There are included comparative wage rates for 1860, 1872, 1878, and 1879, data on time employed, number in family, individual and family earnings for 1878, detailed family living expenditures for 97 of these families for 1878, and answers to the question of whether family living expenses had exceeded income for the previous 5 years. For a smaller number of families there are detailed housing and health studies. Rates of wages and earnings are given for 83 coal miners, and family living expenses for 35 of these.

PENNSYLVANIA DEPARTMENT OF INTERNAL AFFAIRS.

(183)

ANNUAL REPORT OF THE SECRETARY OF INTERNAL AFFAIRS. Pa. Dept. Internal Affairs, Sec. Internal Affairs Ann. Rept. 7 (pt. 3): 320-352. 1880.

To ascertain wage earners' earnings, circulars were mailed to 1,195 workers, of whom 547 replied. Data on income, expenditures, and working conditions for 1879 are given separately for 493 men in 85 occupations. About 30 men were single.

[MASSACHUSETTS] BUREAU OF STATISTICS OF LABOR.

(184)

TWELFTH ANNUAL REPORT. [Mass.] Bur. Statist. Labor Ann. Rept. 12 (pt. 3): 416-441. 1881. ([Mass.] Pub. Doc. 15.)

The data on cost of living were collected in connection with a resolution adopted "to furnish the public with such accurate data, that the question of the establishment of a uniform system of laws throughout the eastern and principal textile manufacturing States, regulating the hours of labor, might be scientifically discussed" (p. 323). Information relative to 1879-80 was collected through the direct personal efforts of agents of the bureau from 33 employees with families in Maine, 41 in New Hampshire, 80 in Massachusetts, 31 in Rhode Island, 130 in Connecticut, and 55 in New York. The figures gathered are presented in tabular form by individual cases for each State according to industry. Data are also given on hours of labor and amount of unemployed time during the year, notation being made of the time out because of sickness and vacations.

NEW JERSEY BUREAU OF STATISTICS OF LABOR AND INDUSTRIES.

(185)

THIRD ANNUAL REPORT. N. J. Bur. Statist. Labor and Indus. Ann. Rept. 3: 3-33, 38-62. 1880.

The tables giving data on wage rates and income, time working, nationality, occupation, and family living expense are made up from answers by individual workmen from all parts of New Jersey. The data cover the year ended August 1, 1880. Incomplete replies from slightly over 1,000 workers are tabulated. Thirty percent of the workers were single.

OHIO BUREAU OF LABOR STATISTICS.

(186)

FOURTH ANNUAL REPORT. Ohio Bur. Labor Statist. Ann. Rept. (1880) 4: 138-150, 237-265. 1881.

Data on wage rates and earnings are given for 286 workers. Family living, income, and expense data are presented for a group of 114 of them. The wage material includes occupation, wage rates, individual income, and family income. A separate study of the wages and earnings of 132 miners and workers about the mines is given, and a comparison of their yearly income in 1880 is made with that of a group of 83 miners in 1879. There is also an itemized statement of the expenses of 38 miners' families.

MISSOURI BUREAU OF LABOR STATISTICS.

(187)

SECOND ANNUAL REPORT. Mo. Bur. Labor Statist. Ann. Rept. 2: 43-54. 1881.

This report contains the results of a study of earnings and living expenditures of 147 workers and their families obtained from various parts of the State. Workers in 38 occupations reported, the larger numbers being employed as carpenters, cigarmakers, coal miners, and machinists. The average number of persons in each family was 4.72. For the year 1880, the total earnings of the families averaged \$473, and their total expenditures, \$469. Nearly two-thirds, or 97 of the 147 workers, declared that for the last 5 years earnings had not covered expenses.

OHIO BUREAU OF LABOR STATISTICS.

(188)

FIFTH ANNUAL REPORT. Ohio Bur. Labor Statist. Ann. Rept. (1881) 5: 7-75. 1882.

The data were collected from questionnaires "mailed to workmen employed in industries other than coal and ore mining" (p. 7), located in over 70 Ohio counties. Family incomes, expenditures, living conditions, rent, and number in

the family were tabulated for 340 families for the year 1880. Additional information was presented on individual earnings and conditions of labor for workmen in the same families. Similar data were given for 28 employees who worked in and about coal mines.

OHIO BUREAU OF LABOR STATISTICS.

(189)

SIXTH ANNUAL REPORT. Ohio Bur. Labor Statis. Ann. Rept. (1882) 6: 90-93. 187-226. 1883.

Material on occupations and wages were tabulated from questionnaires returned from 299 workmen located in 45 counties in the State of Ohio. The material referred to the year 1881. Of these workers, 211 reported average size of family as 5 persons. Average total family income was \$788; expenditures, \$584; average savings amounted to \$204. Data on housing conditions, ownership, and rent are given for 182 of these families. A second study dealt with 46 coal miners. Earnings, expenditures, and composition of family are given, but no data on rents or housing. Total family income averaged \$526, and family expenditures, \$442.

ILLINOIS BUREAU OF LABOR STATISTICS.

(190)

SECOND BIENNIAL REPORT. Ill. Bur. Labor Statis. Bien. Rept. 2: 288-365. 1883.

This report, covering wages and the cost of living in 1881-82 for 449 workmen engaged in 44 occupations and for 21 women engaged in 9 occupations, is based upon a questionnaire issued by the Illinois Bureau of Labor Statistics to wage earners throughout the State. The trade and the labor assembly in Chicago cooperated in getting returns from that city, so the study is based chiefly upon Chicago workers. The averages presented represent all the workers reporting, although 96 were single and 353 were married. For the entire 449, family size averaged 4.1 persons, total annual income averaged \$617, annual earnings of the heads of families averaged \$590, earnings of other members of the 112 families in which others beside the head worked averaged \$236. Total annual income for the 21 women averaged \$250, and annual expenses \$242. For the 449 workmen's families, total expenditures for living averaged \$585; for food, \$282; for clothing, \$103; and for fuel, \$29. Savings were reported by 266 of these families, and losses by 104. Material is also included on wage rates, individual and other earnings, time employed, size of family, status as home owner or tenant. There is a special study of rents, earnings, number in the family, and rooms occupied for 62 occupational groups in Chicago.

OHIO BUREAU OF LABOR STATISTICS.

(191)

SEVENTH ANNUAL REPORT. Ohio Bur. Labor Statis. Ann. Rept. (1883) 7: 14, 15, 110-161, 208-212. 1884.

Material in this study covers the year 1882. One thousand and thirteen workmen's questionnaires from 54 Ohio cities and towns were tabulated for wages, method of payment, etc. For 500 of this group, total family earnings averaged \$707 and expenses \$551. The average size of family was five persons. Housing conditions and rents were given for a group of 360 tenants. Returns showed that 332 families owned homes. A similar study, which omitted all housing data, was made of 212 coal miners from 18 Ohio counties.

NEW JERSEY BUREAU OF STATISTICS OF LABOR AND INDUSTRIES.

(192)

SIXTH ANNUAL REPORT. N. J. Bur. Statis. Labor and Indus. Ann. Rept. 6: 3-29. 1883.

Data on wages and family living are tabulated from questionnaires returned from 550 workers engaged in 26 different types of occupation. The material presented covers the year ended July 1, 1883. The workers were scattered throughout New Jersey.

[MASSACHUSETTS] BUREAU OF STATISTICS OF LABOR.

(193)

FIFTEENTH ANNUAL REPORT. [Mass.] Bur. Statis. Labor Ann. Rept. 15 (pt. 4): 462-469. 1884. ([Mass.] Pub. Doc. 15.)

Nineteen reports of wage earners in Massachusetts and 16 reports of a similar income group in Great Britain were secured by the Massachusetts Bureau of Statistics of Labor for the year 1883 for the purpose of comparing expenditures in the two countries.

Total current living expenditures for the Massachusetts families of 5.21 persons averaged \$754; total family earnings averaged \$803, leaving a surplus of \$49. Expenditures for rent averaged \$149; for food, \$372; and for clothing, \$105. The total expenses for the average Massachusetts family when compared with a



similar average British family was 48 percent greater. The average Massachusetts family expended about 94 percent of its total income and had a surplus of 6 percent; the average British family expended about 98 percent of its income and had a surplus of 2 percent.

The greater cost of maintaining a family in Massachusetts as compared with Great Britain resulted from both higher prices of commodities purchased and a higher level of living. "The standard of living of Massachusetts workmen is to that of the workmen of Great Britain as 1.42 is to 1" (p. 469). Placed on a uniform cost basis, it was found that the ratio for the expenditures in Massachusetts to that in Great Britain would stand 1.23 to 1.05.

Verification was made of the percentages of total expenditures for the various items as drawn from the reports obtained in Massachusetts and in Great Britain with the conclusions drawn from Engel's analysis for the same sized income group. "The remarkable harmony in the items of expenditure shown by a percentage of total expenditure must establish the soundness of the economic law propounded by Dr. Engel" (p. 467).

OHIO BUREAU OF LABOR STATISTICS. (194)

EIGHTH ANNUAL REPORT. Ohio Bur. Labor Statis. Ann. Rept. (1884)  
8: 262-267, 274-275. 1885.

In the section on Statistics from Mechanics material is presented in tabular form for the year 1883 on the earnings of 242 skilled laborers (journeymen exclusively), highest, lowest, and average by towns and counties, their family living expenses, average number of persons in family, and the trades represented by returns from each locality. The average earnings were \$649 and average family living expenses \$553. The average size family was 5.1 persons. Gross earnings, expenses for powder, oil, and tools, net earnings, and family expenses are also tabulated for each of 72 mine employees for the first 11 months of the year 1884.

ILLINOIS BUREAU OF LABOR STATISTICS. (195)

THIRD BIENNIAL REPORT. Ill. Bur. Labor Statis. Bien. Rept. 3: 135-414.  
1884.

The purpose of this report was "to depict, in statistical form, the effect of the wage system in Illinois upon those who live by it, to the end that intelligent action may be taken \* \* \* for the enactment or modification of laws affecting wage classes" (p. 137). The earnings and expenditures for the year 1883-84, of 2,129 families, living in 51 different cities, towns, and villages, engaged in 163 different occupations, and representing 16 different nationalities (p. 136), are presented. Of the heads of these families, 978 were American, 349 German, 348 Scotch, 152 English, and 107 Scandinavian. The average size of the 2,129 families was 4.6 persons. Earnings by the husband, wife, and children averaged \$588. The earnings of the head of the family averaged \$525. Expenses averaged \$508. Expenditures for meat, groceries, and fish averaged \$239 for 1,603 families. Clothing for 1,529 families averaged \$81, and rent for 1,399 tenant families, \$97. For 335 families carrying insurance, payments on life insurance premiums averaged \$23. About 18 percent of the 2,129 families were forced to depend upon the wife's and children's labor; wives and children worked in 24 percent of the families. The report includes data on comparative prices in Illinois, Massachusetts, and Great Britain, and detailed data by occupation groups on time working, wage rates, and earnings.

NEW JERSEY BUREAU OF STATISTICS OF LABOR AND INDUSTRIES. (196)

SEVENTH ANNUAL REPORT. N. J. Bur. Statis. Labor and Indus. Ann. Rept.  
7: 3-65. 1885.

Materials on wage rates, earnings, time employed, earnings by others in the family, family living expenditures, and number in the family are included in this tabulation of questionnaires returned from 1,300 New Jersey workers. Data presented are for the year ended July 1, 1884. Figures are given for individual cases divided into 42 occupational groups. The workers returning blanks were widely distributed throughout the State.

MARYLAND BUREAU OF INDUSTRIAL STATISTICS AND INFORMATION. (197)

BIENNIAL REPORT. Md. Bur. Indus. Statis. and Inform. Bien. Rept. 1:  
80-86, 187-201. 1886.

In the section of this report on miners, individual data are presented for 11 families on the number of workers, income for 1884, total expenses, size of family, and the debit or credit beyond or within their income. Five families lived beyond their income, and six within it. In the chapter on food prices are given itemized



weekly expenditures of 2 wage-earner families in Baltimore, 1 family in England, and 1 in Germany.

MISSOURI BUREAU OF LABOR STATISTICS. (198)  
ANNUAL REPORT. Mo. Bur. Labor Statis. Ann. Rept. (1884) 6: 179-181.  
1885.

For the year 1884, 30 schedules were obtained from wage earners in 10 occupations in Missouri cities. Annual incomes ranged from \$350 to \$1,000. Expenditures for current family living ranged from \$360 to \$910; for rent, from \$11 to \$144; for food, from \$150 to \$460; and for clothing, from \$30 to \$150.

ANNUAL REPORT. Mo. Bur. Labor Statis. Ann. Rept. (1885) 7: 97-102.  
1886.

Individual data on earnings and expenses in 1884-85 are given for 10 Missouri wage-earner families, for 5 German, and 10 British families. Each Missouri family had 2 adult members and from 2 to 6 children. Total family earnings ranged from \$560 to \$991. Total expenses ranged from \$443 to \$802; for rent and fuel, from \$92 to \$150; for food, from \$160 to \$395; and for clothing, from \$90 to \$180. Eight families had excess earnings ranging from \$2 to \$149, and 2 families had excess expenses amounting to \$3 and \$47.

NEW JERSEY BUREAU OF STATISTICS OF LABOR AND INDUSTRIES. (200)  
EIGHTH ANNUAL REPORT. N. J. Bur. Statis. Labor and Indus. Ann. Rept.  
8: 3-33, 147-183. 1885.

Data on wage rates, earnings, and expenditures in New Jersey are presented for the year ended July 1, 1885. Returns from workers in various occupations in all parts of the State are tabulated in several groupings. Employment, wage rates, earnings, and family living expenses, including subsistence, are given for 608 individual workers arranged according to occupation. More detailed family-living data are given for a group of 319 workers, with averages for each occupational group presented. Rent and housing data are given for 2 groups—1 of 390 workers for whom averages by occupation are given, and 1 of 410 workers in many occupations for whom the material is presented in a series of individual cases.

OHIO BUREAU OF LABOR STATISTICS. (201)  
NINTH ANNUAL REPORT. Ohio Bur. Labor Statis. Ann. Rept. (1885) 9:  
16-17, 83-139. 1886.

Data are tabulated from questionnaires returned by 353 wage earners in Ohio giving information for the year ended July 1, 1885. Workers residing throughout the State and belonging to many occupations are represented. Detailed material is included on wage rates, time working, yearly earnings of the head and others in family, family living expenses. Expenditures for meat and groceries are given without any other details on food costs. Averages from somewhat incomplete data are given for each major item of family living expense; 334 families had an average income of \$568; 353 families had an average expenditure of \$489. There is an analysis of the percentage of total income spent for various items in the total expense account. The amount paid for life-insurance premiums and for trade-union dues is also given. There is some material on displacement of workers by machinery. Partial information is given for a group of 223 who returned incomplete questionnaire blanks.

KANSAS BUREAU OF LABOR AND INDUSTRIAL STATISTICS. (202)  
FIRST ANNUAL REPORT. Kans. Bur. Labor and Indus. Statis. Ann. Rept.  
1: 132-142, 204-232, 248-257. 1886.

Material in this report, gathered by questionnaires, includes information for the year 1885, furnished by 337 Kansas wage earners engaged in 39 different trades. The average number of persons per family was  $3\frac{3}{4}$ . Homes were owned by 96, rented by 160; it was assumed that 81 who failed to answer questions on tenure were also renters. The average earnings per family per year were \$502; average value of family living was \$451. Sixty families reported savings, and 112 families failed to make ends meet. The average rent paid by those who rented homes was \$8.

In addition to the joint report for 39 occupations, this report contains two other studies of wage earners. The first gives the returns on questionnaires answered by 33 miners from 3 mining counties. Average net yearly income of 24 miners was \$290; average expenses of 23 miners, \$306. Thirteen owned their

own homes, and 20 were renters. Remarks of individual laborers on such problems as screening and weighing, length of time miners were idle, and earnings are presented. According to the reports of 20 coal operators, average weekly earnings of miners were \$13. Actual earnings of miners, however, were found to be \$8.27, indicating that "from some cause they do not produce the daily average number of bushels that constitute a fair day's work" (p. 141).

The other report gives material from returned questionnaires for 17 "exodusters," engaged in 8 different occupations. These exodusters were southern Negroes who migrated to Wyandotte, Kans., in 1879 to seek better opportunities. The average total annual earnings of 16 of these families were \$363; the average value of family living for all 17 was \$316. Personal accounts by 13 exodusters are included.

[MASSACHUSETTS] BUREAU OF STATISTICS OF LABOR.

(203)

SEVENTEENTH ANNUAL REPORT. [Mass.] Bur. Statist. Labor Ann. Rept. 17 (pt. 3): 255-257, 268, 276-277, 279-283, 286-292, 305-312, 314-326. 1886. ([Mass.] Pub. Doc. 15.)

This study of food consumption was based upon original statistics gathered in 1885 by agents of the bureau of statistics of labor from accounts of tradesmen, to supply in some measure "information necessary to enable the workingman to more intelligently regulate his expenditures for food, and thus enable him to secure with a given expenditure the maximum amount of nutritive elements" (p. 239).

Chemical analyses of the dietaries, giving quantities and costs of food, mainly of manual laborers with limited incomes in Massachusetts and Canada, were made under the supervision of W. O. Atwater. The data are presented in three series: Dietaries of families and boarding houses, in which only a few persons were French-Canadians; dietaries of French-Canadian families and boarding houses in Massachusetts; and dietaries of French-Canadian families and boarding houses in Canada. The Atwater equivalent adult-male-unit scale was used in the analyses. The average and the maximum and minimum quantities of nutrients and costs of food per man per day are given for 7 dietaries in the first group, 10 in the second, and 13 in the third. Ten separate Massachusetts family and seven boarding-house dietaries are presented in detail. Information is given regarding the number and classes of persons nourished by the diet, with income and prices of food; the quantity, cost and estimated nutritive content of the food consumed per household and per man per day. For nine of the Massachusetts families income figures are given.

The results of the study indicated that the French-Canadian laboring man living at home consumed less food and spent less for food per man per day than laborers, factory operatives, etc., in Massachusetts. The nutrients in the food materials showed corresponding gradations. In Canada the French-Canadians consumed less animal food both in actual quantity and in protein content than did either the French-Canadians or laborers of other nationalities in Massachusetts. "These figures are the expression of what we suppose to be a general law, namely, that where the conditions of life are otherwise approximately similar as in the different countries of Europe and America, not only the total amount of food, but, more especially, the amount of meat and other animal food consumed increases with the revenue of the consumer" (p. 312).

The dietaries studied showed a large excess of food consumed not only by well-to-do people, but also by those in moderate circumstances. Compared with European dietaries and standards there was a greater abundance of nutritive material and food content than judged appropriate by authorities on the subject. "One of the most interesting and important facts of all is the very common practice of the poor to purchase the more expensive food materials, especially meats, when food obtainable at only a fraction of the cost would be equally wholesome and nutritious" (p. 325).

The report includes a discussion of the composition of food materials, standards for daily dietaries, a table showing data and results of the estimates of the number of average laboring men at moderate work (p. 305) who would be equivalent in requirements of nutritive material to the person stated to be actually nourished by the food of each dietary, a dietary of brickmakers in Middletown, Conn., suggestions for improvements in dietaries of American laborers, and a discussion of food of the poor in Boston.



WISCONSIN BUREAU OF LABOR AND INDUSTRIAL STATISTICS. (204)  
SECOND BIENNIAL REPORT. Wis. Bur. Labor and Indus. Statis. Bien. Rept.  
(1885-86) 2: 442-445. 1886.

Individual data are presented on annual earnings, expenditures, and working conditions in 1885 for 59 skilled and unskilled workers with families.

NEW JERSEY BUREAU OF STATISTICS OF LABOR AND INDUSTRIES. (205)  
NINTH ANNUAL REPORT. N. J. Bur. Statis. Labor and Indus. Ann. Rept. 9:  
3-75. 1886.

Wage rates, time employed, individual and family earnings, number in family and total family expenditures, surplus and deficit, and nativity of the chief wage earner were tabulated for 330 individual cases. The data covered the year ended July 1, 1886. Eight occupational groups are represented from many sections of New Jersey. Family living data are given for 225 workers whose blanks were answered with sufficient care to justify inclusion in this study. Averages by occupations were given for this material. There is a study of food consumption from the records of 158 families. The quantities are given for 5 foods and the prices paid for 10. The method used in comparing the relative costs for different size families was a combination of the one worked out by Engel before he devised the quart unit, and one used by Professor Voit of the Munich School of Physiological Chemists.

OHIO BUREAU OF LABOR STATISTICS. (206)  
TENTH ANNUAL REPORT. Ohio Bur. Labor Statis. Ann. Rept. (1886) 10:  
187-238. 1887.

The 355 cases included in this study are treated in four separate groups, comprised of 139 home owners of diverse occupations, 133 who rented their homes, also of diverse occupations, 24 railroad employees, and 59 miners. The workers represented were widely scattered throughout Ohio. Data are given on wage rates, earnings, time employed, causes of unemployment, individual and family earnings for the year 1885-86, illnesses peculiar to the occupation and the age at which workers ordinarily became incapacitated in the trade, family living expenses, and size of family. There is a table of comparative expenditures for items of family living in 1885 and 1886, and an analysis of average family living expenditures for each of 22 trade groups. For the 355 families the average family income was \$568; average total expenditure exclusive of rent was \$416. For the 177 who paid rent the average was \$92. For the group as a whole the average expended for meat and groceries was \$223, for clothing \$80. The average size of family was 4.7.

KANSAS BUREAU OF LABOR AND INDUSTRIAL STATISTICS. (207)  
ANNUAL REPORT. Kans. Bur. Labor and Indus. Statis. Ann. Rept. (1886) 2:  
109-373. 1887.

Monthly data for wage earners from April to November 1886 are included in this report. There are data from 16 cities and towns in Kansas and from 471 individuals, 441 of whom lived in family groups. Fifty-six occupations are represented; individual data are presented. Data given include size of family, members of family employed, hours of employment, age of children working, daily and monthly earnings of each working member of the family, monthly expenditures for groceries, meat (including average price per pound), clothing, fuel (including price per ton or cord), drugs and doctor, rent (and number of rooms), interest and insurance, books and newspapers, miscellaneous, total expenses, and deficit or surplus. Comparing the distribution of expenditures by the 471 Kansas workers with the percentage distribution given in Engel's law (Wright's version), it was found that the expenditures were "7½ percent less for subsistence, 2¼ percent less for clothing, and (putting in the Engel table, lodging, fire, lighting, and legal protection together) we have 19 percent, against 20½ percent for shelter, in our reports, or 1½ percent greater" (p. 306). Expenditures for sickness were 3½ percent more for Kansas families than were estimated by Engel. Included in this report are the annual earnings and expenditures of 374 families whose heads were engaged in 62 occupations in 12 counties, of 20 lead- and zinc-miners' families, and of 229 coal-miners' families. There is also a discussion of convict coal miners.

ANNUAL REPORT. Kans. Bur. Labor and Indus. Statis. Ann. Rept. (1887) 3:  
75-171. 1888.

Monthly reports were obtained from 400 families of Kansas wage earners, representing 28 occupations. Information was secured on occupation, age,



nativity, length of employment, wages, family expenditures, tenure of home, rent, insurance, and surplus or deficit. The average size of family was 4.5 persons; the average income per family was \$534, and the annual average family expenses \$449; average housing expenditures for 194 families reporting rented homes were \$94; and average savings amounted to \$86. Tables on the annual earnings and expenses of 44 miners include expenses connected with the trade, as well as family expenses. The report also contains tabulated returns of monthly reports from 704 families from November 1886 to September 1887. The average size of family was 4.9 persons. Average monthly earnings were \$48.76. Expenditures for various items of living are stated for those reporting. Detailed expenditures for the year ended June 30, 1887, are given for 71 families. These included expenditures for food, clothing, fuel, rent, sickness, books, amusement, etc. Four occupations were represented. Total expenditures for family living averaged \$471; for food, \$211; for clothing, \$104; for rent, \$85; for fuel, \$23. The monthly earnings and expenditures of a skilled workman and his wife are given for the first 6 months of 1886 and of 1887, based upon household accounts.

NORTH CAROLINA BUREAU OF LABOR STATISTICS. (209)  
FIRST ANNUAL REPORT. N. C. Bur. Labor Statis. Ann. Rept. 1: 16-31.  
1887.

Questionnaires tabulated from mechanics in all the counties of North Carolina include about 779 returns from heads of families for the year 1886-87. Data cover wage rates, hours of labor, methods of payment, yearly income, size of family, home ownership, rent, board per month, and other details of working and living conditions. Figures for board per month are given as an indication of living expenses, because it was found that replies to the question on cost of living were too inaccurate to publish.

SECOND ANNUAL REPORT. N. C. Bur. Labor Statis. Ann. Rept. 2: 1-54.  
1888. (210)

Questionnaires were tabulated from mechanics and laborers (other than farm laborers) in 92 counties in North Carolina. "The figures given are made up from a great many returns carefully sought from representative mechanics and others in the various counties of the State" (p. 3). Detailed information was secured from 320 individuals, of whom 275 were heads of families. Information is given for wage rates, earnings, hours of labor, time unemployed, family expenditures in 1886-87, yearly rent, house ownership, size of family, children in school, and other data relating to wages and living conditions.

PENNSYLVANIA DEPARTMENT OF INTERNAL AFFAIRS. (211)  
ANNUAL REPORT OF THE SECRETARY OF INTERNAL AFFAIRS. Pa. Dept. Internal  
Affairs, Sec. Internal Affairs Ann. Rept. 15 (pt. 3): H1-H28. 1888.

Details are given of returns from 134 employees, 11 of whom were single, on earnings, expenditures, and family and working conditions for 1886-87.

RHODE ISLAND BUREAU OF INDUSTRIAL STATISTICS. (212)  
[FIRST] ANNUAL REPORT OF THE COMMISSIONER OF INDUSTRIAL STATISTICS.  
R. I. Bur. Indus. Statis., Commr. Indus. Statis. Ann. Rept. 1: 47-57.  
1888.

From about 2,500 blanks sent to employees throughout the State 81 replies were received and tabulated. Individual returns for 27 cotton employees, 21 woolen workers, and 9 employees in the iron industry showed that most of the workers were either born in North America or had come from English-speaking countries. Size of family varied from 1 to 12 persons. Data are given for each of these cases covering earnings per day, week, and month and yearly income in 1886-87, days lost from work due to sickness, total living expenditures for the year, increase or decrease of these expenditures from the preceding year, home ownership, rent paid, and number working for wages. Information regarding savings, debts or surplus is also given. A table is appended showing for 24 additional families (six each of ironworkers, woolen workers, cotton workers, and jewelry workers) the number of persons in the family, the number of members at work, amount of income by sources, total expenditures, and information regarding surplus and deficit.

CAMPBELL, HELEN S. (213)  
PRISONERS OF POVERTY. pp. 115-120. Boston. 1887.

The author made a personal investigation of women wageworkers in New York City in an attempt to discover the underlying conditions of their trades

and their lives. Many individual cases are described. Earnings for a month and expenditures for food for 1 week are presented for a widow and her daughter. The earnings for the month were \$23. Rent was \$10 per month. Expenditures for food for 1 week were \$1.62. Coal and oil cost 27 cents, and 1 cent was spent for a paper during 1 week. The period to which the data apply is not stated, but it was probably not long before 1887, the date when the study was published.

COLORADO BUREAU OF LABOR STATISTICS.

(214)

FIRST BIENNIAL REPORT. Colo. Bur. Labor Statis. Bien. Rept. (1887/88)  
1: 245-[253]. 1888.

A questionnaire was distributed among wage earners in an attempt to ascertain their living standards and conditions of work. Only 138 replies, 84 of which were from married men representing 32 occupations, were complete enough to warrant tabulation. The following items concerning level of living were tabulated for each of the 138 wage earners for the year 1887: wages per day, week, and month, yearly earnings, earnings of wife and children; number of dependents; total expenditures; value of home; rent; membership in labor benefit or insurance organizations; and whether or not there had been savings or debts during the year. Wage rates per day ranged from \$6 to 75 cents, and per month from \$165 to \$21. Only 69 gave the total earnings for the year which ranged from \$2,000 down to \$125. Of 116 replies in regard to savings 54 answered in the affirmative and 62 in the negative.

MAINE BUREAU OF INDUSTRIAL AND LABOR STATISTICS.

(215)

FIRST ANNUAL REPORT. Maine Bur. Indus. and Labor Statis. Ann. Rept. (1887) 1: 61-75, 89-93. 1888.

This report gives family living and wage data for 108 workers representing 38 trades and occupations for the year 1887. They were from cities and towns scattered throughout the State. Only about one-tenth of the blanks sent were returned. Material is included on home ownership, mortgages, nativity, number having bank accounts, and number belonging to labor organizations. For the group the average family income was \$595, average family expenditures \$391, average size of family  $4\frac{1}{2}$  persons. A separate analysis is given of the expenditures of several families.

CONNECTICUT BUREAU OF LABOR STATISTICS.

(216)

FOURTH ANNUAL REPORT. Conn. Bur. Labor Statis. Ann. Rept. (1888) 4: [99]-109, [120]-131. 1889.

While the bureau was making a study of wages paid for production in detail, agents visited the families of employees in 12 industries included in the study and secured information concerning annual earnings and expenditures in 1887-88 for 611 families, and also data on number employed, number owning homes, value of homes, amounts of mortgages, and rates of interest.

Data on incomes and expenditures are tabulated for 62 wage earners with families who sent in to the bureau records of actual wages and expenditures for a period of 1 month.

[MICHIGAN] BUREAU OF LABOR AND INDUSTRIAL STATISTICS.

(217)

SIXTH ANNUAL REPORT. [Mich.] Bur. Labor and Indus. Statis. Ann. Rept. 6: 1-311. 1889.

This report is the result of a personal canvass to investigate the wages and social condition of employees in seven industries in Michigan. Of the married men interviewed, 42 worked in the fire-clay industry, 10 in the slate, 53 in the coal, 64 in the grindstone, 130 in the gypsum, 121 in the stone, and about 1,400 in the copper industry. The majority were American born, but Canada, England, Germany, and Finland were well represented. Individual reports are presented for the year 1887-88. Data given included age at time of canvass and when work began, occupation in the United States and in the old country, nativity, marital status, number of children in the family and attending school, dependents, working time and wages here and in the old country, how often paid, annual earnings, amount saved during the year, amount at interest or in the bank, value of home, amount of mortgage and rate of interest, monthly rental, amount of life insurance, membership in a benefit society, weekly benefit if hurt or sick, possession of a sewing machine, piano, or organ, subscription to daily, weekly or monthly newspaper, state of health now and when beginning work, amount of relief to friends in the old country, and amount furnished for their passage to the United States.



## RHODE ISLAND BUREAU OF INDUSTRIAL STATISTICS. (218)

SECOND ANNUAL REPORT OF THE COMMISSIONER OF INDUSTRIAL STATISTICS.

R. I. Bur. Indus. Statis., Commr. Indus. Statis. Ann. Rept. 2: 3-55. 1889.

Returns covering the financial and living conditions in the year ended July 1, 1888, for 600 wage earners of whom at least 5 were single, in various occupations, were tabulated. Of these workers 272 were native born, and 328 foreign born. The foreign born were found largely among textile workers, whereas the American born predominated in the mechanical trades and in the most lucrative of the manufacturing industries, such as jewelry and machinery.

## KANSAS BUREAU OF LABOR AND INDUSTRIAL STATISTICS. (219)

FOURTH ANNUAL REPORT. Kans. Bur. Labor and Indus. Statis. Ann. Rept.

4: 169-265. 1889.

About 1,500 monthly reports on income and expenditures during 1888 were obtained from workers in 17 occupations in 14 cities of Kansas. A summary for the month of March 1888 of 17 stationary engineers living in 4 localities showed incomes from all sources averaging \$77 a month and total expenditures, including insurance and mortgage payments, averaging \$57. Expenditures for groceries purchased by these families (which comprised an average of 4.4 persons) averaged \$21. Fifteen families recorded meat expenditures averaging \$5 per month, 13 reported clothing expenses averaging \$9 per month, 14 reported fuel at \$2 a month, and 9 families paid rent averaging \$11 a month.

## MAINE BUREAU OF LABOR STATISTICS. (220)

THIRD ANNUAL REPORT. Maine Bur. Labor Statis. Ann. Rept. (1889)

3: 30-38, 69-71, 96-99. 1890.

Returns for the year 1888 were tabulated from questionnaires on wage and family living from 129 workers. These were divided into three groups, 96 from granite workers, 13 from lime workers, and 20 from shipyard workers. In addition to wage data, material is included on home ownership, mortgages, interest rate on same, nationality, number having bank accounts, earnings outside trade, earnings of others in the family, and labor organization membership. A separate section on detailed expenditures for family living contains replies from only part of those giving wage data. The income of the 96 granite workers averaged \$577, cost of family living averaged \$499, and average size of family was 4.5 persons; for shipyard workers the average total family income was \$510, and expenses for family living averaged \$437.

## NEW JERSEY BUREAU OF STATISTICS OF LABOR AND INDUSTRIES. (221)

ELEVENTH ANNUAL REPORT. N. J. Bur. Statis. Labor and Indus. Ann.

Rept. 11: 245-449. 1888.

This report gives "data furnished to the agents of the bureau by employers and employed connected with many of our largest industries" (p. 245). Data cover the year 1888. Material for approximately 680 workers is given on annual income, wage rates, time working, family income and expenditure, number in the family, number working, organization membership, savings-bank and life-insurance holdings, and nationality. Summary data by occupation groups is given.

## KANSAS BUREAU OF LABOR AND INDUSTRIAL STATISTICS. (222)

FIFTH ANNUAL REPORT. Kans. Bur. Labor and Indus. Statis. Ann. Rept.

5: 197-280. 1890.

Monthly reports were obtained from 1,892 persons who were representative of the leading vocations in 8 principal Kansas cities in 1888-89. Data for approximately 150 single men are included in the general averages for Topeka and Wichita. Abstracts of the reports were made showing the number of mechanics reporting each month from the different trades interviewed, the average number of their families, the average number of days worked, and the average daily wages earned. The average size of family was 4.5 persons.

## [MICHIGAN] BUREAU OF LABOR AND INDUSTRIAL STATISTICS. (223)

SEVENTH ANNUAL REPORT. [Mich.] Bur. Labor and Indus. Statis. Ann.

Rept. 7: 3-305. 1890.

This survey presents the individual records, for the year 1888-89, of 5,226 men and boys employed in 78 Michigan furniture factories; 28 in Grand Rapids, 15 in Detroit, and 35 in 22 other towns and cities of the State. Of the total number of employees, 2,530 were married and 108 were widowed. Totals of the individual records and averages are presented by firms for Grand Rapids, Detroit,



and the 22 other towns and cities. Data include age, nationality, specific occupation, marital status, children in family and in school, total number of dependents, annual earnings of worker and his family, time employed, family expenses, savings, rent of home or its value if owned, amount of mortgage, number of magazines and newspapers read, amount of life insurance held, membership in benefit societies, possession of sewing machines, and of musical instruments.

MISSOURI BUREAU OF LABOR STATISTICS.

(224)

ELEVENTH ANNUAL REPORT. Mo. Bur. Labor Statist. Ann. Rept. (1889) 11: 298-408. 1889.

Individual expense accounts and material on family and working conditions are given for 130 mine families for the year ended June 30, 1889. Both Negro and white workers in about 13 counties are included. The number of individuals per family was 4.98 persons. The average amount expended by each family (including insurance) was \$470, and the average amount earned was \$512. Expenditures for food averaged \$212, and for clothing \$84. Fifty-three families paid no rent but either occupied their own houses or received house rent free from their employers. The 77 families who paid rent expended, on the average, \$58 a year. Many of the families supplemented their cash income by keeping small gardens, and pigs, chickens, and sometimes a cow.

NORTH CAROLINA BUREAU OF LABOR STATISTICS.

(225)

THIRD ANNUAL REPORT. N. C. Bur. Labor Statist. Ann. Rept. (1889) 3: 271-277. 1890.

Tabulated returns from various classes of laboring men in 59 counties in North Carolina include 74 reports from heads of families. The data cover the year ended November 1, 1889. Material is given for wage rates, hours of labor, methods of wage payment, family income, size of family, ownership of home, rent paid, price of board per month, church membership and attendance, newspapers taken, and book supply. Board per month is given as the best available indication of level of family expenditure.

UNITED STATES DEPARTMENT OF LABOR.

(226)

COST OF PRODUCTION: IRON, STEEL, COAL, ETC. SIXTH ANNUAL REPORT OF THE COMMISSIONER OF LABOR. U. S. Dept. Labor, Commr. Labor Ann. Rept. (1890) 6: 605-1376. 1891.

On June 13, 1888, the United States Congress passed an act to establish a Department of Labor. Section 7 of that act is as follows:

"That the Commissioner of Labor, in accordance with the general design and duties referred to in section 1 of this act, is specially charged to ascertain, at as early a date as possible, and whenever industrial changes shall make it essential, the cost of producing articles, at the time dutiable in the United States, in leading countries where such articles are produced, by fully specified units of production, and under a classification showing the different elements of cost, or approximate cost, of such articles of production, including the wages paid in such industries per day, week, month, or year, or by the piece, and hours employed per day; and the profits of the manufacturers and producers of such articles; and the comparative cost of living, and the kind of living" (p. 3).

This report gives the first tabulations obtained as a result of carrying out these instructions. Schedules of incomes and expenditures of 3,260 families (2,490 living in North America and 770 in Europe) for the years 1888-90 were tabulated. The facts were gathered from heads of families employed in pig- and bar-iron, steel, coal, coke, and iron-ore establishments from which schedules relating to the cost of production and pay accounts were taken. Selection of the industries was based upon the dutiable value of imported products in the years ended June 30, 1889, and June 30, 1890. The American workers were employed and lived in 10 States and were largely American born or from English-speaking countries.

The average size of these families, comprising husband, wife, children, boarders, and all other persons that go to make up a household, was five persons. The total family income averaged \$622 and expenditures including life insurance \$556. Expenditures for food averaged \$244, and for rent, \$75. For those families reporting such items, expenditures for fuel averaged \$26; for lighting, \$5; for furniture and utensils, \$24; for husbands' clothes, \$36; for wives' clothes, \$24; and for children's clothing, \$54. Four hundred and one families reported life insurance averaging \$21. The surplus of income over expenditures of 1,580 families averaged \$138, and the deficit due to excess of expenses over income of 869 families averaged \$61. Contrasted with these expenditures are those of 770

families living in Europe and averaging 5.3 persons. The average income of these families was \$471, and their total average expenditures for all purposes, \$438; for food, \$223; and for rent, \$42.

Separate analysis is made of the income and expenditures of 928 normal families—families which included no boarders or lodgers, and had five or less children, none of whom were over 14 years of age. These families had an average income of \$526 and total expenditures of \$489. Their expenditures for rent averaged \$71; for food, \$206; for clothing, \$82; and for fuel and lighting, \$27. In addition consumption data are presented covering the costs and quantities of nine articles of food used per individual family in terms of "100 units of consumption." The units of consumption are based upon the adult-male equivalent calculated by the Bureau of Labor Statistics. These figures also are presented by States, industries, occupations, and by size of family. Tables contrasting individual incomes and expenditures by locality also are given. Remarks are included on home surroundings, number of rooms, debts, and purchasing habits.

COLORADO BUREAU OF LABOR STATISTICS. (227)

FOURTH BIENNIAL REPORT. Colo. Bur. Labor Statis. Bien. Rept. (1893-94)  
4: 138-151. 1894.

This report presents figures on the average incomes and expenditures of wage earners, computed on the basis of family expenditure data for 1888-91 published in the seventh annual report of the United States Commissioner of Labor (228), and data published in the report of the Aldrich Committee on Finance on wholesale prices, wages, and transportation (238). Computed figures are given for the years 1856, 1863, 1870, 1884, 1891.

UNITED STATES DEPARTMENT OF LABOR. (228)

COST OF PRODUCTION: THE TEXTILES AND GLASS. SEVENTH ANNUAL REPORT  
OF THE COMMISSIONER OF LABOR. U. S. Dept Labor, Commr. Labor Ann.  
Rept. (1891) 7 (v. 2, pt. 3): 845-2048. 1892.

This report deals with information gathered from 1888 to February 1891, from 5,284 families (965 of them living in Europe), in which the chief wage earners were employed in the cotton, woolen, and glass industries. Separate compilations are presented of the incomes and expenditures of 2,562 normal families in the United States and 703 normal European families. Normal families were defined as those which included no boarders or dependents, rented their homes and recorded expenditures for rent, fuel, lighting, clothing and food, had a husband, wife, and not more than five children, none of whom were over 14 years of age. They included 1,246 families in the iron-steel group (905 living in the United States and 341 living in Europe) and 2,019 families in the textile-glass group (1,657 living in the United States and 362 living in Europe). Quantities and costs of food consumption for each of the normal families are given for nine food articles in terms of 100 units of consumption and in tabular form showing the decreasing per capita cost with increasing size of family. The modal group among the normal families in the United States had total incomes between \$400 and \$500. Total expenditure, including insurance, for the normal families living in the United States was distributed as follows: food, 41 percent; clothing, 15 percent; and rent, 15 percent.

The average income of 1,085 normal families, where the fathers were employed in the cotton and woolen industries in the United States, was \$514. Their total expenditure for all items, including insurance, averaged \$482, for food \$211, for clothing \$69, for rent \$75. The 572 United States normal families included in the glass-industry group had an average income of \$756 and a total expenditure averaging \$704. Food expenses averaged \$256; clothing, \$105; and rent \$105.

Revised figures from the sixth annual report of the Commissioner of Labor for 905 United States normal families included in the group composed of workers in the pig-iron, bar-iron, steel, bituminous coal, coke, and iron-ore industries showed an average annual income per family of \$530 and a total yearly expenditure averaging \$490. Food cost \$206; clothing, \$82; and rent, \$71.

According to the Commissioner of Labor, "the rule of percentages laid down by Dr. Engel finds a more emphatic verification by the facts drawn from the great number of details published in this report" (p. 863).

IOWA BUREAU OF LABOR STATISTICS. (229)

THIRD BIENNIAL REPORT. Iowa Bur. Labor Statis. Bien. Rept. (1888/89)  
3: 5-64, 125-169. 1889.

Included in this report, published in 1889, are the annual earnings and expenditures of 2,141 wage earners, of whom at least 25 were single. Data presented by



counties for the 52 occupational groups represented include number of returns, whether foreign or native born, average hours worked per day, average daily and annual earnings, number assisted by others in the family and the average annual earnings of these members, average size of family, average number attending school, number owning home, number of homes mortgaged, number renting, total average annual expenditure, increase or decrease in wages the past year, effect of immigration on the trade, number with savings, number in debt, number with life or fire insurance, number belonging to labor organizations, and the effect of prohibition on wageworkers. The wages and total average annual expenditures of 518 miners in 14 counties of the State are also included. Averages are presented for each country. The number of heads of families is not given.

MISSOURI BUREAU OF LABOR STATISTICS. (230)

ANNUAL REPORT. Mo. Bur. Labor Statis. Ann. Rept. 12 : 395-569. 1890.

Data were obtained for 303 families living in St. Louis, 123 in Kansas City, and 12 in Crystal City regarding their incomes, expenditures, and living conditions in 1889-90. About 60 occupations requiring skilled and unskilled labor are represented. The average size of family in St. Louis was 4.7 persons with an income of \$897 and expenditures of \$759. Average per capita expenditures totaled \$163, of which \$64 was for food, \$22 for rent, and \$31 for clothing.

NEBRASKA BUREAU OF LABOR AND INDUSTRIAL STATISTICS. (231)

SECOND BIENNIAL REPORT. Nebr. Bur. Labor and Indus. Statis. Bien. Rept. (1889/90) 2: 9-54. 1890.

In this report are five tables on wages, expenses, savings, and itemized family accounts. The data on wages refer to 721 unskilled laborers in 25 occupations in nine Nebraska towns in 1888-89. Unskilled laborers included those earning \$2 per day and less. Wages were considered from the point of view of nominal wages, actual money wages, and actual wages in the necessities of life. "The rent of house and the number of its rooms was made the basis upon which the cost of a 4-room house is made" (p. 19). The number in the family averaged three. Actual weekly wages varied from \$5.70 for Columbus domestics to \$10.50 for Omaha carpenters. Total monthly expenditures varied from \$42.97 for Lincoln carpenters to \$25.41 for brickmakers throughout the State, for the 399 families reporting. Individual annual expense accounts are given for 22 families and a weekly expense account for 6 months for 1 family.

NORTH CAROLINA BUREAU OF LABOR STATISTICS. (232)

FOURTH ANNUAL REPORT. N. C. Bur. Labor Statis. Ann. Rept. 4: 67-94, 176-214. 1890.

Tabulated questionnaires from 34 counties in North Carolina include 26 cotton- and woolen-mill employees and 42 workers of miscellaneous occupation who were heads of families. The data are for the years 1889 and 1890. Material presented covers wage rates, hours of labor, methods of wage payment, family income, size of family, ownership of home, rent paid, price of board per week, family expenditures, church membership and attendance, and other data on working and living conditions.

[MICHIGAN] BUREAU OF LABOR AND INDUSTRIAL STATISTICS. (233)

EIGHTH ANNUAL REPORT. Mich. Bur. Labor and Indus. Statis. Ann. Rept. 8: 1-451. 1891.

This report of wages and the cost of living in 1890 for 8,838 employees, of whom 4,889 were married and 195 were widowers, is based upon a personal canvass of the wage earners in 201 shops and industries making agricultural implements or engaged in ironworking establishments in 25 villages and cities in Michigan. Individual reports of the employees are presented. Totals are shown by towns and cities and by nationalities. Information given covers occupation, nationality, marital status, children in family, supported, and at school, other dependents, time working, weekly and annual earnings, total in come, family expenses, rent, value of home and debt on it if owned, amount of life insurance, membership in benefit societies, number of years in United States, and present worth.

MISSOURI BUREAU OF LABOR STATISTICS. (234)

ANNUAL REPORT. Mo. Bur. Labor Statis. Ann. Rept. 13: 580-665. 1891.

The purpose of this report was to compare the incomes and expenditures in 1890 of 75 wage-earning families in the car shops of St. Charles, in a large country manufacturing establishment, with a similar number employed in the



car shops in the city of St. Louis. The St. Charles group included 30 foreign-born men, and the St. Louis group, 40 foreign-born, chiefly from Germany. The average size of family was 4.3 persons in St. Charles and 3.7 in St. Louis. The average annual net income per family, including families in which the head of the family was a foreman in the shops, was \$619 at St. Charles, and \$742 in St. Louis. Expenditures for current living averaged \$563 and \$651 for St. Charles and St. Louis, respectively; for rent, \$120 and \$111; for clothing, \$135 and \$111; for food, \$214 and \$277; and for fuel and lighting, \$33 and \$34. The report concludes that "the total annual cost of living per family in St. Louis is 15% percent higher than in St. Charles. The total annual income, however, being 24 percent higher in St. Louis, the balance is in favor of the latter place" (p. 583).

MAINE BUREAU OF INDUSTRIAL AND LABOR STATISTICS. (235)  
FIFTH ANNUAL REPORT. Maine Bur. Indus. and Labor Statis. Ann. Rept. (1891) 5: 11-129. 1892.

This report tabulates material on wages and family living expenses from the schedules of 1,082 workers. The material pertains to the year 1890-91. Separate data are given for each major occupational group divided according to family status as follows: Men with families, men without families, and where applicable, women with families, and women without families. Material is given on wages and methods of wage payment, nationality, home ownership, mortgages, interest rate on same, number having bank accounts, earnings outside the trade, earnings by others in the family, and labor organization membership. The men with families totaled 745. For this group the average size of family was 3.8 persons; the average family income was \$527; expenditures for current family living averaged \$457; for food, \$198; for clothing, \$83; for fuel and light, \$43. Expenditure for life insurance premiums averaged \$6. Since the questionnaire method had been criticized as securing data only from the best workers the material for this report was gathered through personal canvassers. "The reports tabulated show that \* \* \* [this method leads to better results] both in the number and representative character of the reports obtained" (p. 11).

MISSOURI BUREAU OF LABOR STATISTICS AND INSPECTION. (236)  
ANNUAL REPORT. Mo. Bur. Labor Statis. and Insp. Ann. Rept. 14: 442-465. 1892.

To obtain data on working and family living conditions in addition to wage rates in 1890-91, about 2,400 questionnaires were circulated among workingmen. Of the 600 blanks returned, about 368 were for married men.

NORTH CAROLINA BUREAU OF LABOR STATISTICS. (237)  
FIFTH ANNUAL REPORT. N. C. Bur. Labor Statis. Ann. Rept. (1891) 5: 156-199, 271-361. 1892.

Tabulated questionnaires include returns from 45 cotton- and woolen-mill employees and 107 workers in a miscellaneous group of manufactures and trades who were heads of families. More than 40 counties in North Carolina are represented. The data are for the year 1890-91 and include wage rates, hours of labor, methods of wage payment, family income, size of family, ownership of home, rent paid, price of board per week, family expenditures, church membership and attendance.

UNITED STATES CONGRESS, SENATE COMMITTEE ON FINANCE. (238)  
RETAIL PRICES AND WAGES. 52nd Cong., 1st sess., S. Com. Rept., v. 8, no. 986, pt. 3, pp. 2040-2097. 1892.

Individual records are given of incomes and expenditures in 1890-91 of 232 families living in 11 cities located in the States of Georgia, Indiana, Iowa, New Hampshire, New York, Ohio, Pennsylvania, and Virginia. The husbands were workingmen, the majority of whom were born in America. The average family consisted of 4.9 persons. Incomes from all sources averaged \$714 a year. Expenditures, including insurance, averaged \$656; for food, \$262; and for rent, \$141. Surplus of income over expenditure was reported for 147 families averaging \$127 and deficits for 79 families averaging \$68. Notes regarding family living conditions are included.

INDIANA DEPARTMENT OF STATISTICS. (239)  
FOURTH BIENNIAL REPORT. Ind. Dept. Statis. Bien. Rept. (1891-92) 4: [339]-352. 1892.

Data on family living and expenditures for 1891 were secured for 71 families of laborers in three Indiana cities—36 families in Indianapolis, 20 in Evans-

ville, and 15 in Terre Haute. The average size of the family was 4.25 in Indianapolis and Terre Haute, and 4.75 in Evansville. The average incomes per family were \$573 in Indianapolis, \$571 in Evansville, and \$623 in Terre Haute. Average expenditures were \$438, \$436, and \$420 in Indianapolis, Evansville, and Terre Haute, respectively. Average yearly rents were \$103, \$99, and \$88, respectively. Total aggregate money expenditures by all families for food were \$9,151 in Indianapolis, \$5,168 in Evansville, and \$3,704 in Terre Haute; for clothing \$2,283, \$1,365, and \$937, respectively; for fuel and light, \$926, \$537, and \$486, respectively. Although per capita expenses were low, some of the families were in debt at the end of the year.

KANSAS BUREAU OF LABOR AND INDUSTRY.

(240)

ANNUAL REPORT. Kans. Bur. Labor and Indus. Ann. Rept. (1895) 11: 96-153. 1896.

The results of questionnaires returned by 519 Kansas wage earners distributed throughout 23 counties are presented in this report. "The department was careful that no particular branch of labor should receive especial notice in distribution of the forms, but that every class of working men, except employees in railway train service should be given the opportunity of replying, setting forth their conditions, and expressing their views on current questions affecting their own welfare" (p. 96). Data for the year 1891 on 519 individual cases are presented, including nationality, age, time working, present occupation compared with learned trade, wage rates and total income, home ownership, value and incumbrances on home, rent, number in family, number of children attending school and number working, membership in labor organization, insurance—life, accident, and fire; yearly or monthly cost of living, savings for part year, debt, opinion on immigration restriction and compulsory arbitration. The size of families ranged from 1 to 14 persons. Twelve reported as representing "single families." Part of the material is summarized by counties and occupations.

NEW YORK [STATE] BUREAU OF STATISTICS OF LABOR.

(241)

TENTH ANNUAL REPORT. N. Y. [State] Bur. Statis. Labor Ann. Rept. (1892) 10 (pt. 1): 293-332. 1893.

"In 1875 and 1884 Mr. Wright announced in the annual reports of the Massachusetts Bureau of Labor Statistics that the results of his own investigations corroborated for Massachusetts the 'economic law' which Dr. Engel had previously propounded (p. 293) concerning the relative percentage of expenditure for various items of living for different income levels. To check the working of this law, the New York State Bureau of Statistics of Labor presented in detail the income and expenditures of 7 families of varying size which were selected from a list of 35 whose budgets had been analyzed in Mr. Wright's study because they alone were in the ordinary condition of working people who have to pay rent, and depend exclusively upon their wages to cover their expenses" (p. 296). Three are of married men who each had one child; the income of the first was \$854, of the second \$470, of the third \$363. The expenditures of the second of these families were as follows: Total expenditures, \$419; for food, \$194; for clothing, \$49; for rent, \$108. No savings or insurance were recorded. The percentages of expenditure shown by each of these seven budgets were compared with the average percentages of the Massachusetts reports of 1875 and 1884. The result showed that a marked change had taken place in the distribution of expenditure. "In the smallest income in 1891 the percentage for subsistence [food] is sensibly smaller than for the largest income in 1875 and 1884; while for incomes of about the same size the difference is considerable \* \* \* on the other hand, there is a marked increase in the percentages for clothing and especially in those for rent and sundries" (p. 315). This same tendency was observed in the Massachusetts percentages of 1884 compared with those of 1875 as well as in the United States Senate committee report on budgets in 1891. Seven additional budgets "that are fairly representative of the range within which the ratio of expenditure for food is found in nearly all the others" are presented to illustrate this change in the distribution of expenditures. The effect of the tariff on the cost of living is analyzed as well as the effect of certain retail prices. The conclusion is that "a part of the benefits which would otherwise have accrued to the wage-working class from the reduction that took place in the average retail price of food and clothing, was therefore transferred to the landlord and the retail dealer" (p. 334) and "that the standard of living of that class has not risen in proportion to its



productivity. Its productivity, in fact, has most increased in the very things that the working class itself can neither consume, own, or enjoy" (p. 335).

[MICHIGAN] BUREAU OF LABOR AND INDUSTRIAL STATISTICS. (242)  
TENTH ANNUAL REPORT. [Mich.] Bur. Labor and Indus. Statis. Ann.  
Rept. 10: 2-796, 1042-1126. 1893.

This report includes statistics for the year 1891-92 from 9,527 married wage earners engaged in approximately 32 occupations in the building trades in these eight cities—Jackson, Muskegon, Niles, Manistee, Bay City, Saginaw, Grand Rapids, and Detroit. About 39 nationalities are represented, Americans, Canadians, English, and German predominating. Individual reports are presented on working conditions, wages, total earnings, rent, and other data. Home account records are also given for varying numbers of months, kept by 93 families in home account books sent to householders for the purpose of securing a year's record of the cost of living. Out of 5,000 books sent, only 135 could be used for tabulation, and of this number only 35 reported annual expenditures and earnings.

RHODE ISLAND BUREAU OF INDUSTRIAL STATISTICS. (243)  
SIXTH ANNUAL REPORT OF THE COMMISSIONER OF INDUSTRIAL STATISTICS.  
R. I. Bur. Indus. Statis., Commr. Indus. Statis. Ann. Rept. 6: 26-150.  
1893.

Returns on income, expenditures, and working conditions in 1891-92 are given for 573 artisans in the building trades of seven cities of Rhode Island. At least 20 workers were single.

KANSAS BUREAU OF LABOR AND INDUSTRIAL STATISTICS. (244)  
ANNUAL REPORT. Kans. Bur. Labor and Indus. Statis. Ann. Rept. (1892)  
8: 23-28, 31-67. 1893.

This report includes individual returns gathered from 50 employees of Kansas City packing houses, engaged in the pork-packing branch of these establishments. The time covered is October 1892, which is "fairly representative of the year, and may be taken as illustrative of the time employed and the wages earned by regularly-employed hands" (p. 23).

The average size of family for the 42 laborers who had families was 5.75 persons. Nineteen fathers and twenty-five mothers were native born, and the other parents were foreign born. The average monthly earnings for all 50 families were \$68; the average expenses \$52. The average amount expended for 1 month for meat and groceries was \$17, for clothing \$13, for rent (for 15 nonowners) \$7.50, for fuel \$5. Forty-seven families averaged \$17 in savings, three families had a deficit. In addition to the study of the employees of meat-packing establishments, there are included in this report detailed tables for the year 1885-86 for 38 coal miners. Monthly tables are given for coal output, total earnings, and store bills. The average annual income was \$451, the average annual store bill \$186. Similar material is given for 33 miners in 1891. Average earnings were \$724, average store bill \$363.

MISSOURI BUREAU OF LABOR STATISTICS AND INSPECTION. (245)  
ANNUAL REPORT. Mo. Bur. Labor Statis. and Insp. Ann. Rept. 15: 305-416. 1893.

Actual earnings of 1,139 miners and 328 workers in other occupations are presented as taken from company pay rolls of seven different operators in seven Missouri counties, in 1892-93. For 306 cases data are given on size of family, home ownership, and financial condition. Average annual earnings were \$549 for 207 miners and \$580 for 50 other workers, where annual earnings were reported. For these families combined, average per capita expenditures were \$98 per year. "This investigation \* \* \* fairly represents the opportunities and the results of the average man who sells his labor to operators of mines" (p. 308-309).

MONTANA BUREAU OF AGRICULTURE, LABOR AND INDUSTRY. (246)  
FIRST ANNUAL REPORT. Mont. Bur. Agr., Labor and Indus. Ann. Rept.  
1: 146-149. 1893.

Individual data are given for 1892-93 on the earnings and expenses of 50 families. These represent about 30 occupations in 14 counties.

NEW HAMPSHIRE BUREAU OF LABOR. (247)  
FIRST ANNUAL REPORT. N. H. Bur. Labor Ann. Rept. 1: 73-185. 1893.

In securing the statistics presented under the heading Conditions of Wage Earners in the Building Trades, more than 4,000 questionnaires were sent to

persons employed in all the industries identified with the building trades, in such a way as to reach all sections of the State. Four hundred and thirty-six usable reports giving information for 1892-93 were received and tabulated. Data reported for individuals by industry are tabulated for the following: Occupation, time employed, wage rates, method of wage payment, marital status, number in family, children at school, individual and family earnings, savings during year, status as owner or tenant, value, encumbrance of, and insurance on home, housing condition of tenant, trade-union membership, benefits, fraternal and other, if any. Three hundred and thirty-two individuals reported as married, with families averaging nearly four each.

RICHARDS, ELLEN H., and SHAPLEIGH, AMELIA (248)  
DIETARY STUDIES IN PHILADELPHIA AND CHICAGO, 1892-93. U. S. Dept. Agr.,  
Off. Expt. Stas. Bull. 129: 37-98. 1903.

"During the year 1892-93 observations were made, at the instance of the College Settlement Association, of the food consumption and dietary customs of families with small incomes living in those sections of Philadelphia and Chicago in which the work of the Settlements was carried on" (p. 37). The families were selected at random. In Philadelphia, the 22 families studied included American, German, Negro, Irish, Italian-Irish, German-Russians, and Rumanian Jews. In Chicago, the 32 families included Americans, Scotch, English, Irish, Germans, French-Canadians, Hungarians, and Bohemians. The Chicago families were in better circumstances than the Philadelphia families. A dietary study, usually for 7 days, is presented for each family within each nationality group. In many studies the weekly income and monthly rate of rent are stated. In Philadelphia, "14 of the 22 families paid from 20 to 36 cents per man per day for food materials \* \* \* which supplied no more nutrient or energy than it was estimated could have been obtained for 15 cents if there had been more intelligence in marketing" (p. 59). In Chicago the average cost of the diet per man per day was 27 cents.

MICHIGAN BUREAU OF LABOR AND INDUSTRIAL STATISTICS. (249)  
ANNUAL REPORT. Mich. Bur. Labor and Indus. Statist. Ann. Rept. 11 (pt. 1):  
1-386. 1894.

This report is based upon statistics of 9,226 railroad employees, of whom 5,792 were married, and 112 were widowed. The data were taken by personal canvass in 1893 for 12 occupational groups of men working for 23 railroads in Michigan. Individual reports of the employees are presented. In addition, summaries are given under the following headings: Occupations, roads on which employed, nationality, marital status, number in families, earnings and savings, ownership of homes, whether homes were encumbered, fire insurance, rent for tenants per month, use of liquors (including expenditure), membership in labor organizations, death benefits from orders, sick benefits from orders, other life insurance and accident insurance outside of orders. A separate table gives average wage rates for each occupational group on each railroad represented.

EATON, ISABEL (250)  
RECEIPTS AND EXPENDITURES OF CERTAIN WAGE-EARNERS IN THE GARMENT  
TRADES. 46 pp. Boston. 1895. (Reprinted from Amer. Statist. Assoc.  
Quart. Pubs. 4 (n. s. 30): 135-180. 1895.)

"Eight trades in Chicago and twelve in New York have been investigated with the purpose of discovering the adequacy or inadequacy of the average income to defray the average expense of living. The information has been obtained at first hand from the trade unions and through a tour of the sweat shops and by the assistance of influential and trustworthy workmen in the garment trades, \* \* \* both in New York and in Chicago" (p. 135). In New York 1,841 schedules were completed, and in Chicago, 1,659. In both cities the average size of family ranged from 4 to 4.9 persons. The cutters' trade (85 cases) was dealt with separately. The average weekly wage and yearly incomes for each trade group during the crisis year, 1893-94, were compared with those in ordinary times. Wages during the crisis of 1893, estimated by heads of unions, and computed from over 1,000 cases, were less than half the usual rate. Customary average family expenditures for rent, food, and clothing were tabulated for an unspecified number of cases in the eight New York trades. The percentage of earnings spent on rent in 1893-94 ranged from 41 to 90 percent as compared with from 20 to 39 percent in an ordinary year. Sweatshop conditions are described in detail as well as the indebtedness of workers and the profits made by retailers.



In the cutters' trade conditions were considerably better. In Chicago their customary average wage was \$17 per week. In New York the average regular weekly wage for 70 families, averaging 4.07 persons, was \$19. The average yearly income was \$686; average expenditure for food, \$8 per week; for clothing, \$122 per year; for rent, \$15 per month.

From the wage record books of 250 cloakmakers in the union in Chicago, it was found that the regular yearly income of both married and single men was \$330, and that the yearly expenditures of family men were \$440. During the year 1893-94 the rates of wages as for the other garment trades were cut down to about half.

In comparing conditions among the garment workers in New York and Chicago, the conclusion was that "in general, men in Chicago garment trades receive slightly better wages than in New York, and rents are much lower" (p. 178). Chicago workers also did not live in such crowded quarters as did New York garment workers.

IOWA BUREAU OF LABOR STATISTICS. (251)  
BIENNIAL REPORT. Iowa Bur. Labor Statis. Bien. Rept. (1894-95) 6:  
23-183. 1895.

Individual statements from about 2,400 married wage earners, of whom 38 were women, are included in this report. Ninety-three counties and a great variety of occupations are represented. Data given include country of birth, age, sex, marital status, number of adults and children dependent upon the wage earner, occupation, time working, average weekly and yearly earnings (April 1893-April 1894), yearly earnings of other members of the family, savings, membership in labor organizations, effect of immigration, ownership of home, debt on home, monthly rental, and number of rooms occupied.

MONTANA BUREAU OF AGRICULTURE, LABOR AND INDUSTRY. (252)  
ANNUAL REPORT. Mont. Bur. Agr., Labor and Indus. Ann. Rept. 2: 61-62.  
1895.

Data on earnings and expenditures in 1893-94 are given for 35 families living in 12 counties and representing various skilled and unskilled occupations.

NEW HAMPSHIRE BUREAU OF LABOR. (253)  
ANNUAL REPORT. N. H. Bur. Labor Ann. Rept. 2: 271-416. 1894.

Of 10,000 questionnaires circulated, only 711 usable reports were received and tabulated. Thirty-two occupations were represented. Of the 513 married workers, 298 reported average yearly living expenses (1893-94) of \$503. Reports for individuals and summary tables grouped by occupations give information as to nationality, marital status, children in family, schooling of children, years of work, time working, wage rates, method of wage payment, individual earnings during year, income from other sources, living expenses (single), living expenses (with family), wages of wife or children required to meet family living expenses, home tenure with value of house, encumbrances and insurance on house, monthly rent if tenant, housing conditions, whether living-expense accounts were kept, membership in trade unions and fraternal orders, and benefits received.

MICHIGAN BUREAU OF LABOR AND INDUSTRIAL STATISTICS. (254)  
ANNUAL REPORT. Mich. Bur. Labor and Indus. Statis. Ann. Rept. 13:  
1-227. 1896.

Individual reports affording cost of living data for 1894-95 are presented for 4,620 married employees in the transportation industry, of whom 1,721 worked for hack and bus lines, 1,285 worked for street railways, and 1,614 drove their own teams. Tabulated material gives information on age, nationality, marital status, size of family, occupation, amounts earned and saved during the past year, ownership of home, rent per month, changes in the cost of living, sufficiency of earnings and family support, and possession of life and of accident insurance.

WISCONSIN BUREAU OF LABOR, INDUSTRIAL AND CENSUS STATISTICS. (255)  
SEVENTH BIENNIAL REPORT. Wis. Bur. Labor, Indus. and Census Statis.  
Bien. Rept. (1895-96) 7: 178-316. 1896.

Over 1,500 blanks were sent out individually or through labor unions or employers to workers in the chief manufacturing cities of Wisconsin to secure data on earnings, expenditures, and working conditions for the year 1895. Incomplete returns were received from 1,488 wage earners in 32 occupations, some of whom were single. For 423 families giving complete reports, average size of family was 4.22 persons, average income \$537, and total expenditures \$511. Expenditures averaged \$233 for subsistence, \$71 for clothing and dry goods, \$89 for rent, and \$33 for fuel.

ATWATER, W. O., and BRYANT, A. P.

(256)

DIETARY STUDIES IN CHICAGO IN 1895 AND 1896. U. S. Dept. Agr., Off. Expt. Stas. Bull. 55, 76 pp. 1898.

This investigation, part of a plan to determine food-consumption habits of people of different nationality, sex, occupation, and financial condition was undertaken chiefly among the immigrant population of the West Side of Chicago, one of the most congested districts of the city, in 1895 and 1896. Under the personal supervision of an agent of the Department of Agriculture, residents of Hull House, a settlement house in the district, selected 53 families to be studied. Data were secured on kinds, amounts, and cost of the food consumed during a given period of time; the age, sex, and occupation of those eating at the family table; the number of meals taken by each person; their financial and hygienic condition; and nationality. In some cases, these data were obtained by the person in charge of the studies through visits to the families 2 or 3 times a day; in other cases the information was recorded by the families themselves according to specific directions. The families for which dietary studies are presented include Italians, French-Canadians, Russian Jews, Bohemians, and Americans. Estimates of income are given for only 30 cases. Food consumption was measured in terms of an equivalent adult-male unit.

— and WOODS, CHARLES D.

(257)

DIETARY STUDIES IN NEW YORK CITY IN 1895 AND 1896. U. S. Dept. Agr., Off. Expt. Stas. Bull. 46, 117 pp. 1898.

This investigation was undertaken as part of a general plan to obtain reliable data upon food-consumption habits in different parts of the country, and under varying conditions of age, sex, health, occupation, and environment. The procedure consisted in visiting a number of representative families in the worst congested portions of the city, observing the kinds and amounts of food bought and the prices paid, noting whether good weight and measure were obtained, and subjecting portions of the food materials to analysis for the purpose of learning their nutritive value. The cooperation of the New York Association for Improving the Condition of the Poor was obtained, and the observations and supervision necessary were in part done by district visitors of that association. The greater part of the work, however, was done by a woman physician practicing in the section under investigation. Data covering a period of about 10 days in 1895-96, secured from 21 families and 1 day nursery, are presented individually. The day-nursery study furnished 4 dietaries, 1 for the caretakers and 3 for the children of different ages. Information bearing on income, general living expenditures, and conditions of family living, as well as content and adequacy of diet is given. Consumption in each case was measured by an equivalent adult-male scale, and adequacy by Atwater's nutritive ratio standards of diet.

BEVIER, ISABEL

(258)

NUTRITION INVESTIGATIONS IN PITTSBURGH, PA., 1894-96. U. S. Dept. Agr., Off. Expt. Stas. Bull. 52, 48 pp. 1898.

Information on condition of living including income, outlay for rent and food, and kind, quality, and quantity of food materials consumed was secured from six Pittsburgh families for varying periods in 1895 and 1896. The families were those of skilled and unskilled workmen except for a lawyer's family. Figures on income and rent were secured from only five families. Samples of the more important foods in three diets were analyzed, and the percentage composition was assumed to represent that in the diet. An equivalent adult-male scale was used in measuring consumption. Adequacy of diet was judged by Atwater's dietary standards. Cost of food per man per day ranged from 22 to 9 cents. The less the income the more economical the expenditures for food, as shown by the amount of nutrients obtained. An analysis of the cost of food accessories (beverages, condiments, etc.) is given for five dietaries. Studies of the composition and cost of commercially baked and home-baked bread lead to the conclusion that in the case of very poor families an important money saving would result if bread were baked at home.

MICHIGAN BUREAU OF LABOR AND INDUSTRIAL STATISTICS.

(259)

FOURTEENTH ANNUAL REPORT. Mich. Bur. Labor and Indus. Statis. Ann. Rept. 14 (pt. 1): 1-192. 1897.

This report includes statistics, collected by personal canvass in 1896, from 2,457 married employees of vehicle factories located chiefly in Detroit, Flint, Grand Rapids, Jackson, Kalamazoo, Lansing, Owosso, and Pontiac. Data are given for individual families on age, nationality, marital status, size of family,



occupation, amounts earned and saved in past year (1895-96), home ownership, rent per month, possession of life and of accident insurance, and membership in labor organizations.

NEW HAMPSHIRE BUREAU OF LABOR.

FIRST BIENNIAL REPORT, N. H. Bur. Labor Bien. Rept. 1: 52-186. 1896. (260)

Special agents collected data by means of schedules concerning income, expenditures, and living and working conditions in 1895-96, from 1,815 shoe workers throughout the State, of whom about 760 were married.

UNITED STATES DEPARTMENT OF LABOR.

CONDITION OF THE NEGRO IN VARIOUS CITIES. U. S. Dept. Labor Bull. 10: 257-369. 1897. (261)

The data in this study were compiled by representative professional colored men and women. The investigation was begun in February 1896, and the data apply to 1895-96. The purpose "was originally to determine the causes of the excessive mortality among Negroes" in Chattanooga, Savannah, and Boston "and also to discover whether the mortality was on the increase or decrease, and if certain measures of reform \* \* \* had been effective" (p. 257). The investigation was carried to completion in 18 cities, all but 1 of which was in the South. Four sets of data are presented, 1 for 16 groups of families in Atlanta, 1 for 10 groups of families in Nashville, 1 for 1 group of families in Cambridge, Mass., and 1 for 32 groups of families in all other places studied. Each group consisted "of from 10 to 20 houses standing together in the portions of the city which were thought to be representative of the various conditions of the Negro in that locality" (p. 258). The groups are numbered and classified as to general condition as good, fair, and bad. Altogether 1,137 families were interviewed; their average size was 4.17 persons. Detailed material is given on composition of family, causes of death, housing conditions, occupation, average wage rates, weeks employed, and status as home owner or tenant.

THE ITALIANS IN CHICAGO: A SOCIAL AND ECONOMIC STUDY. U. S. Commr. Labor Spec. Rept. 9, 409 pp. 1897. (262)

The report gives in tabular form social and economic data for 1895-96 for 1,348 Italian families in the slum districts of Chicago. The families selected were representative of all sections of the city and included 1,265 private or normal families, 68 cooperative groups, usually males, and 15 boarding and lodging houses. The average size of all families was 5.02 persons. Of the 6,773 persons, 4,493 were born in Italy. For the 2,420 persons reporting, average weekly earnings were \$5.94. Food expenditures for 742 families averaged \$4.11 per week, and milk expenditures for 782 families \$0.027 per day.

KANSAS BUREAU OF LABOR AND INDUSTRY.

ANNUAL REPORT. Kans. Bur. Labor and Indus. Ann. Rept. (1896) 12: 61-95. 1897. (263)

Individual returns are tabulated for 539 wage earners of whom at least 10 were single. Information is given concerning occupation, nativity, length of employment, hours, income, days lost, home ownership, number in family, membership in labor organizations, insurance, savings, and debts during 1896.

CONNECTICUT BUREAU OF LABOR STATISTICS.

THIRTEENTH ANNUAL REPORT. Conn. Bur. Labor Statis. Ann. Rept. 13: 17-81. 1897. (264)

Data for the year ended July 1, 1897, are tabulated for 165 wage earners with families for age, nationality, occupation, size of family, time working, weekly earnings, total income, annual expenditures, rent, home ownership, and possible annual savings.

DU BOIS, W. E. BURGHARDT

THE PHILADELPHIA NEGRO. Pa. Univ. Pubs. 14, 520 pp. Philadelphia. 1899. (265)

This study presents data on geographical distribution, family conditions, occupations, social organization, and relations of Philadelphia Negroes to the white people, with the purpose of furnishing material as a guide for improving their condition. A special study was made of the seventh ward in 1896-97 by a house-to-house inquiry of 2,441 families. At the time of the study, this ward represented an epitome of all Negro problems and included every class of Negro and every kind of living condition. Less than one-third of the persons living in the

ward had been born there, and more than one-half of them had come from the South. About 12 percent were totally illiterate. The average size of all families, without lodgers and boarders, was 3.18 persons. The total working population numbered 6,610, of whom 2,644 were servants and 2,889 laborers. The estimated annual incomes of 2,276 of the 2,441 families ranged from \$50 to over \$1,500 in 1896. Forty-eight percent of the families had incomes between \$5 and \$10 per week. The average family rental was \$126. Expenditure accounts are given for 11 families. This survey of Negro life indicated that "the spending of money is a matter to which Negroes need to give especial attention. Money is wasted today in dress, furniture, elaborate entertainments, costly church edifices, and 'insurance' schemes, which ought to go toward buying homes, educating children, giving simple healthful amusement to the young, and accumulating something in the savings bank against a 'rainy day'" (p. 392). Families needed strengthening at every point, especially in the way of social activities in the home, and the housing problem was a serious one.

ANONYMOUS.

(266)

FAMILY FOOD BUDGETS. Amer. Statis. Assoc. Jour. 5 (n. s. 40): 368-370. 1897. (Abstract of Kingsley House Assoc., Pittsburgh, Pa., Ann. Rept. 4, 1897.)

"Two families, typical of the more prosperous workingmen's families, consented to a daily inspection of their food" (p. 368) for a period of 31 and 30 days, respectively, in 1897. The first family consisted of six members, all adults; the mother was of Irish birth. The son and daughter employed at the time of the investigation put their total earnings of \$51 into the family fund. This was augmented by the income from a boarder who paid \$13 for 3 weeks, making the family income \$64. Rent for 1 month was \$11. Food for 31 days amounted to \$33. The second family was typical of a less numerous class. The father, an educated Swiss, was a fresco painter and decorator; the wife was an Austrian; the three children were 15, 12, and 10 years of age. The father's income was estimated at \$83 a month. Rent amounted to \$13, and food \$24 for 1 month. For each family the quantity, waste, and cost of three main classes of provisions purchased are recorded as well as the purchasing procedures. The cost of food for one person for 1 day was about 15½ cents for the first family, and about 15½ cents for the second.

DU BOIS, W. E. BURGHARDT

(267)

THE NEGROES OF FARMVILLE, VIRGINIA; A SOCIAL STUDY. U. S. Dept. Labor Bull. 14: 1-38. 1898.

This study was the first of a series of investigations of small, well-defined groups of Negroes in various parts of the country. During July and August 1897 a general survey was made of the Negro population in Farmville, Va. This town was a typical Virginia market center for six surrounding tobacco counties. Schedules from 249 families showed a total of 1,196 persons in the economic family with annual incomes from less than \$50 to over \$750. From the accounts of the various families trading at their stores, 3 leading colored grocers estimated the yearly income and expenditures for a family of 5 in moderate circumstances, in poor circumstances, and in moderate circumstances owning their home. This study of Farmville showed clearly that there "is a growing differentiation of classes among Negroes, even in small communities" and "that the industrious and property-accumulating class of the Negro citizens best represents, on the whole, the general tendencies of the group" (p. 38).

KANSAS BUREAU OF LABOR AND INDUSTRIAL STATISTICS.

(268)

FOURTEENTH ANNUAL REPORT. Kans. Bur. Labor and Indus. Statis. Ann. Rept. 14: 96-165. 1899.

Reports on income, expenditures and working conditions for 1898 were received from 361 wage earners in 16 occupations in Kansas, of whom 294 were heads of families.

COLORADO BUREAU OF LABOR STATISTICS.

(269)

SEVENTH BIENNIAL REPORT. Colo. Bur. Labor Statis. Bien. Rept. (1899-1900) 7: 51-98. 1900.

Data on earnings, expenditures, and working conditions for 1898-99 were secured from 477 married workers in 30 occupations, including skilled and unskilled labor, in Colorado.



DU BOIS, W. E. BURGHARDT

(270)

THE NEGRO IN THE BLACK BELT; SOME SOCIAL SKETCHES. U. S. Dept. Labor Bull. 22: 401-417. 1899.

To show the development of the Negro from country to city life in the Black Belt at the end of the nineteenth century, Negro life is described in six communities, including one rural group. The notes for these sketches were contributed by senior class students at Atlanta University, each of whom was familiar with the community he described. Each of the groups represented "a selected group of the better class of colored folks" (p. 414) in its locality. The first town study is of 16 families who lived in much poverty and in poor surroundings in the small village of Lithonia, Ga. The heads of these families were stonecutters or artisans. The average size of family was 6.3 persons; the average rent paid was between \$4 and \$5 per month. Six owned their homes. Incomes varied from 5 families with under \$200 per year to 2 families with incomes over \$500 per year. Separate data are also presented for 50 families in Covington, Ga.; 33 families in Marion, Ala.; 40 families in Marietta, Ga.; and 45 families in Athens, Ga. The author believed that in the larger centers of population the Negro was changing his way of life and there was to be found the possibility of progress.

KANSAS BUREAU OF LABOR AND INDUSTRY.

(271)

FIFTEENTH ANNUAL REPORT. Kans. Bur. Labor and Indus. Ann. Rept. 15: 1-301. 1900.

Individual data on income, expenditures, and working conditions for 1899 are presented for 1,058 wage earners engaged in the railway, building, and miscellaneous trades throughout Kansas. Of these, 713 were heads of families.

MAINE BUREAU OF INDUSTRIAL AND LABOR STATISTICS.

(272)

FOURTEENTH ANNUAL REPORT. Maine Bur. Indus. and Labor Statist. Ann. Rept. (1900) 14: 8-32. 1901.

Individual data on income, expenditures, and working conditions in 1899-1900 are presented for 135 men with families, engaged in 7 industries in Maine. Forty-six were foreign born. The average size of family was 4 persons; average family income was \$593. Total annual expenditures including life insurance averaged \$583; for food, \$243; for clothing, \$85; for rent, \$120; for light and fuel, \$43; and for life-insurance premiums, \$11.

THOM, WILLIAM T.

(273)

THE NEGROES OF SANDY SPRING, MARYLAND; A SOCIAL STUDY. U. S. Dept. Labor Bull. 32: 43-102. 1901.

This study included farm as well as wage-earning families, and is annotated as (?).

UNITED STATES DEPARTMENT OF COMMERCE AND LABOR.

(274)

COST OF LIVING AND RETAIL PRICES OF FOOD. U. S. Dept. Com. and Labor, Commr. Labor Ann. Rept. 18: 15-631. 1904.

Part one of this report gives the results of an investigation of the income and expenditures of 25,440 wage earners' and small-salaried workers' families during 1899-1902, most of the data applying to the year 1901. The number studied included 179 professional persons and 2,254 workers engaged in trade. The data were obtained from workers in various occupations and were gathered principally in the industrial centers of 32 States and the District of Columbia. The selection of the number of persons within each geographical area was in accordance with the proportion of wage earners employed in each State. All investigations were limited to workers whose earnings were not in excess of \$1,200. A number of Negro families were included.

Of the 25,440 persons covered by the investigation, 10,279 had come from foreign countries and 15,161 were born in the United States. The average size of the families, including dependents, boarders, lodgers, and servants was 4.88. The heads of the households in 24,402 cases were employed. The number of families living in rented homes was 20,615, and the number owning their own homes was 4,825. The total income of all families from all sources averaged \$750, and total expenditures, including insurance, \$552; savings averaged \$51. Average expenditures for food amounted to \$313, and for lighting \$8. For those families renting homes, rent paid per year averaged \$118, and for those purchasing fuel and clothing, expenditures averaged \$31 and \$95, respectively. The surplus at the end of the year reported by 12,816 families averaged \$121, and the deficit reported by 4,117 families, \$66. Facts concerning sanitary conditions, furnishings, and cleanliness of homes were noted and tabulated. Other data summarized

included the numbers of children in school or working, the condition of the families as to boarders, lodgers, domestic help, the number of rooms per house, the reasons for idleness of heads of families (including sickness), and miscellaneous expenditures.

Of the above families 2,567 were selected and studied separately because of their ability to give the desired information. These families were somewhat more intelligent and better educated than the average family canvassed. Of this group, 1,578 were native born, and 989 foreigners. The average size of the families was  $\pm 5.31$  persons, and their total average income, \$827. Expenditures for current living averaged \$593; for food, \$327. The number and percentage of all families recording certain expenditures are given by States and nationality of head of family along with the averages of expenditures for families reporting such items. Families having such expenditures paid on the average \$123 for rent, \$32 for fuel, \$34 for the husband's clothing, \$26 for the wife's clothing, \$54 for the children's clothing, and \$31 for furniture and utensils. Life insurance payments averaged \$30. Information also is included for this group of families concerning the way deficits were met when expenses exceeded incomes.

Other tabulations relate to incomes and expenditures of 11,156 normal families and food consumption of 1,043 of these households. The normal families were defined as those which included an employed husband, a wife, and not more than five children under 14 years of age, and no dependents, boarders, lodgers, or servants, and which had reported expenditures for rent, fuel, lighting, food, clothing, and sundries. The income and expenditure material for these families is presented by size of family as well as by geographic area and nativity of the head of the family. In addition, expenditures are shown by income groups. The total income per normal family was \$651 and the total average expenditure, including insurance and mortgage payments, \$618. Expenditures for rent averaged \$112; for food, \$266; for fuel, \$28; for lighting, \$7; and for clothing, \$80. The tables dealing with the consumption of 20 staple food items of 1,043 normal families give data on quantities and costs for families of varying sizes, classified by nativity of the head of the family and by States. Food consumption is given in terms of consumption per adult-male equivalent, according to the Wright scale.

KANSAS BUREAU OF LABOR AND INDUSTRY.

(275)

SIXTEENTH ANNUAL REPORT. Kans. Bur. Labor and Indus. Ann. Rept. (1900) 16: 1-144. 1901.

Reports on income, expenditures, and working conditions for 1900 were secured from 531 Kansas wage earners in the railway, mechanical, and miscellaneous trades and included 403 heads of families.

HILLS, JOSEPH L., WAIT, CHARLES E., and WHITE, H. C.

(276)

DIETARY STUDIES IN RURAL REGIONS IN VERMONT, TENNESSEE AND GEORGIA.

U. S. Dept. Agr., Off. Expt. Stas. Bull. 221, 142 pp., illus. 1909.

In this report of three separate investigations of food consumption from 1900 to 1904, 43 (42 from Tennessee, 1 from Georgia) of the 82 dietaries analyzed deal with the food consumption of families of the wage-earner group. The purpose of the study was to determine the adequacy and cost of the average diet in the localities studied. The data for all the dietaries covering 1 or 2 weeks were collected and analyzed by methods described in previous publications of the United States Department of Agriculture, Office of Experiment Stations. Economic and social data, including income and rent in some cases, are given preceding the food analysis for each family. The total number of meals actually served was converted into the number of adult-male-equivalent meals by using the Atwater scale. The nutritive content per man per day of each diet was given in terms of grams of protein, fats, carbohydrates, and the energy value in calories, also the actual cost per day in cents.

MARYLAND BUREAU OF INDUSTRIAL STATISTICS.

(277)

TENTH ANNUAL REPORT. Md. Bur. Indus. Statis. Ann. Rept. (1901) 10: 172 and Table 5. 1902.

Schedules for 1901 were obtained from 1 German and 8 Russian families, the male heads of which were working in the clothing industry in Baltimore, Md. The families included from 2 to 9 persons. Total family income ranged from \$200 to \$900. Total expenditures for current living ranged from \$266 to \$719; for food, \$150 to \$300; for rent, \$60 to \$180; and for clothing, \$15 to \$50.



THOM, WILLIAM T.

(278)

THE NEGROES OF LITWALTON, VIRGINIA: A SOCIAL STUDY OF THE "OYSTER NEGRO." U. S. Dept. Labor Bull. 37: 1115-1170. 1901.

This study, made in 1901, is a continuation of the series of investigations of small, well-defined groups of Negroes in various parts of the country. "The purpose of this investigation was to study the Negroes of Litwalton neighborhood and Whealton village as excellent types of the 'oyster Negro' of the Chesapeake and its tributaries" (p. 1115). These Negroes, with agricultural surroundings, subsisted chiefly by the oyster industry. The 77 Litwalton families reported a total of 401 persons in the economic family with an annual income of from less than \$50 to over \$750. The 71 Whealton families reported a total of 330 persons in the economic family with an annual income of from less than \$50 to over \$1,260.

KANSAS BUREAU OF LABOR AND INDUSTRY.

(279)

BIENNIAL REPORT. Kans. Bur. Labor and Indus. Bien. Rept. 1: 5-121, 193-271. 1903.

Separate data are given for 1901 and 1902 on income, expenditures, and working conditions for employees in the train service, miscellaneous railway trades, building trades, and miscellaneous trades in Kansas. The reports represented nearly every county where labor was employed to any extent. Of the 468 reports for 1901, 358 were for married workers; of the 334 reports for 1902, 256 were for married workers.

[MASSACHUSETTS] BUREAU OF STATISTICS OF LABOR.

(280)

THIRTY-SECOND ANNUAL REPORT. [Mass.] Bur. Statist. Labor Ann. Rept. 32 (pt. 3): 254-314. 1902. ([Mass.] Pub. Doc. 15.)

Income and expense accounts of 152 families, selected at random from different parts of the State, were gathered or constructed from obtainable information by agents of the Massachusetts Bureau of Statistics of Labor in 1902. The purpose was to permit "more definite conclusions as to the effect upon the cost of living" of price changes, "as well as to show more fully the standard of living obtained at present in typical workmen's families in Massachusetts" (p. 254). The families studied were believed to be representative of fairly general or typical conditions. On the whole, the fathers were skilled workers engaged in the following industries: Boots and shoes, building, clothing, cordage and twine, cotton goods, leather, metals and metallic goods, printing, publishing and book-binding, print works, dye works, bleacheries, stone works, woolen and worsted goods, and miscellaneous. The number of members per family, including lodgers, servants, and dependents, averaged a little over 5.

Total yearly earnings of the heads of the families averaged \$594, and total income from all sources averaged \$878 per family, for 1901-2. Expenses for current living averaged \$828; for food and ice, \$415; for clothing, \$108; and for rent, \$105; average paid for insurance premiums was \$19; the average number of rooms occupied was about 6 per family. Personal information relating to the status of the families, their homes and their savings indicated that the general level of living was not low. The dietaries also showed "a much greater variety in articles of food, and a more generous regimen, especially with reference to the consumption of meat, than would be found in any corresponding group of workmen's families, except in the United States" (p. 261). Four families had paid servants, and 119 persons were engaged in housekeeping duties. In about four-fifths of the cases, the earnings of the head alone were insufficient to meet the family expenditure, and in 47 instances, after taking into consideration supplemental income, there was still a deficiency as compared with expenses.

Tabulations for 104 normal families averaging about 5 persons each are given. Normal families consisted of father, mother, and dependent relatives, principally minor children, subject to parental control. Their average annual income from all sources was \$814, and their average annual expenditure \$798. The income was deficient in 39 of these cases. The expenditures of these families, classified according to size of income "support fairly well the first and last propositions of the so-called law of expenditure, formulated by Dr. Engel of Prussia, but do not entirely agree with the others." The propositions supported were: "The greater the income, the smaller the relative percentage of outlay for subsistence" and "as income increases, the percentage of outlay for sundries becomes greater." Other findings from the study were that the classes having the largest incomes had the smallest percentages of expenditure for fuel and light and rent and the largest for clothing and that "as income permits, expenditures are enlarged in the directions

indicating a higher standard of living, rather than entirely reserved as surplus or savings" (p. 298).

Additional information included in the report covered 88 families composed of father, mother, and minor children only. Comparisons are made between wholesale prices for 1897 and 1902 and between the findings relative to earnings by head of family and children of an investigation of the bureau of statistics in 1875 and the conclusions drawn from the present study.

Tables of comparative retail prices show the relative purchasing power of money in 1872, 1881, 1897, and 1902. These prices cover rents, board, and various articles of household consumption in different towns and cities in which numbers of persons were employed. "The comparisons indicate an increase in prices as compared with 1897 of from 13.83 to 15.37 percent" (p. 310).

WRIGHT, RICHARD R.

(281)

NEGROES OF XENIA, OHIO: A SOCIAL STUDY. U. S. Dept. Com. and Labor, Bur. Labor Bull. 48: 1006-1044. 1903.

This study of Negroes of Xenia, Ohio, was undertaken to obtain material on the mode of living of Negroes in a northern community in 1901-2 which would prove useful in comparison with two studies previously made by the Department of Labor. Xenia, the center of trade and the county seat of Green County, Ohio, had 2 public schools for Negroes—1 elementary and 1 high school. It is one of the oldest cities in Ohio and had a very well-defined group of Negroes living in relatively close proximity. In 1900 there were 8,696 persons in Xenia, 1,991 of whom were colored.

The number of "economic" families included in this study was 501 and the total number of persons covered 1,832. An economic family was defined to consist of "all the persons related and unrelated living in one house under conditions of family life" (p. 1030). The average size of these economic families was 3.66 persons. More than 41 percent of the persons included in these families had come from the South, and 37 percent were born in Xenia. Fifty-seven percent of the men and 51 percent of the women over 15 years of age were married. "Of 1,119 reporting, 96 persons over 19 years of age were graduates of high school, and 276 had attended it at some time" (p. 1022). Of 1,505 persons over 10 years of age 65 percent were church members in good standing, and in 84 percent of the families there was at least one person who was a member of the church.

Thirty-five of the Negroes were engaged in professional occupations, 474 in domestic service, 40 in agriculture, 179 in manufacturing and mechanical industries, and 106 in commercial enterprises, including 85 who conducted business enterprises of their own. Nearly every family had a garden.

The income of 457 of the 501 families from wages, rents, and profits on merchandise averaged \$350 for the year. Of the 501 families, 318 owned their homes. The annual rent paid by 178 families averaged \$44.

Itemized income and expenditure accounts of a family of 11 persons for 39 weeks, and for 2 families of 5 persons, are presented. For the period covered, the total income of the first family was estimated at \$674, current expenditures at \$404, the cost of a house and lot at \$225, of an addition to the house at \$45, and \$8 remained on hand. The second family had an estimated income of \$267 and spent \$257 for current living and \$10 for life insurance; the third family had an income of \$399, and current expenditures of \$371; life-insurance premiums cost \$13, and \$15 remained on hand. Other data presented show retail prices of 47 ordinary commodities and the number of property holders (332) with the assessed valuation of their property.

From comparisons with data on the living of the Negroes of the towns of Farmville, Va., and Sandy Spring, Md., it was inferred that the future would see "the Negroes better their conditions as their environment becomes better" (p. 1044). It was also pointed out that "the home was fast becoming among the more intelligent classes in Xenia the real social unit" (p. 1041), in place of the church which formerly completely occupied the social life of the Negroes.

MEEKER, ROYAL, and KITTREDGE, DOROTHEA D.

(282)

ANALYSIS OF SOME EFFECTS OF INCREASED COST OF LIVING ON FAMILY BUDGETS. U. S. Dept. Labor, Bur. Labor Statis. Monthly Labor Rev. 11 (1): 1-10. 1920.

The percentage distribution of expenditures between food, clothing, rent, fuel and light, furniture and furnishings, and miscellaneous items is shown for the wage-earning and low-salaried families studied by the Bureau of Labor Statistics in 1901, and in 1918-19. The percentages spent for food and rent were lower in



1918-19 than in 1901, and that for clothing considerably higher. On the theory that this difference represented in part the inequality of price changes for different types of goods, a hypothetical distribution for 1919 was calculated as follows: Assuming that percentage distribution of expenditures in 1914 would have been the same as in 1901, the amounts that would have been expended by a family with an income of \$1,000 in 1914 were calculated for the items listed above. The amounts equivalent in December 1919 to the sums thus secured were computed with the aid of a cost-of-living index based on prices in six industrial cities, and a new percentage distribution for 1919 calculated. A comparison of the three distributions shows that the relatively small increase in the cost of housing, fuel, and light as compared with the very great increase in the cost of clothing and furniture, and the great, but not so great increase, in the cost of food and miscellaneous items had evidently affected distribution of family expenditures. It seemed clear that "when the price increases of the groups of items in the budget vary widely, as occurred during the war, 'Engel's law' does not hold true" (p. 1).

The article includes detailed figures on quantities of food consumed by families of 3.35 equivalent adult males in the North Atlantic States in 1901, in 5 cities therein in 1918-19, and according to the "health and decency" budget of the Bureau of Labor Statistics.

MARYLAND BUREAU OF STATISTICS AND INFORMATION. (283)  
ELEVENTH ANNUAL REPORT. Md. Bur. Statis. and Inform. Ann. Rept. (1902)  
11: 2-21. 1903.

The average income in 1902 of 40 families selected at random in Baltimore, Md., was \$713 per family and \$129 per capita. Total income ranged from \$245 to \$1,734; total expenditures for current living, from \$280 to \$1,734. Of these 40 families, 9 showed a deficit, 17 came out even, and only 14 showed small surpluses at the end of the year. Summary statements are included for 18 additional families, giving approximate income and expenditures for rent, food, fuel, and clothing, as well as other details of family living conditions.

MORE, LOUISE B. (284)  
WAGE EARNERS' BUDGETS: A STUDY OF STANDARDS AND COST OF LIVING IN  
NEW YORK CITY. Greenwich House Ser. Soc. Studies 1, 280 pp. New  
York. 1907.

This study gives the results of an investigation into the content of living during 1902-5 among families of different races and occupations living in the neighborhood of Greenwich House, a social settlement in the lower West Side of New York City. The 200 families were selected for study because of their friendship with the investigators and because of their willingness and ability to cooperate. They were believed to be typical of different classes of workmen. A few shopkeepers were also included. One hundred heads of families were classified as unskilled workers, 45 as skilled workers, and 55 as clerical. One hundred and five heads of the families were native born, and 95 were foreign born, chiefly from Ireland, Germany, England, and Italy. The average size of all families, including father, mother, children, boarders, and relatives or dependents who had been members of the family 6 months or more, was 5.6 persons.

The total money value of living per family averaged \$836, leaving an average surplus of \$15. The money value of food averaged \$363, of rent \$162, of clothing \$88, of fuel and light \$42, and of life insurance \$32. The value of coal sent to families as gifts was included. Meals given to the man as a waiter or bartender were valued at \$2 a week. Clothing given by friends, churches, or societies was valued as if purchased for cash. Old clothing handed on by more prosperous friends was estimated at what its worth to the housewife would be. Articles bought on the installment plan were included as if bought outright, and any unpaid amounts at the end of the year were regarded as a debt or deficit just as unpaid rent, other bills, and life insurance. Supplementary data are given concerning the manner and life of the families, such as meals served, kind of foods consumed and their quality and quantity, standards of dress, installment sales, appearance of homes, attitude toward funeral expenses, insurance, and pawnshops.

This study of income and expenditures indicated that under city conditions "food and clothing expenditures vary greatly with the income, but rent and insurance are considered by the average family to be the invariable and necessary expenditures" (p. 265). It also showed that as income increased the family's needs and desires expanded as indicated by the many expenditures for comforts

and luxuries entered under sundries. The character of the wife was shown to be of crucial importance for the household economy.

Other material presented includes separate discussions of the content of living of 12 typical families, tabulations of incomes and expenditures of dependent families compared with similar income groups of independent families, information showing sources and causes of dependence, and comparison of the findings of the present investigation with other studies of family expenditures. The latter indicated that "on the whole, there is remarkable harmony in the results of all of the investigations notwithstanding great differences in social and industrial conditions and periods of time and whether they were obtained by the extensive or the intensive method" (p. 263).

The household accounts which had been kept by 50 families for periods ranging from 1 week to 1 year are also given. These records indicated that the ordinary diet of the American workman's family was more abundant and varied than that of other countries. The expenditures for foods for some accounts were reduced to terms of "cost per man per day," by use of the Atwater standard. Separate records given for 10 families which had kept records for 4 weeks or longer show kind and amount of food purchased, and cost per week and per man per day.

GOODYEAR, CAROLINE (285)  
A FAMILY BUDGET. Charities 11 (10): 192. 1903.

A French family of husband, wife, and two small children in New York City kept strict accounts for the month from May 5 to June 5, 1903. The father, a waiter, earned from \$50 to \$60 a month plus meals. During the month of record the family spent for food \$20.82, for dry goods and furniture \$7.35, for light and fuel \$1.89, and for other items \$5.12. Their rent of \$9.50 a month had not been paid.

COLORADO BUREAU OF LABOR STATISTICS. (286)  
BIENNIAL REPORT. Colo. Bur. Labor Statis. Bien. Rept. 9: 16-28. 1904.

Incomplete reports on income, expenditures, and working conditions in 1903-4 were received from 47 wage earners in reply to 2,000 questionnaires distributed throughout the State. Of these, 32 were heads of families reporting income.

KANSAS BUREAU OF LABOR AND INDUSTRY. (287)  
BIENNIAL REPORT. Kans. Bur. Labor and Indus. Bien. Rept. 2: 3-152, 229-337, 361-407. 1905.

This report presents data on income, expenditures, and working conditions for 741 wage earners in 1903, of whom 569 were married, and for 340 wage earners in 1904, of whom 274 were married. These returns came from workers in the train service, miscellaneous railway trades, building trades, and miscellaneous trades throughout Kansas. Data are also given on monthly income and expenditures and on working conditions in 1904 for 267 miners in 3 counties, of whom 203 were married.

WASHINGTON [STATE] BUREAU OF LABOR. (288)  
BIENNIAL REPORT. Wash. [State] Bur. Labor Bien. Rept. (1903-4) 4: 159-168. 1904.

From questionnaires sent to 100 representative wage earners data were secured on income, expenditures, and working conditions in 1903-4 for 54 persons engaged in 33 occupations in 12 cities. Of these workers, 42 were married.

HERZFELD, ELSA G. (289)  
FAMILY MONOGRAPH 8, THE HISTORY OF TWENTY-FOUR FAMILIES LIVING IN THE MIDDLE WEST SIDE OF NEW YORK CITY. 150 pp. New York. 1905.

Following the Le Play method, this author studied 24 families living in the middle West Side of New York City. The studies were begun in October 1899 and were completed by May 1904, each study covering a period of several months. Detailed figures on income and expenditures for 1 month in 1904 are given for a family consisting of a mother and 5 children. For all of the families, detailed descriptions are included of the members of the family, home surroundings, habits of life, beliefs, and attitudes, and material is presented on the occupations, wages, and time of employment for each wage earner. In the majority of the families, the parents were foreign-born, 17 of the fathers and 11 of the mothers having come from England, Ireland, or Germany.



IOWA BUREAU OF LABOR STATISTICS. (290)  
ELEVENTH BIENNIAL REPORT. Iowa Bur. Labor Statist. Bien. Rept. (1903-4).  
11: 272-291. 1905.

Individual reports on earnings, insurance, home ownership, and working conditions in 1904 are presented for 333 wage earners in 69 occupations in Iowa. Of these workers, 253 reported more than one person dependent upon their earnings.

MARYLAND BUREAU OF STATISTICS AND INFORMATION. (291)  
THIRTEENTH ANNUAL REPORT. Md. Bur. Statist. and Inform. Ann. Rept.  
(1904) 13: 118-119. 1905.

Data on income and expenditures in 1904 are presented for 13 families of skilled and unskilled workers living in Baltimore. Size of family ranged from 2 to 8 persons. Total income varied from \$480 to \$996, and total expenditures from \$213 to \$929.

IOWA BUREAU OF LABOR STATISTICS. (292)  
TWELFTH REPORT. Iowa Bur. Labor Statist. Rept. (1905) 12: 166-187.  
1907.

In response to questionnaires concerning earnings and living and working conditions for 1905, replies were received from 407 wage earners in 41 occupations throughout the State. Of these, 224 workers reported more than one person supported by their earnings.

FORMAN, SAMUEL E. (293)  
CONDITIONS OF LIVING AMONG THE POOR. U. S. Dept. Com. and Labor,  
Bur. Labor Bull. 64: 593-698. 1906.

"It is along the poverty line, sometimes above it and sometimes below it \* \* \* that the present inquiry has been conducted" (p. 594). Families of this status were chosen for this study in the District of Columbia because it was believed that "families wholly submerged by poverty" would have been incapable of intelligently and honestly cooperating to keep the records necessary for the study. For 5 weeks—2 in August 1905, 1 in September 1905, and 2 in January 1906—detailed expenditure records were kept by 19 families. For each family, material is given on housing conditions, monthly rent, make-up of the family, those earning and their average wages, and size of family measured in "food-consuming power." The scale, set up as standard in the eighteenth annual report of the Commissioner of Labor, was used to measure "food-consuming" power. The expense accounts are given for individual families for each day of the record and show every item purchased. Summary tables give the total for each item for the 5 weeks for each family. Included are detailed data for these families on insurance policies held and their weekly premiums, on material loans, on installment buying and other uneconomic methods of purchasing, and on irregularity of employment. For those studied "the loss of a week's wages would have meant serious discomfort, if not suffering, while the loss of a month's wages would have resulted in an enforced appeal to charity" (p. 594). The list of miscellaneous expenses was found to contain scarcely anything other than items necessary for household operation, carfare for going to work and market, and health bills. "The more closely the miscellaneous list is examined, the more meager it appears, and its meagerness is a true index to the poverty of the poor" (p. 615).

KANSAS BUREAU OF LABOR AND INDUSTRY. (294)  
TWENTY-SECOND ANNUAL REPORT. Kans. Bur. Labor and Indus. Ann.  
Rept. (1906) 22: 1-88. 1907.

Reports for 1905-6 were obtained from 335 Kansas wage earners, 279 of whom were heads of families. Information on wages, working hours, number of dependents, expenditures for food, clothing, fuel, sickness, rent, insurance, and other items is given for individual cases.

OSKISON, JOHN M. (295)  
THREE FAMILY BUDGETS; CAREFUL RECORDS OF MONEY SPENT THAT HAVE  
LED TO WISE ECONOMY AND MODEST WEALTH. Mother's Mag. 11 (11):  
37-38, 73. 1916.

To show how some families practice thrift, the records of income and expenditures for a period of years are given for three families. One record from 1905 through 1914 is for the family of five of a bookkeeper. In that time total income rose from \$1,626 to \$2,031, and expenditures from \$1,035 to \$1,429, the remainder

being savings. A second record is given in detail for an older couple whose children were no longer home and runs from 1907 through 1912 when the wife died. The husband's record for the following 2 years is also given. The third record is for a professional man's family.

MARYLAND BUREAU OF STATISTICS AND INFORMATION.

(296)

FIFTEENTH ANNUAL REPORT. Md. Bur. Statis. and Inform. Ann. Rept. (1906) 15: 133-151. 1907.

The expenditures of 10 families of different status in society, with an account of their earnings, their income, occupation, and expenditures for all the family, and including both necessities and luxuries are presented for 1906. The total incomes of these Baltimore, Md., families for the year ranged from \$260 to \$1,507. Total expenditures for current living ranged from \$599 to \$1,507; for food, \$264 to \$589; for rent, \$120 to \$360; and for clothing, \$26 to \$251.

CHAPIN, ROBERT C.

(297)

THE STANDARD OF LIVING AMONG WORKINGMEN'S FAMILIES IN NEW YORK CITY. 372 pp., illus. New York, Russell Sage Foundation, Charities Publication Committee. 1909.

This book presents data from four investigations made at the request of the New York State Conference of Charities and Correction, in order to arrive at a dependable representation of the standard of living (1) absolutely, for a given time, place, and class of workers, and (2) relatively, in comparison with the standards of different times, places, and classes.

The first report, that by Professor Chapin, is a study of 391 families who lived in Greater New York City in 1907. An attempt was made to have the families studied representative of every section of the city and of the most important nationalities; no dependent families were included; attention was concentrated on families having an income of from \$500 to \$1,000 a year, consisting of man, wife, and from 2 to 4 children under 16 years of age. Of the 391 families from whom reports were secured for 1906-7, the modal group included 79 cases with incomes ranging from \$700 to \$799. In this group, average income amounted to \$749; \$718 was spent for current living expenses, \$336 for food, \$99 for clothing, \$161 for rent, and \$37 for fuel and light. Size of family in adult-energy units was calculated by the use of the Atwater scale, and the number of families spending less than 22 cents per man per day for food, the amount estimated as necessary to purchase an adequate diet, is given by income and nationality groups.

An estimated clothing budget and the cost of such a budget is given for a normal family—man, wife, girl of 10, and boys of 6 and 4 years of age "on the basis of the averages of expenditures and the details given in typical schedules" (pp. 165-166). This budget cost \$105, and it was therefore assumed that an expenditure of less than \$100 would not be sufficient to provide decent clothing for a family of five, except for the garment workers for whom \$80 was estimated to be sufficient.

As a result of this investigation it was concluded "that an income under \$800 is not enough to permit the maintenance of a normal standard" (p. 245), in New York City in 1907, and "that an income of \$900 or over probably permits the maintenance of a normal standard, at least so far as the physical man is concerned" (p. 246). "A comparison of families by nationalities shows that at almost every point a lower standard of expenditures prevails among the Bohemians, Austrians, Russians, and Italians than among the Americans, Teutons and Irish" (p. 247).

The second report presents in summary form data on the income and expenditures of 19 families in nine cities and towns of New York.

The third study presents an analysis of the expenditures of 100 families in Buffalo, N. Y., by John R. Howard, Jr. Data are given on nationality, occupation of father, average income and expenditure, source of income, type of housing, and overcrowding. Average expenditures for rent, fuel and light, furniture, insurance, food, clothing, health, carfare, taxes, dues, and contributions, recreation and amusement, education and reading, and miscellaneous are given by nationality groups. Food expenditures are analyzed for adequacy by measuring the families according to the Atwater scale, and determining the number spending more or less than 22 cents per energy unit per day. The percentage for each nationality purchasing newspapers and the percentage reporting use of library are also given by nationality groups.

The fourth study in this volume, Report on Nutrition Investigation, by Frank P. Underhill, Sheffield Laboratory of Physiological Chemistry, Yale University,



was undertaken in connection with the study of the standard of living of workmen's families in New York City because there had arisen "the query whether some indication might be obtained concerning the nutritive conditions of these classes of people as judged from the quantities and kinds of food materials bought. Data on food consumption were obtained for 100 families for the period of a week from grocery and meat books of the family, from account books kept by the housewife, and finally from estimations by the family of the various staple articles bought" (p. 319). The families were chosen as representative of 12 different national groups living in New York City. The division into families well nourished and those poorly nourished was made on the basis of the protein, carbohydrate, and energy furnished by the foods purchased. The amount and cost of food purchased were reduced to a per-man-per-day basis by the use of the Atwater scale. Comparison between the amounts spent for food by well-nourished and poorly nourished families indicated that in general when less than 22 cents per man per day is spent for food, the nourishment derived is insufficient, and when more than 22 cents per man per day is expended the family is well nourished. This statement was used as a basis for judging the adequacy of food expenditures by Chapin and Howard in the two studies summarized.

The appendix contains preliminary reports of the committee on standard of living of the New York State Conference of Charities and Correction, a copy of the schedule used, and a translation of one of Le Play's monographs.

IOWA BUREAU OF LABOR STATISTICS. (298)  
THIRTEENTH BIENNIAL REPORT. Iowa Bur. Labor Statis. Bien. Rept.  
(1906-7) 13: 212-239. 1908.

Material for 329 wage earners, men and women who support others than themselves from their earnings, is included in this report. Fifty occupations and all sections of Iowa are represented. The data are for 1906-7. Material is given by individual cases for place of work, occupation, time working, wage rates, yearly earnings, number supported by earnings, conditions of employment, life and fire insurance carried, value of and equity in owned homes, and variation in hours and wages since 1906. The average yearly earnings of the men reporting total income, including those who supported themselves only, were \$800 per year.

KANSAS BUREAU OF LABOR AND INDUSTRY. (299)  
TWENTY-THIRD ANNUAL REPORT. Kans. Bur. Labor and Indus. Ann. Rept.  
(1907) 23: 1-100. 1908.

Reports on family living and working conditions in 1906-7 were obtained from 390 Kansas wage earners, in the railway service, building trades, and other occupations; 316 of them were married.

NEILL, CHARLES P. (300)  
CONDITIONS UNDER WHICH CHILDREN LEAVE SCHOOL TO GO TO WORK. *In* U. S. Department of Commerce and Labor. Report on Condition of Woman and Child Wage Earners in the United States. 61st Cong., 2d sess., S. Doc. 645, v. 7, pp. 80-108. 1910.

"The main part of this report consists of an intensive, though by no means exhaustive, study of 622 children in seven different localities, taken from two northern and two southern States. \* \* \* Industrial and educational opportunities alike had to be taken into consideration in order to secure localities that should be representative" (p. 9). Data on family living are presented for 1906-7 for 574 families. The average yearly income from all sources was \$1,095. The average monthly rent per family varied from \$6.61 in Georgia and Alabama counties to \$11.57 in Columbus, Ga. A portion of the report is devoted to discussion and tables concerning education, the willingness of parents to send their children to school longer, reasons for unwillingness to do so, length of time parents could have sent their children to school, number of children who left school under legal age, etc.

BRUÈRE, MARTHA B., and BRUÈRE, ROBERT W. (301)  
INCREASING HOME EFFICIENCY. 318 pp. New York. 1912.

This study included farm and professional as well as wage-earning families and is annotated as (11) and also listed as (424).

OKLAHOMA DEPARTMENT OF LABOR. (302)  
FIRST ANNUAL REPORT. Okla. Dept. Labor Ann. Rept. 1: 39-118. [1908.]

Data on income, expenditures, and working conditions in 1907 were gathered throughout the State from 242 wage earners, of whom 175 were married. They were employed in the train service, miscellaneous railway trades, building trades, and miscellaneous trades.

BYINGTON, MARGARET F.

(303)

HOMESTEAD: THE HOUSEHOLDS OF A MILL TOWN. 292 pp., illus. New York, Russell Sage Foundation, Charities Publication Committee. 1910.

This study "is essentially a portrayal of these two older social institutions, the family and the town, as they are brought into contact with this new insurgent third" (p. v), the factory. To study "the home life the mill town leads on the wages the mill pays" (p. 4), Homestead, a steel town of about 25,000 people in the Pittsburgh district, was chosen. It is a community "where half the workmen are day laborers, where families are almost solely dependent on the man's earnings, and where a man's earnings 1 month are fairly like those of the next" (p. 43). A detailed account of all purchases for 5 to 8 weeks during the period from October 1907 to April 1908 was obtained from 90 families representing different earning and racial groups. All accounts were discarded in which there was a discrepancy of over 5 percent between income and expenditure. The group was composed of 29 Slavic families, 13 English-speaking European, 25 native white, and 23 colored. The average size of family was, respectively, 4.1, 6.8, 4.6, and 3.4 persons. The average weekly expenditure, including insurance, was, respectively, \$13.09, \$16.97, \$20.47, and \$12.39. Expenditures for food averaged, respectively, \$5.98, \$7.55, \$7.44, and \$4.84; for rent, \$2, \$2.91, \$3.16, and \$2.43; for fuel, \$0.38, \$0.45, \$0.84, and \$0.82; and for insurance, \$0.88, \$1.03, \$1.21, and \$0.92. Expenditures for food per man per day were calculated according to the Atwater scale. The expenditures of a family are given for 1 week in 1907 with the man working full time and in 1908 at half time. The author concludes "that only when earnings are \$15 a week, or more, can we confidently look for a reasonable margin above the requisite expenditures for necessities" (p. 105).

NEILL, CHARLES P.

(304)

COTTON TEXTILE INDUSTRY. *In* United States Department of Commerce and Labor, Report on Condition of Woman and Child Wage-Earners in the United States. 61st Cong., 2d sess., S. Doc. 645, v. 1, pp. 413-516, 756-762, 824-931, 1014-1031. 1910.

"In order to study the family conditions of those families having women or children employed in the cotton mills, the names of a certain number of typical women and child employees of various ages were selected from the list of employees as taken from the pay rolls of each of the establishments investigated, and visits were made to the homes" (p. 413). Data were obtained for 1907-8 from 854 families from 4 New England States (Maine, Massachusetts, New Hampshire, and Rhode Island) and 1,567 families in 6 Southern States (Virginia, North Carolina, South Carolina, Georgia, Alabama, and Mississippi). The average size of family was 6.5 persons in New England and 6.6 persons in the Southern States. The average net income for New England families was \$1,134, and for southern families \$822. The annual rent for New England families was \$76 in company houses, \$111 in noncompany houses; for southern families, \$43 in company houses, \$64 in noncompany houses. Homes were owned by 126 New England families and by 76 southern families; 127 southern families lived in houses rent free.

(305)

GLASS INDUSTRY. *In* United States Department of Commerce and Labor, Report on Condition of Woman and Child Wage-Earners in the United States. 61st Cong., 2d sess., S. Doc. 645, v. 3, pp. 503-620, 739-763, 814-887, 940-955. 1910.

"In order to study the family conditions of those families having women or children employed in the glass factories, the names of a certain number of woman and child employees of various ages were selected from the list of employees as taken from the pay rolls of each of the establishments investigated, and visits were made to the homes. \* \* \* Schedules showing such family condition were secured for nearly all children under 16 and for about half of the women workers" (p. 505). Schedules for 2,137 families were obtained in 1907-8 in 14 States (Georgia, Illinois, Indiana, Maryland, Missouri, New Jersey, New York, Ohio, Pennsylvania, South Carolina, Tennessee, Virginia, West Virginia, and Wisconsin). Classified according to nativity and race of the head of the family, 870 (787 white and 83 colored) were shown to be native born of native parents, 270 were native born of foreign parents, and 997 were foreign born. The average size of family was 6.3 persons. Average annual income was \$855 and average annual rent was \$112. Data were presented for married women at work, their earnings, and their family condition; for 1,235 single women over 16 at work; and for mar-



ried women and children under 16 by States. An analysis was made of 864 families to relate child labor to family income. Tables are given which show income, nativity, and housing conditions of owners and renters according to the size of cities.

NEILL, CHARLES P.

(306)

MEN'S READY-MADE CLOTHING. *In* United States Department of Commerce and Labor, Report on Condition of Woman and Child Wage-Earners in the United States. 61st Cong., 2d sess., S. Doc. 645, v. 2, pp. 215-300, 349-410, 659-669, 715-749, 832-867. 1910.

In 1907-8 schedules were obtained from 2,274 families in Chicago, Rochester, New York, Philadelphia, and Baltimore, that had women or children employed in clothing shops. "In order to study family conditions \* \* \* the names of a certain number of typical woman and child employees of various ages were selected from the list of employees as taken from the pay rolls of each of the establishments investigated" (p. 349). The average size of family was 5.4 persons, and the average number of wage earners was 2.9 per family. Seventy heads of families were native born of native parents, 100 were native born of foreign parents, and 2,104 were foreign born. Italians, represented by 1,041 families, were preponderant, because an effort was made to secure schedules for home finishers, a large proportion of whom were Italians. The average net income per family amounted to \$790; average net incomes for those families having mothers working, \$561; for those having boys 16 years of age and over working, \$1,055; for those having girls 16 years of age and over working, \$935; for those having children 14 and 15 years of age working, \$912; for those having children under 14 years of age working, \$777. The average annual rent amounted to \$132.

(307)

THE SILK INDUSTRY. *In* United States Department of Commerce and Labor, Report on Condition of Woman and Child Wage-Earners in the United States. 61st Cong., 2d sess., S. Doc. 645, v. 4, pp. 11-14, 227-304, 310-321, 420-424, 453-518, 570-583. 1910.

Data on 1,909 families in the silk industry are included in this report. "The investigation of the condition of woman and child wage earners in the silk industry was carried on in the two States of New Jersey and Pennsylvania" (p. 11). In New Jersey, 827 families were studied; in Pennsylvania, 1,082. "No family was thus studied which did not contain a silk-mill worker who was either a child under 16 years or a female 16 years of age and over" (p. 14). The heads of 158 families were native born of native parents, 226 were native born of foreign parents, and 1,525 were foreign born of foreign parents. Homes were owned by 825 families and rented by 1,184. The average size of family was 5.5 persons in New Jersey and 7 persons in Pennsylvania. Average annual income (1907-8) was \$1,050 in New Jersey and \$902 in Pennsylvania. The average monthly rent was \$9.89 and \$8.25 in the two States, respectively. Discussion and tables on family composition, distribution of income according to the members of the family working, average earnings of children of various ages, married and single women at work, literacy, and school attendance are included.

WASHINGTON [STATE] BUREAU OF LABOR STATISTICS AND FACTORY INSPECTION. (308)

SIXTH BIENNIAL REPORT. Wash. [State] Bur. Labor Statis. and Factory Insp. Bien. Rept. (1907-8) 6: 90-91, 157-159. 1908.

A study of 61 wage earners in skilled and unskilled work in 10 cities gives data for the year 1907-8 on income, expenditures, and working conditions. Thirty-nine workers were married. A second study of 33 wage earners in 22 occupations gives earnings and rentals in eight cities. Average earnings were \$92 per month and average rent \$12 per month.

WEBER, GUSTAVUS A.

(309)

SOCIOLOGICAL STUDY OF 1,251 FAMILIES. Report of Committee on Social Betterment of the President's Homes Commission, pp. 284-297. Washington, the President's Homes Commission. 1908.

Data for 1907-8 on the income and expenditures of 1,217 families in Washington, D. C., were collected under the direction of the President's Home Commission as part of a housing study of 1,251 families. The plan was to select families having incomes under \$1,000 and representing in equal proportions the worst, medium, and best housing conditions for this income group. About half the families investigated were colored. Eight percent of the 1,217 families reporting

on incomes and expenditures had incomes of \$1,000 or over. Size of family ranged from 3.11 to 5.48 persons. The 1,123 families with incomes less than \$1,000 had an average income per family of \$559 per year. Expenditures for current living averaged \$536, leaving \$23 for savings. The proportion of expenditure for food, shelter, fuel, and light decreased steadily with increase in income. Expenditures for clothing and amusements tended to increase proportionately as incomes increased. The proportion of income spent for insurance varied irregularly. Other items of expenditure showed no marked tendency to decrease or increase with increases in income. Data are also given on working conditions, sickness, school attendance, installment payments, and insurance.

NEILL, CHARLES P., WORCESTER, WOOD F., and WORCESTER, DAISY W. (310)  
 FAMILY BUDGETS OF TYPICAL COTTON-MILL WORKERS. *In* United States  
 Department of Commerce and Labor, Report on Condition of Woman and  
 Child Wage-Earners in the United States. 61st Cong., 2d sess., S. Doc.  
 645, v. 16, 255 pp. 1911.

An intensive study of working and living conditions from 1907 to 1909 of the families of 35 cotton-mill workers was made from a more general investigation in order to show in greater detail the family economy of cotton-mill operatives (p. 9). New England was represented by 14 families in one locality, Fall River, and the South by 21 families in Atlanta, Ga., Greensboro, N. C., and a mill near Burlington, N. C. "In order fairly to present the economic condition of the cotton operatives it was necessary in selecting families to include some which had attained, in the judgment of the investigators and of the respective communities, a fair standard of life. It was also desirable to study particular families that represented the lowest standards found among cotton-operative families" (p. 10).

All members of the southern families studied were native-born white Americans. The average size of these families was 8.5 persons, including boarders; the average number of wage earners was 3.6 persons per family. The total value of food, furnished and purchased, ranged from \$221 to \$738. In order to determine the sufficiency of the dietaries, comparisons were made with the dietary of the Federal prison in Atlanta. Minimum standards for food, clothing, rent, fuel, light, and sundries are discussed. A fair standard of living is one "that provides not only for physical efficiency but allows for the development and satisfaction of human attributes. Just what is to be included in such a standard depends upon the people to whom it is applicable" (p. 142). A standard of living for southern cotton-mill families and its cost is presented.

The 14 Fall River families included English, Irish, French-Canadian, Portuguese, Polish, and north Italian. The average size of family was 6.8 persons, including boarders and lodgers; the average number of wage earners was 3.2 per family. Expenditures for various items of family living are presented for each family. A fair standard of living and its cost for these families were also determined. The total cost for a fair standard was placed at \$732 for English, Irish, and French-Canadian families and at \$691 for Polish, Portuguese, and Italian.

UNITED STATES IMMIGRATION COMMISSION. (311)

IMMIGRANTS IN CITIES; A STUDY OF THE POPULATION OF SELECTED DISTRICTS  
 IN NEW YORK, CHICAGO, PHILADELPHIA, BOSTON, CLEVELAND, BUFFALO, AND  
 MILWAUKEE. U. S. Immigr. Comm. Repts., v. 26-27. 1911. (61st Cong.,  
 2d sess., S. Doc. 338, 2 v.)

This report presents the results of an investigation of living conditions in 1907-9 among the residents of some of the most crowded quarters in seven cities, New York, Chicago, Philadelphia, Boston, Cleveland, Buffalo, and Milwaukee. "The purpose of the inquiry was to determine to what extent congestion actually prevails among immigrants in cities and the conditions peculiar to particular cities and races, and also to find generally the economic and social status of the city-dwelling immigrants" (v. 1, p. 3). Agents obtained records from all the households within a neighborhood selected for study. The investigation covered 10,206 households, comprising 51,006 individuals. The data are summarized for the seven cities and for each city with reference to composition of population studied, living conditions, economic status, and assimilation.

For each city data are presented on family income for selected groups of families. In making the selection, families established less than 1 year, families with complicated financial arrangements obscuring exact amount of income or sources, and families with earnings or contributions representing the entire earnings of members who are profit earners or whose net earnings are uncertain, were omitted. Average yearly income for the families selected was as follows: Boston, 925



families, \$582; Buffalo, 422 families, \$574; Chicago, 1,495 families, \$694; Cleveland, 908 families, \$491; Milwaukee, 637 families, \$650; New York, 1,665 families, \$771; Philadelphia, 663 families, \$494. Figures on expenditures are given for rent only by households. The average monthly expenditure for rent for 8,673 households was about \$10.

Du Bois, W. E. BURGHARDT, ed.

(312)

THE NEGRO AMERICAN FAMILY; REPORT OF A SOCIAL STUDY MADE PRINCIPALLY BY THE COLLEGE CLASSES OF 1909 AND 1910 OF ATLANTA UNIVERSITY, UNDER THE PATRONAGE OF THE TRUSTEES OF THE JOHN F. SLATER FUND; TOGETHER WITH THE PROCEEDINGS OF THE 13TH ANNUAL CONFERENCE FOR THE STUDY OF THE NEGRO PROBLEMS, HELD AT ATLANTA UNIVERSITY ON TUESDAY, MAY THE 26TH, 1908. Atlanta Univ. Pub. 13, 156 pp., illus. Atlanta. 1908.

This study analyzes the marriage customs, home conditions, economic organization, and family life of Negroes, to provide a basis for encouraging and helping social reform. Among the original data presented are income and expenditure records collected from 14 families. The family living conditions are described for 13 country and city families ranging from a family of 3 with an annual income of \$200, to a family of 11 with an income of \$2,500. For 20 laborers' families, information is given on weekly earnings, monthly rent, quantities and expenditures for various kinds of food, and expenditures for fuel and light.

OKLAHOMA DEPARTMENT OF LABOR.

(313)

SECOND ANNUAL REPORT. Okla. Dept. Labor Ann. Rept. (1908-9) 2: 41-91. [1909.]

Data on income, expenditures, and working conditions in 1908 are given for 92 wages earners of whom 66 were married. The report came from all parts of the State from those employed in the train service, the miscellaneous railway trades, building trades, and miscellaneous trades.

GREAT BRITAIN BOARD OF TRADE.

(314)

COST OF LIVING IN AMERICAN TOWNS; REPORT OF AN ENQUIRY BY THE BOARD OF TRADE INTO WORKING-CLASS RENTS, HOUSING, AND RETAIL PRICES, TOGETHER WITH THE RATES OF WAGES IN CERTAIN OCCUPATIONS IN THE PRINCIPAL INDUSTRIAL TOWNS OF THE UNITED STATES OF AMERICA, WITH AN INTRODUCTORY MEMORANDUM AND A COMPARISON OF CONDITIONS IN THE UNITED STATES AND IN THE UNITED KINGDOM. 533 pp. London. 1911.

"The present enquiry is the fifth of a series undertaken by the Board of Trade into working-class conditions of life in the more important industrial towns of various countries, and particularly into wages and hours of labour, rents and housing conditions, retail prices of food and the expenditure of working-class families on food" (p. ix). Data for the United States which were comparable with those obtained in the report on the Cost of Living of the Working Classes in the United Kingdom were obtained in 1909 for 7,616 families in 28 representative industrial towns. Twenty-six of these towns were east of the Mississippi River; 1 was located on both banks of the river, and 1 on the west bank. The investigation was limited to wage earners in the three trades common to all cities, namely, the building, engineering, and printing trades. No less than 28 different nationalities were represented among the families studied.

The largest of these groups, the American-British northern, contained 3,215 families. The size of the families ranged from 3.8 to 6.4 persons. The average income ranged from £1 16s to £10 6s. 10d.; the expenditure for food, 18s. 6d. to 58s. 9d.

Information on occupations, wages, hours of labor, housing conditions, rents, and retail prices are presented in detail for each of the 28 cities included in the report.

The conclusions drawn from the investigation indicated that the predominating type of dwelling in the United States and in Great Britain was the single-family dwelling. The American workman paid a little more than twice as much as the English workman for the same amount of house accommodation.

"By the budgets as a whole, however, various features are brought into relief, and among these may be mentioned the high level of family income, the large contribution made by children in the higher income classes, the insignificant earnings of the wives, the considerable expenditure on food, and the large proportion of income remaining after the cost of food and rent has been deducted" (p. iv).

The wage-earner families in the United States paid more for food than did similar families in Great Britain. The consumption of meat was higher among all income groups in the United States than in European countries and well above the general European standard, but the food bill of the American families required a relatively smaller proportion of the total income than in the European countries.

The data from this report has been summarized in dollars and cents, with minor changes, in the forty-first annual report on the statistics of labor published by the Massachusetts Bureau of Statistics of Labor.

IOWA BUREAU OF LABOR STATISTICS. (315)  
FOURTEENTH REPORT. Iowa Bur. Labor Statis. Rept. (1908/9) 14: 270-311, 327-345. 1910.

Reports on family living and working conditions in 1909 were secured from 519 wage earners, of whom 423 reported more than one dependent upon their earnings. Data were also secured for 1909 from 118 men in the railway service of whom 108 reported more than one dependent.

KENNGOTT, GEORGE F. (316)  
THE RECORD OF A CITY; A SOCIAL SURVEY OF LOWELL, MASSACHUSETTS. pp. 110-137. New York. 1912.

This volume shows the living conditions among the laboring population in the city of Lowell, Mass., from its early development as a factory site. As part of this study, reports on incomes and expenditures for 1 week in 1909 were secured from 287 families, some of whom were unmarried men and women. About 11 nationalities were represented, chiefly French-Canadian, Greek, Polish, and Irish. The individual records of 87 families chosen at random are given. The author concludes that "our earlier view is confirmed that the condition of the unskilled laborer in Lowell today is a hard one, if he must support a family with his wages, unassisted by wife or children" (p. 137).

MASSACHUSETTS [BUREAU OF STATISTICS]. (317)  
FORTY-FIRST ANNUAL REPORT ON THE STATISTICS OF LABOR. Mass. [Bur. Statis.] Ann. Rept. on Statis. Labor (1910) 41 (pt. 3): 189-333. 1911. (Mass. Pub. Doc. 15.)

This report summarizes in dollars and cents material which was collected in 1909 and which, presented in terms of pounds sterling, was published in the Report of an Enquiry by the Board of Trade into Working Class Rents, Housing, and Retail Prices, together with the rates of wages in certain occupations in the principal industrial towns of the United States of America, with an introductory memorandum and a comparison of conditions in the United States and the United Kingdom. The text of this report referring to Massachusetts cities is therefore, with certain minor changes in diction, virtually a reprint of the original text, without other important changes than the substitution of later returns obtained by this bureau (pp. 189-190).

MASSACHUSETTS COMMISSION ON THE COST OF LIVING. (318)  
REPORT OF THE COMMISSION ON THE COST OF LIVING, MAY, 1910. [Mass. General Court, 1910.] House [Doc.] 1750, 752 pp. 1910.

The first report of the Massachusetts Commission on the Cost of Living, created in March 1910, gives the results of a thorough investigation of the cost of living in Massachusetts and of "an inquiry into the causes of the increased prices of the necessities of life as compared with wages and incomes, and into the direct and indirect effect of our present tariff laws upon wages, income and cost of living" (p. 11). Lack of time prevented any extended original research. The commission made use of all existing material which could be assembled, instituted inquiries where possible, and had some special studies made by experts. Some information was also obtained through public hearings. The final report submitted contains detailed facts as to the movement of wholesale prices, retail prices and wages, lengthy discussions on the causes and the effects of the changes, and possible legislative or other remedial action.

Specific data relative to family expenditures are found in the appendix. A report prepared by I. H. Howie contains a compilation of data previously published, some unpublished material, and other facts gathered from interviews with persons familiar with the subject.

Data which never before had been published by any other agency give in detail, for 1 week in 1909, the expenditures of 43 Boston families. The schedules had been filled out in March of that year for the investigation of the Board of Trade of



Great Britain into the cost of living in cities in the United States. The figures cover the expenditures for various purposes for each family, the number of persons in the family, the occupation of the head of the family, and total weekly income. Clothing was not included.

Expenditures for food for a professional family of four adults for the month of March of each year from 1906 through 1910 as shown in the family account book are also given.

The commission found the causes with regard to the advance in prices since 1897 to have been (1) the increase of gold supply, (2) the enormous waste of income through uneconomic expenditure, extravagance, and wastage, (3) "a complexity of causes, operating on the side of supply to reduce the volume and increase the expenses of production, and on the side of demand to extend and diversify the consumption of commodities \* \* \*. The chief influences on the side of demand \* \* \* are the growing concentration of population in great cities, which has increased the proportion of nonproducing food consumers; the general advance of the standard of living, which has enlarged the requirements on the part of individual consumers of all classes; and the national habit of extravagance, which has further extended and diversified the demand for comforts and luxuries created by the advance of the standard of living" (p. 529 ff.). The tariff, trusts, and unions could not be regarded as a direct and active cause of price increases.

MINNESOTA BUREAU OF LABOR, INDUSTRIES AND COMMERCE. (319)  
TWELFTH BIENNIAL REPORT. Minn. Bur. Labor, Indus. and Com. Bien.  
Rept. (1909/10) 12: 559-567. 1910.

A section of this report is devoted to the incomes and expenditures of 212 Minneapolis and Duluth families for 1909. Average size of family ranged from 4.1 persons in the \$30-to-\$35 income group to 7.28 persons in the \$40-and-over income group. Average family income from all sources was \$22.19 per week. Percentages of expenditures for food, rent, fuel, and light are tabulated according to income groups. "The nationality classification does not show anything striking because the habits and standards of the nationalities covered by the investigation are too similar" (p. 563). "The increase in food expenditures with the growth of the family is consistently seen to cut into the 'balance' from which insurance, medical care, recreation, comforts, etc., are secured" (p. 564).

OKLAHOMA DEPARTMENT OF LABOR. (320)  
THIRD ANNUAL REPORT. Okla. Dept. Labor Ann. Rept. (1909-10) 3: 67-95,  
115-138. [1910.]

This report presents data on income, expenditures, and working conditions in 1909 for 117 wage earners engaged throughout the State in the train service, miscellaneous railway trades, building trades, and miscellaneous trades. Of these men, 103 were married.

UNITED STATES IMMIGRATION COMMISSION. (321)  
IMMIGRANTS IN INDUSTRIES, PT. 1, BITUMINOUS COAL MINING. 61st Cong., 2d  
sess., S. Doc. 633, v. 1, pp. 353-413. 1911.

A section of this report includes a study on the cost of living and general level of living of families of representative races whose heads were employed in the Pennsylvania bituminous mines. "The data were secured from the records of mining and store companies, and the period covered is from April 1 to June 30, 1909. A total of 24 families of 9 races were selected for detailed comparison. The American families (3) were chosen for purposes of comparison with those whose heads were foreign born, and an effort was made to select American families whose heads were engaged in practically the same occupations as those whose heads were of foreign birth" (p. 353). The groups represented were white native born of native father, Croatian, English, German, Irish, Magyar, Polish, Scotch, Slovak, and Welsh. Household size for the 27 families ranged from 2 to 12, 4 being the modal number. Earnings of heads of families for the 3-month period ranged from \$117 to \$375. Detailed records of the daily purchases of goods for family living for each family are given. The proportionate amount of meat consumed per individual is highest for the Croats, the Croats and the Slovaks spending more than half the family income for this purpose. The American and Welsh families consumed a much greater quantity of fruit than did the other races; these two groups also had the highest proportionate outlay for miscellaneous household supplies. For a representative community figures are given for 100 families (25 families from each of the following groups, Poles, Americans,

Slovaks, Magyars) on total amount of earnings and of individual deductions by the company for rent, smithing, hospital, store, and miscellaneous, in August 1908. Such deductions represented 14.2 percent of total earnings.

KENNEDY, J. C., and others.

(322)

WAGES AND FAMILY BUDGETS IN THE CHICAGO STOCKYARDS DISTRICT, WITH WAGE STATISTICS FROM OTHER INDUSTRIES EMPLOYING UNSKILLED LABOR; A STUDY OF CHICAGO'S STOCKYARDS COMMUNITY . . . AN INVESTIGATION CARRIED ON UNDER THE DIRECTION OF THE BOARD OF THE UNIVERSITY OF CHICAGO SETTLEMENT. 80 pp., illus. Chicago. [1914.]

This study was made under the direction of the Board of the University of Chicago Settlement and deals with conditions in the "Packingtown" district (the community about the settlement) up to and including 1910. The purpose of the investigation was to ascertain how the standards of living among the people of the district were affected by the wage scales in the packing plants, and further, what factors determined wage scales. Information was obtained from pay rolls, timekeepers, and officials; from a personal canvass of 350 workers in the various departments of the packing industry; and from 184 typical stockyard families, who kept daily records of expenditures which were checked every week by paid agents, at certain periods between April 1909 and April 1910. Over 75 percent of the accounts were kept for periods of 6 months or more. An effort was also made to collect accounts representative of various groups of workers as regards incomes and nationality. Eighty-eight of the families cooperating were Polish, 68 were Lithuanian, and 28 miscellaneous. The average size of these families was 5.3 persons. Total expenditures for current living averaged \$854; for rent (131 families), \$108; for food and liquors, \$451; and for clothing, \$95.

A budget of \$800 is outlined as the minimum amount required to support a family of five decently and efficiently, and \$56 is suggested as the amount needed for each additional child. The budget for a family of five allows \$156 for rent, heat, and light; \$367 for food; and \$100 for clothing. Other points covered in the report include a discussion of the racial composition of the district; broken time, and probable average weekly earnings; actual yearly earnings of male and female workers; comparative wage scales for 1896, 1903, and 1910; movement of wages in relation to cost of living; and comparison of conditions in the packing districts of Chicago with conditions among workers in the ready-made clothing establishments of Chicago, and with conditions among unskilled laborers in Kansas City and in Omaha.

NEBRASKA BUREAU OF LABOR AND INDUSTRIAL STATISTICS.

(323)

TWELFTH BIENNIAL REPORT. Nebr. Bur. Labor and Indus. Statis. Bien. Rept. (1909-10) 12: 140-142. 1910.

This report is based on yearly expense accounts (1909-10) kept for the bureau by 6 families in 5 Nebraska cities. The tabulations show, for each family, yearly wages, yearly rentals, monthly and yearly cost of food and fuel. Rent of owned homes was estimated by the owner at what he would have to pay for the house he owned were he a tenant. Average yearly wages were \$1,113. Average annual expenditures for rent were \$188 and for fuel, \$69. Annual expenditures for food ranged from \$600 for an Omaha family to \$270 for a Lincoln family. The monthly and yearly cost of food was based on expenditures for food for the month of January 1910.

UNITED STATES IMMIGRATION COMMISSION.

(324)

IMMIGRANTS IN INDUSTRIES, PT. 2, IRON AND STEEL MANUFACTURING. 61st Cong., 2d sess., S. Doc. 633, v. 8-9.

The purpose of this study was to ascertain the extent to which immigration had furnished the labor supply for the iron and steel industry. Information on family composition and characteristics, economic status, working conditions, and housing was secured from 2,456 households in representative communities in the East, Middle West, and South. The head of the household was foreign born in 2,144 cases. The average size of the household was 6.33 persons. The annual family income (1909-10) for 2,049 selected families averaged \$568. Individual data on family and housing conditions and on income and expenditures are given for 67 families, in the eastern Pennsylvania, New York, and Birmingham districts. Detailed expenditures for food and other items were secured from store accounts for 21 households in the Birmingham district for 1 week in February-March 1909.



(325)  
WASHINGTON [STATE] BUREAU OF LABOR STATISTICS AND FACTORY INSPECTION.  
SEVENTH BIENNIAL REPORT. Wash. [State] Bur. Labor Statis. and Factory  
Insp. Bien. Rept. (1909-10) 7: 166-167. 1910.

This report contains data from 50 wage earners in 19 occupations in 11 cities on their income, expenditures, and working conditions. Thirty-three of the wage earners were married. The period to which the data applied is not definitely stated, but in all probability was 1909-10, the period for which the report was issued.

IOWA BUREAU OF LABOR STATISTICS. (326)  
FIFTEENTH BIENNIAL REPORT. Iowa Bur. Labor Statis. Bien. Rept. (1910-11) 15: 266-281. 1912.

This report for the year 1910-11 contains material on income and working conditions of 138 workers who supported others than themselves from their earnings. They represent 46 different crafts and many sections of Iowa.

MARTIN, ASA E. (327)  
OUR NEGRO POPULATION: A SOCIOLOGICAL STUDY OF THE NEGROES OF KANSAS CITY, MO. 189 pp., illus. Kansas City, Mo. 1913.

This study, made in 1912, of the Negro population of Kansas City, Mo., includes an account of the income and expenditures of 348 Negro families in 1911. Of these, 26 percent were public charges to the extent of \$37 per family per year. Average size of family ranged from 2.4 persons for the \$500-to-\$600 income group, to 3.6 persons for the \$900-to-\$1,000 income group. Average total incomes ranged from \$168 to \$1,139. Average total expenditures were \$440; for food, \$202; for clothing, \$49; for rent, \$116; and for fuel and light, \$25. Data on occupation, wages, total income, and size of family are presented for 25 heads of typical Negro families of Kansas City; also data on income, occupation, and housing conditions for 197 property owners.

ANTHONY, KATHARINE S. (328)  
MOTHERS WHO MUST EARN. Russell Sage Foundation West Side Studies, v. 2, 223 pp. New York. 1914.

An historical sketch of the middle West Side, New York City, precedes the account of a survey made of the wages, working conditions, and family life of 370 wage-earning mothers in 1911-12, in a district which comprised 80 blocks, bordering on the Hudson River between Thirty-fourth and Fifty-fourth Streets. The population of Irish and German stock was as nearly homogeneous and stable as can be found in New York. In 196 cases the husband was still living and at home; 33 of them were incapacitated or unemployed. An analysis of the occupation of all husbands, living and deceased, showed that 54 percent were engaged in seasonal work. Of the women, 70 percent were in domestic and personal service and 23 percent in manufacturing and mechanical pursuits. The average number of wage earners in a family was 2.2 persons, and the average number of persons in the family, 4.7. Average yearly income ranged from \$394 to \$1,112, and rent from \$116 to \$165 for families in which the mother only worked to families in which the mother, father, and children worked. This study indicated that not one of the mothers could afford not to earn if the home was not to be broken up or the children to suffer seriously.

MOORE, ANNE (329)  
REPORT ON THE INVESTIGATION OF ONE THOUSAND DISPENSARY CASES (SEPT. 15, 1912 TO NOV. 1, 1912). N. Y. State Jour. Med. 13 (1): 49-52. 1913.

This study was made to discover what proportion of the patients who applied for free treatment at the New York City dispensaries could have paid for the services of a private physician. From the books of 13 representative dispensaries, consecutive groups of 50 to 100 names were taken of the most recent applicants for treatment in 1912 residing in Manhattan. Since, of the 1,000 cases visited, 255 could not be located, there was clearly a need for more uniformity and care in keeping dispensary records. The majority of the patients were of the laboring class. For the 620 families reporting, size of family ranged from 2 to 9 or more persons and income from less than \$10 to over \$25 a week. Of the 745 cases located, 90 percent seemed worthy of free treatment; and the remaining seemed able to pay for medical treatment under ordinary circumstances where continuous treatment or special services would not be required.

NEBRASKA BUREAU OF LABOR AND INDUSTRIAL STATISTICS.

(330)

INDUSTRIAL SURVEY OF THE WAGE-EARNERS, LABOR UNIONS, OCCUPATIONAL DISEASES, INDUSTRIAL ACCIDENTS, COST OF LIVING, GENERAL LABOR CONDITIONS. Nebr. Bur. Labor and Indus. Statis. Bull. 25, 118 pp. 1912.

A table on average cost of living is based on data "prepared upon scientific information obtained through the keeping of 'The Family Budget,' by families selected from towns indicated, representing those receiving the minimum standard wage, each family consisting of five persons" (p. 55). The period to which the data applied, while not definitely stated, was presumably just previous to the date of the bulletin (1912).

For the seven cities studied, monthly expenditures averaged \$57. The average expenditures for food and provisions were \$21; for clothing, \$6; for rent, \$13; and for household operation, \$18.

(331)

THIRTEENTH BIENNIAL REPORT. Nebr. Bur. Labor and Indus. Statis. Bien. Rept. (1911-12) 13: 70-78. 1912.

A table on the family expenditures of wage earners of the minimum class in seven Nebraska industrial centers in 1912 is included in this report. The average size of family, according to census reports, was five persons. Total monthly expenditures for family living were \$57.97; for food and provisions, \$21.35; for clothing, \$5.92; for rent, \$13.30; for fuel, ice, and lights, \$7. Expenditures for incidentals, including union dues and insurance, were \$3.94, and for other items, \$6.46. It was found "that the cost of living, invariably, increases proportionately with the wage standard" (p. 77).

LITTLE, ESTHER L., and COTTON, WILLIAM J. H.

(332)

BUDGETS OF FAMILIES AND INDIVIDUALS OF KENSINGTON, PHILADELPHIA. 273 pp. Lancaster, Pa. 1920.

"The purpose of the investigators in making this study has been: (1) To present in detail the budgets of a number of representative textile-mill workers of the northeast section of Philadelphia, known as Kensington; (2) to attempt to ascertain, from an analysis of the data obtained in the investigation, what may be considered a fair standard of living for a textile-mill worker's family in Kensington \* \* \*" (p. 1), and further to discover whether a man could support a family, and a woman could support herself according to a fair standard of living, on wages from the textile mills. For 22 families there are detailed case studies covering 11 weeks to a year for each family, and for 1 family more than 3 years. The data apply to the period from 1912 to 1915, although most of the records were begun in 1913 and were continued into 1914. The families were of American, English, Scotch, and German birth. They lived in most cases in single houses with from 4 to 9 rooms (including bathroom), having city water and back yards. Seven families owned their own homes; for those who paid rent the range of payment was from \$8 to \$17 per month. Cost of food was measured in terms of the male-adult-equivalent scale used by the United States Department of Agriculture in its dietary studies. Cost of food per man unit averaged \$2.16 per week. On the basis of previous "maintenance of decency budgets" and the data furnished from these studies on expenditure, a budget for a fair standard of living for textile mill workers in Kensington having a family of five was presented. According to this budget total expenditures for such a family would amount to \$1,070. Many families studied earned as much as this and many did not earn nearly as much.

PARK, ROBERT E.

(333)

NEGRO HOME LIFE AND STANDARD OF LIVING. Ann. Amer. Assoc. Polit. and Social Sci. (whole no.) 138: 147-163. 1913.

This discussion of the Negro since the Civil War contains a summary of the expenditures of a journeyman printer in the South. No date is given for these expenditures, but it is probable that they refer to a period closely preceding 1913, the date when this report was published. The man lived in a 5-room cottage which he owned. Living expenses were \$240; clothing, \$60; total expenditures were \$460; savings were \$150, and insurance, taxes, and interest were \$84. He published a Sunday-school paper which added to his earnings at his trade, and his wife supplemented the income by conducting a little store.



WOOFER, THOMAS J.

(334)

THE NEGROES OF ATHENS, GEORGIA. Ga. Univ. Bull. 14 (4): 1-62. Athens. 1913. (Phelps-Stokes Fellowship Studies 1.)

This study of 1,224 Negro families of Athens, Ga., contains data (applying probably to the period just preceding 1913, the date of publication of the study) on income and expenditures for family living of 184 families. Information on property, housing conditions, schools, and community organizations was secured for the 1,224 families. The 184 families had an average income of \$500. Average expenditures for food were \$143; for clothing, \$39; for housing, \$26; for fuel and light, \$27. A comparison of percentages expended for various items by these Negro families and those given in Engel's law (C. D. Wright's version) "indicates a profound difference in the conditions of life among Negroes and German laborers. The Negro's standard of life is so low that he is able to spend the bulk of his earnings not on the necessities of life, but on pleasure and recreation" (p. 51).

NEW YORK [CITY] BUREAU OF STANDARDS.

(335)

REPORT ON THE COST OF LIVING FOR AN UNSKILLED LABORER'S FAMILY IN NEW YORK CITY. 57 pp. New York. 1915.

In order to fix the salary of street cleaners in New York City so that they should not be out of line with general wage rates for unskilled labor and yet should provide an adequate living for an average family, the board of estimates initiated the present study. A digest was made of eight studies of living costs among wage earners; 24 persons familiar with living costs in New York were visited, and a study was made of the actual expenses of 20 street-cleaners' families in 1914. On the basis of these combined studies a detailed and very carefully constructed budget for maintaining a decent standard of living for an unskilled laborer's family was presented. Five additional tentative budgets are quoted. In order to present comparable data the street-cleaners' families were selected so that each family contained only father, mother, boy 13, girl 10, and boy 6 years old. The annual family income averaged \$841 and annual expenditures for current living, \$994. Insurance premiums averaged \$37. Expenditures for food averaged \$481; for clothing, \$210; for rent, \$172; and for light and heat, \$54.

STREIGHTOFF, FRANK H.

(336)

REPORT ON THE COST OF LIVING. N. Y. State Factory Invest. Comn. Rept. 4, v. 4, appendix 7, pp. 1461-1838. Albany. 1915.

As a fourth part of its inquiry into the amount of money necessary for life in simple decency and efficiency, the New York State factory investigation made a study of family living "with particular reference to the influence of income on the breadth of that life" (p. 1471). Families in three cities were visited; 34 in New York City, 18 in Buffalo, and 17 in Troy, N. Y. The object of the study was twofold: "\* \* \* first, to serve as a check upon the estimates of the cost of living of families which have been made by various social agencies, and second, to afford independent data for new estimates" (p. 1471). Attempt was made to take only families having incomes of not more than \$20 per week nor less than \$12. Eleven nationalities were represented by the parents in the families investigated. Descriptive data are given of the mode of living of these families in 1914 during the period of the study. The more detailed descriptions covered in addition to the source and amount of the income, nationality of the parents, number of children, expenditures for food, rent, insurance, health and recreation, menus for a week, and list of clothing of the members of the family.

The brief sketches of the various families indicated that in New York City "in almost every case where the income for a family of five was less than \$17 a week, the household was clearly below a normal standard of living; in most cases where the income was above that amount the family was realizing decency. When there were more than five members, the standard was of course lowered by the small per capita income" (p. 1813). The study of the Buffalo families confirmed in a general way the need of between \$14 and \$15 to maintain a normal family of five in that city, while the results of the Troy investigation indicated that the amount of money necessary for decent living was neither less than in Buffalo nor as great as in New York. A decent living was defined as providing "food, clothing, shelter, intellectual development, recreation, and provision for the future" (p. 1468).

WARBER, GUSTAV P.

(337)

SOCIAL AND ECONOMIC SURVEY OF A COMMUNITY IN NORTHEASTERN MINNESOTA. Minn. Univ. Current Problems No. 5, 115 pp., illus. Minneapolis. 1915.

A community survey of the town of Braham in the northwestern corner of Isanti County, Minn., includes data on family living for 60 village families, as well as for farmers living in the vicinity. The village "has been selected as the center of economic activities, and the territory covered is that which is tributary to the village" (p. 3). The period to which the data apply is not stated, but was probably just previous to 1915, the date when the survey was published. Comparisons are made between village families and neighboring farm families. The incomes of merchants ranged from \$600 to \$2,500 per year, and the average income of heads of families other than merchants was \$900. In 11 homes, wives contributed an average income of \$176. This included payments of boarders and roomers. Some of the families raised part of their food supply. Rental value of owned houses was \$127 per year. Expenditure for food averaged \$289; for fuel, \$51; and for lighting, \$12. A discussion of the recreation and social life of the community is included.

UNITED STATES RAILROAD ADMINISTRATION.

(338)

REPORT OF THE RAILROAD WAGE COMMISSION TO THE DIRECTOR GENERAL OF RAILROADS, APRIL 30, 1918. 156 pp. 1918.

This study was undertaken to determine the level and adequacy of wages among railway employees. The section on costs of living presents the estimated averages of earnings and expenses for 265 families in 1915 and in 1917. These estimates were secured by questionnaires sent to newspaper editors in selected cities throughout the country. Three income groups were considered in the eastern, southern, and western sections of the United States. In 1915 the average total income was \$1,031, and average family expenditure \$955. In 1917 the average total income was \$1,162, and average family expenditure \$1,210.

OGBURN, WILLIAM F.

(339)

ANALYSIS OF THE STANDARD OF LIVING IN THE DISTRICT OF COLUMBIA IN 1916. Amer. Statis. Assoc. Quart. Pubs. 16 (n. s. 126): 374-389. 1919.

This report presents a method of determining how expenditure for different items varies with the size of income and size of family. Two hundred cases were selected from over 2,000 family schedules giving data on family living for 1916, collected by the United States Department of Labor, Bureau of Labor Statistics, in the District of Columbia. In the original study (340) the families were both white and Negro, and the head of the family earned not less than 75 percent of the total family income, the total of which did not exceed \$2,000 yearly. For this study there were selected 200 white families, composed of man and wife, with no lodgers, boarders, or adults other than their children, living in rented houses and supplying full detail on expenditures classified as "sundry." About 90 occupations are represented.

Relationships are worked out between annual family income in dollars, and size of family in adult-male units (based on relative food requirements, Bureau of Labor Statistics scale), and 18 "variables," including items of expenditure, and surplus or deficit. The degree of relationships is expressed (1) in terms of correlation coefficients, (2) in terms of regression equations, and (3) in terms of partial correlation coefficients. Attention is called to the correlation ratio as a check upon the accuracy of the assumption of straight-line regression.

A test is made of the suitability of the food requirement scale as a measure for other items of consumption by comparing the percentage relation of clothing expenditures for husbands, wives, and children with the calorie requirements of men, women, and children.

These methods make possible comparison of studies in which family size and income are different, indicate what families of any given size and income will spend on various items, and show the effect of a constant income and a change in family size.

UNITED STATES DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS. (340)

COST OF LIVING IN THE DISTRICT OF COLUMBIA. U. S. Dept. Labor, Bur. Labor Statis. Monthly Labor Rev. 5 639-655; 835-846; 1073-1090; 7 588-590. 1917-18.

Data on family living for 1916 were secured for 2,110 families (1,481 white and 629 colored) in the District of Columbia. "To insure a fair representation of the working population of Washington, including Government clerks, the city was



divided into districts and a fair proportion of schedules was obtained from each district" (p. 639). "Only those families were scheduled whose principle breadwinner worked for wages or, if paid a salary, received not more than \$1,800 a year. Families with incomes from sources other than the earnings of the head of the house were included, however, even though the total income exceeded \$1,800. No families were taken which had not resided in the District of Columbia for all of 1916" (p. 640). The average size of family was 3.7 persons and of household (including boarders, etc.), 4.9 persons. The average annual income was \$1,091. Average total expenditures (including insurance, etc.) were \$1,083; for food, \$437; for clothing, \$103; for fuel and light, \$71. Housing expenditures for families renting apartments were \$210; for those renting houses, \$225; and for those owning homes, \$237.

A summary of family expenditures includes a discussion of the adequacy of food, clothing, and housing conditions. Detailed analysis was made of the dietaries of 31 typical families (23 white and 8 colored) consisting of husband, wife, two or more children under 16, and no roomers or lodgers, with incomes ranging from \$400 to \$1,600. Each study covered a period of a week. Cost per week per family, amount consumed per man per day of various kinds of foods, and caloric value were tabulated. A table presents quantity and cost of the principle items of food consumed. An itemized account of food expenditures and quantities for 1 month for 88 families is also given.

BEYER, WILLIAM C., DAVIS, REBEKAH P., and THWING, MYRA (341)  
WORKINGMEN'S STANDARD OF LIVING IN PHILADELPHIA; A REPORT BY THE  
BUREAU OF MUNICIPAL RESEARCH OF PHILADELPHIA. 125 pp., illus.  
New York. 1919.

Data for 1916-18 were obtained from 260 families that were "self supporting, but whose principal breadwinner did not earn more than \$2,000 a year" (p. 11). "Families of skilled and unskilled laborers were preferred \* \* \* no family was chosen in which there were no children under income-earning age" (p. 11). Of the total number, 203 husbands were native born. The average size of family was 5.04 persons. The average total income per family was \$1,262. Total expenditures for family living averaged \$1,221; for food, \$557; for clothing, \$176; for housing, \$178; and for fuel and light, \$64. Average expenditures for insurance amounted to \$41. A standard of living is suggested for the standard family assumed in this report. The standard is divided into specified and unspecified expenditures. The former, including housing, fuel and light, food, clothing, carefare, and cleaning supplies and services, constitutes 82 percent of the household budget. The unspecified section includes health; furniture and furnishings; taxes, dues, and contributions; recreation and amusements; education and reading; insurance; and miscellaneous expenditures. Tables show the requirements of a fair standard of living and detailed expenditures for the 260 families surveyed.

DALLAS [TEXAS] WAGE COMMISSION. (342)  
REPORT OF SURVEY COMMITTEE TO THE DALLAS WAGE COMMISSION AND SUB-  
MITTED BY THEM TO THE HONORABLE MAYOR AND BOARD OF COMMISSIONERS  
OF THE CITY OF DALLAS, APR. 25, 1917. 16 pp. [Dallas.] [1917.]

A wage commission was formed in February 1917 at the request of the mayor of Dallas to inquire into living costs. Seventy-one families were asked to keep careful accounts for 30 days. Complete records were kept by 50 families, representing 29 city employees and 21 factory employees. The average number of persons per family was 4.8. The average annual family income on the basis of 1 month's accounts in 1917 was reported as \$963. Those making the study felt that the estimate made on this 1-month basis, was too high, and that the actual average family income was probably \$805 for these families. Average annual expenditures including insurance payments and payments on owned home were \$1,135; for food, \$511; for clothing, \$143; for rent, \$165; and for household maintenance and operation, \$103. Special attention is given to family deficits and the price increases since 1914. A recommended budget suggests \$1,082 as safe normal living cost for a family of five, and \$747 as lowest bare existence for a like family. A table of prices of 35 foodstuffs is given, as well as a minimum clothes budget giving cost of each necessary item for a man, woman, boy, and girl.

DAVIS, MICHAEL M.

(343)

FOOD SUPPLY IN FAMILIES OF LIMITED MEANS; A STUDY OF PRESENT FACTS OF THE FOOD PROBLEM IN BOSTON FAMILIES, BY SIX WELFARE AGENCIES, MEMBERS OF THE LEAGUE FOR PREVENTIVE WORK. League for Preventive Work Pub. 3, 24 pp. Boston. 1917.

This study of expenditures, purchasing habits, and nutritive adequacy of food purchased was undertaken to obtain material for use in making practical suggestions for a food campaign under way in Boston, Mass. The agencies selected at random families with whom they had personal contact with the mother and in which there were children. Two hundred and forty-three schedules were collected covering food purchased during the week of July 8, 1917. Of those which were sufficiently complete, 200 were tabulated, including 50 schedules from dependent families.

Three-fourths of the 200 families were American, Irish, Jewish, or Italian. The remaining 43 were distributed among 12 other nationalities. The average size of the family was between 6 and 7 persons, including boarders and lodgers. For 1198 families, weekly incomes ranged from less than \$10 to over \$30, with 88 families reporting \$15 to \$19 a week. More than half these families were spending over 60 percent of their weekly income for food and in practically all cases expenditure for rent required 20 and 25 percent of the weekly income, leaving three-quarters of the families only 25 percent for other items.

A comparison of the family's calorie requirements with the calories available in the food purchased indicated that of 198 families, 100 received an inadequate supply of energy, 35 were on the border line, and 63 were adequate. The protein supply was generally adequate and often more than necessary. A reasonably satisfactory diet could not be purchased in Boston in July 1917 for less than 10 or 12 cents for 1,000 calories. Of the 200 families, 72 percent spent over 10 cents per 1,000 calories. The expenditure for meat was twice as much as the proportion recommended by dietetic authorities. Milk consumption was seriously inadequate. The data showed that less ready-cooked cereals and sugar should be used, and more fresh fruits and vegetables, to secure an adequate diet.

EPSTEIN, ABRAM

(344)

THE NEGRO MIGRANT IN PITTSBURGH. Univ. of Pittsburgh. 76 pp., illus. Pittsburgh. 1918.

The demand for labor in Pittsburgh during 1917 helped greatly to increase the already constant Negro migration from the South to that city. "The belief that in an intelligent treatment of the problem lay the welfare of the entire community as well as that of the local Negro group, prompted the attempt at a scientific study of the situation" (p. 8). In order to secure data, Negro employees were canvassed, court records were studied, every Negro section studied, and for 500 Negro migrants (147 with families) questionnaires were filled out during July and August 1917. An analysis of occupations showed that most of the Negroes were employed at unskilled labor. The report includes a comparison of hours and wages in the South and in Pittsburgh, and a discussion of how the migrants came North and why, and of their social and political status and problems. In a group of 15 families supervised accounts were kept for a week in September 1917. For each individual family, number in the family, income, and expenditures, summarized under seven headings, are given for the 7-day period.

STITES, SARA H.

(345)

A STUDY OF THE COST OF LIVING OF WORKING CLASS FAMILIES IN ROXBURY, MASS. Jour. Home Econ. 10: 147-156. 1918.

Data are given on 11 Roxbury families who in 1917 had less than the desirable minimum for dietary needs, as worked out by Alice F. Blood, of Simmons College. The average size of family was 4.7 units, as measured by the Atwater scale. "An income of \$1,000 was implied by the sum total that it cost this average family to live" (p. 151). Comparisons of the percentages of expenditures for various items of living for these families are made with those given by the United States Department of Labor and others to indicate a fair standard of living. Expenditures for food absorbed 56 percent of their total resources; for rent, 12.4 percent; and for light and fuel, 6.6 percent.



UNITED STATES DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS. (346)  
COST OF LIVING IN SHIPBUILDING CENTERS. U. S. Dept. Labor, Bur. Labor  
Statist. Monthly Labor Rev. 6 (3): 112; (4): 151-2; (6): 99-104; 7 (2):  
132-135; (3): 115-122; (4): 112-116; (6): 115-146. 1918.

The United States Bureau of Labor Statistics obtained data on family expenditures for 1917-18 from 5,227 families in shipbuilding centers in 35 localities along the Atlantic and Pacific coasts and the Great Lakes. Of the total number, 219 were colored families living in 9 localities. In the Philadelphia area 512 schedules were obtained for 1917. Total expenditures were \$1,399; for food, \$606; for clothing, \$223; for housing, \$168; and for fuel and light, \$69. In the New York area 608 families reported for 1917 average total expenditures of \$1,349; for food, \$607; for clothing, \$200; for housing, \$174; and for fuel and light, \$62. Similar data are given for the other shipbuilding centers. Size of family is measured in terms of equivalent adult males according to the scale of the Bureau of Labor Statistics.

KYRK, HAZEL (347)  
ECONOMIC PROBLEMS OF THE FAMILY. pp. 330-371. New York and  
London. 1933.

The primary purpose of this book is to analyze the problems American families "face in securing, safe-guarding and disbursing the money income upon which their welfare so largely depends under present-day economic conditions" (p. 1). Factual material already published is presented in some cases in a reanalyzed form, and some previously unpublished material is given.

Data on cost of living in 1917-19, from the study of 12,096 wage-earning and lower salaried families made by the Bureau of Labor Statistics in 1918-19, (350) are utilized, usually in an adapted form. Other data adapted or computed from various sources include distribution of average yearly income among the main items of consumption in 238 wage-earning families with 3 children under 15 years in 1889-90, classified by income; for 322 wage-earning families with incomes of \$500 and under \$600 in 1889-90, classified by number of children under 15; and for 1,773 families with 3 children under 15 in 1901, classified by income; and expenditures and consumption per capita for various items of food by 3,215 wage-earning families of American or British stock in northern cities of the United States in 1909, classified by income.

With reference to expenditures for food and clothing, the author writes: "The hypothesis might be advanced that in the lowest economic levels an increase in income brings proportionate increases in both food and clothing; with further increases the proportion spent for food begins to decline and for clothing to increase; with a rise still higher expenditure upon clothing also shows inelasticity or a failure to keep pace with the increase in income" (p. 341).

OSBURN, WILLIAM F. (348)  
A STUDY OF FOOD COSTS IN VARIOUS CITIES. U. S. Dept. Labor, Bur.  
Labor Statist. Monthly Labor Rev. 9 (2): 1-25. 1919.

This article analyzes the food expenditures and consumption for selected groups of white families included in the cost-of-living survey of 1917-19 of 12,096 wage-earner families in 92 cities. The larger study is presented in the United States Bureau of Labor Statistics Bulletin 357 (351). This report gives the average food expenditure in 91 of these cities for 3,959 families having incomes between \$1,200 and \$1,500. (Bisbee, Ariz., had no families with incomes between \$1,200 and \$1,500.) The figures are presented in terms of expenditure per family and per adult-male unit (measuring the families according to the scale of the Bureau of Labor Statistics). Statistics on average annual expenditures for food per family are presented for 43 localities for families of the same size (3.35 adult-male units) and with the same total annual expenditure, \$1,300. The cost of adequate dietaries in 11 localities for families with varying expenditures was estimated by assuming that "the dietaries which yield 3,500 calories per man per day are usually abundant enough and varied enough to be fairly well balanced and fairly adequate in the amounts of the necessary constituents." A section on variation in food costs with changing income and changing size of family shows that the percentage of total expenditure for food decreases as the income increases, and that the expenditure for food increases as the size of the family increases. Another section discusses the extent of underfeeding and concludes that habit differences are chiefly responsible for the fact that the fuel value of food purchased when incomes are large is sometimes not much greater than the fuel value of food purchased when incomes are small. A final section of the article presents a chemical analysis of the food in average dietaries in 11

localities (giving the protein, fat, carbohydrates, calcium, iron, phosphorus, and ash in grams per man per day) and a tabulation of the amounts of different foods consumed per man per day in each of these localities.

OGBURN, WILLIAM F.

(349)

A STUDY OF RENTS IN VARIOUS CITIES. U. S. Dept. Labor, Bur. Labor Statist.  
Monthly Labor Rev. 9 (3): 9-30. 1919.

This article analyzes the data on house rents paid by families of wage earners gathered by the Bureau of Labor Statistics in 1917-19 (350). Average expenditures for rent are given for the 3,959 families paying rent in 91 communities in which the incomes ranged from \$1,200 to \$1,500 a year, not including those families whose payments for light and fuel were combined with rent. For 45 communities rents were computed for families of constant size with an annual expenditure of \$1,300. Variations in the percentage of the family income devoted to rent in relation to variations in size of family and in size of income are given for 10 different communities. Variations in rent with the type of housing provided is given by comparing the rents of apartments and houses of different size, with and without bath. Overcrowding is measured by studying different localities according to the number of persons per room in families of the same size having annual expenditures of \$1,300, the number of persons per room in families of varying size but with the same income, and the number and percent of all families reporting specified number of rooms per person.

UNITED STATES DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS. (350)

COST OF LIVING IN THE UNITED STATES. U. S. Dept. Labor, Bur. Labor Statist. Monthly Labor Rev. 8 (5): 147-177; (6): 101-116; 9 (1): 75-114; (2): 117-119; (5): 1-19; (6): 29-41; 10 (1): 27-34; 11 (3): 83-99; 14 (5): 77-80. 1920-22.

These reports present preliminary information on 12,096 white families, later published in United States Department of Labor, Bureau of Labor Statistics Bulletin 357 (351), and also additional material for colored families. Data are given for 741 colored families in 1917-19 living in 12 cities—Baltimore, Pittsburgh, Columbus, Atlanta, Birmingham, Houston, Jacksonville, Memphis, Mobile, New Orleans, St. Louis, and Savannah. For this group, size of family averaged 5 persons, and 3.39 equivalent adult-male units. Total income averaged \$1,139. Total expenditures for family living averaged \$1,115; for food, \$476; for clothing, \$178; for rent, \$139; and for fuel and light, \$59.

(351)

COST OF LIVING IN THE UNITED STATES. U. S. Dept. Labor, Bur. Labor Statist.  
Retail Prices and Cost of Living Ser. Bull. 357, 466 pp. 1924.

"In 1918-19, the United States Department of Labor, through the Bureau of Labor Statistics, working in cooperation with the National War Labor Board, made an investigation into the cost of living in industrial centers in the United States. This investigation covered white families in 92 cities or localities in 42 States, the cities varying in size from New York to small country towns of a few thousand population. In selecting these places it was the aim of the bureau to get representative data that would show living conditions in all sections of the country and in all kinds of localities \* \* \*. The data for this study were secured \* \* \* through personal visits \* \* \* to the homes of wage earners and small-salaried men, where, by means of interviews with the wife or other members of the family, information was obtained relative to the income and expenditures of the family for a period of one year. The period covered ranged from the year ending July 31, 1918, to the year ending February 28, 1919. \* \* \* In the selection of families to be included in the inquiry the requirements to be met were, that (1) The family must be that of a wage earner or salaried worker, but not of a person in business for himself. The families taken should represent proportionally the wage earners and the low or medium salaried families of the locality. (2) The family must have as a minimum a husband and wife and at least one child who is not a boarder or lodger. (3) The family must have kept house in the locality for the entire year covered. (4) At least 75 percent of the family income must come from the principal breadwinner or others who contribute all earnings to the family fund. (5) All items of income and expenditures of members other than those living as lodgers must be obtainable. (6) The family may not have boarders nor over three lodgers, either outsiders or children living as such. (7) The family must have no subrental other than furnished rooms for lodgers. (8) Slum or charity families or non-English speaking families who have been less than five years in the United States should not be taken" (pp. 1-2).



There were 12,096 families included in this study. Size of family averaged 4.9 persons, or 3.32 equivalent adult males. The total average income was \$1,513 of which the husband's earnings averaged \$1,349; the wife's, \$14; the children's, \$89; and the dependents', \$2. Total expenditures for current living averaged \$1,394; for food, \$549; and for clothing, \$238. Rent averaged \$187 and fuel and light \$74 for the 11,795 families reporting separate data. The average cost of life-insurance premiums was \$40. Detailed data on the consumption of these families are presented.

Included also are data on the annual quantity of fuel and light purchased per family, and tables on changes in the cost of living in 32 cities and in the United States.

BURGESS, ERNEST W.

(352)

A STUDY OF WAGE-EARNING FAMILIES IN CHICAGO. Ill. Health Ins. Comm. Spec. Rept. 1: 179-317. [Springfield.] 1919.

This study was made to obtain data on sickness, medical service, and protection against health risks. Conditions in 1918 were studied for three groups of families. A block study was made of 3,048 families in several "social blocks" and represented various types of wage earners. The second group of 304 families was chosen by the Visiting Nurses' Association as representative not only of the families which came under their care but also of the problems involved in the medical service secured. The third study was of 628 dependent families from charity societies' lists, for whom illness was a major cause of dependency. The incomes of the families are compared with a subsistence budget. Composition of family, nationality, various phases of health and sickness, cost of illness including loss from wages, and types of insurance held by the families were studied. Among the independent families the largest group had incomes of about \$1,200 per year.

DAVIS, MICHAEL M.

(353)

THE HIGH COST OF BEING SICK (REPORT OF A STUDY IN 1918 BY THE NEW YORK ACADEMY OF MEDICINE, PUBLIC HEALTH COMMITTEE). Amer. Labor Legis. Rev. 18 (2): 171-180. 1928.

The high cost of being sick and the unevenness of the incidence of sickness expenditures are both indicated. Most of the material on family living and cost of illness is taken from published sources, but data are given for 366 families studied by the public health committee of the New York Academy of Medicine in 1918. The average size of these families was 5.5 persons. The average yearly income was \$1,800. The families were grouped according to the amount spent for sickness during the year; 16 percent of them spent nothing on account of sickness; 5 percent spent over \$90 apiece for medical care.

UNITED STATES DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS. (354)

COST OF LIVING IN SPOKANE, WASH. U. S. Dept. Labor, Bur. Labor Statist. Monthly Labor Rev. 8 (2): 113. 1919.

Family expenditures for 240 wage-earning families for October 1918 were obtained by the chamber of commerce of Spokane, Wash. Size of family ranged from 2 to 6 persons. Average total monthly expenditures for family living were \$103; for food, \$46; for clothing, \$18; for rent, \$16; and for fuel and light, \$9. Insurance payments averaged \$5.

HUGHES, GWENDOLYN S.

(355)

MOTHERS IN INDUSTRY; WAGE-EARNING BY MOTHERS IN PHILADELPHIA. 265 pp. New York. 1925.

"To determine whether the employment of the mother is vital to industry on the one hand, whether her wage-earning activity interferes with home life on the other hand \* \* \*" (p. vi) was the purpose of this study, made during 1918 and 1919, of 728 mothers in industry in six sections of Philadelphia. "In some instances, districts known to contain large numbers of working mothers were selected, while the choice of other districts was based only upon the expectation that they might be found there \* \* \*. No colored women were included" (p. viii). Mothers were selected who had one or more children under 16, and all were at work at the time the study was made or had been within the year previous. Of the 728 women wage earners, 439 were native born and 289 foreign born. Data are given for all or part of the 728 mothers on why they became wage earners, kinds and conditions of their work, earnings, composition of households, income from other sources, expenditures for rent, the work of their homes, and care of children.

MOSSELL, SADIE T.

(356)

THE STANDARD OF LIVING AMONG ONE HUNDRED NEGRO MIGRANT FAMILIES IN PHILADELPHIA. 50 pp. [Philadelphia.] [1921.] (Reprinted from Ann. Amer. Acad. Social and Polit. Sci. 98 (187): 173-218. 1921.)

A hundred families living in the twenty-ninth ward in an area of  $6\frac{1}{2}$  blocks, which was practically limited to migrants from the South since 1916, were selected for this investigation, carried on in October, November, and December 1919. One reason for making this analysis of living expenditures for this group was to determine what constitutes a fair standard of living for the Negro migrant in Philadelphia. One hundred and sixty-one persons in the 100 families studied were breadwinners, including 96 fathers, 52 mothers, and 13 children. The majority (134) were laborers or domestics. The family incomes ranged from \$767 to \$5,582, 75 percent of the incomes falling between \$767 and \$1,970. A summary of the food purchases made during 4 weeks in November 1919 by three representative families is compared with a summary of items of food suggested for a fair standard of living by the Bureau of Municipal Research Study of Workingmen's Standard of Living in Philadelphia. "The expenditure tendencies of the group under consideration, were not only sufficiently regular to be stated in the form of definite tendencies, but also that the tendencies either agreed substantially with Engel's historic laws of expenditures, or, where they fail to do so, coincide with the more recent findings of the War Labor Bureau" (p. 206).

A "Suggested Budget" was planned for a family of 5 (or 3.95 male adult units), "consisting of a father, a mother, a boy of 13, a girl of 10, a boy of 6, during the year 1918-19 \* \* \*. The period of time, as well as the age and sex, used here, are those selected by the Bureau of Municipal Research of Philadelphia" (p. 206). The plan is based on attempts to combine those items for which the families investigated actually spent their incomes in such proportion as to provide adequately for their desires, health, and comfort. The classifications used in the budget are food, clothing, rent, fuel and light, amusement, church, insurance, furniture, medical aid, carfare, tobacco, and miscellaneous, with a total annual estimate of \$1,829.

The report concludes with a comparison of the actual incomes and expenditures of the families with those required by the recommended budget. This comparison shows "that in 64 percent of the families investigated, the incomes from all sources were sufficient to maintain a fair standard of living, as described in the study; but that in only 41 percent of the families was the income of the father alone large enough to secure such a standard of living" (p. 214). Other hindrances to obtaining a fair standard of living are summarized.

NOBLE, CLARENCE V.

(357)

THE COST OF LIVING IN A SMALL FACTORY TOWN. N. Y. (Cornell) Agr. Expt. Sta. Bull. 431, [70] pp., illus. Ithaca. 1924.

Receipts and expenditures of 92 homes in Groton, N. Y., or its vicinity for the year ended August 31, 1919, were analyzed for the purpose of (1) studying living conditions and living costs of persons employed in a factory located in a small town; (2) of making a comparative study of living conditions and living costs of persons employed in a factory and (a) living on farms, (b) living in town and keeping gardens or livestock, (c) living in town with no gardens or livestock; and (3) of formulating some of the advantages and disadvantages of the small town as a factory site.

Groton, a small manufacturing town, had a population of 2,200 in 1920. It is located in the northeastern part of Tompkins County, N. Y. At the time of the study the Corona Typewriter Co. was the largest single industrial plant in the town, employing on September 1, 1919, about 800 individuals. Eighty-six of the families selected for study were secured from lists of the Corona Co. and six additional records were obtained from employees of other manufacturing concerns in the town.

All the families visited were white, and most of the husbands and wives had been born in or near Groton; 13 families lived on small farms near Groton and 62 of the families living in town had gardens or livestock. Five of the families were boarders, 44 owned their own homes, and 43 rented houses. Of the husbands, 43 had not attended high school, 44 had received more or less high-school training, 4 had attended college, and 1 had completed college. Of the wives, 34 had received less than high-school training, 47 had gone to high school, 8 had entered college, and 3 had completed college.



The average size of the immediate family was 3.3 persons, or 2.46 adult-male equivalents, according to the scale devised by Langworthy, of the United States Department of Agriculture. The total cash income averaged \$1,891 a year and the total expenditures, \$1,545. Expenditures for purchased food averaged \$627; for clothing, \$176; for upkeep of home or rent, \$201; and for fuel and light, \$100. Savings averaged \$285. The value of all goods produced for home use averaged \$123.

The percentage of outlay for food, rent or upkeep of house, and fuel and light tended to decrease while the percentage for clothing and all other purposes tended to increase with increasing family income. The average expenses per family were largest for the farm families and smallest for the town families with no gardens or livestock. To the factory owner, the small town offers the advantage of a native, permanent, and uniform labor force but the disadvantages of slower and more expensive transportation and of getting sufficient labor at a time of expanding business. The employees have the opportunity to own their own homes, to keep gardens or livestock and to enjoy lower living expenses, but the possibility of the factory shutting down is a decided disadvantage.

OGBURN, WILLIAM F.

(358)

THE FINANCIAL COST OF REARING A CHILD. *In* United States Department of Labor, Children's Bureau, Standards of Child Welfare, pp. 26-30. 1919.

A method is here presented for computing the cost of raising a child in a wage-earner's family. The author has built a series of regression equations based on the well-established principle that for families of a given size and belonging to a specified income group living under similar conditions, the percentage of total income spent for a given major item of family living is fairly constant. By comparing the actual costs (1918-19) of a given item for families of various sizes in the same group it was possible to find the actual added cost per person of a given age for the item in question. After experimentation it was found that the best measure of family size was the adult-male energy unit used by the United States Bureau of Labor Statistics. The "net increase" in the family food budget was found not to equal the "actual" cost of food consumed by the child but to equal "only that part of it which was not met by economies or by lessened consumption by the other members of the family" (p. 28). The actual cost of food for a child may be estimated by finding the cost of food for an adult-male unit of the group represented and then multiplying this by the fraction of the adult unit representative of the age and sex of the child in question. While it was possible to work out individual costs only for food and clothing, it was found possible to derive figures for the net increase in the family budget due to the presence of the child for other items of family expense. Thus the net increase in family expenditure for rearing a child from 1 to 16 years can be worked out for clothing, rent, food, light and fuel, furniture, miscellaneous, deficit, or surplus. The author illustrates this discussion of method by reference to data taken from a study of 800 Philadelphia families in 1918-19.

INTERCHURCH WORLD MOVEMENT, COMMISSION OF INQUIRY.

(359)

REPORT OF THE STEEL STRIKE OF 1919. pp. 105-118. [New York.] 1920.

Included in this report on the conditions prevailing in the steel industry just prior to and during the strike of 1919 is some material from a subreport on Family Budgets and Living Conditions, by Marion D. Savage. Data were collected in the Pittsburgh district in November 1919. "Strikers, and nonstrikers, 'foreigners' and 'Americans' were interviewed. The visits were haphazard \* \* \* the neighborhoods were principally those of the immigrant semiskilled and unskilled workers who constitute the bulk of steel communities" (p. 105). The average income of 41 immigrant striker's families was \$132 per month. Size of family varied from 4 to 8 persons.

[UNITED STATES] FEDERAL RESERVE BOARD.

(360)

ADJUSTING SALARIES OF BANK EMPLOYEES TO MEET CHANGES IN THE COST OF LIVING. Fed. Reserve Bd., Fed. Reserve Bull. 6: 1293-1295. 1920.

The purpose of the investigation was to devise a plan "for ascertaining changes in the cost of living of bank employees, with a view to affording a basis for changes in salaries in accordance with such changes in the cost of living" (p. 1293). All employees of Federal Reserve banks receiving salaries of less than \$5,000 per annum received questionnaires. Data for the year 1919 for 819 families were tabulated by salary groups separately from data received from single individuals. Of these families, 643 received incomes ranging from \$600 to \$2,700 per annum. The largest number of families, 182, had incomes ranging from \$2,100 to \$2,400

per year. Total expenditures for this salary group averaged \$2,437, rent \$436, heat and light \$84, food \$960, clothing \$369, furniture and house furnishings \$135, and miscellaneous items \$453.

CHICAGO COMMISSION ON RACE RELATIONS.

(361)

THE NEGRO IN CHICAGO: A STUDY OF RACE RELATIONS AND A RACE RIOT. pp. 152-183. Chicago. [1922.]

For a study of the Negro housing problem in 1920, 274 families in different occupations living in all sections of Chicago were interviewed. Room crowding and the lodger problem for the group are discussed, and individual cases show the reasons for taking lodgers in relation to income. To show how the Negro lives, case studies of several families are presented, and in one case, that of a railway clerk, the total income is stated. He earned \$125 monthly, spent \$37.50 a month for rent, \$15 a week for food, \$4 a month for gas, and always put \$10 a month into the family bank account.

CHILDS, BENJAMIN G.

(362)

THE NEGROES OF LYNCHBURG, VIRGINIA. Va. Univ. Pubs., Phelps-Stokes Fellowship Papers 5, 57 pp., illus. Charlottesville. 1923.

A table in the study shows the weekly income per capita (1920-21) for 1,819 families with group averages for each of 6 income groups. The average family income per capita was approximately \$5 per week. The average size of family for 2,002 families was 4.14 persons. Data on population distribution, social and educational life, occupation, home ownership, housing conditions, and percentage of income spent for rents are presented for varying numbers of cases.

PEIXOTTO, JESSICA B.

(363)

HOW WORKERS SPEND A LIVING WAGE; A STUDY OF THE INCOMES AND EXPENDITURES OF EIGHTY-TWO TYPOGRAPHERS' FAMILIES IN SAN FRANCISCO. Calif. Univ. Pubs., Econ. 5: [161]-245. 1929.

Data for the period September 1920 to September 1921 were obtained from 82 families living in San Francisco. The purpose of the investigation was to "add something to the history of 'budget' studies" by analyzing the earnings and expenditures of a group of workmen who were earning a living wage. The original plan contemplated a random and impartial sampling of the families in the entire membership of the Typographical Union, but various difficulties resulted in limiting the sample to a smaller, and possibly an exceptional, group of settled middle-aged families. Eighty-three percent of the heads of families were native-born Americans, and 96 percent were born in English-speaking countries. The average size of family was 3.4 persons.

Incomes from all sources averaged \$2,819 per family. Total expenditures for current living averaged \$2,529; for food, \$893 (77 families); for clothing, \$351 (69 families); for housing, \$427 (80 families); for household operation, \$264 (81 families); investments averaged \$232 (58 families). When the data for the 82 families of typographers were compared with the averages presented for families of the same income level studied by the Bureau of Labor Statistics in 92 industrial cities of the United States in 1918-19, the typographers were seen to be better off, since their families were smaller, and one wage earner was able to bring in enough to provide the income needed to support the family. Their differential gains went for food, better housing, amusements, and union dues.

Eight cases were selected for more elaborate individual presentation as exemplifying "large and small incomes, lucky and unlucky families, the 'typical example' and the unusual case" (p. 217). The appendices include copies of the schedules used in collecting the data, and tables giving discrepancies between monthly earnings as recorded at the office of the Typographical Union and reported earnings, and number and percentage of families reporting expenditures for specified items.

REED, RUTH

(364)

THE NEGRO WOMEN OF GAINESVILLE, GA. Ga. Univ. Bull. 22 (1): 1-61, illus. Athens. 1921. (Phelps-Stokes Fellowship Studies 6.)

"In the present study an attempt has been made to deal with those conditions of the Negro home, community, institutional, and industrial life which affect most vitally the position of the Negro woman among her own race and her attitude toward the white women for whom she works" (p. 6). Gainesville was selected as representative of urban communities where the colored women exceeded the colored men and where the white race outnumbered the Negroes. The period to which the data apply was in all likelihood just previous to 1921,



the date when the study was published. Incomplete data were secured from 256 Negro homes on housing conditions, and the occupation of the homemaker. Reports from 126 families indicated an average annual income of between \$500 and \$600. Life and health insurance averaged \$1.38 per week for 215 families. Complete figures on family expenditures are given for 2 families. In 1 family of 5, the father earned \$52 a month as team driver, and the mother \$24 as laundress. Of this, \$12 per month was spent for food, \$8 for rent, \$12 for fuel, \$16 for insurance, and \$28 for miscellaneous. The other family, typical of the best class of Negro families, consisted of 4 persons. The mother did no outside work. The house was being purchased. Monthly expenditures amounted to \$30 for food, \$9 for fuel, \$2 for insurance, \$21 for savings, and \$10 for miscellaneous items.

BROOKLYN [NEW YORK] CHAMBER OF COMMERCE, HOUSING COMMITTEE. (365)  
INVESTIGATION OF RENT EXPENDITURES OF 433 FAMILIES IN 1922. 11 pp.  
Brooklyn. 1922. [Mimeographed.]

To obtain a picture of the existing housing situation in New York City and Brooklyn as it affected Brooklyn industry, a study of the relationship between income received and rent paid by persons with moderate incomes was made in 1922. The rent data presented were taken from questionnaires filled out by 433 workers employed by 8 Brooklyn manufacturing and utility concerns. The companies themselves supplied the material on earnings.

The average size of family was 4.3 persons. The average wage earned approximated \$32 per week. Over 79 percent of the persons filling out questionnaires earned less than \$40 per week. Rent per month averaged \$27, or \$6 a room. Judging from the relative proportion of total monthly income allocated for rent, as determined by the United States Department of Labor, the Brooklyn group studied was paying about 46 percent more for shelter than might be expected as necessary for adequate quarters. Families were found to be occupying one room per member; congestion was greatest in those families with incomes under \$25. Data on the residential building construction for New York City and for the United States indicated that on the basis of current rental rulings, only 3 percent of the new construction was within the renting power of the employees covered by the survey in Brooklyn, but that 75 percent of the new construction was within the purchasing power of the employees, if suitable financial programs could be arranged.

NIENBURG, BERTHA M. (366)  
RETAIL PRICES AND THE COST OF LIVING IN BITUMINOUS COAL REGIONS. *In*  
U. S. Coal Comn. Rept., pt. III, Bituminous Mine Workers and Their  
Homes, pp. 1452-1463, 1513-1602. 1925.

An extensive study of cost of living in 1922 among bituminous coal miners' families in 10 representative mining centers of different character in West Virginia, Pennsylvania, Ohio, Illinois, and Alabama was based largely on data on sales of merchandise from stores and mail-order houses serving isolated communities or groups of communities and from company unions in company-union towns. In addition to this "in each district patches representing different conditions were selected, in each of which 10 percent of the families living were visited, to check over sources of supply and expenses as listed on company books, and to ascertain all other expenditures" (p. 1452). Total income and expenditures are given for 11,275 families in each of 6 localities: New River district, W. Va., 4,615 families; Kanawha district, W. Va., 4,366 families; Westmoreland district, Pa., 494 families; Barnesboro district, Pa., 642 families; Illinois, 540 families; and Ohio, 618 families. More detailed expenditures are given for 733 Alabama families. Retail prices for food in company stores, in independent stores, and in wage-earner sections of nearby cities are given. Monthly rentals charged for company houses are tabulated for each district according to type of house. Water and light rates and prices of coal are also tabulated.

UNITED STATES DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS. (367)  
COST OF LIVING IN COAL-MINING TOWNS. U. S. Dept. Labor, Bur. Labor  
Statis. Monthly Labor Rev. 14 (4): 9-12. 1922.

Data on income and expenditures were obtained for 299 families in 12 coal-mining towns in Illinois, Ohio, Pennsylvania, and West Virginia. The period of the study probably closely preceded 1922, the date of its publication. In each locality 25 families were selected, 20 of which were families with the chief wage earner working in or about the coal mines, and 5 with the chief wage earner in some other industry than mining. The average size of family was 5.6 persons and 4.12 adult units. The average annual income was \$1,608. Average total

expenditures were \$1,695; for food, \$676; for clothing, \$308; for rent, \$110; and for fuel and light, \$69. Sources of income are given for 246 coal miners' families.

NEW YORK STATE COMMISSION OF HOUSING AND REGIONAL PLANNING. (368)  
REPORT \* \* \* ON THE PRESENT STATUS OF THE HOUSING EMERGENCY,  
DECEMBER 22, 1923. pp. 32-36, 70-73. Albany. 1924.

A survey of 3,841 families was made in New York City in 1923 to determine the relation of rent and income. For the groups as a whole the average income for the year 1922-23 was \$1,934, and the average expenditure for rent was \$354. For those with incomes under \$2,500 the average income was \$1,515 and the average expenditure for rent was \$307.

NIENBURG, BERTHA M. (369)  
COST OF LIVING AND RETAIL PRICES IN THE ANTHRACITE REGION. U. S. Coal  
Comm. Rept., pt. II, Anthracite—Detailed Studies, pp. 577-601. 1925.

In order to ascertain whether the mine-worker's earnings were sufficient to maintain his family in health and comfort, a study was made of the income and expenditures of 712 anthracite mine workers' families. The period chosen for the study was the 6 months following the 163-day strike in 1922, namely, from October 1, 1922, to March 31, 1923. Adjustments for seasonal demands were made so that the period would be representative of a year's expenditures. "The estimated number of schedules that could be gotten in the allotted time was divided among the three districts in the anthracite region and each district's quota subdivided according to the number of miners living in cities of 50,000 or more, cities of 10,000 to 50,000, cities of 2,500 to 10,000, and in cities of less than 2,500 population. The files of the United States census were used to ascertain the wards in which mine employees lived in cities of 2,500 and over. From each ward in which a large number of mine employees lived were chosen a proportion of names and addresses, such names and addresses being divided equally between miners, other skilled employees, and mine laborers. With these lists of names and addresses in hand, the agent began family visiting." The average family size was approximately six persons. The average monthly income was \$176. The monthly expenditures for 198 additional anthracite mine workers' families living in cities of less than 25,000 population are tabulated from store and mine-company records. For the 712 families who lived in towns of 2,500 and over, the expenditure for food averaged \$71 per month; for clothing, \$27; for payments toward buying homes, \$37. Rents varied according to size of city. Insurance payments averaged \$6 per month. Retail prices of foods are given for various cities of the anthracite region and for Philadelphia and Pittsburgh. The cost of a dietary standard was estimated at \$70 per winter month.

ROBINSON, LOUIS N., and STEARNS, MAUDE E. (370)  
TEN THOUSAND SMALL LOANS; FACTS ABOUT BORROWERS IN 109 CITIES IN 17  
STATES. Russell Sage Foundation, Small Loan Series. 159 pp., illus.  
New York. 1930.

"The purpose of this study is to afford some description of the borrowers from these small-loan offices, to show who they are and under what circumstances and in what amounts they borrow \* \* \*. The statistics here presented were secured through the cooperation of the managers of small-loan offices to whom questionnaires were sent \* \* \*. These offices \* \* \* were chiefly in States in which the uniform small-loan law, or an equivalent law, was in effect" (p. 15). For the period August 1922 through August 1923, 10,000 questionnaires were obtained through 211 loan offices located in 109 cities. Of the 10,000 borrowers, 8,189 were married couples living together. Of this group, the loan was made by 7,147 husbands and wives jointly. Of the husbands, 84 percent were native-born white, 10 percent were foreign born, and 6 percent were Negro. Thirty-three percent of the married couples had no children, 21 percent had 1 child, and 21 percent had 2 children. About half of the 8,677 men reporting occupation were engaged in manufacturing and mechanical industries. The weekly incomes of the married men ranged from \$10 to over \$100, 36 percent earning from \$30 to \$40. The median monthly rental of married couples was \$26.50, or \$26 with heat and light excluded.

About 8 percent of the married borrowers reported unemployment at the time of the loan. Information is given for the borrowers on the amount of the indebtedness at the time of the loans; ownership of real estate; amount of life insurance held; length of residence in the city where the loan was made and in the present dwelling. Of the married couples 25 percent owned their homes subject to mortgage, while 69 percent rented.



One-half of the married men received loans of \$70 or less, and 31 percent had received no loan before. Household furniture was the usual security.

MISSOURI BUREAU OF LABOR STATISTICS. (371)  
ANNUAL REPORT. Mo. Bur. Labor Statis. Ann. Rept. 44: 54-56. 1924.

The incomes and expenditures of 227 average earners in the largest cities in Missouri, St. Louis and Kansas City, were investigated for 1923. The families were carefully selected to include those dependent upon the earnings of the husband for support. The average size of family was 4.6 persons. Incomes ranged from under \$900 to \$2,500 and over. Expenditures for current family living averaged \$1,348; for food, \$520; for clothing, \$202; and for rent, \$180.

LYND, ROBERT S., and LYND, HELEN M. (372)  
MIDDLETOWN: A STUDY IN CONTEMPORARY AMERICAN CULTURE. 550 pp.  
New York. 1929.

This study of a small city aimed " \* \* \* to present a dynamic, functional study of the contemporary life of this specific American community in the light of the trends of changing behavior observable in it during the last 35 years" (p. 6). The city, called Middletown for the purpose of the study, had a population of about 38,000 in 1924 and is located in the east-north-central group of States. Among the factors which led to its selection as a representative middle-western city were a temperate climate, a sufficiently rapid rate of growth to reveal social changes, an industrial center without the predominance of one industry, a substantial local artistic life, and the absence of any special local problems.

The entire book is in a broad sense a study of standards of living as compared with the actual living prevailing in the city in 1890 and 1924. The six sections deal with getting a living, making a home, training the young, using leisure, religious practices, and community activities. The section on making a home is based upon local and Federal statistics, on material from the local press in both periods, and on schedules collected from 124 working-class families and from 40 business-men's families.

The median income of the 100 working-class families from whom 1923-24 income figures were secured was \$1,495. The median size of family was 5 persons. The minimum cost of living for a family of 5, based on the minimum quantity budget of the United States Bureau of Labor Statistics, was calculated according to prices prevailing in Middletown in 1924. The difference between living costs in 1924 and 1891 was computed by a method similar to that used by the United States Bureau of Labor Statistics in computing the index of the cost of living of wage-earning and low-salaried groups except that every effort was made "to make the weights by which the prices were multiplied correspond to the amounts consumed by a Middletown family of 5 in 1891."

HOUGHTLING, LEILA (373)  
THE INCOME AND STANDARD OF LIVING OF UNSKILLED LABORERS IN CHICAGO.  
Social Sci. Studies directed by the Local Community Research Com., Univ.  
Chicago, no. 8, 224 pp. Chicago. 1927.

Undertaken for the purpose of determining whether a proposed revision of the Chicago Standard Budget for Dependent Families set a higher standard than could be maintained by the families of independent laborers, this study analyzes schedules received from the families of 467 unskilled and semiskilled workers in Chicago in 1924 and detailed records of food consumption for 1 month of the same year from 54 such families. Annual earnings of the chief wage earner were checked against the pay rolls of the companies furnishing the names of the men whose families were interviewed. Only families having at least one dependent child were included. The schedules were not complete in all respects, but a report is given for 467 families on sources and amount of family income, housing, heating and lighting, savings and debts, certain comforts, and assistance received at any previous period from social agencies. For the purpose of studying food expenditures, size of family was measured in terms of equivalent adult-male units according to the expenditure scale of the Chicago standard budget. Food consumption and housing were compared with the conditions set by the standard budget.

Of the 467 families, 97 consisted of 5 members; 155, fewer than 5 members; and 215, more than 5 members. The earnings of the chief wage earners ranged from \$800 to \$2,200 and over per year; and of the working mothers, \$50 to \$1,200 and over. The family income was supplemented by the earnings of children, contributions of boarders and roomers, income from property, benefits, and gifts.

Three hundred and thirty-seven families were living in rented houses or apartments. Of these families, 85.6 percent spent less than \$400 a year for rent; and 64.7 percent, less than \$300.

Two hundred and sixteen schedules for families whose estimated total expenditure was not more than 10 percent above the estimated total income or not more than 15 percent below the estimated total income, were analyzed with regard to amount of annual expenditures for food. One-half of the 216 families spent less than \$700 a year for food. Over half of the families estimated that they spent more than the amount for food called for in the Chicago standard budget. Eighty-five percent spent more than 30 percent of their entire income for food, and more than one-sixth spent over 50 percent for food.

A dietary study was made of 54 families willing and able to keep records of food purchased during 1 month. Thirty-five families spent less for food than the Chicago budget required while 19 spent more than the required amount. The Hawley scale was used in calculating nutritive content of diet and dietary standards of adequacy were based on those of Gillett, Holt, Sherman, and Hawley.

"Analysis of the general living conditions of the whole group and of the food consumed by a smaller number of families has shown quite clearly that the families living on a lower standard than that provided by the budget estimate were living under conditions which fail utterly to provide a standard of living that will make possible a high standard of physical, mental, and moral health and efficiency for adults, the full physical and mental growth of children, and make provision for their moral welfare" (pp. 130-131).

When the results of the investigation were compared with the estimated Chicago standard budget for 1925, "it was found that just over one-half of the total number of families were able to maintain a standard equal to or above the estimated Budget \* \* \*" (p. 130).

DAVIS, MICHAEL M.

(374)

PAYING YOUR SICKNESS BILLS. 276 pp. Chicago. [1931.]

In discussing the ability to pay, and fitting the bill to the purse in private practice, the author presents the medical expenditures for 1924 and 1925 of a Boston family who kept a memorandum of everything spent for sickness. The family consisted of father, mother, four children ranging in age from 3 to 18, and an infant that was born in 1924 and died in 1925. Total income for the 2-year period amounted to about \$3,500, of which the father, a peddler, contributed about \$1,500 a year, and the oldest daughter the rest. The family's medical expenditures for the 21 cases of illness during the period amounted to \$224. Service from a nursing organization, from hospitals, and from doctors totaled \$776. The author states that this family would have preferred to pay more, but the sliding scale indicated that even their actual expenditure was over 50 percent more in proportion to income than the average family spends.

HELLER COMMITTEE FOR RESEARCH IN SOCIAL ECONOMICS, UNIVERSITY OF CALIFORNIA. (375)

COST OF LIVING STUDIES. IV. SPENDING WAYS OF A SEMI-SKILLED GROUP.

A STUDY OF THE INCOMES AND EXPENDITURES OF 98 STREET-CAR MEN'S FAMILIES IN THE SAN FRANCISCO EAST BAY REGION. Calif. Univ. Pubs., Econ. 5: 295-366. Berkeley. 1931.

A study of the income and expenditures of 98 married street-car men during 1924-25 with incomes of between \$1,600 and \$2,000 in the San Francisco, Calif., bay section was made to determine the level of living of a group of semi-skilled workers and their families. Letters asking cooperation were sent to men whose names had been chosen at random from the lists of the Amalgamated Association of Street and Electrical Railway Employees of America, covering motormen, conductors, brakemen, and bus drivers who had been employed by the Key System Transit Co. for at least 1 year. Sixty percent of those asked to cooperate refused. The majority of the men and their wives covered by this report were either American born or had come from English-speaking countries. The average size of family was four persons. The annual average income of the 98 families was \$1,886, and the average wage of the father, \$1,658 per year. Of the average total expenditure, \$790 went for food, \$239 for clothing, \$373 for housing, and \$145 for house operation; savings amounted to \$110. The adequacy of the food expenditures was judged on the basis of the cost of feeding an adult man as determined by Meyer E. Jaffa and also as given by Florence Nesbitt. "Briefly, the 'average' street-car man's family had enough to eat and was comfortably housed. It could not be described as suffering from want. On the



other hand, the income was not sufficient to provide for the rising standard of dress, especially for children in school, to free the wife from the heaviest house-keeping burdens, to pay for adequate medical care, or to make adequate provision for old age or for the husband's death" (p. 344).

HUGHES, ELIZABETH A.

(376)

LIVING CONDITIONS FOR SMALL WAGE EARNERS IN CHICAGO. Chicago Department of Public Welfare, Bureau of Social Surveys. 62 pp. Chicago. 1925.

This is, in the main, a study of housing conditions made between November 1924 and April 1925 among 1,526 families, newcomers to Chicago, most of them Negroes and Mexicans. The household of median size among native whites numbered 4; among Negroes and foreign-born, exclusive of Mexicans, 5; and among Mexicans, 6. A table shows the percentage of the 1,244 families reporting specified earnings in 1 month according to nationality groups, including 84 native white, 199 Mexican, 369 other foreign born, 590 Negro, and 2 American Indian families. The opportunities and occupations of Negroes and Mexicans in Chicago are discussed. Tables show the number and percentage distribution and nativity of 1,526 households by specified number of rooms in the dwellings and by number of persons per room. Recommendations are made for improved housing.

NEW YORK CITY JOINT COMMITTEE ON NEGRO CHILD STUDY.

(377)

A STUDY OF DELINQUENT AND NEGLECTED NEGRO CHILDREN BEFORE THE NEW YORK CITY CHILDREN'S COURT, 1925. Joint Committee on Negro Child Study in New York City, in cooperation with the Department of Research of the National Urban League and the Women's City Club of New York. pp. 29-35. [n. p.] 1927.

This report on the problems of the delinquent and neglected Negro child includes a study of the social background of 50 children who were institution inmates in 1925. Family income in 42 cases ranged from \$75 to \$115 per month, and rent in 23 cases ranged from \$15 to \$75 per month. In 30 out of the 50 cases the mother or female guardian was forced to work out.

CARPENTER, NILES, and associates.

(378)

NATIONALITY, COLOR, and ECONOMIC OPPORTUNITY IN THE CITY OF BUFFALO. Buffalo Univ. Studies 5: 169-179. [n. p.] 1927.

The chapter on The Negro Worker in Buffalo includes a study of rent in relation to income for 50 Negro families in 1925-26. The number of children per family averaged 2.6. The average weekly income was \$36. The average rent was \$27 per month for the 46 families renting. "The results of this study also bear out Streightoff's modification of Engel's laws, as they are related to American workingmen" (p. 174). The number of families having expenditures for automobile, piano, phonograph, radio, and telephone is recorded. One of the conclusions stated that the families showed an insufficient number of children to maintain the Negro population by natural increase.

HOLLOWAY, CHARLOTTE M.

(379)

REPORT OF THE DEPARTMENT OF LABOR ON THE CONDITIONS OF WAGE EARNERS IN THE STATE [1924-1926.] Conn. Department of Labor. pp. 39-45. Hartford. 1926. (Connecticut Public Document—Special.)

The chapter on The Cost of Family Living presents detailed expenditures in 1925-26 for a family of husband, wife, and children (number of children not given). The breadwinner was an insurance clerk who by overtime work earned \$2,250 per year. The total expenditure for current family living was \$2,050, of which \$809 was for food, \$540 for rent, and \$202 for clothing; \$100 was paid on insurance premiums.

UNITED STATES DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS.

(380)

COST OF MEDICAL SERVICE. U. S. Dept. Labor, Bur. Labor Statis. Monthly Labor Rev. 26 (5): 1-4. 1928.

Information presented in this study was obtained from 42 employees of the Bureau of Labor Statistics with 1 or more dependents whose salaries were under \$3,000 per annum. The term "cost of medical service" covered all direct expenditures for health purposes, including care of teeth and eyes, medicines, hospital and nursing charges, surgical appliances, etc., as well as the services of physicians and surgeons. The schedules used requested information back to January 1927 in the case of "normal medical services" and to January 1926 in the case of "special

medical services." By normal services is meant the ordinary and more or less routine services of the dentist, oculist, and family physician; by special services, those incident to the more serious illnesses requiring expenditures for surgeons, nursing, etc.

ZIMMERMAN, CARLE C.

(381)

INCOMES AND EXPENDITURES OF VILLAGE AND TOWN FAMILIES IN MINNESOTA. Minn. Agr. Expt. Sta. Bull. 253, 47 pp., illus. University Farm, St. Paul. 1929.

The purpose of this study was to furnish material for a basis of comparison between the level of living of Minnesota farm families previously studied and those of families in 11 towns and communities scattered over the State. The communities were primarily farm service centers. Estimates of expenditures and incomes covering the year ended July 1927 were obtained from 395 households, 18 of which were homes of professional men, 32 of retired farmers, 217 of business men or clerical workers, and 128 of wage earners, widows, and spinsters (41 unskilled and skilled workers, 46 semiskilled workers). Three-fourths of the male heads of all the families studied were native born. Forty-one percent of the heads of families had had some high-school education, and half of these had gone on to college for a year or more. The families in 52 percent of the cases owned homes free from debt.

Average income and expenditures, and surplus or deficit per family and per adult-male unit are presented for each occupational group and for each community. Numbers of adult-male units were computed on the basis of energy requirements as estimated by L. Emmett Holt.

The 46 semiskilled workers had families averaging 4.7 persons. Their average income was \$1,496 and their expenditures for current living, \$1,343. Expenditures for food averaged \$486; for clothing, \$193; for rent, \$111; and for household, exclusive of rent, \$280. Investments (including insurance), savings, money paid on homes, farms and other property, interest, debts, taxes, and losses, averaged \$209. Other data presented relate to gardens and their vegetable output, types of automobiles owned, home ownership, distribution of wealth, and reasons for existing deficits between incomes and expenditures.

The study showed that, although families tended to spend all they made, expenditures were adjusted to income-producing capacity, and that "the social scale is also an economic scale to a considerable extent" (p. 11). Comparison of family living expenditures of different occupational groups indicated that as incomes increased from the laboring to the upper business and professional classes, "the proportions for advancement less than double, while those for automobiles increase four times, and for investment more than six times. The relative competition within the budgets is between the 'necessity' expenditure and investments for automobiles and travel. The miscellaneous group furnishes a minor third type of competition with the previous groups of expenditures" (p. 18).

GEE, WILSON, and STAUFFER, WILLIAM H.

(382)

RURAL AND URBAN LIVING STANDARDS IN VIRGINIA. Va. Univ. for Research in the Social Sci., Inst. Monog. 6, 133 pp. University, Va. 1929.

One hundred and thirteen white families living in Lynchburg, Va., were visited and questioned for the purpose of comparing the standard of living of different economic groups and with the idea "of testing out certain new methods of attacking problems" (p. 124) of measuring living standards. Families living in Lynchburg were selected with the assistance of the secretary of the chamber of commerce, a responsible official of the associated chambers, and other responsible persons. Lynchburg was chosen for its representative character as regards location, composition of population, traditional background, and diversity of manufacturing interest. The city is located in the piedmont section of Virginia, is well supplied with transportation facilities, and is an important tobacco market.

In the study the families were selected according to somewhat arbitrarily but fairly well defined classes. Class designations for the wage earners and clerical workers studied are given as "poor" and "intermediate." Thirty-five families in the first group and 78 in the second were studied. The data apply to the period 1927-28, and all tables give separate figures for each economic class.

The average number of individuals per family at home was 4.3 in the poor group and 4.9 in the intermediate group. The average number of years of formal schooling which had been acquired by the husbands of the poor families was 7.0, of the intermediate, 7.8. Formal schooling of the wives averaged 6.2 for the poor families, and 7.9 for the intermediate ones. In all the families studied in the city, there were only two individuals who reported no formal schooling.



The occupational grades of the families indicated that the earners of money income in poor families worked largely in employments where the degree of skill and ingenuity required was not great, and that the employments of the families of the intermediate group were largely those of skilled mechanical operators in the mills and factories, clerical workers in offices, banks, and stores, sales work, and similar grades of activity.

The annual total money value of living of the poor families averaged \$977; of the intermediate families, \$1,959. Expenditures for current family living for the poor group and the intermediate group averaged \$366 and \$554, respectively; for clothing, \$119 and \$276; for rent, \$161 and \$332; and for household operating expenses, exclusive of automobile costs, \$127 and \$284. Life and health insurance averaged \$49 and \$78, respectively, for the two groups.

The value of food consumed was measured in terms of adult-male energy units. An analysis of its nutritive value was made by Edith Hawley, of the United States Bureau of Home Economics. The poor city families consumed barely enough food for energy and protein needs and did not obtain enough minerals. The food of the intermediate families had an excess of energy and protein content and a deficiency in minerals. In calculating the nutritive value of the diet, size of family was measured according to the Hawley energy and protein-mineral scales. The economy of the different diets is also measured by comparing the distribution of energy among the various food groups with the distribution recommended by C. L. Hunt in United States Department of Agriculture Farmers' Bulletin 1313, *Good Proportions in the Diet*.

Inadequacy of the clothing of the poor families is observed when their expenditures are compared with the requirements for comfort and decency of the standard budget developed in 1925 by the Chicago Council of Social Agencies. The poor families also fell below the level of adequacy in housing, judging by the standards of the United States Bureau of Labor Statistics, the National Conference on Social Work, and the New York Factory Investigating Commission, that the number of rooms should approximate and tend to be in excess of the number in the family.

A short discussion of other investigations of living expenditures includes a presentation of Engel's law (C. D. Wright's version), and his table of expenditures precedes the data for Virginia families.

HOLLOWAY, CHARLOTTE M.

(383)

REPORT OF THE DEPARTMENT OF LABOR ON THE BUSINESS AND CONDITIONS OF WAGE-EARNERS IN THE STATE [1926-1928]. Conn. Department of Labor. pp. 90-95. Hartford. 1929. (Connecticut Public Document—Special.)

In the chapter on Cost of Living, income and expenditure figures for 1927-28 are given for one mechanic's family which consisted of husband, wife, and one small child. The annual earnings were \$1,938. Annual expenditure for current family living totaled \$1,338. The expenditure for rent (including light and heat) was \$8 a week; for food, \$7 a week; and for clothing, \$150 for the year. Savings amounted to \$600.

UNITED STATES DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS. (384)

COST OF LIVING OF FEDERAL EMPLOYEES OF FIVE CITIES. U. S. Dept. Labor, Bur. Labor Statis. Monthly Labor Rev. 29 (2): 41-61; (3): 248-259; (4): 241-254; (5): 1-10. 1929.

"In accordance with the arrangements made with the Personnel Classification Board the Bureau of Labor Statistics collected information concerning the income and expenses of the families of 506 Federal employees in the lower salary groups in the cities of Baltimore, Boston, New York, Chicago, and New Orleans" (p. 41), to show how Government employees were living in 1927-28, the period covered by the study. "The study is limited to the families of male workers who were in the employ of the Federal Government for a year or longer, who were married and living with their wives, and who had at least one dependent in the family. The study is restricted still further to families in which the male head had a Government salary not exceeding \$2,500 in the year ended June 30, 1928, without regard to retirement deductions and without regard to any outside income" (p. 42). Postal employees were excluded.

The average total income per family was \$2,337 in Baltimore, \$2,411 in Boston, \$2,483 in New York, \$2,746 in Chicago, and \$2,194 in New Orleans. The Government salary of the husband constituted from 68 percent of the total family income in Chicago to 78 percent in New Orleans. Average total expenditures for family living, in the five cities, respectively, were \$2,435, \$2,498, \$2,598, \$2,928, and \$2,280; for food, \$717, \$812, \$927, \$814, and \$780; for clothing, \$301, \$283,

\$305, \$338, and \$260; for housing \$541, \$501, \$486, \$614, and \$361; for heating and lighting, \$145, \$162, \$118, \$165, and \$86. Food produced at home was counted at its market value as part of income and of expenditure.

From 48 to 69 percent of the families had expenses above their total income. Of the 506 families, 42 percent were making installment payments on articles of different kinds during the year for which data were secured.

WRIGHT, HELEN R.

(385)

WELFARE OF CHILDREN OF MAINTENANCE-OF-WAY EMPLOYEES. U. S. Dept. Labor, Children's Bur. Pub. 211, 192 pp. 1932.

This study of living conditions of maintenance-of-way employees was undertaken to find out, in part, how the families managed on the limited wages of the fathers, and what efforts the community had exerted to prevent the poverty of the parents from being visited on the children. Names of men who had been identified with maintenance-of-way work for at least 12 months were obtained from the railroads. Data for the period 1927-29 were obtained from 550 families, having a total of 1,674 children, and living in widely scattered towns and hamlets throughout 10 States. The selection of these families was based upon accessibility, census figures on the distribution of railway laborers, and upon rates of wages paid. One hundred and ninety-nine families lived in cities with a population of 100,000 or more, 82 lived in smaller cities, and 269 lived in towns and villages of less than 5,000 population. Of the fathers of these families, almost one-half were native-born whites, 71 were Negroes, and 243 were foreign born, with Italians, Mexicans, Poles, Scandinavians, and Germans represented in the order given. Seventy-seven of the fathers were foremen, and 473 were laborers.

The material covers employment, general working conditions, expenditures, and mode of life of these employees for the years 1927-29. Accounts of household expenditures for 24 individual families are given, with a discussion of other than monetary values obtained through the accounts. General income and expenditure figures are available for 533 families. The average number of children per family was just over three. Only 117 families were dependent solely on the father's earnings. Four hundred and forty-nine families had some income in kind. A distribution of heads of families by earning levels showed the greatest number in the range between \$750 and \$1,000 a year. The median total family income, including an allowance for the value of goods furnished, lay between \$1,000 and \$1,250. Food expenditures were reduced to adult-male-equivalent costs; the median expenditure per family was between \$400 and \$500. Expenditures for clothing were expressed in terms of adult-male clothing cost units; the median fell between \$100 and \$200 per family. The number of families who owned or were buying their homes was 172, and there were 378 tenants, of whom 152 lived in company houses. Only 75 owned homes free of encumbrances. Excluding the 152 families in company houses, the median rent paid by renters was between \$100 and \$200 a year. Of the 533 families reporting income and total expenditure, 246 succeeded in keeping expenditures within incomes and 287 spent more than they received.

Throughout the study, the allowances of the Chicago Standard Budget prepared for the Chicago Council of Social Agencies, after being somewhat modified to meet different conditions of climate and price levels, were used as base lines from which to measure the adequacy of the family expenditures. The requirements of each family were worked out according to this revised schedule. "Studied in this way the families whose income was \$100 or more below this estimated minimum cost of decent living numbered 305 (57 percent of the 539 whose incomes were known), and the children in these families numbered 1,085 (66 percent of the 1,640 counted)" (p. 188). It was shown with regard to food, clothing, and housing that the majority of the families did not maintain the standards laid down as essential for health and decency, although about one-fourth of the group were apparently up to the budget standards. The food used by 529 families was reported in sufficient detail to enable grading of diets by a dietitian. In the group as a whole, only 182, or 34 percent, of the families had satisfactory diets and 144 had diets that were seriously deficient. The study of diets suggested "\* \* \* the importance of more education in food values, especially in the need for milk, but it shows equally clearly that such education can accomplish little unless some means are found for increasing the families' income" (p. 75). Only 150, or 29 percent of the families, and 19 percent of the children, were living in houses that would be acceptable. Not all of the children were having the minimum educational opportunities.



The results of the study indicated a need for larger incomes, accompanied by more adequate schools, playgrounds, and health and social services in the rural and backward communities.

BATCHELOR, CAREY

(386)

WHAT THE TENEMENT FAMILY HAS AND WHAT IT PAYS FOR IT; A STUDY OF 1,014 TENEMENT FAMILIES, SHOWING INCOME, RENT, AND HOUSING CONDITIONS. United Neighborhood Houses, in cooperation with the League of Mothers' Clubs. 10 pp. New York. [1928?] [Multigraphed.]

A survey of income, rent, and housing conditions in 1,014 tenement families in New York City was made in 1928 by the United Neighborhood Houses to secure information from the tenants themselves as a basis for remedying the slum situation. The families lived in the Lower East Side, Middle East Side, East Harlem, West Harlem (Negro), Bronx, Lower West Side, Brooklyn, and Long Island. The workers held in the main unskilled or skilled jobs in seasonal trades. Only 11 percent were professional or office workers. Only half the families were supported by the father alone. The median annual income reported was \$1,570. The median family numbered four persons and paid \$316 a year to rent four rooms, or \$6.67 per room per month. Eighty-three percent of the families lived in old law tenements of which one-fourth were unfit for human occupancy. About 50 percent of the families were crowded or overcrowded. The Negro families in West Harlem showed the most serious housing problem, paying \$9.50 per room per month on a median annual income of \$1,300. Seventy-five percent of the families indicated they would willingly move to better quarters within the city.

HUBERT, JAMES H.

(387)

HARLEM—ITS SOCIAL PROBLEMS. Hosp. Social Serv. 21 (1): 43-47. 1930.

This radio script describes the high rents which Negroes in Harlem are obliged to pay to secure any kind of living quarters. A study made in 1928 by the New York Urban League gave for the heads of 3,000 families \$85 as the average earnings per month. The average rent for this group was over \$40 per month.

LYMAN, MARGARET H.

(388)

BABY HEALTH STATIONS AND FAMILY BUDGETS. Mod. Hosp. 32 (6): 140, 142, 144, 146. 1929.

This study was undertaken in order to determine the economic status of families using the free baby-health stations in the Bronx. Data for 1928 are presented for 501 families representing about 10 percent of the total estimated registration of baby-health stations in the Bronx. Because of obvious inaccuracies, the material returned was used only as the basis of estimates of annual incomes. The level of living possible for an average family of five was determined upon the basis of comparisons of standard budgets for subsistence, minimum decency, and minimum comfort without luxuries. Only 13 percent of the families are indicated as having incomes which on an adult male-energy-equivalent basis "would provide these families with limited comfort and modest reserves for medical emergencies and savings, but not for luxuries" (p. 144). It was estimated that, for a family of five, \$2,150 provided decent living but no comforts.

GILLETT, LUCY H., and RICE, PENELOPE B.

(389)

INFLUENCE OF EDUCATION ON THE FOOD HABITS OF SOME NEW YORK CITY FAMILIES. New York Association for Improving the Condition of the Poor. 48 pp., illus. New York. 1931.

This study of food habits in the year 1928 was intended to duplicate for purposes of comparison a study made in 1914 by Sherman and Gillett. "It was felt that such a study would give not only valuable information concerning the effect of the reported changes in general food habits on the food value of some individual diets, but would indicate the degree to which specific and general efforts have influenced the choice of food" (p. 6).

"One hundred so-called uninfluenced families and 20 families which had been influenced by a nutrition worker, both groups essentially comparable to those studied in 1914-15, were obtained \* \* \* through the courtesy of various health centers and clinics of New York City. Care was taken \* \* \* to have records evenly distributed throughout the four seasons of the year; to have the various predominating nationalities represented; and to have families of varying sizes, generally earning low incomes. One-fifth of the uninfluenced and of the influenced group was, respectively, Jewish, Italian, other European, Negro, and

other native-born American. The incomes were derived chiefly from unskilled labor and ranged approximately from 15 to 55 dollars weekly, with the majority between 20 and 40 dollars. The average composition of the uninfluenced families was 2.5 adults and 3.8 children up to and including 15 years \* \* \*. The average influenced family had 2 adults and 3.4 children" (p. 10).

Food value of diets was estimated for calories, protein, calcium, phosphorus, iron, and vitamins A and C. Scales used were the Atwater scale adapted by Sherman and Gillett, the Hawley double scale, and a third scale derived from Sherman and Gillett's Food Allowances for Healthy Children and Sherman's Chemistry of Food and Nutrition. Cost per man per day in 1928 was \$0.58 for the uninfluenced group and \$0.56 for the influenced group. When the results of the 1928 study are compared with those of 1914 it is seen that the uninfluenced families in 1928 spent a larger percentage of their food money for milk, fruits, and vegetables, and less for meat and fish than did the uninfluenced families in 1914. This resulted in fewer dietaries with insufficient calcium, phosphorus, and iron, and in a greatly increased vitamin A and C content.

In both 1914 and 1928 the influenced families distributed their money among the different types of food so as to obtain a better balanced diet at less cost than the uninfluenced families. The average influenced family of 1928 spent more for milk and cheese and practically as much for fruit and vegetables as for meat, fish, and eggs. None of the influenced families had diets deficient in calcium, fewer of them had diets deficient in calories, and their diets were richer in vitamins A and C.

NATIONAL FEDERATION OF SETTLEMENTS, UNEMPLOYMENT COMMITTEE. (390)

CASE STUDIES OF UNEMPLOYMENT. 418 pp. Philadelphia. 1931.

Case studies are given for 150 families with a record in the past of independence and self-sufficiency. The chief breadwinner was out of work during the winter of 1928-29. For each case there is a description of the family and of the way in which it met the financial problem of securing the necessities of life when the main source of income was cut off. There is summary analysis of the causes of unemployment and the ways in which its problems have been met. The data presented differ from family to family. For eight families, not aided by any charitable organizations, there are given income figures and amount expended for rent, as well as information on home conditions.

WAITE, WARREN C., and HOWE, CHARLES B. (391)

THE CONSUMPTION OF DAIRY PRODUCTS IN SIX NEW JERSEY TOWNSHIPS. N. J. Agr. Expt. Sta. Bull. 506, 47 pp., illus. New Brunswick. 1930.

The purpose of this study, covering a period in 1928-29, was to determine the consumption of dairy products in six rural areas of New Jersey. The types of farming occurring most frequently in the townships were dairy farming, poultry raising, and market gardening. In Howell Township much farming was done on a part-time basis. In Washington Township the land was being turned to recreational uses by urban families. The villages in the six townships were composed of merchant, professional, and retired families. Each family (1,381 in the townships) was visited. Native white stock predominated, accounting for 92.4 percent of all the families. Russian Jews, Poles, Rumanians, Italians, and a few Negroes made up the remaining part of the population. The average size of family was 3.7 persons. Incomes averaged \$1,987. There were 53 families of summer residents in Washington Township who were treated as a separate group and excluded from the totals and averages of other comparisons. This urban group of families temporarily residing in the country had incomes ranging from under \$5,000 to \$10,000 and over. From the analysis of families with and without cows it was found that the possession of cows led to about a doubling of the consumption of fluid milk. Families with cows but not selling milk consumed larger quantities of fluid milk, butter, and cottage cheese than did any other group.

BLANSHARD, PAUL (392)

HOW TO LIVE ON FORTY-SIX CENTS A DAY. Nation 128: 580-581. 1929.

The author visited a typical home in the mill village of Poinsett just out of Greenville, N. C., as part of an investigation of the textile strike then in progress (April). The family discussed in this article consisted of the husband, wife, and five children, all of whom appeared in good health. The data presented apply to the year 1929. The husband earned \$12.85 a week, and the wife \$9.95 for 5½ days' labor. Food cost \$16 a week, and rent \$1.30 a week for a four-room cottage with electric lights but with no cook stove or central heating. Electricity and water were supplied free. The washing was done out at a cost of \$2 a week.



COVER, JOHN H.

(393)

NEIGHBORHOOD DISTRIBUTION AND CONSUMPTION OF MEAT IN PITTSBURGH AS RELATED TO OTHER SOCIAL AND ECONOMIC FACTORS. 228 pp., illus. Chicago. 1932.

Five neighborhoods in Pittsburgh were surveyed to secure data on meat consumption and its relation to social and economic factors. "It was essential to the purpose to select neighborhoods with characteristics representative of the various population groups of Pittsburgh; the more homogeneous each neighborhood, the greater the facility in isolating significant factors" (p. 2). The data collected apply to the year 1929. The predominant size of family was 4 persons, represented by 148 families of the total 717 reporting on size of family. In 719 families, 59 percent of the homemakers were native born. The total number of families interviewed was 719, but data on income and food expenditures were obtained for only 176. Further tables are given on milk and meat expenditures, the relation of rent to meat expenditures, and expenditures per fammain for food.

EDWARDS, PAUL K.

(394)

THE SOUTHERN URBAN NEGRO AS A CONSUMER. pp. 41, 42, 283, 284, illus. New York. 1932.

A study made in Nashville, Tenn., in 1929 is included in an effort to determine the distribution of income by Negro families of different occupational groups. Material is given on the earnings and family expenditures of 318 wage-earner and low-salaried families together with material on 41 families whose heads were professional men or business men with incomes of \$2,100 or over. All families are divided into seven income groups, and each group is weighted according to its importance in the total Negro community of Nashville. The division of the community into various income groups was worked out on the basis of a field survey in 1929 in which 1 house in every 10 in the Negro sections of the city was visited. It was found that the average Negro family in Nashville had an annual income of \$1,310, 78 percent of which was earned by the head of the household. At one extreme were 20 families with an annual average income of \$355 which left them all with an annual deficit. At the other extreme were the highest income professional families. Food consumption was measured in terms of the adult-male unit as defined by the United States Bureau of Labor Statistics in Bulletin 357 (351).

UNITED STATES DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS. (395)

STANDARD OF LIVING OF EMPLOYEES OF FORD MOTOR COMPANY IN DETROIT.

U. S. Dept. Labor, Bur. Labor Statis. Monthly Labor Rev. 30 (6): 11-54. 1930.

This survey of 100 families was undertaken "to secure detailed data regarding the living conditions and expenses of a representative number of Ford Motor Co. employees in Detroit who were maintaining a family on the company's minimum wage of \$7 per day" (p. 11). The families selected met these requirements: The husband earned about \$7 per day in 1929, and worked for the Ford Motor Co. at least 225 days that year; his earnings were the family's only material income; the family consisted of husband, wife, and not less than 2 nor more than 3 children and no other persons; no child was more than 16 years old on the birthday occurring in 1929; there were no expenditures for the benefit of persons living outside the family; the family kept house in a single house, flat, or apartment throughout 1929, or, if they were buying a home, the payment on it was fairly comparable to the rental value of a similar house.

The average size of the families was 4.5 persons. Income averaged \$1,712, of which the husband's earnings averaged \$1,695. "Food furnished from a garden, a poultry yard, or received as a gift was entered in the food expenditures as though it had been purchased by the family and was also shown in the budget under supplementary income from other sources" (p. 16). Total expenditures for current living averaged \$1,661; for food, \$556; for clothing, \$211; for housing, \$389; and for household operation, \$131. The cost of life-insurance premiums averaged \$59.

In these 100 families there was an average of 3.27 adult-male equivalents (using the Wright scale as the basis of measurement). The average quantity and cost are given of over 120 articles of food consumed per family and per equivalent adult male. These specified articles of food are analyzed, and the number of calories and grams of protein, calcium, phosphorus, and iron are given per pound and per family for the year. A special section deals with installment buying, a purchasing procedure used by 59 of the families.

FREEMAN, RUTH C., and SOUDER, M. ATTIE

(396)

LIVING EXPENDITURES OF A SELECTED GROUP OF ILLINOIS FARM AND SMALL-TOWN FAMILIES (1929-30). Ill. Agr. Expt. Sta. Bull. 372: 331-351, illus. Urbana. 1931.

This investigation was initiated among rural homemakers in Illinois for the purpose of showing the "desirability of making a more satisfying apportionment of total, or 'realized', income" (p. 331). Household accounts were kept during the year 1929-30 in 18 different counties in central Illinois by 18 small-town and 70 farm homemakers.

Annual expenditures averaged \$2,636 for the town families, and savings \$1,026. Expenditures were \$602 for food, \$270 for clothing, and \$371 for operating items.

HELLER COMMITTEE FOR RESEARCH IN SOCIAL ECONOMICS, UNIVERSITY OF CALIFORNIA, and PANUNZIO, CONSTANTINE

(397)

COST OF LIVING STUDIES. V. HOW MEXICANS EARN AND LIVE; A STUDY OF THE INCOMES AND EXPENDITURES OF ONE HUNDRED MEXICAN FAMILIES IN SAN DIEGO, CALIFORNIA. Calif. Univ. Pubs., Econ. 13 (1): 1-114. Berkeley. 1933.

This study exhibits the manner of living in 1929-30 of a group of 100 non-migratory Mexican families living in a Mexican neighborhood in San Diego, Calif. Families were selected for study which had been living in the city for 12 months, which had 1 Mexican parent, both parents living at home, and which included at least 1 child. The families in the main were self-supporting and independent. The families were either personally known to the investigator, or were neighbors or relatives of families already included. Twenty-two schedules were not used, usually because of an unexplained discrepancy of over 10 percent between income and expenditure.

Ninety-one percent of the parents and 28 percent of the children were natives of Mexico. Seventy of the fathers were low-skilled or semiskilled workmen, 15 were skilled workmen, 5 were salesmen, agents, or shop clerks, 7 were small tradesmen, and 1 was a minister; 2 were too old or ill to work. In 44 families the woman was gainfully employed at some time during the year.

The average family had 3.6 children. Income for the year averaged \$1,337. Total expenditures, including savings, averaged \$1,383. Expenditures for food averaged \$507; for clothing, \$189; for household operation, \$79; for furnishings, \$36; for housing, \$221; for life and accident insurance, \$32, and for other savings, \$35. Approximately half the families had expenditures exceeding their incomes.

The average family was found to be much better housed than would have been possible in Mexico, although overcrowding prevailed when judged by the standard of one room per person as set by Government studies. On the whole, they had adopted the American manner of living to a large extent, with the notable exception of diet. Expenditures per consumption unit in each family were computed by combining the food expenditure per equivalent adult male and the per capita expenditures for all items. Adequacy of diet was measured in terms of how far expenditures for food were sufficient to meet the cost of a standard ration, which in this instance was taken to be a series of diets for persons of different sexes and ages as compiled by Florence Nesbitt in Los Angeles in 1927 for the use of local charities. "It is obvious that undernourishment, according to accepted dietetic standards, was prevalent \* \* \* insofar as the amount spent for food is an index of the nutritive value of the diet" (p. 35). Data are given on the weekly expenditures of 87 families for nine groups of food, on the individual expenditures and incomes of 6 families, and on the stock and average replacement of clothing for a man, woman, boy of 12 or older, and a girl between 2 and 12 years of age.

KIRKPATRICK, ELLIS L., and TOUGH, EVELYN G.

(398)

STANDARDS OF LIVING IN THE VILLAGE OF CROZET, VIRGINIA. Va. Univ. Rec. Ext. Ser. 16 (2): 1-40, illus. University, Va. 1931.

This investigation of 104 white and of 24 Negro families in the village of Crozet, Va., was undertaken to obtain information on the different aspects of village life and to learn to what extent such a study might be made a university class exercise in rural sociology. The average size of the 104 white families was 3.7, of the Negro families 4.5. The chief earners of income in the white families had completed 9.2 grades, the homemakers 9.3, on an average. The money value of the living for 1929-30 averaged \$1,970 for the whites, \$894 for the Negroes. Housing furnished (10 percent of the value of the house) averaged \$396 for the whites, and \$75 for the Negroes. Food both purchased and furnished averaged \$511 for the whites and \$339 for Negroes, and clothing both furnished and purchased averaged \$265 for whites and \$134 for Negroes. Food furnished was valued at farm



prices, and clothing gifts were valued in comparison with new garments of similar kind. Life and health insurance averaged \$52 for the whites and \$32 for the Negroes. The poor village families appear to have had a better living than did the poor farm or city families studied by Gee and Stauffer (437). Intermediate village families lived about as well as did the intermediate farm families included in the earlier study, but less well than the intermediate city families. Prosperous village families lived less well than did corresponding farm or city families.

MAINE UNIVERSITY, COLLEGE OF AGRICULTURE, EXTENSION SERVICE. (399)

A SUMMARY OF HOME ACCOUNTS FROM EIGHTY-FOUR MAINE HOMES FOR THE YEAR APRIL 1929-APRIL 1930. 4 pp. [Orono.] [1930.] [Mimeographed.]

This study included farm as well as wage-earning families and is annotated as (123).

TIME, INC.

(400)

MARKETS BY INCOMES; A STUDY OF THE RELATION OF INCOME TO RETAIL PURCHASES IN APPLETON, WISCONSIN. 2 v. New York. 1932.

A survey of how people in different income brackets spend their money was made in Appleton, Wis., by Time. This city of 25,000 inhabitants was chosen as a "normal" city. It is located in the center of a good farming district, contains a diversity of manufactures, and is 100 miles from any large center of distribution. Cooperation in the study was easily secured from the local groups. The grocery study was made for the month of July 1931; for many of the other purchases an average was given for the years 1929, 1930, and part of 1931. Income data were secured from the income-tax reports of the State. The material for the food study was secured from a canvass of housewives and from grocery-store records. Store records were used in constructing the tables relating to the purchase of larger items such as automobiles, refrigerators, and radios. Municipal records were used to secure assessed valuations of real property and building permits. The survey includes reports from 1,099 families. Of these, 627 had incomes under \$3,000 (431 families with incomes under \$2,000 and 196 families with incomes from \$2,000 to \$3,000). Purchases of automobiles, automatic refrigerators, electrical appliances, material for sports and hobbies, radios, mens' clothing, groceries, house furnishings, and a number of miscellaneous items were analyzed. There is also an analysis of home ownership, value, and adequacy of housing. The data are presented in most cases by number and value of purchases per thousand families in five income groups. Summary tables show the percentage distribution of total purchases by 2 or 3 income groups.

PERROTT, G. ST. J., and COLLINS, SELWYN D.

(401)

SICKNESS AND THE DEPRESSION: A PRELIMINARY REPORT UPON A SURVEY OF WAGE-EARNING FAMILIES IN BALTIMORE, CLEVELAND, AND SYRACUSE. Milbank Memorial Fund Quart. Bull. 12 (1): 28-34. 1934.

This report presents a preliminary analysis of data for 2,906 families in Baltimore, Cleveland, and Syracuse obtained in a larger house-to-house canvass of 12,000 white families of the wage-earning class in the poorer districts of 10 localities in 1929-32. The occupations, nativity, and racial stock of these families were similar to the group of 2,566 families in Birmingham, Detroit, and Pittsburgh (402), but their economic status was lower. The annual family income per capita of the 2,906 families in 1932 ranged from under \$150 to \$425 and over. Analysis of illness in relation to income change and unemployment showed that "a large drop in economic status is associated with a high rate of illness" (p. 33), and "that none of the beneficent effects often attributed to the economic depression are evidenced by the data" (p. 34).

— and COLLINS, SELWYN D.

(402)

SICKNESS AND THE DEPRESSION: A PRELIMINARY REPORT UPON A SURVEY OF WAGE-EARNING FAMILIES IN BIRMINGHAM, DETROIT, AND PITTSBURGH. Milbank Memorial Fund Quart. Bull. 11(4): 281-298. 1933.

The data analyzed in this report were secured as part of a house-to-house survey of 12,000 white wage-earning families in the poorer sections of 8 large cities (New York, Brooklyn, Syracuse, Pittsburgh, Detroit, Cleveland, Baltimore, and Birmingham), 1 coal-mining area in the vicinity of Morgantown, W. Va., and 1 district of cotton-mill villages near Greenville, S. C. The United States Public Health Service and the Milbank Memorial Fund cooperated in this study to secure records of illness in 1933 and of economic history from 1929 to 1932 from every family within the selected district of each locality. The purpose of the study was (1) to determine if there is any relation between income changes during the depression and ill health as measured by morbidity and mortality, (2) to dis-

cover what kinds of ill health are chiefly responsible for the relationship, if any, and (3) to determine the amount and kinds of medical care received by various economic classes of people.

The chief wage earners of the 2,566 families surveyed in Birmingham, Detroit, and Pittsburgh were employed as skilled laborers, unskilled laborers, and clerical help. In 1929 only 1 percent of the families had no employed workers. In 1932, 12 percent of the families were without employment. Fifty-four percent were of native white stock. The foreign group was largely of English, Irish, and German stock. In 1929, 25 percent had incomes of under \$1,200 per year; by 1932, 69 percent of the families were in this group. The percentage of families having incomes of \$3,000 and over decreased from 18 percent in 1929 to 2 percent in 1932.

"The results show a higher incidence of disabling illness among individuals in the lower income classes than among individuals with higher incomes. The highest illness rate is reported by a group which was in reasonably comfortable circumstances in 1929 but which had dropped to comparative poverty by 1932" (p. 298).

PERROTT, G. ST. J., SYDENSTRICKER, EDGAR, and COLLINS, SELWYN D. (403)  
MEDICAL CARE DURING THE DEPRESSION: A PRELIMINARY REPORT UPON A  
SURVEY OF WAGE-EARNING FAMILIES IN SEVEN LARGE CITIES. Milbank  
Memorial Fund Quart. Bull. 12 (2): 99-114. 1934.

This report presents a preliminary analysis of the hospital, nursing, and physician's care received by 6,686 wage-earning families in seven large cities. The material for this report was obtained by a larger house-to-house canvass of 12,000 white families in 7 cities. The 6,686 families were comprised of 28,959 individuals. In 1929, 10 percent of the persons surveyed were in families with an annual per capita income of \$149 or less; by 1932, 43 percent were in this class. The results indicated that a very large proportion of the total service received was free. "The 'chronic poor,' a group which were poverty stricken even in 1929, show the largest percentage of free care and the largest total volume of hospital and visiting nurses' service. Families that had suffered loss of income during the depression (the depression poor) received more hospital care, largely free, than families of similar economic status in 1929 that had not lost income" (p. 114).

SYDENSTRICKER, EDGAR, and PERROTT, G. ST. J. (404)  
SICKNESS, UNEMPLOYMENT, and DIFFERENTIAL FERTILITY. Milbank Mem-  
orial Fund Quart. Bull. 12 (2): 126-133. 1934.

This preliminary report attempts to discover to what extent a high fertility rate was associated with inadequate income and ill health during the depression. The data were secured as part of a larger house-to-house canvass of 12,000 white families of the wage-earning class in the poorer districts of 10 localities. The data in this paper cover 8,000 families in 8 cities (Birmingham, Baltimore, Cleveland, Detroit, Greenville, New York City, Pittsburgh, and Syracuse). The average annual income for this group decreased from \$1,700 in 1929 to \$900 in 1932 when many of the families were on relief or had no means of support. The sickness rate in 1933 was over 50 percent higher in families whose incomes had dropped most sharply during 1929 to 1932 than in families which remained in the higher income class. The findings indicated that "\* \* \* the birth rate was highest during the depression in families which were without employment or on part-time work in 1932. Furthermore, if the birth rate is studied in connection with income changes during the depression, it appears that high fertility was associated with inability to succeed in the severe competition for jobs brought about by the depression. Low social status, unemployment, and low income in 1932 went hand in hand with a high illness rate and increased malnutrition among children" (p. 133).

ACHSTEIN, ASHER (405)  
REPORT OF THE STATE BOARD OF HOUSING ON THE STANDARD OF LIVING OF  
400 FAMILIES IN A MODEL HOUSING PROJECT, THE AMALGAMATED HOUSING  
CORPORATION. State Board of Housing. 93 pp., illus. New York.  
1931.

Schedules covering the year ended December 1, 1930, were obtained from 400 families living in the Amalgamated Housing Corporation in the Borough of the Bronx, New York City, to determine the class of tenants benefiting from the State housing law and the effect of model housing upon the standard of living of families with small incomes. This group was chosen for study because of its homogeneity, the possibility of checking family estimates with the records of



the cooperative stores located in the building, and the large sample available. This housing development covers three city blocks in an attractive neighborhood, and is the largest low-rental cooperative-housing experiment in the United States.

No limitations were set in the selection of families either as to income, size, or occupation. The families were distinctly of foreign-born Jewish ancestry; only about 10 percent of the parents had been born in the United States. The chief breadwinners were in the main wage earners or salaried employees, only about 8 percent being shopkeepers or individual proprietors. Thirty-one percent of the chief breadwinners were employed in the men's and women's clothing trades, 10 percent were professionals, and over 8 percent were engaged in the building trades. Of the chief breadwinners over one-half reported union membership.

The average size of family was 3.74 persons, and the average annual income \$2,621. The average annual quantity of food consumed and clothing purchased and the average cost are given for specific kinds of food and clothing by expenditure groups. The average annual total expenditure per family was \$2,880; rent averaged approximately \$532; food, \$949; clothing, \$309; house operation, \$206; and all other items, \$883. Only about 10 percent of the families reported savings during the year, which averaged \$272 per family reporting, or about \$30 for all families.

A social consciousness among the residents resulted in the development of all kinds of communal activities such as a library, kindergarten, clubs, lectures, concerts, a monthly paper, etc.

The effect of economic status on purchases of items bought and prices paid for commodities is indicated by the findings of the investigation.

HOPPER, WILBERT C.

(406)

EFFECT OF VARIOUS FACTORS ON THE CONSUMPTION OF FRESH FRUITS AND VEGETABLES IN CITY FAMILIES. N. Y. (Cornell) Col. Agr., Farm Econ. 78: 1815-1820. 1932.

This study is part of a preliminary report of a city market survey begun in the summer of 1930 with the assistance of officers of the bureau of markets of the New York State Department of Agriculture and Markets. Expenditures for fruits and vegetables during the year 1930 were secured from 1,020 families living in Albany. The heads of the households were unskilled laborers, small business executives, nonclerical skilled laborers, professional men, clerical skilled workers, salesmen, and large business executives. The average size of the families was 3.9 persons. Less than 4 percent of the number had city vegetable gardens and a little over 2 percent grew their own fruit. Of the families, 428 had incomes under \$2,000. The average annual expenditure for all families for fruits and vegetables was \$206 and the per capita annual expenditure, \$53. Per capita expenditures for fresh fruits and vegetables were higher in families where the income was larger, where the family was smaller or without children, where the head was native born, and where the head was engaged in the more skilled occupations. A larger number of families bought fruits and vegetables at independent retail stores than at any other retail outlet.

PRESIDENT'S CONFERENCE ON HOME BUILDING AND HOME OWNERSHIP, COMMITTEE ON RELATIONSHIP OF INCOME AND THE HOME. (407)

HOME OWNERSHIP, INCOME AND TYPES OF DWELLINGS. President's Conf. on Home Bldg. and Home Ownership Rept., v. 4, pp. 76-134, illus. Washington. 1932.

The home ownership study in this report was made in Buffalo, N. Y., which is "one of the most highly developed and diversified industrial centers in the country" (p. 76). The 789 families selected for the study were chosen to meet the following conditions: total income not to exceed \$3,000 in 1930; family composed of husband, wife, and at least one dependent child, both parents born in the United States; owning home, but still in process of paying for it in 1930; no more than two roomers or lodgers taken; living in 1- or 2-family dwelling, and no doubling up with extra families. Material is given regarding size of lots and houses, equipment of houses, value, mortgages including terms, etc., number of garages, occupation and earnings of chief breadwinner, number of weeks of employment at time of purchase of house and in 1930, source of down payment on property, relation of cost of property to family income, effect of home purchase upon certain items of family expenditures. A case study of 10 families is included. Each family and its real estate are described together

with the effects of home purchase on the family habits and budget. Detailed family living expenditures are tabulated for this group.

REED, LOUIS S.

(408)

THE ABILITY TO PAY FOR MEDICAL CARE. Costs Med. Care Com. Pub. 25, [113] pp. Chicago. 1933.

The purpose of this study was to inquire into the ability of American people to pay for medical care and to examine the expenditure habits of families of different income levels. Usable schedules of living expenditures from 141 families of various income levels living in places of 10,000 to 500,000 population in New York, Indiana, Minnesota, Virginia, and Wisconsin were obtained in conjunction with a study of the costs of medical care of 8,758 families. Data covering the 1930 expenditures of 103 of these urban families are presented along with material for comparable income classes taken from other family-living studies. Eighteen families, averaging 4.9 persons, had incomes of less than \$1,000 and current living expenses averaging \$904; 21 families, averaging 4.3 persons, had incomes averaging \$2,226 and expenditures for current living averaging \$1,991; and 64 families, averaging 5.1 persons, had incomes averaging \$1,479 and current living expenses averaging \$1,413. For the 64 families, total expenditures for food averaged \$536, for shelter \$443, for clothing, \$99, and for household furnishings, \$48. Insurance averaged \$81 for the year. The amounts expended for medical care by each of the three groups of families averaged \$48, \$127, and \$75, respectively. In the second group of families more was spent for this item than the amount estimated as necessary by the Chicago Council of Social Agencies in 1929 in its minimum health and decency standard. The other two groups failed to meet this requirement by \$36 and \$9.

The study indicated that families with incomes of over \$1,200 could possibly pay the present average costs of medical care. But "many families it may be assumed, who each year could easily pay the average cost of medical care for people of their income level, may be quite unable to pay the actual cost of necessary medical treatment in a year when much illness or illness of great severity or long duration occurs among their members" (p. 78). Inability to pay for medical care results partly from inadequacy of income and partly from the unpredictable nature of illness. "The cost of modern medical treatment in severe illness is such that each year from 2 to 4 percent of families with low or moderate incomes will urgently require medical treatment, the cost of which will be beyond their means or which they will be able to pay only with difficulty" (p. 95).

Material dealing with national income and its distribution, national expenditures and the factors affecting them, and the average cost of medical care is given in addition to the analysis of data on living expenditures.

WAUGH, FREDERICK V.

(409)

THE CONSUMPTION OF MILK AND DAIRY PRODUCTS IN METROPOLITAN BOSTON IN DECEMBER, 1930. 27 pp. [n. p.] 1931.

This study, undertaken in 1930, was divided into two parts. "The first part was the tabulation and analysis of retail sales of milk by months on six routes in metropolitan Boston in 1929 and 1930 \* \* \*. The second part of the study was a house to house survey of 2,879 families in the metropolitan Boston area made \* \* \* during the first two weeks in December 1930" (pp. 3-4). The survey covered 36 districts. Families visited included 1,340 native white, 362 Irish, 254 Italian, 211 Jewish, 192 Canadian, 169 English and Scotch, 126 Negro, 60 German, and 145 from other groups. Family size ranged from an average of 3.1 in the district which had the largest percentage of native white families, 97, to 6.2 in the district which had the lowest percentage of native white families, 70. Incomes ranged from under \$900 to over \$4,000. The average consumption of milk was 0.391 quart a day for each person, or 1.58 quarts for each family. The per capita consumption ranged from 0.469 quart daily in the Irish families to 0.214 quart in the Negro families. "The nationality averages were, therefore, weighted according to the nationality distribution in the metropolitan area to get a weighted average reported consumption which is \* \* \* 0.424 quart daily for each person and 1.71 \* \* \* for each family" (p. 4).

For all nationalities taken together, as per capita income decreased and as family size increased, per capita milk consumption decreased. For native white families of high incomes, per capita milk consumption was fairly stable regardless of the number in the family. Nationality was closely related to the grades of milk consumed. Only 3 percent of Negro families used grade A milk; the per-



centage of native whites using grade A milk was 10 times as great. Disregarding 27 families with incomes under \$900, the percentage of families buying grade A milk increased with each increase in income in native white families. Grade A milk was bought largely for children.

There was a high consumption of cream during the berry season and in the winter. Cream consumption increased with increase in income. The consumption of butter, of butter substitutes, and of condensed and evaporated milk is discussed, as is the extent of milk drinking, which has apparently decreased for children and increased for adults since 1922. (Comparison is made with the findings of the 1922 survey of milk consumption in metropolitan Boston, made by the Massachusetts Department of Agriculture and the United States Bureau of Agricultural Economics.) About 46 percent of the housewives interviewed remembered having seen or heard milk advertising, and 15 percent remembered that the source was a newspaper or magazine. About 24 percent of the Jewish and 3 percent of the Negro housewives knew about the milk programs in schools. Of the total number of families, 67 percent bought most of their milk from dealers. The average per capita purchase of families buying from stores was almost exactly the same as that of families buying from dealers.

WINTERS, JET C.

(410)

A REPORT ON THE HEALTH AND NUTRITION OF MEXICANS LIVING IN TEXAS. Tex. Univ. Bull. 3127, 99 pp. Austin. 1931. (Tex. Univ. Bur. Research in the Social Sciences Study no. 2.)

Two groups of Mexican families living in San Antonio and Austin, Tex., were investigated in 1930 to determine the content of their diet. In San Antonio where over 30 percent of the population is Mexican "20 representative families from 2 adjacent corrals were selected \* \* \*. They represent the lowest income group, from \$10 to \$25 per week. Dietary data were also collected from 20 Mexican families living in different and better districts and not in corrals" (p. 10). For this group incomes ranged from \$25 to \$40 per week. A "corral" consists "of rows of small houses built very close together and facing each other. Water is supplied from hydrants in a center plot of ground. Each corral is required by law to have a definite number of shower baths and toilets" (p. 10). Twenty-five families, representing a mixed-income group of about the same range as in San Antonio, were studied in the smaller city of Austin. All families selected had at least three children between the ages of 2 and 15 years. Careful contact was made with the families. In San Antonio a trained worker "went into the homes and made an inventory of all food on hand at the beginning of the study, then made daily visits to determine the kind and amount of food bought, and made a second inventory of food on hand at the end of the period (week)" (p. 10). Volunteer rather than trained workers gathered the data for Austin. The calorie, protein, calcium, phosphorus, and iron content of the food was estimated on the basis of scales in Rose's Laboratory Handbook of Nutrition. Two scales for measuring adequacy of diet were used: (1) The Hawley method and (2) the per capita method. The adequacy of the vitamin content of the diet was measured. For the purpose of reducing cost to a per-man-per-day basis the United States Department of Labor scale was used. "A careful study of prices at the time this investigation was made showed that 40 cents per day per person might reasonably be considered the minimum amount for which adequate nutrition could be provided" (p. 15). A list of 61 foods is given, and if they appeared in as many as one-quarter of the dietaries studied the average amounts used are given. There is discussion of the percentage distribution of costs among the leading groups of foods, and also of the diet of these families in relation to health.

FREEMAN, RUTH C.

(411)

SUMMARY OF HOME ACCOUNT BOOKS, 1930-31. Ill. Univ., Col. Agr., Home Econ. Ext. Serv. [15] pp. Urbana. [1931?] [Mimeographed.]

Home account books for 1930-31 for 135 farm and small-town families in 29 counties in Illinois are summarized to enable account keepers to make comparisons with the accounts of families of the same approximate size and range of income as a means of checking their own expenditures for "leaks" and wiser planned spending. One hundred and eleven records are for farm homes and 24 are for town homes. The total average value of living for the small-town homes was \$3,337, including savings and investments. Average money value of food furnished was \$24. Total expenditures for current living averaged \$2,516; for food, \$484; for clothing, \$233. Savings and investments averaged \$797.

MAINE UNIVERSITY, COLLEGE OF AGRICULTURE, EXTENSION SERVICE. (412)

A SUMMARY OF HOME ACCOUNTS FROM EIGHTY-THREE MAINE HOMES FOR THE YEAR APRIL 1930-MARCH 1931. 6 pp. [Orono.] [1931.] [Mimeographed.]

This study included farm as well as wage-earning families and is annotated as (149).

NEW JERSEY CONFERENCE OF SOCIAL WORK, INTERRACIAL COMMITTEE, and NEW JERSEY STATE DEPARTMENT OF INSTITUTIONS AND AGENCIES. (413)

THE NEGRO IN NEW JERSEY; REPORT OF A SURVEY BY THE INTERRACIAL COMMITTEE OF THE NEW JERSEY CONFERENCE OF SOCIAL WORK IN COOPERATION WITH THE STATE DEPARTMENT OF INSTITUTIONS AND AGENCIES. 116 pp., illus. [n. p.] 1932.

In 1931 this survey was undertaken "to ascertain the social and economic status of the Negro population of New Jersey through an analysis of that group's advantages and disadvantages in the fields of education, employment, housing, business, health, law observance, dependency, delinquency, recreation, and citizenship \* \* \* and to make available these facts \* \* \* that they may be used \* \* \* in promoting the social well-being of the Negro, and in improving interracial relationships" (p. 11). The cooperation of 22 biracial committees, 14 of which were set up by the survey staff, was secured. "Staff investigators interviewed 2,162 Negro families in 47 communities" (p. 11). Local surveys, covering 80 percent of the State's Negro population, were made in 60 communities in 16 counties. "In each community, interviews were had with \* \* \* the superintendents of schools, local health officers, employment secretaries and labor leaders, executives of all social agencies dealing with Negro families and Negro and white community leaders \* \* \* visits were also made to all social agencies engaged in programs open to Negroes" (p. 12). Of the 2,134 families, 5.1 percent were illiterate. Of persons over 16 years of age, 5.3 percent were born in New Jersey. The median size of family was 3.6 persons. The median weekly total family income was \$22, the median weekly wage of heads of families was \$21, of all male workers, \$21, and of all female workers, \$9. The median weekly expenditure for rent was \$5.49.

PRESIDENT'S CONFERENCE ON HOME BUILDING AND HOME OWNERSHIP, COMMITTEE ON NEGRO HOUSING. (414)

NEGRO HOUSING. President's Conf. on Home Bldg. and Home Ownership Rept., v. 6, pp. 58-91, illus. Washington. 1932.

This special analysis, made possible by the New Jersey Conference of Social Work, summarizes an investigation made during June 1931 covering the family life of 200 Negro families. The families resided in the third and fourth wards of Newark, N. J., areas representing to a great extent the least desirable residential section of the city. The general environmental conditions were those to be found in any community where the municipality had seen cause for condemning structures as unfit for habitation.

The total number of persons in all households was 1,081, 515 of whom were under 16 years of age. There were relatively few lodgers and relatives. The median size household was 4.7 persons. Most of the adult members of the families were southern born; only 4 percent had been born in New Jersey. Sixty percent of the employable persons in the families were unemployed at the time of the analysis. The median weekly wage for 102 of the families with employed persons was \$13. The "type" family of the group lived in a four-room frame house for which it paid \$6 weekly or \$26 a month. In the main the houses of the families were lacking in modern conveniences.

The first striking observation regarding Negro living expenditures was that they are required to spend a larger proportion of their income for rent than do other groups. High rents and low wages meant working mothers, necessitated lodgers, and meant overcrowding.

Additional material on the relation of rent to family income is given, summarizing data gathered in Elizabeth, N. J., from 210 Negro families.

FREEMAN, RUTH C. (415)

SUMMARY OF HOME ACCOUNT RECORDS. Ill. Univ., Col. Agr., Home Econ. Ext. Serv. 19 pp. [Urbana.] [1932.] [Mimeographed.]

Two hundred and sixteen farm and small-town families from 30 Illinois counties cooperated in keeping records for a 12-month period, 1931-32. One hundred and thirty-two books were from families that had submitted yearly records for from 1 to 3 years. Of the 201 books used in this study, 159 were from farm families



and 42 from small-town families. For the small-town families average size of family (Hawley scale) was 2.7 adult units. Total value of living averaged \$2,422. Average value of food consumed was \$425. Average expenditures for clothing were \$199; for housing, including repairs and furnishings, \$512; and for household operation, \$266. Savings and investments averaged \$483.

MAINE UNIVERSITY, COLLEGE OF AGRICULTURE, EXTENSION SERVICE. (416)  
SUMMARY OF HOME ACCOUNTS, 1931-32. 6 pp. [Orono.] [1932.] [Mimeographed.]

This study included farm as well as wage-earning families and is annotated as (157).

AXELRAD, SIDNEY (417)  
TENEMENTS AND TENANTS; A STUDY OF 1104 TENEMENT FAMILIES, MEMBERS OF THE LEAGUE OF MOTHERS' CLUBS, SHOWING INCOME, RENT, AND HOUSING CONDITIONS. League of Mothers' Clubs. 16 pp. New York. [1933.] [Mimeographed.]

The League of Mothers' Clubs studied the income, rent, and housing conditions of 1,104 tenement families in New York City in the latter part of 1932 to secure facts about housing as a basis for temporary relief and long-time planning. The group was composed of members of the mothers' clubs in the neighborhood settlement houses in the lower East Side, middle East Side, West Side, Bronx, Harlem (Negro), and Brooklyn.

The wage earners were chiefly factory employees. A median income of \$1,049 a year supported a median sized family of 4.1 persons, the amount of earnings showing a persistent increase with the number of workers per family. Over half the reporting groups were living under poverty conditions. Comparison of the median income with a minimum of subsistence level of \$1,150 for a family of four, a figure compiled by Lucy Gillett of the Association for Improving the Condition of the Poor, indicated that 55 percent of the families were below the necessary minimum. The median rent of \$319 secured the use of 3.7 rooms per family. The median number of persons per room was 1.2. Half of the families occupied apartments rated as unfit for human habitation. The members of this group indicated a willingness to move if suitable accommodations were available. Comparison with a 1928 study of 1,014 comparable tenement families indicates that wages had decreased much more rapidly than rent, that rents for tenement houses had remained fairly stable, that overcrowding had increased, and that there was a decided scarcity in supply of available apartments for low-income groups.

"At the present time for the tenement-house family there is no positive relationship between the amount earned and the amount spent for rent" (p. 8), the smaller income groups apparently paying rents disproportionate to size of incomes. About 40 percent of the wage earners who were formerly employed were without any work at all in 1932.

FREEMAN, RUTH C. (418)  
SUMMARY OF ILLINOIS HOME ACCOUNT RECORDS, 1932-33. Ill. Univ., Col. Agr., Home Econ. Ext. Serv. 14 pp. [Urbana.] [1933.] [Mimeographed.]

One hundred and ninety-two home account books for 1932-33 from farm and small-town families in Illinois were summarized to show ways of adjustment to decreased income. Thirty-three of these records were from small-town families. Average size of family was 2.4 adult-male units (Hawley scale). The average total money value of living was \$2,146. The average value of food furnished was \$42. Total expenditures for current living averaged \$1,721; for food, \$307; for clothing, \$175; for shelter, \$445; for household operation, \$258. Savings averaged \$383, of which \$264 represented life-insurance premiums. Food furnished was valued at local retail prices.

WILLIAMS, FAITH M., SCHMIDT, GERTRUDE, and RICE, FRANCES (419)  
CHANGES IN COST OF LIVING OF FEDERAL EMPLOYEES IN THE DISTRICT OF COLUMBIA FROM 1928 TO 1933. U. S. Dept. Labor, Bur. Labor Statis. Monthly Labor Rev. 39 (1): 213-224. 1934.

The United States Bureau of Labor Statistics and the Bureau of Home Economics cooperated in making a study of changes in the cost of living of Federal employees living in Washington, D. C. This was in connection with the administration of a law requiring that an index number (with a base period of the first 6 months of 1928) be used to adjust Federal salaries. Complete figures on incomes, expenditures, and savings were secured for 1932-33 and fragmentary

data for 1927-28 from 336 families and 123 single individuals. These cases were chosen by lot from the important salary groups representing the chief types of family organization and civil service classification of the Federal service in Washington. This selection of certain groups was based upon data secured by questionnaire from 50,573 of about 66,000 employees working in Washington in the fall of 1933. Of the families, 105 represented the custodial service, 127 the clerical-administrative-fiscal service, and 104 the professional service. The average custodial family of 5.25 persons reported \$1,447 for total expenditures and \$120 for savings. Expenditures averaged \$442 for food, \$156 for clothing, \$360 for housing, and \$172 for household operation. Similar data are given separately for three types of families in the clerical-administrative-fiscal service, and in the professional service. Material is also presented on the construction of the index number for Federal employees.

## OTHER INDEPENDENT FAMILIES

WOODHOUSE, CHASE G. (420)

THE STANDARD OF LIVING AT THE PROFESSIONAL LEVEL, 1816-17 AND 1926-27.  
*Jour. Polit. Econ.* 37: 552-572. 1929.

A family account book of a Government employee for 1816-17 is compared with that kept by a man holding a similar position in 1926-27. The first family was composed of husband, wife, and a 5-year-old daughter. The second consisted of husband, wife, a son aged 3, and a daughter 4 months old. Each family had a boarder and kept a maid. The yearly earnings for 1816-17 were \$1,000; for 1926-27, \$3,000. The families probably had other sources of income, such as investments, but no definite information is given. Percentages of total expenditures for both cases are included for purposes of comparison, and the Hurlin price-index series is used to show prices and price trends. Total expenditures for family living in 1816-17 and 1926-27, respectively, were \$1,987 and \$4,336; for food, \$916 and \$914; for clothing, \$106 and \$604; for housing, \$191 and \$1,242; and for operating costs, \$163 and \$707. Savings for 1926-27 amounted to \$518, of which \$292 represented life insurance. Although the amount in dollars spent for food by the two families was practically the same, it represented 46.1 percent of the total expenditures in 1816-17 and only 18.8 percent in 1926-27. Other studies on percentages of expenditures for food are cited to show that "the percentage of income spent for food is one of the most effective indicators of the level of living. When the level is low, the percentage spent on food is high" (p. 557).

UNITED STATES TREASURY DEPARTMENT. (421)

REPORT FROM THE SECRETARY OF THE TREASURY IN COMPLIANCE WITH A  
 RESOLUTION OF THE SENATE, RELATIVE TO INCREASE OF THE SALARIES OF  
 CLERKS, ETC. 24th Cong., 1st sess., S. Doc. 355, 23 pp. 1836.

In response to a Senate resolution asking the heads of the Executive Departments to report to the Senate their opinions on increasing the salaries of the clerks in their departments, the second comptroller asked one of his clerks who kept a regular diary of his expenses to give him an account of them. This report presents the detailed expenditures of this clerk for the year 1835. His family consisted of 3 adults and 5 children. His salary for 1835 was \$1,400. Total expenditures for the same year amounted to \$1,448, of which \$338 was for clothing. He paid no house rent. His expenses for 1833 and 1834 totaled \$1,324 and \$1,121, respectively.

MASSACHUSETTS BUREAU OF STATISTICS OF LABOR. (422)

ANNUAL REPORT. *Mass. Bur. Statis. Labor Ann. Rept.* 7 (pt. 2): 204-258.  
 1876.

The facts concerning living expenses of salaried workers, given in this report, are based on the work of the decennial census and industrial statistics of the commonwealth for the decade ended May 1, 1875. The questions relating specifically to the subject of expenditures for the year ended May 1, 1875, constituted the individual schedule of the census system. In all 9,554 schedules were returned for the salary class—7,748 from males and 1,806 from females. About 150 different occupations were covered, including a few master mariners, marine engineers, and traveling salesmen who received board in addition to their salaries, and a few persons who might be thought to belong to the category of persons who do business on their own account. In all instances averages are given for the number of persons answering the questions asked. The average number of persons dependent on the males was 2.64; the number dependent on



females averaged 1.63. The average yearly earnings of the males was \$1,016 and of the females \$429. Living expenditures of men averaged \$913, and of women \$359.

RICHARDS, ELLEN H. (423)  
THE COST OF LIVING AS MODIFIED BY SANITARY SCIENCE. Ed. 3, enl., 154 pp., illus. New York. 1915.

The purpose of this investigation is to supply data on the distribution of expenditures for current family living for American families who are "obliged to do the best they can on from two thousand to five thousand dollars a year." Records for 1 family are presented for each year from 1879-98. The expenditures for the family increased from \$1,307 in 1879 to \$3,028 in 1898. In 1879, \$335 (26 percent of the current family expenditures) was spent for food; in 1898, \$479 (15 percent). Additional records for 18 families in different localities over varying periods of time are also presented. Budgets are recommended for families consisting of 2 adults and 2 or 3 children with incomes ranging from under \$500 to \$4,000. The "ideal division" for family expenditures allows 25 percent for food, 15 percent for operating, 20 percent for rent, 15 percent for clothes, and 25 percent for "higher life."

BRUÈRE, MARTHA B., and BRUÈRE, ROBERT W. (424)  
INCREASING HOME EFFICIENCY. 318 pp. New York. 1912.

This study included farm and wage-earning as well as professional families and is annotated as (11) and also listed as (301).

OSKISON, JOHN M. (425)  
THREE FAMILY BUDGETS, CAREFUL RECORDS OF MONEY SPENT THAT HAVE LED TO WISE ECONOMY AND MODEST WEALTH. *Mother's Mag.* 11 (11): 37-38. 1916.

To show how some families practice thrift, the records of income and expenditures for a period of years are given for three families. One record from 1907 through 1914 is for the family of 4 of a professional man with an average income of \$4,035 a year. Of the total expenditure, including insurance for the 8 years, 16 percent went for food, 18 percent for clothing, 25 percent for rent, and 5 percent for fuel, light, and service.

OKLAHOMA DEPARTMENT OF LABOR. (426)  
THIRD ANNUAL REPORT. Okla. Dept. Labor Ann. Rept. (1909-10) 3 (pt. 1): 67-138. 1910.

This report gives the results of an investigation covering general working and living conditions of 225 families in Oklahoma during 1909. Returns for 66 single and 157 married workers give individual data on time worked, number of persons supported, marital status, home ownership, encumbrance on the home, rent, income, expenditures, and savings. Of the 157 married workers, 54 were school teachers.

NATIONAL EDUCATION ASSOCIATION OF THE UNITED STATES, COMMITTEE ON SALARIES, TENURE, AND PENSIONS OF TEACHERS. (427)  
REPORT OF THE COMMITTEE ON TEACHERS' SALARIES AND COST OF LIVING. 328 pp. Ann Arbor. 1913.

The committee on teachers' salaries and cost of living of the National Education Association investigated wholesale prices, retail prices, salaries, total incomes, and expenditures for rent, clothing, life insurance, religion, charity, amusement, health, and professional improvement in relation to teachers actively engaged in the profession. The purpose of the investigation was to determine the burden of direct and indirect professional demands upon the funds of teachers, and whether the increase in teachers' wages had kept pace with increases in wages of other workers and the increase in the cost of living. Teachers in five cities located in various parts of the country received questionnaires, and replies were returned by 1,666. Complete statements of expenditures for 1911 were submitted by 58 married men teachers in four cities (Hamilton, Denver, Atlanta, and New Haven). Data are given on age, sex, conjugal condition, dependents, residence and home ownership, salaries and other sources of income, training, and direct and indirect demands upon teachers' time. Data for the married home owners, married renters, and single individuals were tabulated separately.

The average size of the 29 families paying rent ranged from 4 persons per family in the lowest expenditure group to 4.4 persons in the highest. The

average incomes for the different expenditure groups ranged from \$861 to \$2,560. Total expenditures for family living including savings ranged from \$786, the average for the lowest expenditure group, to \$2,380 for the highest group; for clothing, \$190 to \$350; and for rent, \$144 to \$354.

When compared with the expenditures of workingmen in 1901 investigated by the United States Bureau of Labor, it was found that teachers spent more relatively for life insurance, religious purposes, charity, amusement, vocation, and care of health. Direct professional demands on the income of the teachers ranged in amount from 1 to 7 percent of the total expenditures of married men.

PARK, ROBERT E.

(428)

NEGRO HOME LIFE AND STANDARDS OF LIVING. *Ann. Amer. Acad. Polit. and Social Sci.* 49 (whole no. 138): 147-163. 1913.

This discussion of the Negro since the Civil War contains a summary of the expenditures of a better paid teacher in a large industrial school and of the principal of another industrial school. Although the period to which the data apply is not stated, it was in all probability just before the date of publication of the study. For the teacher, expenditures amounted to \$1,200. Garden vegetables and house rent furnished by the institution were not evaluated. The expenditure for clothing was \$144. Savings were \$300. For the principal, expenditures amounted to \$1,452. Fuel, light and house rent were furnished by the State. The expenditure for groceries was \$300; for clothing, \$275; for household operation, \$100; for life insurance, \$86; for mother, \$120; and for education of sister, \$90.

LEEDS, JOHN B.

(429)

THE HOUSEHOLD BUDGET, WITH A SPECIAL INQUIRY INTO THE AMOUNT AND VALUE OF HOUSEHOLD WORK. 246 pp., illus. Philadelphia. 1917.

Twenty students of the household science class in 1914 at Temple University, Philadelphia, and the same number in 1915 obtained schedules from their own and other middle-class families of the incomes, expenditures, and amount of time spent in household work. The 40 families included in the investigation had an average size nearly that of the normal family of man, wife, and three children. The total expenditures of the families for current living averaged \$2,018 and \$1,879 in 1914 and 1915, respectively; for food, \$529 and \$511; for clothing, \$404 and \$353; for rent, \$306 and \$273; for household operation, \$247 and \$261; and for savings, \$135 and \$100. A scientific household budget is presented for a family of five having an income of \$2,400. After revising the ordinary budget to include the money value of the time spent in housework, taking account of the skill required for that work and rearranging the entries under operation and sundries, the following distribution was presented: Food, 35 percent; clothing, 19 percent; shelter, 21 percent; advancement, 23 percent; and savings, 2 percent. "What we desire to know through the study of the budget, is the total expense of feeding the family, not of food as a raw material; the expense of shelter, not merely the rental price of an empty house" (p. 163). The investigation concluded that in the city of Philadelphia in 1915 an income of \$1,800 secured for a family of five only a moderate living, while \$2,400 was required for comfortable family life.

[UNITED STATES] FEDERAL RESERVE BOARD.

(430)

ADJUSTING SALARIES OF BANK EMPLOYEES TO MEET CHANGES IN THE COST OF LIVING. [U. S.] Fed. Reserve Bd., Fed. Reserve Bull. 6: 1293-1295. 1920.

The purpose of the investigation was to devise a plan "for ascertaining changes in the cost of living of bank employees with a view to affording a basis for changes in salaries, in accordance with such changes in the cost of living" (p. 1293). All Federal-reserve-bank employees having salaries of less than \$5,000 per annum received questionnaires. Data for the year 1919 for 819 families of employees of the Federal Reserve Bank of New York were tabulated by salary groups separately from data received from individuals. Of these families 176 received incomes ranging from \$2,700 to \$3,900 and over. The largest number of families, 57, had incomes ranging from \$2,700 to \$3,000 per year. Total expenditures for this salary group averaged \$3,021; rent, \$476; heat and light, \$95; food, \$1,206; clothing, \$516; furniture and house furnishings, \$184; and miscellaneous items, \$544.



ROCHESTER, ANNA

(431)

WHAT ELEVEN FAMILIES SPEND. THE COST OF COMFORT THAT IS NOT LUXURY.  
*World Tomorrow* 5 (6): 169-172. 1922.

Data for 11 families are presented to illustrate the "kind of expenditure which seems to socially-minded families essential, although it is beyond the reach of the wage-earner" (p. 169). Ten of the fathers of the families were professional, including an engineer, a social worker, a lawyer, a teacher, and six writers and organizers in the field of radical social activity. The families lived in 11 different communities in 5 States. Figures for 7 families cover the full calendar year 1921 and for 1 family the year ended July 1, 1921; for the 3 other families expenditures for certain items were given for less than a year; the number of items for which accurate figures could be given were incomplete. In every case, both mother and father were living and there was at least one child, not more than 11 years old. No family had more than 4 children.

The total expenditures (exclusive of contributions, savings, life insurance, and income taxes) in the 8 families giving figures for a full 12 months ranged from \$2,139 in a family with 1 child to \$7,209 in a family which included 3 children and 3 adults. Three families owned their homes, 3 were buying their homes on some part-payment plan, and 5 lived in rented dwellings. The first three families reported actual expenditures for dwelling during the year, including taxes, repairs, insurance, interest on mortgage, fuel, and commutation, ranging from \$400 to \$1,105. The payments toward the purchase of the dwelling, including fuel and commutation, ranged in the second group of three families from \$618 to \$1,530. The highest rent paid plus fuel and commutation was \$1,128, the lowest \$384. Seven families reported food expenditures ranging from \$775 to \$1,887 per year. The amounts expended for upkeep and supplies of the household for 10 reporting families ranged from \$116 to \$400 per annum. Clothing expenditures of 9 families ranged from \$208 to \$780 a year.

The simplest of these 11 accounts showed more generous expenditures for various purchases than the allowance estimated by the United States Bureau of Labor Statistics in its minimum health and decency budget for a Government employee's family in Washington in 1919. All families lived in quarters which had a margin of space beyond the one room per person standard which was set by the Bureau.

PEIXOTTO, JESSICA B.

(432)

GETTING AND SPENDING AT THE PROFESSIONAL STANDARD OF LIVING: A STUDY OF THE COST OF LIVING IN ACADEMIC LIFE. 307 pp. New York. 1927.

This study presents data on the family living of 96 families of married faculty at the University of California in Berkeley for the year ended December 1, 1932. "The main question that gave impulse to this study was whether or no these 96 families had salary enough to pay for an accepted standard of living" (p. 116). Families were selected in which both husband and wife were living and which were permanently settled in the community. Originally 247 families were asked to cooperate. Of the fathers, 28 were full professors, 26 associate professors, 22 assistant professors, 12 instructors, and 8 associates. The families were typically native Americans from the northern or the western part of the United States. Only 10 percent of the men and 10 percent of their wives were foreign born. The average family comprised 3.5 persons. The average salary of the heads of the families was \$3,376; average total income, \$5,344. Total disbursements, including savings, averaged \$5,512. Expenditures for food averaged \$894; for clothing, \$488; for shelter, \$871; and for house operation, \$746. Investments averaged \$774. Sixty-one families were home owners and 35 were tenants. Data are given on the average expenditures of 28 of the professional families with an average size of 4 persons and an average expenditure of \$7,015 as well as expense records of 12 typical families with incomes from \$1,800 to \$10,000.

Regardless of income, the families tended to spend a fixed amount for food and clothing, an amount approaching the minimum. Housing expenditures were fairly constant, but at a relatively higher level of living than the food and clothing standards. A well-defined class standard of living seemed to control the spending in all ranks. In conclusion the author states that "given prevailing prices, and recognizing that a simple, middle-class, professional standard of consumption is permissible and necessary for this academic group, 'no due care in spending' can make three thousand dollars pay for the needs of a professor's family" (p. 250). It was estimated that \$7,000 would be necessary to maintain a reasonable comfort basis for professional life and that only persistent care in spending would make \$5,000 suffice.

McGAUGHY, JAMES R., and others.

(433)

TEACHERS' SALARIES IN NEW YORK CITY. FINAL REPORT OF THE CITIZENS' COMMITTEE ON TEACHERS' SALARIES. 256 pp. New York, Teachers Col., Columbia Univ. 1927.

For purposes of analysis, the New York teachers studied are classified as man, woman, married and unmarried, and further divided according to the group they teach. Of the total number studied, 2,484 were married. Material is given on salaries in 1910 and in 1925, other income in 1925, average rents by income groups, average expenditure for meals by income groups, number of dependents, and a study of changing price levels and purchasing power of 1925 salaries in terms of 1910 and 1900 prices. It was found that in 1925 married teachers with incomes of less than \$2,000 paid an average rent of \$800, or about 40 percent of their incomes, while married teachers with incomes of \$5,000 paid about 25 percent of their income for rent.

UNITED STATES DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS. (434)  
COST OF MEDICAL SERVICE. U. S. Dept. Labor, Bur. Labor Statis. Monthly Labor Rev. 26 (5): 1-4. 1928.

Information presented in this study was obtained from nine employees of the Bureau of Labor Statistics whose salaries were \$3,000 or over per annum. Of these, seven had one or more dependents. The term "cost of medical service" covered all direct expenditures for health purposes, including care of teeth and eyes, medicines, hospital and nursing charges, surgical appliances, etc., as well as the services of physicians and surgeons. The schedules used requested information back to January 1927 in the case of normal medical services and to January 1926 in the case of special medical services. By "normal services" was meant the ordinary and more or less routine services of dentists, oculist, and family physician. By "special services" was meant those incident to the more serious illnesses requiring expenditures for surgeons, nursing, etc. "It may be assumed that the members of the group earning \$3,000 and over were expending approximately enough for all the major requirements of health, without being in a position to spend wastefully for services of this nature. It is probable, therefore, that the average per capita expenditure in this group represents the average minimum amount per individual necessary for the maintenance of health" (p. 1). The average per capita expenditure of the group was \$87. On this basis the average annual cost of adequate medical services for a family of 4 would be about \$350 and for a family of 5, \$430.

WOODHOUSE, CHASE G., and WILLIAMS, FAITH M.

(435)

COMPARISON OF SCHEDULE AND ACCOUNT METHODS OF COLLECTING DATA ON FAMILY LIVING. U. S. Dept. Agr. Tech. Bull. 386. 42 pp. 1933.

This study was undertaken to compare the results obtained by the schedule and account methods in evaluating family expenditure and consumption. Twenty-four professional families were chosen; all but 1 of the husbands had technical training beyond high school, and 6 held Ph. D. degrees. Twenty-one of the wives also were college graduates. Sixteen of these families lived in Washington, D. C., and its environs, the remaining 8 were from 4 other cities. The group was selected because of their willingness to cooperate in the undertaking. The data collected apply to 1926-27. The yearly money value of their living averaged \$5,327. The income was derived chiefly from the salary of the husband, augmented in some instances by earnings of the wife or from investment income. The average size of the family was 4.4 persons.

From these families data were secured by two different methods. Each family kept household accounts for a year and mailed them weekly to the investigator. Before any yearly totals were made and without reference to the accounts, schedules were filled out. For the families of this group the results were in marked agreement; the total value of family living derived from the schedule averaged within 4 percent of that obtained from the accounts. According to the figures secured by the account method the average expenditure for food was \$664, for clothing \$461, for housing \$669, for household operation \$486. Total savings averaged \$1,545. For 14 of the families material is presented showing the quantities consumed of 19 kinds of food. The significance of the differences between the account and schedule figures was calculated by the use of the "t" measure originated by Student and developed by R. A. Fisher, of the Rothamsted Experimental Station. These calculations lead to the conclusion that for families of the professional group the schedule method may be expected to yield good results in securing data on money expenditures and savings. The schedule did not, how-



ever, appear to be a satisfactory method of collecting detailed figures on food consumption, neither did the annual account unsupervised by the investigator throughout the account period, nor the account supervised by mail. The results of the investigation indicated that if an analysis of the nutritional content of the diet is to be made a part of a project, schedule data should be supplemented by records of food consumption.

ZIMMERMAN, CARLE C.

(436)

INCOMES AND EXPENDITURES OF VILLAGE AND TOWN FAMILIES IN MINNESOTA.

Minn. Agr. Expt. Sta. Bull. 253, 47 pp., illus. University Farm, St. Paul. 1929.

The purpose of this study was to furnish material for a basis of comparison between the level of living of Minnesota farm families previously studied and those of families in 11 towns and communities scattered over the State. The communities were primarily farm service centers. Estimates of expenditures and incomes covering the year ended July 1927, were obtained from 395 homes, 128 of which were headed by wage earners, 18 by widows and spinsters, 32 by retired farmers, 78 by clerical and managerial workers, 58 by low-income business men, 25 by low-income professional men, 37 by upper income business men, and 19 by upper income professional men. Three-fourths of the male heads of all the families studied were native born. Forty-one percent of the family heads had had some high-school education, and half of these had gone to college for a year or more. The families in 52 percent of the cases owned homes free from debt.

Average incomes and expenditures and surplus or deficit per family and per adult-male unit are presented for each occupational group and for each community. Numbers of adult-male units were computed on the basis of energy requirements as estimated by L. Emmett Holt.

Seventy-eight clerical and managerial workers had families averaging 4.5 persons. Their average income was \$2,653, and their average expenditure for current living \$2,402. Expenditures for food averaged \$575; for clothing, \$344; for rent, \$126; and for household, excluding rent, \$625. Investments, including insurance, savings, money paid on homes, farms, and other property, interest, debts, taxes, and losses averaged \$508.

Other data presented relate to gardens and their vegetable output, types of automobiles owned, home ownership, distribution of wealth, and reasons for existing deficits between incomes and expenditures.

The study indicated that, although families tended to spend all they made, expenditures were adjusted to income-producing capacity and that "the social scale is also an economic scale to a considerable extent" (p.11). Comparison of family living expenditures of different occupational groups showed that as incomes increase "the proportions for advancement less than double, while those for automobiles increase four times, and for investment, more than six times. The relative competition within the budgets is between the 'necessity' expenditures and investments for automobiles and travel. The miscellaneous group furnishes a minor third type of competition with the previous groups of expenditures" (p. 15). "The ideals as to what means successful living among these upper classes in towns are not essentially different from those among farmers" (p. 47).

GEE, WILSON, and STAUFFER, WILLIAM H.

(437)

RURAL AND URBAN LIVING STANDARDS IN VIRGINIA. Va. Univ. Inst. for

Research in the Social Sciences, Inst. Monog. 6, 133 pp. University, Va. 1929.

Twenty-seven prosperous white families living in Lynchburg, Va., were visited and questioned for the purpose of comparing the standard of living of different economic groups and with the idea "of testing out certain new methods of attacking problems" (p.124) of measuring living standards. Prosperous families were those represented, in the main, by professionals, owners, and higher executives in the business field, and families of independent means who were no longer actually engaged in business. Selection was arbitrary although along somewhat well defined lines and was made with the assistance of the secretary of the chamber of commerce, a responsible associated charities' official, and other responsible persons. Lynchburg was chosen because of its representative character as regards location, composition of population, traditional background, and diversity of manufacturing interest. The city is located in the piedmont section of Virginia, is well supplied with transportation facilities, and is an important tobacco market center.

The data collected were for 1927-28. The average number of individuals per family at home was 5.1. The average number of years of formal schooling which had been acquired by the husbands was 12.5, of the wives 11.6. The parents of all families had had some formal education.

The annual total money value of living averaged \$6,771 of which \$539 was for insurance. Total annual expenditures for food averaged \$860; for clothing, \$914; for rent, \$1,365; and for household operations, excluding automobile costs, \$1,005.

The value of food consumed was measured in terms of adult-male energy units. An analysis of the nutritive value of the foods was made by Edith Hawley, of the United States Bureau of Home Economics. Food consumption was found to be slightly under energy needs and under requirements for certain minerals, but adequate for others. In calculating the nutritive value of the diet, size of family was measured according to the Hawley energy and protein-mineral scales. The economy of the different diets was also measured by comparing the distribution of energy among the various food groups in the diets studied with the distribution recommended by C. L. Hunt in United States Department of Agriculture Farmers' Bulletin 1313, *Good Proportions in the Diet*. Judged by the standards of the United States Bureau of Labor Statistics, the National Conference of Social Work and the New York Factory Investigating Commission, the housing was adequate as regards number of persons per room.

The data for this group are presented and considered in comparison with material gathered for urban families classed as "poor" and "intermediate" and for farm families classed as "poor", "intermediate", and "prosperous." A short discussion of other investigations of living expenditures, including a presentation of Engel's law (C. D. Wright's version), precedes the discussion of the material for Virginia families.

HENDERSON, YANDELL, and DAVIE, MAURICE R., eds. (438)

INCOMES AND LIVING COSTS OF A UNIVERSITY FACULTY: A REPORT MADE BY A COMMITTEE ON THE ACADEMIC STANDARD OF LIVING APPOINTED BY THE YALE UNIVERSITY CHAPTER OF THE AMERICAN ASSOCIATION OF UNIVERSITY PROFESSORS. 170 pp., illus. New Haven, Conn. 1928.

The purpose of this investigation was to define the economic level of living of the Yale faculty and to compare this level with that of their neighbors. Questionnaires on income and expenditures in 1927-28 were sent to all the faculty and were returned by 63 percent or 272 members. Of these, 200 were married. The number of children averaged 1.45 per married faculty member. Their median total income ranged from \$2,987 a year for married couples without children to \$10,750 for families of 4. Their median salary varied from \$2,500 to \$7,000. For the 117 faculty members renting, the median annual rent was from \$660 to \$1,680. The median amount saved was from \$217 to \$1,500 a year. The analysis indicated that "the faculty are striving to live in better neighborhoods than they can well afford on their total incomes, and certainly more than they can afford on their salaries" (p. 67). In general, their total income permitted "55 percent of them to live according to the modest standard now prevailing and to set aside a small amount to meet the demands and uncertainties of the future" but forced "45 percent of them, in order to attain this standard, to expend all their income and in some cases to mortgage the future" (p. 61).

WOODHOUSE, CHASE G. (439)

HOW THE JONESES DO IT. Survey Graphic 14: 146-150. 1928.

This article analyzes family living expenditures of 4 families chosen as more or less representative of a group of 200 business and professional families in various parts of the country, whose expenditures were studied by the United States Bureau of Home Economics. The larger study was undertaken to furnish data useful to other families in the middle-income group for comparison with their own expenditure figures. Annual expenditures for current living for the 4 families were \$6,674, \$4,529, \$2,044, and \$5,336. The last family lived in a large city in central Massachusetts, the other three in the suburbs of Washington, D. C. Three families either owned or were buying homes. The father of the first family was a professional man and writer with a salary of \$5,400. The total cash income of this family of four for the year was \$9,055. Expenditures for food totaled \$1,029; for clothing, \$881; for household operation, \$978, and for housing, exclusive of the 6 percent equity, \$1,277. Total savings amounted to \$2,543. The father of the second family of 4 was an engineer with a salary of \$4,200. Aside from a legacy of \$5,000 the total income of this family of 4 was \$4,710. Expenditures for food were \$651; for clothing, \$391; for household operation, \$536; and for housing, \$1,243. Total savings were \$1,021. The third family was that of a



young business man with a wife and one child. Expenditures for food amounted to \$676; for clothing, \$169; for household operation, \$227; and for housing, \$566. Their total savings were \$369. The last family comprising 5 persons had 2 sons in college and a third in high school. The total family income was \$4,974. Expenditures for food were \$952; for clothing, \$383; for rent, \$520; and for household operation, \$311. Life-insurance payments amounted to \$13.

The study of the entire group of 200 families showed a surprising homogeneity of tastes and desires in all localities except for New York City where expenditures were shaped by environment rather than by inherent desire. "In what they want, in what they are trying to get with their incomes, these families are all much alike, though in their actual expenditures limitation of income necessarily makes a difference in the way desires are expressed in concrete goods." (p. 146). Clothing seemed to play a role of secondary importance in their expenditures.

PLUMLEY, MARGARET L.

(440)

THE ABILITY TO PAY FOR MEDICAL CARE. Inst. Med. [Chicago], Proc. 8 (9): 121-137; (10): 152-169; (11): 178-192. 1930-31.

Data were secured for 536 Chicago families for 1928-29 in order to determine the ability of these families to meet expenses for medical care. "Two things were essential in making such a study, first, to get, so far as possible, a group of patients typical of those generally found in hospitals and clinics; second, to obtain a sufficiently complete picture of their standards of living and medical expenditures" (p. 124). Of the 536 completed schedules, 244 were taken from hospital records and 292 from clinics. Almost half the families fell into the \$1,000-to-\$1,999 income group. Thirty-nine families were relief cases, and 59 had incomes over \$3,000. Families with four members comprised the largest group, 128 families. The chief wage earners were distributed in 14 occupational and professional groups. Rents varied from under \$30 to over \$200 a month. Sixty-five percent of the families had no savings. Data on length of hospitalization, amount paid by hospital and clinic groups, and ability to pay were included. Of 155 hospital patients who paid nothing, 17 were judged able to pay; less than 4 percent of 266 clinic families were judged able to have paid private office rates, and 48 clinic families paid more than they could afford. It was found that "the sickness expenditures of the families increased with income" (p. 181).

FALK, I. S., KLEM, MARGARET C., and SINAI, NATHAN

(441)

THE INCIDENCE OF ILLNESS AND THE RECEIPT AND COSTS OF MEDICAL CARE AMONG REPRESENTATIVE FAMILIES; EXPERIENCES IN TWELVE CONSECUTIVE MONTHS DURING 1928-31. Costs Med. Care Com. Pub. 26, 327 pp., illus. Chicago. 1933.

This study was designed to find out how many illnesses occur in a population during 12 consecutive months, what agencies and facilities families of various economic levels use for the prevention and care of illness, what the cost of medical care is to families, and how the total bill is distributed among the families and among various types of practitioners and facilities utilized.

The 8,758 families whose experiences for the years 1928-31 provided the data for the report embraced 39,183 persons. A few families (133) consisted of single individuals. Essentially, however, the study was of families of two or more persons each. They included all income levels and lived in 130 communities in 17 States and the District of Columbia, ranging from rural areas and towns under 5,000 to cities of 100,000 or more. Business folk, professional groups, tradespeople, wage earners in manufacturing industries, mining, and other pursuits, farmers, and retired, disabled, and unemployed persons were represented. Twenty-seven percent of all persons in families of two or more persons were gainfully employed. Of the 27 percent gainfully employed, 12 percent were skilled, semiskilled, or unskilled laborers, 6 percent clerical workers, 3 percent professional workers, 3 percent farmers, and 4 percent dealers, etc. Data are presented by income groups ranging from under \$1,200 to \$10,000 and over. Of the total, 1,336 families fell in the former group and 312 in the latter. The determining factors in the selection of the States were expression of interest in the project, the presence within their boundaries of areas suitable for study, and the availability of nurses in the areas and their willingness to undertake the task of collecting basic information. The study was restricted to experiences of white families—that is, all families exclusive of Negroes. In general, the families were selected through house-to-house canvass, and selection was restricted to the ones known to be free of illness or not receiving medical care at the time of the survey. All families were visited by investigators six times during the course of the survey at intervals of about 2 months.

"For the purpose of this study an illness was defined as any disorder which wholly or partially disables an individual for 1 or more days, or as any experience for which medical service of any kind is received. Any condition, symptom, or disorder from which drugs costing 50 cents or more are purchased is considered an illness" (p. 8). The costs of sickness as recorded included the medical expenses of all items which occurred during the year, the costs of all medicine, all charges for dental care, refractions and glasses, health examinations and preventive services, transportation charges for the sick, and the cost of additional household help required because of illness. It included also all money actually expended during the year, for old and current bills and illnesses of children at boarding school. Medical expenses paid for servants were counted with those of the family and the servants listed in the census of the household. Family income was taken to mean earnings of all persons counted as members of the family and contributing to the family fund. For rural or semirural families, incomes covered earnings from wages, from sale of produce and from other sources, unearned income, local cash value of farm produce traded at local markets for commodities consumed by the family, the local cash value of produce consumed by the family, and the rental value of the farmhouses (when occupied by the owner) at local rates—usually estimated at 10 percent of the capital value.

The average number of persons per family was 4.4; the average annual income, \$2,605. The number of illnesses per family averaged 3.8. The charge for all services of the average family was \$108 a year, or \$23 per person. Expenditures for medical care averaged \$104. The prevailing form of medical practice was the private service of independent practitioners. Only 35 cents, or 1.4 percent, of the total charges per person, was found to be spent for preventive services. Compared with reasonable standards of good medical care neither the rich nor the poor received the care they needed, especially in respect to dentistry and preventive services. "Recognizing that sickness falls unevenly and that individuals cannot predict its onset nor easily budget its costs in advance, the facts inevitably compel the conclusion that the costs of medical care should be distributed over groups of people and over periods of time, rather than permitted to descend upon individuals or families at the time when sickness occurs" (p. 248).

EDWARDS, PAUL K.

(442)

THE SOUTHERN URBAN NEGRO AS A CONSUMER. pp. 41-42, 283-284, illus. New York. 1932.

This study was made in Nashville, Tenn., in 1929 "in an effort to determine the amount of Negro family income expended for principal groups of items of cost of living in Nashville \* \* \*" (p. 41). Three hundred and fifty-nine widely scattered families were interviewed; of this number, 41 were families of professional men or of business men with incomes of \$2,100 and over. For 17 families in the business group reporting an annual family income of \$2,100 or over, the average income was \$3,474, of which 14 percent was spent for food, 7 percent for rent, 10 percent for clothing, and 5 percent was saved. For 16 of the professional families the average annual income was \$4,394, of which 14 percent was expended for food, 9 percent for rent, 7 percent for clothing, and 12 percent was saved. Eight professional families reported an average annual income of \$1,539.

WHITNEY, FREDERICK L., and GOODMAN, ARTHUR K.

(443)

THE ECONOMIC STATUS OF TEACHERS COLLEGE AND UNIVERSITY FACULTIES. Jour. Ed. Research 23: 308-318. 1931.

This report is "\* \* \*" an attempt to show how the incomes and expenditures of the teachers college group compare with those of the University of California faculty members" (p. 308). The data, applying to the year 1929, were obtained by means of questionnaires from 20 families of 7 State teachers colleges located in 6 States, and are compared with those collected by Jessica Peixotto in her investigation of 96 faculty families of the University of California (432). The size of the families of the two groups is similar. Of the teachers college families 25 percent had no children, 25 percent had 1 child, and 30 percent had 2. Less than 10 percent of the instructors in either group were foreign born, and approximately 50 percent were born in the section of the country in which they were teaching. Homes were owned by 64 percent of the university group and by 53 percent of the teachers college group.

The median total income for the University of California group was \$3,788, and for the teachers college group, \$3,600. A comparison of detailed expenditures for each group is tabulated according to the percentage distribution of expenditures for the total of the incomes of all members in each group. The median total expenditure for shelter was \$684 for the University of California



group, and \$660 for the teachers college families; for food the median expenditure was \$808 for the university families and \$538 for the teachers college families; for clothing, \$440 and \$408; for household operation, \$568 and \$400. Tables show median percentage of expenditure for food in relation to size of family and total expenditures of each of the two groups, median amount and percentage spent for shelter, and proportion of owners and tenants in relation to total expenditures of each group. "A comparison of median income and median expenditure shows that the latter exceeds the former in the case of both groups" (p. 317).

ZITLOW, CLARA I.

(444)

CASE STUDIES OF TWO WELL-TO-DO FAMILIES IN CALIFORNIA. Jour. Home Econ. 23: 441-445. 1931.

The incomes and expenditures of two professional families in California, both enjoying a higher level of living than the parents had, are presented for 1929. The head of one family was a Jewish violinist, who composed music for the sound pictures; the second, a screen character actor. The families had 3 and 4 members, respectively. In 1929 the first family had an income of \$12,000. The current expenditures for the family were \$5,690; for food, \$780; for clothing, \$550; for housing, \$1,080; and for household operation, \$1,260. Savings were \$6,310. The income of the second family was \$75,510. The current expenditures for the family were \$25,510; for food, \$3,900; for clothing, \$3,000; for housing, \$5,500; and for household operation, \$4,910. Savings were \$50,000. The comparison of the two families showed that the family with the smaller income was receiving better returns for the money expended by the wise selection of goods and services than was the "nouveau riche" family "where spending had increased without corresponding increase in taste or sense of real values" (p. 445).

TIME, INC.

(445)

MARKETS BY INCOMES; A STUDY OF THE RELATION OF INCOME TO RETAIL PURCHASES IN APPLETON, WISCONSIN. 2 v. New York. 1932.

"How do people in different income brackets spend their money? How do people with incomes of \$2,000, \$3,000, \$5,000, or \$6,000 vary as prospects for coffee, soap, refrigerators, automobiles?" (p. 7). In order to answer such questions Time undertook a survey of buying in Appleton, Wis. This city of 25,000 inhabitants was chosen as a normal city. It is located in the center of a good farming district, contains a diversity of manufactories, and is 100 miles from any large center of distribution. Cooperation in the study was easily secured from the local groups. The grocery study was made for July 1931. For many of the other purchases an average was given for 1929, 1930, and part of 1931. Income data were secured from the income tax reports of the State. Material for the food study was secured from a canvass of housewives and from grocery store records. Store records were used in constructing the tables relating to the purchase of larger items such as automobiles, refrigerators, and radios. Municipal records were used to secure assessed valuations of real property and building permits.

The survey includes reports from 1,099 families. Of these families, 472 had incomes of \$3,000 or over, 231 had incomes of \$3,000 to \$5,000, 154 had incomes of \$5,000 to \$10,000, and 87 had incomes of \$10,000 and over.

Purchases of automobiles, automatic refrigerators, electrical appliances, material for sports and hobbies, radios, men's clothing, groceries, house furnishings, and a number of miscellaneous items were analyzed. There is also an analysis of home ownership, values, and adequacy of housing. The data are presented in most cases by number of purchases per thousand and value of purchases per thousand families by income groups.

Summary tables show the percentage distribution of total purchases by 2 or 3 income groups.

HOPPER, WILBERT C.

(446)

EFFECT OF VARIOUS FACTORS ON THE CONSUMPTION OF FRESH FRUITS AND VEGETABLES IN CITY FAMILIES. N. Y. (Cornell) Col. Agr., Farm Econ. 78: 1815-1820. 1932.

The material given in this study is a part of a preliminary report of a city-market survey which was begun in the summer of 1930 with the assistance of officers of the bureau of markets of the New York State Department of Agriculture and Markets. Expenditures for fruits and vegetables during the year 1930 were secured from 1,020 families living in Albany. The heads of the households were unskilled laborers, small business executives, nonclerical skilled laborers, professional men, clerical skilled workers, salesmen, and large business executives.

The average size of the families was 3.9 persons. Less than 4 percent of the number had city vegetable gardens, and a little over 2 percent grew their own fruit. Of the families, 592 had incomes of \$2,000 and over. The average annual expenditure for all families for fruits and vegetables was \$206, and the per capita annual expenditure \$53. Per capita expenditures for fresh fruits and vegetables were higher in families where the income was larger, where the family was smaller or without children, where the head was native born, and where the head was engaged in the more skilled occupations. A larger number of families bought fruits and vegetables at independent retail stores than in any other retail outlet.

HOYT, ELIZABETH E., and MEINTS, VIOLA C. (447)

ACADEMIC INCOMES AND PLANES OF LIVING. *Amer. Econ. Rev.* 22 (1): 78-81. 1932.

In the spring of 1931, schedules of incomes and expenditures were collected from 75 faculty families of all academic ranks at Iowa State College for the year 1930. Family size averaged 3.5 persons. Total income averaged \$4,107, of which the basic 9 months' salary averaged \$3,200. Ninety-six percent of these faculty families had some income supplementary to their 9 months' salary. Expenditures for food averaged 14.1 percent of total disbursements, 7.6 percent for clothing, 15.7 percent for housing, 12.8 percent for household operation, and 13.6 percent for savings. Comparison is made with studies of the incomes and expenditures of faculty families at the University of California and at Yale University. The authors conclude that "the Iowa group was under less pressure than the California group for certain elements of conspicuous consumption. This pressure would be more likely to exist where professors, their wives and children are constantly thrown with families of higher income groups, as at Berkeley and New Haven \* \* \*. Then, too, at California and at Yale there were a few faculty families with relatively large incomes from investments. The range of incomes was narrower, the distribution more equal, at Iowa State College \* \* \*. It would seem that the pressure of conspicuous consumption might be especially provocative of dissatisfaction with income \* \* \*. Even if one is able to demonstrate an income as inadequate to meet the requirements of a given group \* \* \*, that is certainly not to endow the 'approved' scale with social justification" (pp. 80-81).

VEENSTRA, THEODORE A. (448)

HOUSING STATUS OF SALARIED WORKERS EMPLOYED IN PITTSBURGH. *Pittsburgh Univ. Bull.* 28 (20): 1-99, illus. Pittsburgh. 1932. (Pittsburgh Univ. Bur. Business Research Monog. 1.)

The data for this study were secured by means of questionnaires distributed among 1,385 salaried workers including salesmen, accountants, clerks, statisticians, engineers, and junior executives in 2 public utilities, 4 department stores, 5 financial institutions, 5 industrial concerns, 1 railroad, and 2 insurance agencies in down-town Pittsburgh. For 789 families renting, the average annual income in 1930 was \$3,269. The average monthly rent, adjusted to exclude services sometimes included with rent was \$54, as compared with the average rent as actually paid of \$59. For 563 home owners, annual income averaged \$4,151. The average home cost \$9,387 and carried a first mortgage of \$3,623 and a second mortgage of \$212. It was found that as income increased, the proportion expended for rent decreased, and that "home owners differ from renters with respect to age, number in the family, and income. Owners averaged almost 8 years older than renters; their families averaged 4.1 members as compared with 3.5 members in the families of renters; and their total annual family income averaged \$4,151 as compared with \$3,269 for renters. Home owners out-numbered renters only among those salaried workers 40 years of age or older and among those with incomes greater than \$4,000" (p. 88).

HYDE, AGNES R. (449)

WHERE THE MONEY GOES: WHAT TWENTY NEW YORK FAMILIES DO WITH THEIR INCOMES. *Harper's Mag.* 163: 688-699. 1931.

This article attempts to show how 20 families living in or near New York City were getting as much as possible out of their money. The inquiry was made to show both the sums spent and the reasons for the expenditures in 1930-31. With three exceptions the families included had children of school age or younger, and in each case the husband was the only wage earner; 12 of the men had salaried positions in large corporations, 3 were partners in businesses of their own, 3 were



professional men, and 2 others were writers. With the exception of one family whose income was \$50,000 and for whom details are not given, the incomes ranged from \$4,000 to \$15,000 a year. The number of persons in these 19 families ranged from 2 to 7. The families were divided arbitrarily into three groups, according to incomes of \$4,000 to \$7,000, \$8,000 to \$11,000, and \$12,000 to \$15,000. Expenditures for rent or interest on mortgage ranged from \$800 to \$2,400 a year, for food from \$672 to \$2,400, and for clothing from \$300 to \$1,600. Insurance and savings ranged from nothing to \$4,800 a year.

It was found that in families where the wife had been reared under better circumstances, economy in food purchases was difficult and that as incomes decreased expenditures for domestic service were the first to be decreased. Eighteen families reported that the increased incomes which has been received during the years previous to 1931 were spent for more domestic service, more savings, more children, larger living quarters, better clothes, house furnishings, a car, and more charity. The material indicated that New Yorkers spend their money and live in much the same manner as people in other places and that "an income of \$10,000 a year provides for very little material luxury if one is attempting to create enough capital to provide a secure living in one's old age" (p. 699).

EELLS, WALTER C., and others.

(450)

SALARY AND COST STUDY OF FRESNO SCHOOLS. pp. 78-111, illus. Fresno, Calif., Fresno City Council of Education. 1932.

As part of a study of educational costs in Fresno, information concerning incomes and expenditures for the year ended April 1, 1932, was secured by questionnaires filled out by teachers, administrators and other certificated employees, and by the members of the janitorial and mechanical staff of the school system. Four hundred and ninety-one of the 500 blanks sent out were returned by certificated employees (referred to as "teachers"). Of these, 488 were used for tabulations. Eighty-five of the men and 154 of the women teachers replying were married. The married men reported an average of 2.6 dependents each, and the married women 1.6. The average total income of the married men was \$3,122, and of the married women \$2,166. Current living expenditures of the married men averaged \$2,632. Their food expenses averaged \$589, housing \$263, household operation \$297, and clothing \$294. Their savings averaged \$436. The married women expended, on the average, for total current living \$1,937, for food \$369, for housing \$189, for house operation \$227, and for clothing \$277. Their savings averaged \$293. It was found "that salaries and salary scales on the whole are distinctly lower than in most other cities, while the teaching load is greater" (p. 177). Analysis of the teachers' income and expenditures indicated that a marked reduction in salaries to effect school economy would not have been justified at that time.

LEIFFER, MURRAY H.

(451)

STANDARDS OF LIVING IN THE MINISTRY. Methodist Episcopal Church, Bd. of Pensions and Relief, Pension Prog., 24th yr., no. 42, pp. 17-24. 1932.

This report gives data on family living for 1,038 ministers in 1931-32. A questionnaire "was sent to all members in full standing of 29 white, English-speaking conferences in the Methodist Church in the United States. These conferences were chosen because they were representative of geographical areas and different economic and social conditions" (p. 17). The average cash salary for those reporting was \$2,081; the average income \$2,324. Because houses were furnished in all cases, the factor of rent was eliminated. Average total expenditures for current family living were \$1,998; for food, \$504; for clothing, \$180; for household furnishings, \$67. Savings averaged \$280, of which \$170 represented live-insurance premiums. It was found that "the larger the family, the greater is the percentage spent for food, although the per capita cost of food is progressively lower \* \* \*. This difference in the cost of food presents the most marked contrast, ranging as it does from 19.8 percent of the total expenditures in families of 2 members to 32.7 percent in families of 7 or more members" (p. 22). The average deficits were large in the families in the lower income groups.

WILLIAMS, FAITH M., SCHMIDT, GERTRUDE, and RICE, FRANCES

(452)

CHANGES IN COST OF LIVING OF FEDERAL EMPLOYEES IN THE DISTRICT OF COLUMBIA FROM 1923 TO 1933. U. S. Dept. Labor, Bur. Labor Statis. Monthly Labor Rev. 39 (1): 213-224. 1934.

This study included wage-earning as well as professional families and is annotated as (419).

## DEPENDENT FAMILIES

MORE, LOUISE B.

(453)

WAGE-EARNERS' BUDGETS: A STUDY OF STANDARDS AND COSTS OF LIVING IN NEW YORK CITY. Greenwich House Ser. Social Studies 1, 280 pp. New York. 1907.

Twenty-seven dependent families were included in this investigation of the content of living of 200 wage earners during 1903-5. The families represented different races and occupations living in the neighborhood of Greenwich House, a settlement in the lowest West Side of New York City. All families studied were selected because of their friendship or acquaintance with the investigators and because of their willingness and ability to cooperate. The dependent families were those who had received some aid through the usual channels of charity, whether they had sought such aid or not. The heads of 15 families partially dependent on relief funds were native born, and 12 had come from foreign countries. The relief given them was only a small proportion of their income, ranging from \$4 to \$136 a year. Twenty of the 27 families had incomes less than \$600 a year. The average size of family was 5.6 persons. The three families with incomes between \$800 and \$900 had an average of 8.7 persons per family. Twenty-five families, comprising 5.9 persons, had average incomes of \$490 and an average value of living of \$508. The value of food for family use averaged \$239, of clothing \$46, and of fuel and lighting \$30. Rent averaged \$124 a year.

Relief in 15 instances was from organized charity, in 7 from churches, in 3 from settlements, and in 2 from various sources. The kinds of charity given were usually clothing, shoes, groceries, coal, milk, medicines, and payment of rent. Dependency was due mainly to drink, unemployment (generally due to intemperance), illness, death of husband or principal wage earner, and size of family in relation to income.

Comparison of dependent families with independent ones of the same size income group showed that the former expended their incomes carefully and were justified in receiving charity.

In calculating fuel values, coal sent to families as gifts was included. Clothing given by friends, churches, or societies was valued as if purchased for cash. Old clothing handed on by more prosperous friends was estimated at what its worth to the housewife would be. Articles bought on the installment plan were included as if purchased outright and any unpaid amounts at the end of the year regarded as a debt or deficit just as unpaid rent or other bills. Life-insurance payments were handled in the same manner.

GIBBS, WINIFRED S.

(454)

THE MINIMUM COST OF LIVING; A STUDY OF FAMILIES OF LIMITED INCOME IN NEW YORK CITY. 93 pp., illus. New York. 1917.

Expense accounts were obtained from 75 families in order to determine minimum cost-of-living budgets. Although the period to which these accounts applied is not stated, it probably closely preceded 1917, the date when the study was published. "The families were those of widows, who, by reason of the death of the wage earner, had been granted a definite monthly cash allowance. This allowance was based on a carefully planned estimate of needs" (p. xiv). The largest group (26 families) was composed of 4 members, a widow and 3 children. An ideal division of income and a practical division were set up for apportioning money for various items of family living. Estimated needs and actual expenditures for rent, food, fuel and light, clothing, and sundries are presented for each of the 75 families. The 75 dietaries were considered in detail. A discussion of the conditions of health of these families after a year of instruction and steady income concludes that "a carefully planned minimum standard can lay the foundation of good health for all members of the family" (p. 54).

BURGESS, ERNEST W.

(455)

A STUDY OF WAGE-EARNING FAMILIES IN CHICAGO. Ill. Health Ins. Comn. Rept. 1: 179-317. [Springfield.] 1919.

This study of wage-earning families in 1918 was made to obtain data on sickness, medical service, and protection against health risks. Three groups of families were studied. Six hundred and twenty-eight dependent families were selected from charity lists because illness was a contributing factor in dependency. A few dependent families are included in the other studies—one a block study covering 3,048 cases, the other a nursing-service study covering 304 cases. In all three studies the incomes are compared with a subsistence budget. Composition of family, nationality, various phases of health and sickness, cost of illness including loss from wages, and types of insurance held by the families are studied.



DALLAS, TEXAS, CIVIC FEDERATION.

(456)

WIDOWS' PENSIONS: A STUDY OF 53 FATHERLESS FAMILIES IN DALLAS COUNTY WHO ARE AIDED BY THE COUNTY COMMISSIONER'S COURT. 16 pp. Dallas. [1923.]

"The purpose of this study was to exhibit, through a careful collating of facts, just what this use of public funds actually means." The field investigation was for the year 1918 and was done largely by 60 students of Southern Methodist University under supervision. The group of families differ from a general cross section of the population only by the loss of the natural breadwinner. The income of 44 families is tabulated showing number of persons in household. The average size of family was 4.6 persons. The monthly income other than pension averaged \$68, and the pension averaged \$17, making a yearly income of \$1,031. These figures were compared for each of the families and a scale adapted from The Chicago Standard Budget for Dependent Families for minimum cost of normal family maintenance. For the group, the average minimum cost of normal family maintenance was estimated at \$1,188. Data on health conditions, housing, rates of rent, and church membership are given for 53 families, and on occupation of the 28 mothers working away from home and 15 working at home.

BUFFALO FOUNDATION.

(457)

WHAT IT COST FIFTY FAMILIES TO LIVE FOR FIVE YEARS IN BUFFALO. Buffalo Found. Forum 50, 27 pp., illus. Buffalo. 1926.

Data on family expenditures and incomes were secured for the 5-year period 1920-24 for the families of 50 widows in Buffalo, who were receiving allowances from the board of child welfare. The families selected for this study were those who adhered carefully to the classification of expenditures as shelter, food, fuel and light, clothing, and miscellaneous. In 1920 there were 188 children in the families, of whom 175 were under 16 years of age. Of the 50 mothers, 32 supplemented their family incomes by doing unskilled or semiskilled work outside the home. The total income of the 50 families for the 5-year period was \$217,011 of which the mothers earned \$31,600, and the child welfare board furnished \$143,396 as an allowance for children under 16 years of age. For the 5-year period, total expenditures amounted to \$231,169, of which 54 percent went for food, 13 percent for clothing, 17 percent for shelter, and 8 percent for fuel and light. For the 44 families carrying insurance, premiums averaged \$32 a year. In 34 families expenditures exceeded income. The scale of the United States Bureau of Labor Statistics was used to calculate the number of male units. The food consumption of the families conformed closely to the amounts prescribed by nutrition specialists.

CLARKE, HELEN I.

(458)

A STUDY OF INCOMES, EMERGENCIES, AND CREDIT IN DEPENDENT FAMILIES. Family 12 (3): 92-94. 1931.

Seventy-five public-welfare association families in Dove County, Wis., were interviewed by students of the University of Wisconsin to determine to what extent they had been able to meet their emergency situations on the basis of their annual income and to what extent they were forced to resort to credit. The cases for study were carefully selected to meet the following requirements: "First, student investigation should be no detriment to constructive case work; second, the family had to be sufficiently integrated at the time of the study to make it possible to get the information necessary for the study from a single informant, that is, if family ties were severed there would be no household for which to get information; third, the employers of the wage earners during this period had not only to be known, but to be accessible for verification of wages" (p. 92). Although the period of the study is not stated, it is probable that it just preceded 1931, the date of publication. The wage earners were engaged in such occupations as manufacturing and mechanical trades, transportation trades, and domestic and personal service. The income groups ranged from \$500-\$1,000 to \$2,000-\$2,500. The average of the wage incomes was \$92 per month. Of the 36 families receiving relief from the agencies, 32 received an average of \$129 per family. Many of the families in the survey augmented their incomes by purchasing on the installment plan, charging purchases, and securing loans. Thirty-eight families were making installment purchases; 60 percent of the purchases were being made by families having an income either coincident with or above the minimum budget used by Milwaukee social agencies. Fifty-seven families used charge accounts, having an average of three accounts per family. More than half of the 35 loans secured were made by finance companies and averaged \$124. Forty-one families had an average of four policies per family.

## ALASKA

MARSHALL, ROBERT

ARCTIC VILLAGE. 309 pp., illus. New York. 1933.

(459)

The life of the 127 people of the remote Arctic village of Koyukuk, Alaska, is described. Gold mining and trapping were the sources of community income, but a very large proportion of the goods used in the village were produced either by the family using them or by others in the village, so that in no sense do any expenditure figures give an adequate picture of the level of living. The total population was divided among whites, of whom there were 70 males and 7 females, and Eskimos of whom there were 22 males and 28 females, men, women, and children being included. The primitive way of life leads to the appearance of equality of economic status, although the net worth varied from \$50 to \$45,000. All information was secured by the author when he lived among these people for many months in 1929-30. In a population with a large proportion of single individuals and also a number of family groups with children it was difficult to present any figures representing average expenditures. However, in response to numerous requests the author has furnished 4 itemized living expense analyses—2 are for single men and 2 are for married couples without children. During the year 1929-30 one family spent \$1,452, the other \$1,600. Each of these families raised most of its vegetables and procured from the wilderness much of its meat and all of its fruit and wood for fuel. The articles purchased were at very high prices.

## HAWAII

UNITED STATES DEPARTMENT OF LABOR AND COMMERCE, BUREAU OF LABOR.

(460)

REPORT OF THE COMMISSIONER OF LABOR ON HAWAII. U. S. Dept. Labor and Com., Bur. Labor Bull. 66, 685 pp. 1906.

This report aimed to include all nationalities in Hawaii: Puerto Ricans, South Sea Islanders, Chinese, Japanese, Koreans, Portuguese, Hawaiians, and Americans. The cost of living varied widely for these different groups during the period of the study, 1905. The population consisted of a small group of employers and a preponderant group of wage earners. The employer class was American or Japanese, the latter often "farmed" contracts and "sweated" labor. The Hawaiians were fast disappearing. Among the laborers, the Japanese had the highest level of living. Only about 13 percent of the island was available for cultivation, and much of this was held under long leases at low rentals. Small farming was not yet practical. Laborers were fined for injury to property or tools. The Hawaiians were employed mostly as cowboys; the Portuguese on the farms; the Chinese in the rice fields; and the Japanese in trades. In considering the cost of living of the working people, three distinct classes had to be considered: white skilled labor, white unskilled labor (including Hawaiians), and Asiatics. The first had a high level of living. The unskilled white laborer usually had a level higher than that of the orientals in order to maintain his superiority over them. The Portuguese farm laborers were less ambitious. The Chinese, Japanese, and Koreans spent about the same amount for food, lodging, and clothing, but the distribution varied. The Chinese and Koreans did not object to herding together, the Japanese preferred private rooms. Sanitary conditions were satisfactory for all classes; illiteracy was common only among the older generation. Most of the Japanese were transients; most of the others were permanent residents. About half of the report is devoted to tabulations of wages, nationality, hours of labor, prices of commodities, etc. No individual records of expenditure are given, only the income and expenditure by classes. The applicability of Engel's law cannot be determined because of class variations.

(461)

REPORT OF THE COMMISSIONER OF LABOR ON HAWAII. U. S. Dept. Labor and Com., Bur. Labor Bull. 94, 465 pp. 1911.

Tables in this study give, among other things, make-up and income of family, occupation of the head of the family of representative wage-earning families, the incomes and expenditures of representative wage-earning families by race, and retail prices of commodities, 1890-1910. Data were secured on incomes and expenditures in 1910 from 363 families of wage earners in Honolulu.



PHILIPPINE ISLANDS DEPARTMENT OF COMMERCE AND COMMUNICATIONS. (462)  
REPORT OF THE DIRECTOR OF LABOR TO HIS EXCELLENCY, THE GOVERNOR-  
GENERAL OF THE PHILIPPINE ISLANDS—COVERING THE INVESTIGATION OF  
LABOR CONDITIONS AND EMPLOYMENT OF FILIPINOS IN HAWAII. Bur. of  
Labor Bull. 7 (25): 1-31, illus. Manila. 1926.

This report describes the living conditions of Filipinos in Hawaii about 1926. Its conclusions are obviously affected by the author's desire to make these conditions appear better than they actually were. He gave a very rough estimate of a workers' cost of living.

#### PUERTO RICO

BROOKINGS INSTITUTION. (463)  
PUERTO RICO AND ITS PROBLEMS. 707 pp., illus. Washington. 1930.

This study deals with the problem of raising income and level of living of the people of Puerto Rico to a parity with those of the United States. Before the American occupation, the workers were the mountain peasants and the semiserf, migratory landless laborers of the lowland. These formed the basis of later groupings. Only 200,000 of the estimated population of 1,454,000 lived in towns. There were no farming communities in the island, only communities of agricultural laborers. Four-fifths of the population was still landless. Most of these laborers lived in huts of sticks with palm-thatched roofs, or board cabins with galvanized-iron roofs, or long frame tenements. Such houses were almost devoid of furniture, having only hammocks or canvas cots. The only utensil was an iron cooking pot. House and furnishings together were seldom worth \$75. Forty-seven percent of the families lived in two-room houses. The present survey is based on a study of 4,263 families in 1928; the information was obtained by questionnaire and by personal observation. The average income of a rural family, including the wages of wife and children, was about \$250 a year. Sometimes this was increased by the sale of surplus products from share farming. The income of the urban laborer was but little higher. Nearly all of this income was spent for food. The meals consisted of coffee for breakfast, meal and vegetables for lunch, rice and beans for supper. Of the six records of expenditure given, the entire income was spent for food.

#### CANADA

GAULDRÉE-BOILLEAU, M. (464)  
PAYSAN DE SAINT-IRÉNÉE (BAS-CANADA—AMÉRIQUE DU NORD). OUVRIER  
CHEF DE MÉTIER DANS LE SYSTÈME DU TRAVAIL SANS ENGAGEMENT, D'APRÈS  
LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN 1861 ET 1862. Les  
Ouvriers des Deux Mondes (1) 5: 51-108. 1885.

This study was made in 1861-62 in the village of Saint-Irénée. There was little exchange of money, except for the yearly export of wheat. The houses were close together, the farms being very long and narrow. The goal of each farmer was to establish his sons on farms of their own. Property was usually willed intact to the most competent son. The members were respected for their good morals. The household consisted of the head (40), his wife (39), 4 daughters (15, 14, 12, and 6), and 2 sons (10 and 4). Another daughter (18) had been married 1 year and was living with her husband's family. Education was quite elementary. The people were hospitable. There was no social stratification. The men had a decided liking for intoxicating drinks. Health conditions were excellent. The chief work of the man was his farming, but he added a little to his income by the occasional sale of furs from animals killed. The wife did all the housework, assisted at times by the three eldest daughters who spent most of their time in needlework. There was practically no recreation, except for frequent attendance at church. The favorite recreation of dancing had been barred by the clergy. The well-being of the family was assured by the fertility of their land, good management, and economy. Few people in the community had any insurance; in case of fire the neighbors helped to replace the loss, and in case of death of the parents the children were soon adopted. Their property consisted of a dwelling (valued at 2,000 francs), outbuildings (1,652 francs), 23 hectares of land in the village (10,000 francs), 26 hectares of land in a neighboring village (3,000 francs), money (200 francs), animals (2,720 francs), and tools (739 francs), a total of 20,311 francs; and furniture and clothing valued at 3,462 francs. Net income was 3,631 francs, of which 1,103 francs was in money. Property accounted for 1,040 francs income; work, 715 francs; and family industries 1,876 francs.

Food cost 1,999 francs; the household, 399 francs; clothing, 764 francs; moral, recreational, and health needs, 88 francs; and all other, 15 francs. Savings amounted to 365 francs. Notes are given on the mineral resources of Saint-Irénée, the life of the people, the nature of the country on the north of the Saint Lawrence River, religion and the influence of the clergy, the public schools, the municipal organization, the climate, the most common maladies of the locality, the words and phrases in common use, French immigration to lower Canada, and a short typological description of social organization among the French Canadians.

YOUNG, EDWARD

(465)

LABOR IN EUROPE AND AMERICA; A SPECIAL REPORT ON THE RATES OF WAGES, THE COST OF SUBSISTENCE, AND THE CONDITION OF THE WORKING CLASSES IN GREAT BRITAIN, GERMANY, FRANCE, BELGIUM, AND OTHER COUNTRIES OF EUROPE; ALSO IN THE UNITED STATES AND BRITISH AMERICA. [U. S.] Treasury Dept., Bur. Statist., pp. 840-841. Washington. 1875.

This report includes in the chapter on Labor in Canada a table showing the average weekly and yearly expenditures and earnings for 18 families of workmen in 1873 in 17 towns in the Provinces of Ontario, Quebec, Nova Scotia, New Brunswick, and Newfoundland, and for 1 family in Kingston, Jamaica. Yearly earnings averaged for Ontario \$832, for Quebec \$452, for the Maritime Provinces, \$702. Yearly expenditures averaged for Ontario \$618, for Quebec \$387; for the Maritime Provinces \$664.

AMES, HERBERT B.

(466)

INCOMES, WAGES, AND RENTS IN MONTREAL. U. S. Dept. Labor Bull. 14: 39-51. 1898.

This report utilizes the results of a house-to-house canvass made during the autumn and winter of 1896 in connection with a private industrial census. The results of this survey were published in a monograph, *The City Below the Hill*. This locality comprised about one-sixth of the entire city, constituting its south-eastern portion. The district canvassed was divided into 30 sections, and the results worked out for the several sections. Equal proportions of French-Canadians, British-Canadians, and Irish-Canadians were represented. The social status of the inhabitants was fairly homogenous. Nearly all the 7,671 resident families were dependent on local industries. Fifteen percent of the families were well-to-do, 73 percent industrial, and 12 percent poor. The typical family had an average of 4.9 persons. The weekly incomes of these families averaged \$11. The average number of rooms per family was five. The average rental paid was \$9 per month, or 18 percent of average income. The accepted ideal for the city home was one where the front door was used by one family only, where there were at least as many rooms as there were members in the family, where the house faced a through street, and wherein proper sanitary accommodation was provided. This ideal was by no means universally attained throughout the district investigated. In the matter of sanitary accommodation, the house of the wage earner of Montreal was less desirable than that of his fellows elsewhere. Some discussion concerning model dwellings and the rents at which they could be supplied is included.

LORTIE, STANISLAS A.

(467)

COMPOSITEUR TYPOGRAPHE DE QUÉBEC, CANADA (AMÉRIQUE DU NORD) SALARIÉ À LA SEMAINE, DANS LE SYSTÈME DES ENGAGEMENTS VOLONTAIRES PERMANENTS D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN 1903. *Les Ouvriers des Deux Mondes* (3) 2: 61-132. 1908.

This study shows the condition of a worker's family in Quebec in 1903. The family was unusually successful because of its moral qualities, its honesty, and the capacity of its head. The household consisted of the head (54), his wife (53), and 2 sons (23 and 21). Four children died as infants. Two daughters were well married. The church was an important factor in the social structure of the community. Health conditions were excellent, physicians being called only at times of birth or of extreme sickness. The man had no secondary work, and the woman had only her domestic duties. The eldest son worked in a linen draper's shop, and the second was an apprenticed mechanic. Recreations consisted in walks, evening gatherings with friends and relatives, and in smoking. The well-being of the family was assured by insurance, by savings, by its religious solidarity, and by the good positions of the children. Property consisted of money and tools valued at 2,540 francs, and furniture and clothing valued at 4,979



frances. Income was valued at 6,474 frances, of which 6,059 frances was in money. Property was credited with 99 frances, and work with 6,375 frances. Food cost 1,527 frances; the household, 910 frances; clothing, 1,252 frances; moral, recreational, and health needs 644 frances; and all else, 344 frances. Savings amounted to 1,797 frances. Notes are given on the climate and sanitary conditions, the religion and morals of the people, education, the average wages of workers in Quebec, a strike in the shoe factory of Quebec settled by the arbitration of the archbishop, the worker's legislation in Canada, and on some peculiarities of the Canadian civil legislation concerning inheritance of property.

CANADA, BOARD OF INQUIRY INTO COST OF LIVING IN CANADA. (468)  
REPORT OF THE BOARD, v. 2, pp. 1018-1019. Ottawa. 1915.

This report gives a table embodying the results of a survey made at Winnipeg, Manitoba, of the monthly incomes and expenditures of 13 families. Although the period to which the data apply is not stated, it probably closely preceded 1915, the date when the report was published. The average size of family was 5.15 persons. Monthly incomes averaged \$98, and total expenditures, including savings, \$96. Monthly expenditures for food averaged \$37; clothing for the mother averaged \$11; household furnishings, exclusive of installments on furniture, averaged \$1.46; rent, \$23; and fuel and light expenditures, \$9.

PARKER, C. V. (469)  
FAMILY LIVING EXPENSES IN THE RED RIVER VALLEY OF MANITOBA. [Canada] Dept. Agr., Agr. Econ. Branch. Econ. Annalist 3 (5): 51-53. 1933.

In a survey of 157 farms in the Red River Valley of Manitoba, Canada, data on family living were obtained from 129 of the records. Many of the farmers had been factory workers, carpenters, railway men, or mechanics. Fifty-eight reported that they had come from Europe, 6 from the United States, and 77 from Manitoba and other parts of Canada.

The total money value of living of these farmers in 1931 averaged \$1,089. The value of food furnished by the farm averaged \$290, and of fuel furnished \$11. The average rental value of the house was estimated as \$130. Expenditures for food averaged \$245, for clothing \$104, and for household operation \$103. Savings amounted to \$35. Study of the value of living according to expenditure groups revealed that "with every increase in the total amount expended, expenditures for food decreased; clothing expenses, though variable, tended to decrease; shelter costs decreased and operating expenses increased after a certain point was reached; savings, education, health, personal and auto increased and church and charity remained practically the same" (p. 53). The fact that fully 60 percent of the living expenses of the Red River Valley farmers in 1931 were of a cash nature indicated the importance of the farmer as a purchaser of goods and services.

#### MEXICO

MEXICO, SECRETARÍA DE INDUSTRIA, COMERCIO Y TRABAJO. (470)  
EL SALARIO EN EL DISTRITO FEDERAL. Bol. Mens. Dept. Trabajo 1 (3): 2-7, illus. 1922. [Summary in U. S. Dept. Labor, Bur. Labor Statis. Monthly Labor Rev. 16 (6): 127-129. 1923.]

This article contains statistics of average daily wages in 1922, by industry and occupation, in the city of Mexico and 9 of the other 12 municipalities that make up the Federal district. A weekly expenditure budget was estimated for a workman's family in the city of Mexico, and from this it was concluded that the legal minimum wage in the city should be 3.48 pesos (about \$1.74). The summary in the Monthly Labor Review contains the most important conclusions of the article.

MEXICO, DEPARTAMENTO DE LA ESTADISTICA NACIONAL. (471)  
NUMEROS INDICADORES DE PROMEDIOS DE SUELDOS Y JORNALES EN LOS ESTADOS QUE SE EXPRESAN. [FIGURES ON SALARIES AND WAGES IN CERTAIN STATES.] Estadis. Nac. 1925 (4): 3-7, illus. 1925. [Summary in U. S. Dept. Labor, Bur. Labor Statis. Monthly Labor Rev. 21 (6): 39-40. 1923.]

The Mexican Department of National Statistics published estimates of the average monthly wages paid in 1924 and of the average expenditure of a family of from 3 to 5 persons. The summary gives a table showing wages in various districts and average monthly expenditures of various types of workers' families in specified Mexican States in 1924. No cases were presented in the original report.

MEXICO, OFICINA DE ESTUDIOS ECONOMICOS, FERROCARRILES NACIONALES. (472)  
 UN ESTUDIO DEL COSTO DE LA VITA EN MEXICO. 104 pp., illus. Mexico,  
 District Federal. 1931.

The study was undertaken to secure data as to actual salaries for the committee for reorganization of railroads to use as a basis for reform measures by the national government. The study includes all the provinces of the republic, and all nationalities engaged in gainful occupation: Spanish, Mexican Indians, and foreigners. Questionnaires for distribution were sent to each municipal district and called for data applying to 1924-25. Not all of the questionnaires were returned, however, and many were filled out in the offices of the municipalities by officials of rudimentary training, so the results are neither complete nor accurate. Most of the questionnaires returned were filled in by Federal employees. Between 75 and 97 percent of the replies were usable. In making the average estimates, the family consisted of 3 to 5 members. The Engel consumption unit was used. The families had from 1 to 11 members. There are 5 groups ranged according to size, and 8 according to salary. On the whole, the relative percentages of income devoted to the different sorts of expenditure varied but slightly.

FERRARI, EGIDIA (473)  
 ECONOMIC CONDITIONS OF THE AGRICULTURAL WORKERS IN MEXICO. Internatl. Rev. Agr. Econ. 4: 87-101, illus. 1926. [Summary in U. S. Dept. Labor, Bur. Labor Statis. Monthly Labor Rev. 23 (5): 131-132, illus. 1926.]

Rough estimates of the weekly food expenses of Mexican workers in the Federal district, Jalisco, Michoacan, Puebla, and Vera Cruz were based on secondary data appearing in official journals and census material. It is assumed that the data apply to the period around 1926, the date of publication of this study. The average wage and the average proportion of it spent for food is given. The quantities of beans, chili, meat, and beverages consumed were estimated. The author concluded that if the cost of living and the rate of wages were adjusted on a scientific basis to existing food prices, wages would have to be raised at least 2 pesos a day. The summary in the Monthly Labor Review gives the main conclusions of Ferrari's article.

## SOUTH AMERICA

### ARGENTINA

BUCHANAN, WILLIAM I. (474)  
 LA MONEDA Y LA VIDA EN LA REPÚBLICA ARGENTINA. Rev. de Derecho, Historia y Letras, pp. 197-221, illus. December 1898.

An attempt is made here to discover the effects of the fluctuation of currency on wages and living costs in Argentina. The tables included throw light on the cost of family living from 1886 to 1896. The information on which these are based came from family-account books of urban laborers and employers. Nine rural families—Italians, Basques, and Swiss—living near Santa Fé were studied. These included from 4 to 10 members, exclusive of children under 7. Their holdings ranged from 340 to 800 acres, and their expenses, not including rent, heavy instruments, or food raised on the farm, ranged from \$650 to \$1,720 a year. An average family composed of 5 persons spent \$1,119.65 a year; 25 percent of this was for rent, nearly 50 percent for food, and about 12 percent for clothing. Of the 9 families studied, some owned their farms, some were tenants who paid either a cash rent or 10 to 20 percent of their crops. A record of the expenditures of one urban family with an income of \$300 a month is given. This family spent less than 25 percent of its income for housing, less than 40 percent for food, and 10 percent for clothing.

BÓREA, DOMINGO (475)  
 ESTUDIO SOBRE LA CARESTIA DE LA VIDA EN LA REPÚBLICA ARGENTINA ESPECIALMENTE EN LA CIUDAD DE ROSARIO. Bol. Mens. Mus. Social Argentino 3: 5-43, illus. 1914.

The material on the cost of living and its increase from 1905 to 1912 was obtained from questionnaires sent to individuals and municipal authorities, and from municipal statistics. No actual records of expenditure are included, but some average expenditures are tabulated, and from the data given, it would be possible to find the average cost for different foods. Rent amounted to from three-tenths to four-tenths of the total income; clothing was cheap, and so was wheat, but bread and meat were expensive.



BUNGE, ALEJANDRO E.

(476)

COSTO DE LA VIDA EN LA ARGENTINA DE 1910 A 1927. *Rev. Econ. Argentina* 1: 39-63. 1918.

Previous studies relating to this period are here discussed, and index numbers are constructed showing variation in cost of living.

---

WAGES AND COST OF LIVING IN ARGENTINA. *Rev. Econ. Argentina*. September 1928. [Original not seen. Summarized in U. S. Dept. Labor, Bur. Labor Statis. Monthly Labor Rev. 29 (1): 232-233, illus. 1929.] (477)

From 1914 to 1918, 50 percent of the average wages in Buenos Aires was spent for food, 20 percent for rent, and 30 percent for clothing and incidentals. From 1919 to 1926, the figures were 50, 26, and 24 percent, respectively.

ARGENTINA, DEPARTAMENTO NACIONAL DEL TRABAJO.

(478)

PRESUPUESTOS OBREROS. [WORKINGMEN'S ACCOUNTS.] *Crón. Mens.*, pp. 507-508, illus. August 1920.

A survey was made of the cost of living for 84 workingmen's families in Buenos Aires during the year 1919 in order to ascertain the need for assistance, and to ascertain actual living conditions. No individual records of family expenditure are given. An average budget is worked out which includes expenditures for food (59.6 percent), clothing (8.4 percent), rent (17.8 percent), fires (4.1 percent), books (0.7 percent), workingmen's societies (0.3 percent), amusements (0.1 percent), wine (3.6 percent), tobacco (3.5 percent), and miscellaneous (1.9 percent). The 84 families had an average of six members each, of whom 34 percent were children. Of the total individuals, 173, or 34.1 percent, were wage earners. In the 38 cases in which income exceeded the expenditures, 40 percent of the members of the families were employed; in the 44 cases where there were deficits, 27.2 percent were employed. In the 2 cases in which income and expense were equal, 45.4 percent were employed. Eighty percent of the families occupied 1-room dwellings, of which 9 had both door and window, and 59 percent had no ventilation.

---

PRESUPUESTOS OBREROS. *Crón. Mens.* 5, no. 52. 1922. (479)

---

RECURSOS, GASTOS Y VIVIENDA DE LA FAMILIA OBRERA. [INCOME, EXPENDITURES, AND COST OF LIVING IN A LABORER'S FAMILY.] *Crón. Mens.* 7, no. 77, 1924; 8, no. 86, 1925. (480)

---

A RÉSUMÉ OF ARGENTINA. *Crón. Mens.*, pp. 1734-1736. February 1926. [Summarized in U. S. Dept. Labor, Bur. Labor Statis. Monthly Labor Rev. 23 (3): 175-176, illus. 1926.] (481)

The study of the average income and expenditure of a working-class family in Buenos Aires in the year 1925 was undertaken by the national department of labor. The data were obtained by an "inquiry", but no details are given concerning methods. The family was considered as a unit; the average size was 5 members, 2 of whom contributed to the support. The average earnings were 2,033 pesos. (A paper peso equals 44 percent of its face value of 91.38 cent.) The average expenditure was 1,976 pesos. Food costs amounted to 55.82, and rent to 18 percent of the total expenditure. Of the 1,000 families investigated, 776 had balanced accounts, 162 had an average surplus of 445 pesos, and 62 families had deficits averaging 294 pesos. Expenditures based on number in family are tabulated, also the average for food, rent, and miscellaneous expenditures. The 1,000 families occupied 1,097 rooms; 172 were in wooden structures and 925 in brick.

---

RECURSOS PRESUPUESTO Y VIVIENDA DE LA FAMILIA OBRERA EN EL AÑO 1926. [INCOME, EXPENDITURES, AND COST OF LIVING OF A LABORER'S FAMILY IN THE YEAR 1926.] *Crón. Mens.*, pp. 1987-1991, illus. April 1927. [Summary in U. S. Dept. Labor, Bur. Labor Statis. Monthly Labor Rev. 25 (4): 202-203. 1927.] (482)

A survey of 700 families of laborers in Buenos Aires was made by the national labor department of Argentina for 1926 to ascertain the average income and average expenditure. The 700 families included 2,772 persons; the average income was 1,955 pesos (1 paper peso equals 40.5 cents); a high average for the

families was 5,022 pesos; a low average for 10 families was 728 pesos. The average expenditure was 1,923 pesos with a high average of 4,283 pesos and a low average of 700 pesos. Of these families, 530 had balanced accounts, 135 had an average yearly surplus of 500 pesos, and 35 families had an average deficit of 502 pesos. No actual records of family expenditures are given. The 700 families occupied 724 rooms, 4 persons to a room. The average expenditure for food was 480 pesos, and for rent 500 pesos.

ARGENTINA, DEPARTAMENTO NACIONAL DEL TRABAJO.

(483)

RECURSOS, GASTAS, Y VIVIENDA DE LA FAMILIA OBRERA EN LA CAPITAL FEDERAL EN EL AÑO 1928. Crón. Mens., March 1929, pp. 2695-2701, illus. Buenos Aires. 1929.

The national bureau of statistics for Argentina made a study of incomes, expenses, and living conditions among the laboring classes in Buenos Aires in 1928. A total of 1,198 families were visited. No individual records of family expenditures are given. The average annual income was found to be 2,044 pesos; 10 families had a maximum average income of 5,976 pesos; 10 a minimum average of 618 pesos. The expenditures averaged 2,036 pesos a year, the high average for 10 families being 5,328 pesos, and the low, 664 pesos. There were 975 cases, 81 percent of the total, in which 1.7 members of the family contributed to the support, and in which there was a margin at the end of the year; 119 cases, or 10 percent, had balanced accounts, an average of 2.2 members of the families working; 104 cases, or 9 percent, showed a deficit. The families averaged four members each; the 4,776 persons inhabited 1,296 rooms. Tables are given showing the expenditures of the families according to size and membership.

#### PERU

LAVALLE Y GARCIA, HERNANDO

(484)

EL PRESUPUESTO DE LA FAMILIA OBRERA EN EL PERU. Rev. Universitaria (Universidad de San Marcos) 13 (11): 527-544, illus. Lima. 1918.

This study of conditions in 1918 is based upon information obtained from questionnaires sent to 17 families of the lower middle class in Lima or its environs. All were Peruvian day laborers engaged in such occupations as seamstress, fruit peddler, market gardener, tailor, painter, factory worker, mason, etc. The incomes ranged from 0.80 to 4 soles a day. The size of the families ranged from 2 to 9 persons. Food costs averaged about 65 percent of the income; housing, 10 percent. To estimate these last values, the average family was considered as 3.46 persons.

#### URUGUAY

URUGUAY, OFICINA NACIONAL DEL TRABAJO.

(485)

COST OF LIVING IN URUGUAY IN 1919 COMPARED WITH 1913. Montevideo. May-August 1919. [Original not seen. Summary in U. S. Dept. Labor, Bur. Labor Statis. Monthly Labor Rev. 11 (2): 71-72, illus. 1920.]

This article is based on observations by the bureau of statistics and information of the national labor office of Uruguay. The number of cases studied is not mentioned, but three records of expenditure are given to show the increase of living costs between 1913 and 1919. For the unmarried day laborer the income was presumably the same; rent was the same; food costs had increased from 144 to 218.88 pesos; clothing from 55.64 to 87.91 pesos; and, instead of a surplus of 52.18 pesos, he had a deficit of 75.77 pesos. The married laborer's expenditures show the same percentage of increase, but his deficit was larger proportionally; and the married laborer with children shows a still larger deficit. Increased food costs are tabulated by specific items.

URUGUAY, MINISTERIO DE INDUSTRIAS.

(486)

EL SALARIO REAL (1914-26). 69 pp., illus. Montevideo. 1927.

A summary of this study is given in International Labour Review 17: 263-264, 1928. The method used and the results obtained are described, and a table is given showing the movement of normal and real wages from 1915 to 1926, inclusive, in private industry and State undertakings, 1914 being taken as a base. The inquiry covered all the industrial and commercial undertakings and rural industries. It appears that 33 percent of the workers earned less than 356 pesos, which was recognized as the minimum of subsistence for a single worker. If nonadult workers are excluded, the percentage still remains high, being 20 percent. Further, if annual earnings are compared with the minimum annual cost of living of a worker's family, which was calculated by the Ministry



of Industry as 663 pesos for 1926, it is found that 40.1 percent, or 57 percent of the 70,204 adult workers covered by the inquiry, did not earn enough in 1926 to keep a family. The tables at the close of the text give two estimates of expenditures—one of a married working man with no children, and the other of a public employee, also married, both living in Montevideo. All costs are given for each year from 1914 to 1926. Food and clothing are itemized, and the amount consumed is given in each case. The income of 91,436 laborers is averaged according to 9 groups, which range from 240 pesos or less to 3,600 pesos or more per annum. A distinction was made between men and women and between adults and minors.

HERRERA, LUIS A. DE

(487)

LA ENCUESTA RURAL. 76 pp., illus. Montevideo. 1920.

Questionnaires regarding the wages and cost of maintenance of peons were sent to all employers of peons, and replies were received from 186. The groups studied were all Uruguayans. The number of peons on the farm was not mentioned in all cases. Wages ranged from \$7 to \$70 a month, although in one case the salary of the superintendent amounted to \$200. The cost of maintenance, evidently a part of the income, ranged from \$10 to \$45 a month; the increase in costs during the period 1914–20 ranged from 30 to 300 percent, while the salaries increased from 30 to 150 percent. The questionnaire provided for remarks comparing the labor conditions on the farm with those in the cities, and for suggestions for improvement of rural conditions. The percentage of illiteracy among the rural workers ranged up to 50 percent. General statements are made as to moral and general educational conditions, and some figures are given on the cost of separate foods. Answers given by each employer are put in a separate table, but not in tabular form.

## EUROPE AND THE MEDITERRANEAN REGION

### AUSTRIA

LE PLAY, F.

(488)

MINEUR DES GITES DE MERCURE D'IDRIA (CARNIOLE). OUVRIER-TÂCHERON DANS LE SYSTÈME DES ENGAGEMENTS VOLONTAIRES PERMANENTS, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN 1846. *In* Les Ouvriers Européens, ed. 2, v. 6, pp. 1–33. Paris. 1878.

This is a study made in 1846 of a family in a disorganized social structure, the antithesis of the type of family which prevailed in eastern Europe. The worker, a miner of mercury at Idria (Carniola), was paid according to the amount of mercury-bearing rock he mined daily. His family consisted of himself (36), his wife (30), 2 daughters (10 and 1), and 2 sons (8 and 4). The two oldest children were technically illegitimate, certain local restrictions on marriage having led to a general system of concubinage which disrupted many of the religious practices. Health was not particularly good because of constant contact with mercury, but medical aid was furnished free. The wife made false teeth for sale. Recreations consisted of smoking, gambling, walking, drinking, and religious ceremonies. Family well-being was protected by mutual-insurance societies. Property was valued at 117 francs; furniture and clothing at 220 francs. Income was 559 francs, of which 376 francs was in money. Subventions accounted for 163 francs; labor, 364 francs; and industries, 31 francs. Food cost 306 francs; household, 62 francs; clothing, 75 francs; moral, recreative, and health needs, 63 francs; all else, 51 francs. There were no savings other than insurance payments. Notes deal with the population problem in parts of the Austrian Empire; the impossibility of restraining marriage; poor relief in parts of Germany; and the influence of industrialization upon the mores and the social structure of parts of Germany and Austria.

SAINT-LÉGER, A. DE, and LE PLAY, F.

(489)

COMPAGNON-MENUISIER DE VIENNE (AUTRICHE). OUVRIER-TÂCHERON DANS LE SYSTÈME DES ENGAGEMENTS MOMENTANÉS, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN MAI 1853. *In* Les Ouvriers Européens, ed. 2, v. 5, pp. 1–59. Paris. 1878.

This is a study of an unsettled family in western Europe threatened by industrialization and broken tradition. Institutions guaranteeing the social and economic well-being of the family were disappearing rapidly. Attempts at repairing the social structure were being made, however, by means of new forms of community organization through the development of property and by good

employer-employee relations. When the study was made in 1853 the household consisted of the head (38), his wife (36), 3 sons (15, 7, and 1½), and 2 daughters (11 and 4). They had exemplary morals. The worker had good health, but his wife and children were ailing. The city provided medical aid. The woman spent 120 days making gloves at home. The eldest son who had just been apprenticed to the corporation of carpenters, received lodging and part of his clothing. The only recreations were Sunday walks and an occasional delicacy on feast days. This family started out with a small capital but the loss of it, the poor health of the wife, and the rapid increase in family placed them in a most precarious financial situation. Property consisted of tools valued at 169 francs, and furniture and clothing at 479 francs. Income was 1,018 francs, of which 912 francs was in money. Property contributed 8 francs income; subventions, 71 francs; labor, 812 francs; and industries, 127 francs. Food cost 646 francs; household, 221 francs; clothing, 112 francs; moral, recreative, and health needs, 25 francs; and all else, 14 francs, there being nothing left for savings. Notes are supplied on the causes of the disruption of the social structure of Moravia; the nature of the arts and crafts guilds of Austria and southern Germany; the factors menacing the old guild organization; the repugnance which certain families showed to saving; the practice of religion and its expense; the legal restrictions on marriage in Wien (Vienna) and their failure; and betrothal and marriage customs among the Slavs of the Danube and the Adriatic.

WESSELY, JOSEPH

(490)

DIE EINRICHTUNG DES FORSTDienstES IN ÖSTREICH IN SEINEM ZUSAMMENHANGE MIT DER DOMÄNEN. Montan und Finanzverwaltung. 2 v. Wien. 1861. [Listed in Kayser's Bücher-Lexikon.]

FRIEF.

(491)

DIE ENQUÊTE ÜBER HAUSSTANDS-EINNAHMEN UND -AUSGABEN SCHLESISCHER FABRIK-ARBEITER FAMILIEN. 1875. [Original not seen. Summarized from Engel, E., Die Lebenskosten, 1895.]

In this study (published in 1875) the income and maintenance cost of 235 families averaging five persons each are considered. The average income per family was 805 marks and the expenditures 803 marks; of the expenditures, 61.03 percent was for food, 13.57 percent for clothing, 7.59 percent for rent, 7.10 percent for heat and light, 0.87 percent for church and school, 1.87 percent for taxes and insurance, 1.87 percent for health and savings, 4.11 percent for personal necessities, and 1.99 percent for implements. The textile and foundry industries were most largely represented in the study.

LAVOLLÉE, RENÉ

(492)

LA SITUATION DES OUVRIERS EN AUTRICHE. Réforme Sociale (2) 6: 458-463. 1888.

This article is made up of a few extracts taken from a résumé of an investigation made 4 years earlier by M. de Vogelsang concerning 260 factories and a working population of about 100,000 people. Neither the exact reference nor the method used in this original investigation is supplied. The living conditions of the workers were very bad. Some of them lived at the factory all week because they had no time to go home; frequently 6 or 7 families lived together in one small room. They usually ate nothing but bread and potatoes, with occasionally a bottle of spirits or a little horse or dog meat. The receipts and expenditures for one family of seven persons are given for each of the 4 years from 1879 to 1882. The expenditure for food in 1879 was 479 francs out of a total output of 699 francs; in 1882, 967 francs out of 1,481 francs.

BRÁF, ALBIN

(493)

STUDIEN ÜBER NÖRDBÖHMISCHE ARBEITERVERHÄLTNISSE. 163 pp. Prague. 1881. [Original not seen. Listed in Kayser's Bücher-Lexikon.]

UNITED STATES BUREAU OF LABOR.

(494)

REPORT ON EARNINGS AND EXPENSES OF WAGE RECEIVERS IN EUROPE. U. S. Commr. Labor Ann. Rept. 1 (app. B): 452, illus. 1886.

An expense record given in this report was kept by a miner in Salzburg, Austria, in 1885. His family consisted of himself, his wife, and baby, living in a single room. The father worked in 6-hour shifts, earning on an average 20 to 24 cents per shift. The mother worked a little on the hand loom. The food consisted chiefly of beer, black bread, potatoes, or cabbage. Meat was never used. The



total income was \$200.80 per year. Expenditure for rent was \$14.40, for clothing \$28.80, and for food \$147.29. There was a deficit of \$3.29.

GRUBER, IGNAZ (495)  
DIE HAUSHALTUNG DER ARBEITENDEN KLASSEN. Staatswiss. Studien 1 (4): 96-112. 1887.

This study, published in 1887, is based on the investigations of Von Wahlberg, which originally included 25,000 cases. From these, 800 were selected for the present study. The cases were divided into three groups: Unmarried, or widowed without children; widowed with children; and families with mother, father, and children. Most of the cases fell into the second group. The working year was estimated at 300 days. The incomes ranged from 156 to 1,248 florins a year. Tabulations are furnished for percentages of income expended for rent, but no other costs are given. On the whole, Schwabe's law is confirmed.

MISCHLER, ERNST (496)  
DIE WOHNVERHÄLTNISSE DER ARBEITENDEN KLASSEN IN DEN ÖSTERREICHISCHEN STÄDTEN. Wien. 1888.

PAYGERT, CORNELIUS VON (497)  
DIE SOCIALE UND WIRTSCHAFTLICHE LAGE DER GALIZISCHEN SCHUHMACHER. Staats u. Sozialwiss. Forsch. 11, 193 pp., illus. Leipzig. 1891.

The data for this detailed account of the economic and social conditions of shoemakers living in the Polish district of Galicia refer to 1888 and 1889 and were obtained from (1) questionnaires answered by 205 trade unions of various sorts, and (2) personal interviews according to a fixed list of questions with the families of 69 apprentices and masters in the shoemaking and some other trades. Inventories of property are given, as well as yearly expenditures and other detailed information. The method of investigation differs only in a few details from that of Schnapper-Arndt. The raw data obtained are not presented, although various references are made to them in the text. The appendixes give complete answers to the questionnaire by the families of three shoemakers, of which one was a master, another an apprentice. The author concluded that the diet in the towns studied was inadequate by comparison with the rest of the country; people living in the country districts, who carried on farming as well as shoemaking, had more and better food. More than 60 percent of the average family expenditure went for food which consisted mainly of potatoes and rye bread.

SCHÖFER, H. (498)  
LANDESÜBLICHE MENAGEN UND DIE KRIEGSVERPFLEGUNG DER KÖNIGLICHEN TRUPPEN. 122 pp. Wien. 1889. [Listed in Kayser's Bücher-Lexikon.]

BUNZEL, JULIUS (499)  
MONATS-BUDGET EINES GRAZEN ARBEITERS. 8 pp. Graz. 1900. [From Blätter für das Armenwesen.]

AUSTRIA, ARBEITSSTATISTISCHES AMT. (500)  
WIRTSCHAFTSRECHNUNGEN UND LEBENSVERHÄLTNISSE VON WIENER ARBEITERFAMILIEN, 1912-1914. Wien. 1916. [Original not seen. Summarized in International Labour Office, Methods of Conducting Family Budget Enquiries, pp. 59-60. Geneva. 1926.]

Household accounts kept by 119 families of Viennese workers for 1 year were utilized in this study. Of these, 70 kept budgets for a second year. The data apply to the period from 1912 to 1914. The average number of persons per family was 4.64. The average number of adult equivalents (German scale) was 2.8. The investigators made frequent visits to the account keepers. The background of each family studied is described in detail.

LÖWENFELD-RUSS, HANS (501)  
ERNÄHRUNGS WIRTSCHAFTLICHE GEGENWARTS PROBLEME IN ÖSTERREICH. 42 pp. Wien. 1919. [Listed in Kayser's Bücher-Lexikon.]

WIENER KAMMER FÜR ARBEITER UND ANGESTELLTE. (502)  
LÖHNE UND LEBENSHALTUNG DER WIENER ARBEITERSCHAFT IM JAHRE 1925. 225 pp., illus. Wien. 1928.

The first part of this study gives wage statistics and describes industrial conditions for 115,281 Viennese workers. The second and last part deal with the standard of living and dietaries of 42 Viennese families for 1925. These families

represent a cross section of the worker and employee class. Household accounts were kept for a year by the 42 families, and these, together with a complete description of each family, are published in this book. The average size of the family was 3.7 persons. The average food consumption per family is estimated in terms of calories, and of fat, albumen, and carbohydrates. The consumption unit used is one worked out by Sigismund Peller, who wrote the last part of the book, in which he compared the 1925 dietary with dietaries found in a study made in 1912. Food accounted for 57.47 percent of the total output of the 42 families; of this 15.21 percent went for meat, 11.36 percent for bread and other cereal products. From 1912 to 1925 the expenditure for alcoholic beverages decreased, and that for rent dropped from 13.7 to 2.62 percent of the total output. This reduction of rent allowed the calorific value of the worker's dietary to reach in 1925 its pre-war figure..

WIENER KAMMER FÜR ARBEITER UND ANGESTELLTE. (503)

WIRTSCHAFTSTATISTISCHES JAHRBUCH 1930-1931. Jahrb. 7, pp. 387-393, illus. Wien. 1932.

Examination of 72 household account books for the year 1930 showed an average expenditure of 5,082 S. and average income of 5,120 S. The families averaged 3.36 members each. Food, drink, and tobacco averaged 2,357 S., rent 201 S., heating and light 194 S., clothing, working and bedclothes 524 S., intellectual pursuits 236 S. per family. Labor income averaged 4,130 S.; cash benefit payments and borrowings increased the income to 5,120 S. All budget items, including articles of food, were evaluated in money, according to total family income and expenditure. The data confirm Engel's and Schwabe's laws. With increased income the proportion of expenditure for clothing, rent, fuel, and light stayed about the same, while expenditure for miscellaneous goods constantly increased.

#### BELGIUM

BERTRAND, LOUIS

L'OUVRIER BELGE DEPUIS UN SIÈCLE. 448 pp. Bruxelles. 1924. (504)

The author collected no original data, and the facts he used were obviously chosen for socialistic propaganda. But the work contains interesting quotations regarding the Belgian workers' clothing, dietaries, living conditions, etc., in the nineteenth and twentieth centuries, many of them taken from old inquiries made by the city of Brussels and not available elsewhere.

BELGIUM, MINISTÈRE DE L'INTÉRIEUR. (505)

ENQUÊTE SUR LA CONDITION DES CLASSES OUVRIÈRES ET SUR LE TRAVAIL DES ENFANTS. 3 v., illus. Bruxelles. 1848.

These volumes constituted an official compilation of detailed questions and answers concerning wages, hours of labor, conditions of labor, standard of living, sanitary conditions, and child labor in all the industries in the major cities and towns of Belgium during the period 1843-48. Reports from manufacturers, chambers of commerce, trade associations, mining engineers, medical colleges, and associations were all included in detail. The report stressed malnutrition, alcoholism, small wages, unsanitary factory and housing conditions, and extreme poverty among the workers. A minimum weekly budget for a Ghent family of 2 adults and 4 young children was: bread 4.62 francs, potatoes 2.24 francs, butter 2.38 francs, coffee 0.35 franc, chicory 0.21 franc, milk 0.21 franc, salt 0.14 franc, pepper 0.03 franc, vinegar 0.14 franc, buttermilk 0.16 franc, rice 0.24 franc, flour 0.08 franc, onions 0.08 franc, upkeep of clothing 0.80 franc, heating and lighting 1 franc, soap 0.22 franc, starch 0.11 franc, rent 1.27 francs, a total of 14.28 francs a week, or 742.56 francs a year. The wife frequently worked; some of the children worked but their wages were negligible. This budget was typical for the working classes in both the large and small cities. Meat was a luxury, eaten only on Sundays, but of poor quality. Disease was prevalent. Some workers had gardens. Bread, the chief item of diet, was usually made from flour containing 10 to 16 percent gluten but badly adulterated with vegetable and foreign matter.

GEORGENS, D. (506)

Blicke und Winke zur geschickten Führung eines Familienhaushalts-Buches. Mannheim. 1851. [Listed in Kayser's Bücher-Lexikon.]



DUCPÉTIAUX, E.

(507)

BUDGETS ÉCONOMIQUES DES CLASSES OUVRIÈRES EN BELGIQUE. Bull. Comm. Cent. Statis. 6: 261-440, illus. Bruxelles. 1855.

This investigation, which attempted to cover every phase of the economic life of the Belgian worker, was undertaken in all nine Provinces of Belgium in 1854. Questionnaires were distributed in each Province by the bureau of statistics, but the actual number of cases studied is not stated. Detailed discussions and tables regarding the worker's needs, habits, etc., are given for each Province, followed by a short summary table, and three representative budgets are then drawn up for families of six persons in the Province who are poor, fairly well off, and very comfortable, respectively. The author finally draws some general conclusions for the entire country, although he gives no averages as to size of family, income, etc. Wages in different industries are compared with prices of food by 5-year periods from 1830 to 1854. Tables also compare the cost and quantity of worker's food with that of a soldier, a sailor, and a prisoner. The nourishment of the workers was found to be inadequate, both in quantity and in quality; the rent of dwellings was moderate, but they were usually constricted and insanitary; clothing was adequate, but bedding was not; and expenditures for religious, moral, and intellectual purposes were practically nonexistent. In a great number of cases, the expense accounts showed deficits which could only be made up by recourse to charity. These data were analyzed in more detail by Ernst Engel 40 years later. In order to emphasize his conclusions concerning living conditions, Ducpétiaux compares Belgian working families with a number of different social classes living in Ixelles (suburb of Brussels). For this purpose, he gives data concerning the consumption of the investors, the officials, the merchants, the middle class, gardeners, tobacco dealers, shoemakers, bakers, masons, and a number of other social classes. Some of these data were also presented later by Engel.

DAUBY, JOSEPH

(508)

COMPOSITEUR-TYPOGRAPHE DE BRUXELLES (BRABANT—BELGIQUE). JOURNALIER DANS LE SYSTÈME DES ENGAGEMENTS MOMENTANÉS D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN NOVEMBRE 1857. Les Ouvriers des Deux Mondes (1) 2: 193-232. 1858.

This analysis, taken mostly from Les Ouvriers Européens, shows the social disruption arising from the introduction of the factory system in western Europe. In this particular family the social structure had been reorganized mainly about employer-employee relationships. When this study was made in 1857 the household consisted of the head (34), his wife (35), three sons (14, 12, and 10), and a daughter (1). They were of good morals. Health was fair. The man did proof-reading in addition to typesetting. The eldest son was apprenticed in the same establishment as his father. The other two sons were in school. Recreations were mostly noncommercialized. Family well-being was somewhat precarious. They belonged to a mutual-aid society. Property consisted of tools, money, and rights in insurance valued at 174 francs, and furniture and clothing at 1,951 francs. Income was 2,225 francs, of which 1,864 francs was in money. Property was credited with 5 francs income; subventions, 131 francs; labor, 1,732 francs; and industries, 357 francs. Food cost 1,197 francs; household, 342 francs; clothing, 441 francs; moral, recreative, and health needs 241 francs; and all else 3 francs, with no savings. Notes discuss the alternating conditions of stability and disruption in Belgium; associations of mutual aid and insurance founded by the printers of Brussels; increase in the printers' salaries in 1857; and the feasts or annual reunions of the printers.

---

LES CLASSES OUVRIÈRES EN BELGIQUE. Bruxelles. 1863.

(509)

---

LA QUESTION OUVRIÈRE EN BELGIQUE. Bruxelles. 1871.

(510)

DENIS, HECTOR

(511)

L'INDUCTION STATISTIQUE ET LES FONDEMENTS PHYSIOLOGIQUES DE NOTRE CIVILISATION INDUSTRIELLE. Bruxelles. 1881.

JEHAY, M. LE COMTE F. VAN DEN STEEN DE (512)  
 TISSERAND DE LA FABRIQUE COLLECTIVE DE GAND (FLANDRE ORIENTALE—  
 BELGIQUE). TÂCHERON DANS LE SYSTÈME DES ENGAGEMENTS VOLONTAIRES  
 PERMANENTS, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX  
 EN OCTOBRE ET NOVEMBRE 1884. *Les Ouvriers des Deux Mondes* (2): 3:  
 173–212. 1892.

Agriculture constituted the chief labor for the family in this study which was made in 1884 and deals with the influence of the factory on the domestic system. The family consisted of the head (50), his wife (33), four daughters (12, 7, 5, and 2½), and a son (9). The worker was peaceable, skilled, honest, sociable, literate, and loved and respected by all. The wife was illiterate, but intelligent and active. Health was good, except for that of two daughters. Doctor's visits were usually free. Recreations were few and mostly noncommercialized. The worker was constantly in debt which never exceeded 21 francs nor fell below 3 francs. His chief hope was that his feet and eyes might be spared until his children were old enough to work. Property consisted of 6 francs in money, 17 francs in animals, 55 francs in working equipment, and 196 francs in furniture and clothing. Income was 781 francs, of which 618 francs was in money. Property contributed 7 francs; subventions, 56 francs; labor, 601 francs; and industries, 108 francs. Food cost 457 francs; household, 99 francs; clothing, 146 francs; moral, recreative, and health needs, 76 francs; and all else 3 francs, with no savings. Notes are concerned with morals of the Flemish rural population; the industry of lace making and weaving; payment of the workers; credit accorded the weaver by the employer; and the workers' lodgings at Gand.

BRANTS, VICTOR (513)  
 PÊCHEUR CÔTIER D'HEYST (FLANDRE OCCIDENTALE, BELGIQUE). OUVRIER-  
 PROPRIÉTAIRE DANS LE SYSTÈME DES ENGAGEMENTS VOLONTAIRES PER-  
 MANENTS D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN  
 JUILLET 1885. *Les Ouvriers des Deux Mondes* (2): 109–152. 1890.

Saving was almost universal in the locale of this study, because the chance of losing property was great, and the necessity for knowing the fishing grounds made for stability. This worker was poor, but respected because of his good character and courage. When the study was made in 1885 the household consisted of the head (41), his wife (45), and son and daughter of the first wife (12 and 14). The boy went to a free school, the girl to a French private school. Morals and health were good. The woman cultivated a garden, raised a pig, cared for a little shop, and rented a shed for three boats. The son would soon become a cabin boy. Recreations comprised feast-day celebrations, smoking, moderate drinking, and cards. Well-being was protected chiefly by the organizations of fishermen and the traditional mutual-aid customs which they maintained. Property consisted of dwelling valued at 3,500 francs, animals at 60 francs, fishing equipment and merchandise at 424 francs, and furniture and clothing at 1,187 francs. Income was 1,460 francs, of which 1,185 francs was in money. Property was credited with 199 francs; subventions, 40 francs; labor, 524 francs; and industries, 694 francs. Food cost 775 francs; household, 191 francs; clothing, 224 francs; moral, recreative, and health needs, 149 francs; and all else, 36 francs. Savings were 85 francs. Notes describe the organization of the fishing industry on the coast of Belgium, the social organization of the fishers, mutual-aid societies, the regulation of insurance societies, religious and magical beliefs, and the history and law of fishing in Belgium.

UNITED STATES BUREAU OF LABOR. (514)  
 EARNINGS AND EXPENSES OF WAGE RECEIVERS IN EUROPE. U. S. Commr.  
 Labor Ann. Rept. 1 (app. B): 423–431, illus. 1886.

According to this study of wage earners in 1885, the living conditions of the Belgian laborer were adversely affected by his intemperance and by the great competition which resulted from the density of population. The moderately thrifty laborer occupied a tenement of 2 to 4 rooms for which he paid \$3 to \$6 a month. In the rural districts gardens were included. Glass blowers earned up to \$3 a day and paid \$10 to \$15 a month rent; some owned their own homes. Papermakers, weavers, etc., earned \$0.50 to \$0.65 a day. Some expense records are furnished: 3 from Antwerp, 2 from Liège, 2 from Charleroi, 2 from Brussels,



1 from Lille, and 4 from Seraing. The records show a slight surplus in all but three cases. The range of income was from \$191 to \$1,023 a year. Over half of the income in every case went for food. Engel's and Schwabe's laws are confirmed.

GUÉRIN, URBAIN

(1515)

TOURNEUR-MÉCANICIEN DES USINES DE LA SOCIÉTÉ COCKERILL DE SERAING (BELGIQUE). OUVRIER-TÂCHERON DANS LE SYSTÈME DES ENGAGEMENTS VOLONTAIRES PERMANENTS D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN 1886. *Les Ouvriers des Deux Mondes* (2) 2: 1-52. 1890.

This is a study of extreme poverty in a large manufacturing center, where there was no personal relationship between employer and employees. In 1886, the period of the study, the household consisted of the head (36), his wife (45), and twin daughters (11). The parents were respected for their industrious habits. The children were receiving schooling. The worker held himself aloof from the socialist movements and the tavern. Father and children were in good health. The woman occasionally went out by the day to cook. Recreations consisted only of walks and visits with relatives. Their well-being depended on the worker's ability to do his work well, and on a mutual-aid society. Property consisted of washing equipment valued at 5 francs, and furniture and clothing at 864 francs. Income was 1,083 francs, of which 996 francs was in money. Subventions were credited with 45 francs; labor, 1,028 francs; and industries 11 francs. Food cost 712 francs; household, 184 francs; clothing, 127 francs; moral, recreative, and health needs, 58 francs; all else, 3 francs; there being no savings. Notes deal with the Cockerill Co.; the official investigation of working conditions in Belgium; the mutual-aid society; the maintenance of patronage and of social peace in the factories of industrial joint-stock companies; the glassmakers' industry; the social spirit and home owning among Belgian workers; and the economic and social situation of Belgium.

DENIS, HECTOR

(1516)

L'ALIMENTATION ET LA FORCE DU TRAVAIL. Bruxelles. 1887.

UNITED STATES DEPARTMENT OF LABOR.

(1517)

COST OF PRODUCTION: IRON, STEEL, COAL, ETC. U. S. Dept. Labor, Commr. Labor Ann. Rept. (1890) 6: 605-1376. 1891.

Along with the summary of 2,490 schedules of American families employed in the iron, steel, and coal industries (226), this report gives data on income and expenditures, between 1888 and 1891, of 100 families living in Belgium. The heads of these families were all born in that country and were employed in the pig-iron, bar-iron, bituminous-coal, and coke industries. Material is presented by industries for each family and per individual as well as by family averages. Eleven families in the pig-iron industry, comprising an average of 5.8 persons, had incomes averaging \$375 and expenditures for current living averaging \$373. Rent per family for an average of 4.5 rooms was \$32. Expenditures for food averaged \$170; for fuel and light, \$21; and for clothing, \$103. Seventy-five families in the bar-iron industry, comprising 5.5 persons, had incomes averaging \$359 and expenditures for current living averaging \$353. Expenditures for food averaged \$196. For families reporting such purchases, expenses for fuel averaged \$14; for lighting, \$4; and for clothing for husband, wife, and children, \$27, \$15, and \$42, respectively. The 62 families reporting rent paid an average of \$34 for an average of 3.5 rooms. The 10 families in the bituminous-coal industry averaged 6 persons. Total incomes of these families averaged \$427 and total expenditures for current living \$371. Food purchased averaged \$218; lighting, \$4; and clothing for the husband and wife, \$28. Families renting homes paid for an average of 3.3 rooms an average rent of \$19. Families reporting such purchases expended an average of \$14 for fuel and \$35 for children's clothing. The 4 families in the coke industry averaged 7 persons, had incomes averaging \$378, and expenditures for current living of \$394. Purchases of food averaged \$214; of fuel and lighting, \$22; and of clothing for the husband and children, \$67. The wife's clothing in 3 cases averaged \$8 per year. The 3 families renting homes paid an average rent of \$27 for 2 rooms. Other information presented covers surplus and deficits of these families' incomes. Quantities and costs per 100 units of consumption for 18 articles of food are given for a selected group of families. The unit of consumption is based upon the adult male equivalent calculated by the United States Bureau of Labor Statistics.

A separate analysis is also made of the incomes and expenditures of 31 normal families—families which included only a wife, husband, and 5 or fewer children,

none of them over 14 years of age. The income of 29 normal families in the pig-iron, bar-iron, and steel groups combined averaged \$242. Expenditures for all purposes averaged \$265; for food, \$123; for clothing, \$56; and for fuel and lighting, \$15. The average income of the 2 normal families in the bituminous-coal industry was \$346 and their average expenses \$334. Expenditures for food averaged \$189; for rent, \$14; for clothing, \$36; and for fuel and lighting, \$20.

The incomes and expenditures of the Belgian families are contrasted with families living in other European countries and in the United States. Remarks on various points relative to living conditions of the families from which records of expenditure were obtained are appended. These throw light on home surroundings, number of rooms, debts, and purchasing habits.

UNITED STATES DEPARTMENT OF LABOR.

(518)

COST OF PRODUCTION: THE TEXTILES AND GLASS. U. S. Dept. Labor, Commr. Labor Ann. Rept. (1891) 7 (v. 2, pt. 3): 2048. 1892.

This report includes, along with similar data for wage earners of other foreign countries and the United States (228, 656, 777, 979, 1311), income and expenditure figures of 24 Belgian families, gathered during the period 1888 to February 1891. The fathers of these families were employed in the glass industry. Revised figures from the commissioner's sixth annual report covering 3 "normal" families in the pig-iron industry, 26 in the bar-iron, and 3 in the bituminous-coal industries also are presented. Individual records for each family in the first-mentioned industry cover the following points: Family description (age, sex, size, occupational status); sources of income; home ownership; expenditure for food (quantities of 11 and costs of 22 staple articles of diet); rent (number of rooms), fuel and lighting (kind); clothing (husband and wife separate, children grouped); furniture and utensils; taxes, insurance (property and life), organizations, religion, charity, books and newspapers, amusements and vacations, intoxicating liquors, tobacco, sickness and death, and unclassified expenses; contrasted income and expenditure, showing surplus or deficit, and descriptive remarks concerning conditions and furnishings of homes. The entries for any one family can be traced through the various tables of expenditure of commodities. The average size of the 24 Belgian families, including boarders, etc., was 5 persons, the average total family income \$628, and the average total family expenditure \$492.

Separate computations are recorded for 17 normal families in the glass industry in addition to compilations, by size of family and income, of the percentages of total expenditure for each classification for the normal families in the iron, coal, and glass groups combined. Families considered normal were those which included no boarders or dependents, rented their homes, and recorded expenditures for rent, fuel, lighting, clothing, and food, and included a husband, wife, and not more than 5 children, none of whom were over 15 years of age. Quantities and costs of food consumed for these families are given for 9 food articles in terms of 100 units of consumption and in tabular form showing decreasing per capita cost with increasing size of family.

The percentage of total average expenditure for food for all 39 normal Belgian families was 47 percent; for clothing, 20 percent; and for rent, 10 percent.

The average annual income per normal family in the glass industry was \$423 and the total average annual expenditure, including insurance, \$386. Food expenses averaged \$170; clothing, \$76; and rent, \$39. The 3 normal families in the pig-iron industry had incomes averaging \$209 per year. Expenditures for all items, including insurance, averaged \$235; for food, \$115; and for rent, \$32. The total yearly income of the 26 normal families in the bar-iron industry averaged \$246, and total expenditures \$268. Food costs averaged \$124; clothing, \$58; and rent, \$26. The incomes of the 3 normal families in the bituminous-coal industry averaged \$337 per year and total expenditures averaged \$319. Expenditures for food averaged \$182; for clothing, \$47; and for rent, \$14.

DENIS, HECTOR

(519)

NOTE SUR LES INDICES DE LA PROSPÉRITÉ ET SPÉCIALEMENT SUR LES BUDGETS OUVRIERS. Bull. Inst. Internat. Statist. 4: 76-82, illus. 1889.

This study in 1889, based on the data collected by E. Ducpétiaux and C. D. Wright, attempts to show that the proportion of the total expenditure spent for food decreases as receipts increase, miscellaneous expenses increase at the same time, the proportion of expenditure for clothing increases, and the proportion for lodging decreases.



MOREAU, LE CHEVALIER DE

(520)

CONDUCTEUR-TYPOGRAPHE DE L'AGGLOMÉRATION BRUXELLOISE (BRABANT-BELGIQUE). OUVRIER-JOURNALIER DANS LE SYSTÈME DES ENGAGEMENTS MOMENTANÉS, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN 1899. *Les Ouvriers des Deux Mondes* (2) 3: 369-412. 1892.

The superintendent (44) dealt with in this study in 1890 was head of a household including his wife (45) and 2 daughters (14 and 8). Morals and health were excellent. The worker belonged to a mutual-aid society, thus receiving free medicine and care for himself. Recreations consisted of helping in theatricals, concerts, hiking, the circus, smoking, and festivals. Excellent conduct helped to form a basis of family well-being. Education was scanty. Property consisted of 884 francs in money, 2,041 francs in working equipment, 2,292 francs in eventual right to the allowances of a tontine society, and 1,761 francs in furniture and clothing. Income was 4,234 francs, of which 3,737 francs was in money. Property contributed 87 francs; subventions, 85 francs; labor, 2,945 francs; and industries, 1,117 francs. Food cost 1,066 francs; household, 1,577 francs; clothing, 946 francs; moral, recreative, and health needs, 405 francs; and all else, 93 francs. One hundred and forty-six francs were saved. Notes deal with the free association of the typographical compositors and printers of Brussels; a tontine fund; legislation concerning cabarets; mutuality and the societies of mutual aid; and the parallel established between the means of existence of the compositor-printer of 1857 and the superintendent-printer of 1891 (the 1857 study was another monograph summarized in this series).

BELGIUM, MINISTÈRE DE L'AGRICULTURE, DE L'INDUSTRIE, ET DES TRAVAUX PUBLICS. (521)

SALAIRES ET BUDGETS OUVRIERS EN BELGIQUE, AU MOIS D'AVRIL 1891. Renseignements Fournis par les Conseils de l'Industrie et du Travail. Bruxelles. 1892.

GENART, CHARLES

(522)

COUTELIER DE LA FABRIQUE COLLECTIVE DE GEMBLOUX (PROVINCE DE NAMUR-BELGIQUE). TÂCHERON DANS LE SYSTÈME DES ENGAGEMENTS VOLONTAIRES PERMANENTS, D'APRÈS LES RENSEIGNEMENTS PRIS SUR LES LIEUX EN AVRIL ET JUILLET 1891. *Les Ouvriers des Deux Mondes* (2) 3: 413-460. 1892.

This study made in 1891 illustrates the factory influence upon the domestic system in a location where agriculture was the principal resource. The family consisted of the cutler (33), his wife (34), a daughter (11), and 2 sons (10 and 7). The couple were literate; the children were all in school. Their health was good. Recreations were few: Visiting, reading, cards, tobacco, and cockfights. The worker was patient and conscientious. Well-being was far from assured, and there were no mutual-aid societies. Property consisted of 1,900 francs in a house and garden, 314 francs in working equipment, and 364 francs in furniture and clothing. Income was 1,169 francs, of which 824 francs was in money. Property contributed 110 francs; subventions, 43 francs; labor, 838 francs; and industries, 178 francs. Food cost 645 francs; household, 184 francs; clothing, 203 francs; moral, recreative, and health needs, 54 francs; all other expenses, 78 francs, 5 francs being saved. Notes discuss the origin, developments, and current state of cutlery manufacturing in Gembloux; the law of August 16, 1887, concerning payment of workers' salaries; the law of July 6, 1891, modifying some aspects of the law on the patent rights; mutuality; and the recently organized union of producers.

JULIN, ARMAND

(523)

L'OUVRIER BELGE EN 1853 ET 1886. *Réforme Sociale* 21: 257-276, 345-359, illus. 1891.

The author of this article, written in 1891, draws conclusions from a comparison of certain phases of the expenditure accounts studied by Ducpétiaux with the studies of 1886 made by the Commission du Travail and entitled "L'Enquête du travail." He modifies Ducpétiaux's method by making a distinction between rural and urban accounts. The main point under consideration is the quantity of food consumed. The diet of industrial Belgian workers contains, as compared with the diets of workers in general and especially of rural workers, less bread and potatoes, more meat and pork, more butter, fat, and coffee.

JULIN, ARMAND

(524)

UNE ENQUÊTE EN BELGIQUE SUR LES SALAIRES, LES PRIX ET LES BUDGETS OUVRIERS. *Réforme Sociale* 24: 557-572, 679-686, 756-769, illus. 1892.

This study is based on secondary data obtained from the Belgian Ministère de l'Agriculture, de l'Industrie et des Travaux Publics. Salaires et Budgets Ouvriers en Belgique au Mois d'Avril 1891. Renseignements Fournis par les Conseils de l'Industrie et du Travail. The rise of wages and price changes from 1846 to 1891 are studied with the aid of workers' expense accounts.

NICOLAI, EDMOND

(525)

SALAIRES ET BUDGETS OUVRIERS EN 1853 ET 1891. 23 pp., illus. Bruxelles. 1895.

The title of this monograph is rather misleading, since the main items listed are for April 1891, though certain general comparisons of expenses are made with those of 1853. The inquiry of April 1891, made under the supervision of the Minister of Agriculture, Industry, and Public Works, included 188 families and their 800 children. The wages of the father contributed 69.7 percent of the family income, those of the mother 1.21 percent, those of the male children 1.45 percent, and those of the female children 3.43 percent. The average daily wages were 4.10, 1.15, 1.45, and 0.82 francs, respectively, per day. Food listed included bread, potatoes, vegetables, meat (very little), fat, eggs, milk, cheese, butter, coffee, and sugar. The amounts consumed were somewhat larger in 1891 than in 1854, and the costs somewhat smaller.

JULIN, ARMAND

(526)

OUVRIER GARNISSEUR DE CANONS DE FUSILS DE LA FABRIQUE COLLECTIVE D'ARMES À FEU DE LIÈGE (LIÈGE, BELGIQUE). OUVRIER CHEF DE MÉTIER DANS LE SYSTÈME DES ENGAGEMENTS MOMENTANÉS, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN 1892 ET EN 1893. *Les Ouvriers des Deux Mondes* (2) 5: 1-72. 1899.

This study deals with a worker who, with the aid of professional unions, was fighting the competition of the great factories in order to maintain a small domestic shop. He owned his house and was greatly respected. At the time of the study, 1892 and 1893, his household consisted of himself (56), his wife (52), 6 sons (28, 25, 23, 17, 15, and 13), and a daughter (11). The eldest son (30) was married and living separately. The daughter went to school. Three sons worked with the father, the workshop being in the back yard. Moral standards were high. The health of the family was good. Recreations were noncommercialized. Well-being was protected by family stability, independence in their own shop, ample supply of work, and economical habits. Property consisted of the house and shop valued at 6,000 francs, money 36 francs, tools 318 francs, fowls 6 francs, and furniture and clothing 1,733 francs. Income was 4,551 francs, of which 4,086 francs was in money. Property contributed 462 francs; subventions, 15 francs; labor, 4,029 francs; and industries, 45 francs. Food cost 2,217 francs; household, 461 francs; clothing, 904 francs; moral, recreative, and health needs, 685 francs; and all else, 40 francs; savings being 243 francs. Notes deal with the organization of labor in the nondomestic factories of gun finishers and the history of the Liège arms industry; its technical and commercial nature, its sweating system, its economic organization, its workers' mutual-aid societies, and its use of machine methods.

ENGEL, ERNST

(527)

DIE LEBENSKOSTEN BELGISCHER ARBEITERFAMILIEN FRÜHER UND JETZT—ERMITTELT AUS FAMILIENHAUSHALTRECHNUNGEN. *Bull. Inst. Internatl. Statis.* 9: 1-124, illus. 1895.

This study, published in 1895, includes in addition to the original analysis an exact reprint of *Die Produktions- und Konsumtionsverhältnisse des Königreichs Sachsen* as published originally in the *Zeitschrift des Statistischen Bureau des Königlichen Sächsischen Ministerium des Innern*, nos. 8-9, pp. 27-29, November 22, 1857. The reprint gives the original statement of the Engelian law concerning the influence of the income upon the budgets of the working classes as follows:

The poorer a family is, the greater is the proportion of the total outgo which must be used for food.

The proportion of the outgo used for food, other things being equal, is the best measure of the material standard of living of a population.



In proof of the validity of these above statements, a statistical analysis is made of data on 153 Belgian families presented by Edward Ducpétiaux about 1853, and of the 36 monographs on family living presented by Frédéric Le Play in the first edition of *Les Ouvriers Européens* published in Paris in 1857. On the basis of these data, along with certain others gathered by the Saxon statistical bureau, Engel develops the famous table quoted in proof of his law. Other parts of his analysis deal with the order of satisfaction of wants. A final table arranges all families studied by income groups from 200 francs to more than 3,000 francs. This series showed a steady decrease in the percentage of income used for food from 73 percent for the 200 franc class to 57 percent for the class earning 3,000 francs or more. A summary is furnished of Ducpétiaux's earlier conclusions concerning the standard of living in Belgium. The study concludes with consideration of the significance of the standard of living in the formation of population policy. Engel was inspired by Malthus.

The new material includes a historical account of studies of family living, the development of the so-called "quet" scale, and an analysis of the data from the Belgian investigations by Ducpétiaux in 1853 and by the Belgian department of labor for 1886 and 1891. In his discussion of methods Engel points out that due to their variability neither the individual nor the family is satisfactory as a unit of measurement of consumption; instead, he suggests as a unit a new-born baby, to which he gives the value of 1. This unit he calls a quet, and to it he adds one-tenth for each year of growth until the individual reaches the age of 20 if a female and 25 if a male. This gives the adult female the weight of 3.0 in consumption; the adult male 3.5. Engel's choice of a unit is based upon the findings of physical anthropology; he named his unit after Quételet, who was famous for his statistical investigations. The growth curve in the Engelian scale does not fit exactly to the curve of physical growth, but Engel points out that his desire is to develop a unit adequate to represent not food alone but all consumption needs. In his work Engel always used the quet as a unit, but later investigators have preferred as a unit  $3\frac{1}{2}$  quets, or the adult male 25 years of age, calling this unit the *engeleinheit*. In the latter part of his study Engel attempts to discover whether the level of living, as measured by percentage of expenditures used for food or for a group of items including food, clothing, rent, heat and light, and health (called physical necessities), had increased in Belgium between 1850 and 1891. Some theories concerning quantitative and qualitative changes in the food consumption are studied, and the conclusion is reached that changes in the economic level are associated with changes in the proportion of food from animal origin.

HEINRICH, C.

(528)

DIE LEBENSKOSTEN BELGISCHER ARBEITER-FAMILIEN FRÜHER UND JETZT.  
Dresden. 1895.

PELICHY, GILES DE

(529)

CORDONNIER D'ISEGHEM (FLANDRE OCCIDENTALE—BELGIQUE). TÂCHERON  
DANS LE SYSTÈME DES ENGAGEMENTS VOLONTAIRES PERMANENTS, D'APRÈS  
LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN 1895. *Les Ouvriers*  
*des Deux Mondes* (2) 5: 137-188. 1899.

This shoemaker lived under the domestic system, with no large competing factories near. He combined gardening with his trade. In 1895, when this study was made, his family consisted of himself (37), his wife (34), and 3 daughters, (15, 12, and 2). They were devoutly religious, and morals and health were excellent. The father worked 12 hours a day and had a 13-year-old apprentice. The mother made children's shoes and also had an apprentice. The eldest daughter was apprenticed as a sewer of women's shoes. Recreations comprised organized games at the workers' club, reading aloud, the raising of canaries, and community feasts. Well-being was protected by the worker's spirit of saving, his love of work, his willingness to adopt new and better ways, and a mutual-aid society. Property consisted of tools and animals valued at 71 francs, and furniture and clothing at 458 francs. Income was 1,348 francs, of which 1,086 francs was in money. Property contributed 4 francs; subventions, 14 francs; labor, 1,116 francs; and industries, 215 francs. Food cost 780 francs; household, 176 francs; clothing, 281 francs; moral, recreative, and health needs, 112 francs, leaving nothing for savings. Notes are added on the history of the shoemaker's trade in Isegheem, workers' laws, the institutions of an economic and moral order, gambling and local commercialized recreations, and the trade-union organization of the shoemakers in the Flemish towns.

## BRUSSELS TRAVAUX PUBLICS, MINIMUM DE SALAIRE.

(530)

ENQUÊTE—MAI 1896. II. FIXATION DU MINIMUM DE SALAIRE. 163 pp., illus. Bruxelles. 1896.

The purpose of this report was to study wage rates and to recommend a minimum wage of 4 francs a day for workers in Brussels in 1896. In 1890 the average daily income of 19,594 households, of which 10,462 were further aided by charity, was 3.14 francs a day. In 1896 the minimum expenditures of 11 households consisting of 2 adults and an average of 3.4 children was as follows: Rent, 186.6 francs; food, 628.55 francs; lighting and heating, 80.3 francs; clothing, 126.48 francs; personal, 8.27 francs; bedding, 63.84 francs; washing, 68.76 francs; mutual society, 12 francs; savings, 24 francs; recreation, 12 francs; a total of 1,410.8 francs plus one-fifth for incidentals, 1,693 francs, or 4.65 francs a day.

RUTTEN, G.-C.

(531)

MINEUR DU BASSIN HOULLIER DU COUCHANT DE MONS (BORINAGE—BELGIQUE) OUVRIER-TÂCHERON DANS LE SYSTÈME DES ENGAGEMENTS MOMENTANÉS, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN AOÛT 1900. Les Ouvriers des Deux Mondes (3)1: 211-288. 1904.

The laboring family of this study lived amid a certain degree of antagonism between the coal-mine owners and employees but was immune largely because of the organization of insurance by the mining company and the State, and of the family garden. In 1900 the household consisted of the head (45), his wife (45), and 3 daughters (17, 15, and 10). Morals and health were excellent. The man did not go to work until afternoon and cultivated his garden and that of a neighbor in the morning. The woman worked as charwoman 2 days a week. The eldest daughter was a servant, the second an apprenticed ironer, and the third was still in school. The favorite recreations of the miners were archery and cricket. Family well-being was protected by various types of workers' insurance. Property consisted of animals valued at 60 francs, personal property at 20 francs, money 200 francs, tools 53 francs, and furniture and clothing 1,446 francs. Income was 2,904 francs, of which 1,879 francs was in money. Property contributed 12 francs; subventions, 87 francs; labor, 1,815 francs; and industries, 179 francs. Food cost 1,023 francs; household, 278 francs; clothing, 513 francs; moral, recreative, and health needs, 233 francs; and all else, 6 francs. Forty francs were saved. Notes describe a second Borain miner family, the economic conditions of the Belgian coal valley, the operation of a Belgian coal-mining company, the sanitary condition of the mines, and the material and moral condition of the Belgian miners.

GENART, C.

(532)

CORDONNIER DE LA FABRIQUE COLLECTIVE DE BINCHE (PROVINCE DE HAINAUT, BELGIQUE). TÂCHERON DANS LE SYSTÈME DES ENGAGEMENTS VOLONTAIRES PERMANENTS, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX DE 1901 À 1903. Les Ouvriers des Deux Mondes (3) 2: 1-58. 1908.

This study in 1900-1903 illustrates a domestic industry in which the wife furnished 41 percent of the income. Both husband and wife made shoes at home. This worker considered himself in a class above those who worked in factories, although he barely made a living. The household consisted of the head (29), his wife (28); and daughter (6). Their health was poor. They lacked foresight, and there was nothing to assure their well-being if either or both should be unable to work. Property consisted of money and tools valued at 56 francs, and furniture and clothing at 419 francs. Income was 1,548 francs, of which 1,533 francs was in money. Property contributed 2 francs income; subventions, 15 francs; labor, 1,517 francs. Food cost 626 francs; household, 365 francs; clothing, 222 francs; moral, recreative, and health needs, 197 francs; all other expenses, 135 francs. Savings were 3 francs. Notes deal with domestic industries at Binche, men's clothing and shoemaking, a cooperative flour mill and bakeshop, the social-science club of Binche, and domestic industries in Belgium.

LOSSE, A.

(533)

NOTE SUR LA RATION ALIMENTAIRE DES EMPLOYÉS À 1,800 FRANCS. Bruxelles. 1903



SAVOY, ÉMILE

(534)

ARDOISIER DU BASSIN D'HERBEUMONT (BELGIQUE). OUVRIER-TÂCHERON DANS LE SYSTÈME DES ENGAGEMENTS VOLONTAIRES PERMANENTS D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN 1903 ET 1904. Les Ouvriers des Deux Mondes (3) 2: 133-197. 1908.

The household described in this study in 1903-4 consisted of the head (51), his wife (50), a son (20), and 3 daughters (16, 14, and 9), all with good morals. Except for the frequency of an asthmatic condition produced by the quarry, their health was good. Both father and son worked in the slate quarry and cultivated a garden. The woman also helped with the garden and cared for the pigs and fowls. Recreations consisted of community festivals, drinking, and smoking. Well-being in a measure was assured by the influence of the church and the patronage of the employers, but this particular family lacked the foresight and thrift necessary to cut down expenditures and save or invest in insurance. Property consisted of a home valued at 3,809 francs, money 130 francs, animals 186 francs, tools 105 francs, and furniture and clothing 1,254 francs. Income was 3,077 francs, of which 2,384 francs was in money. Property contributed 179 francs income; subventions, 99 francs; labor, 2,552 francs; and industries, 247 francs. Food cost 1,194 francs; household, 431 francs; clothing, 467 francs; moral, recreative, and health needs, 475 francs; and all else, 147 francs. A surplus of 362 francs was used for debts. Notes are added on the history of the exploitation of the Belgian slate quarries, the specific characteristics of the quarries and labor conditions in the valley of Herbeumont, and the customary privileges concerning fuel from the public domain.

THÉATE, T.

(535)

COMMISS À L'ADMINISTRATION CENTRALE DES CHEMINS DE FER DE L'ÉTAT BELGE (SCHAERBEEK-BRUXELLES, BELGIQUE), SALARIÉ DU TRÉSOR PUBLIC DANS LE SYSTÈME DES ENGAGEMENTS VOLONTAIRES PERMANENTS, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN 1904. Les Ouvriers des Deux Mondes (3) 2: 197-256. 1908.

This study, made in 1904, deals with a worker belonging socially to a much higher class than his salary afforded. The household consisted of the head (47), his wife (48), 3 sons (22, 19, and 17), and a daughter (13). They were of excellent morals. The sons had secondary-school education. Family health was fair; the worker had no sickness insurance. The eldest son was a warehouse keeper in an automobile factory, the second son a mechanic. Recreations comprised cards, fishing, smoking, drinking, and the theater. Family well-being was protected by the permanency of the worker's position and by a pension he would receive at 65. Property consisted of money valued at 3,214 francs, and furniture and clothing at 2,298 francs. Income was 4,852 francs, of which 4,616 francs was in money. Property contributed 66 francs; subventions, 65 francs; labor, 4,614 francs; and industries, 107 francs. Food cost 1,893 francs; household, 822 francs; clothing, 1,169 francs; moral, recreative, and health needs, 501 francs; all else, 463 francs. Savings were 5 francs. Notes are supplied on the operation of the railways by the Belgian Government, the position and salary of the employees of the railway, the associations formed by the employees of public works to advance their material condition, and the social and legal conditions of Belgian employees.

BELGIUM, MINISTÈRE DE L'AGRICULTURE.

ALIMENTATION DU CULTIVATEUR. Bruxelles. 1905.

(536)

ROWNTREE, B. S.

(537)

LAND AND LABOUR LESSONS FROM BELGIUM. 633 pp., illus. London. 1910.

The purpose of this study of Belgian labor conditions was to throw some light, by means of comparison, on the problem of poverty in Great Britain. Topics considered include the Belgian system of land tenure, industrial and agricultural wages, transport, education, etc. The fifth section deals with standard of living among the working people. Between November 1906 and August 1908, 70 working-class expense records (kept for 4 weeks) were collected, 54 from towns and 16 from the country. The keeping of the accounts was supervised by an investigator who made frequent visits. In addition to quantities and prices of purchases, these accounts include the menus of all meals eaten and the number of persons present. Specimen records are given with descriptions of typical families. The nutritive value of the dietaries was analyzed, the Atwater scale being used. The families were classified according to income, regardless of their size: Group 1 contained 15 families with weekly earnings of less than 16s. 8d.,

who obtained on the average only four-fifths of the nutriment necessary for the maintenance of physical efficiency, and spent 67 percent of their income for food; group 2 contained 17 families with weekly earnings of between 16s. 8d. and 25s. 9d. who spent nearly two-thirds (61.1 percent) of their total income for food; their underfeeding amounted on the average to about 9 percent; group 3 contained 21 families with weekly incomes of over 25s. 9d. (only 9 families of which were adequately fed) and spent 62.1 percent of their income for food, a higher proportion than in group 2; group 4 consisted of 16 families living in the country who were engaged mainly in agriculture, including 6 families decidedly underfed and 4 others that ate ill-balanced meals. No attempt was made to evaluate the incomes of the families of the latter group. By a study of the cost of living, the minimum sum necessary to maintain physical efficiency was approximated. The matter of housing and rents was also discussed in detail.

JOTEYKO, J., and KIPIANI.

(538)

ÉTUDE PHYSIOLOGIQUE SUR LES VÉGÉTARIENS. Premier Congrès Internatl. Hyg. Aliment. 1907.

GREAT BRITAIN BOARD OF TRADE.

(539)

COST OF LIVING IN BELGIAN TOWNS. 218 pp., illus. London. 1910.

Investigators visited 15 cities of Belgium to secure information concerning rents, prices, wages, and hours of labor; to compare the Belgian towns in these respects; and to compare the results with a similar study made by the board in Great Britain in 1905. Food expense records for a normal week in June 1908 were obtained from 1,859 families of workers of all incomes (under 20s. to over 40s.) in the main Belgian industries. The data indicated that the percentage of family income spent on food and rent both diminished as the income rose, but this decline was very gradual until the change was made to the highest income group. The total consumption of meat and fish increased from 5¼ pounds in the lowest income group to 13¾ pounds in the highest, but the percentage of weekly income spent on meat and fish was curiously uniform. In Belgium as in Great Britain, meat and fish were the most important items in the dietary.

SLOSSE, A., and WAXWEILER, E.

(540)

ENQUÊTE SUR L'ALIMENTATION DE 1065 OUVRIERS BELGES. 260 pp., illus. Bruxelles. 1910.

This study was conducted in 1909 among the families of 1,065 Belgian workers in 10 classes of occupations, who were scattered throughout the country and who lived in average circumstances. Household accounts were kept for 2 weeks; they were concerned especially with quantities of various kinds of food purchased. The nutritive content of the individual's diet was estimated by comparing quantities of food purchased with W. O. Atwater's coefficient of the edible portions of these foods; and by finding the chemical content of these foods from tables compiled by Atwater and A. P. Bryant, and by König. Atwater's unit of consumption was used. The families had daily incomes of from 2 to over 8 francs. The authors draw a number of conclusions, of which the following are particularly emphasized: (1) The diet of the Belgian worker was not regulated by the nature of his occupation; (2) it was not regulated by the nutritive value of the foods which could be procured for a given sum; (3) the industrial worker had a less nutritive diet than the rural worker; (4) in general, the higher the workman's income, the more nutritive his diet and the greater his consumption of meat. The Belgian worker ate one-half or one-third as much meat as the American worker, one-tenth as much sugar, and seven times as many potatoes. But the Belgian who emigrated to America promptly conformed to the foreign dietary, which indicates, in the authors' opinion, that the social milieu is the most powerful influence on diets. A bibliography is attached.

WAXWEILER, E.

(541)

L'ENQUÊTE DE L'INSTITUT SOLVAY SUR L'ALIMENTATION DE LA CLASSE OUVRIÈRE EN BELGIQUE. Bull. Inst. Internatl. Statis. 18 (1): 462-473, illus. 1909.

This is a synopsis made in 1909, of the work published a year later by Slosse and Waxweiler (540). Waxweiler lists his own main conclusions: (1) In the various regions, the nutritive value of the diet, and especially its composition in albumen, tended to rise with the income; (2) the proportion of albumen was lowest in industrial centers; (3) vocation seemed to exercise influence on the diet; and (4) in any one region, the higher the income, the larger the consumption of meat and the lower the consumption of bread.



BERNOLET, JEAN (542)  
 TISSERAND D'USINE DE ROULERS (FLANDRE OCCIDENTALE-BELGIQUE).  
 OUVRIER-TÂCHERON DANS LE SYSTÈME DES ENGAGEMENTS MOMENTANÉS,  
 D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN JUILLET-  
 AOÛT 1909 ET JUILLET-AOÛT 1910. Les Ouvriers des Deux Mondes (3) 3:  
 217-263. 1912.

This study of Roulers, famous for linen weaving, deals with labor conditions in which the machine had supplemented the domestic loom and cotton had affected the linen industry. Social melioration was affected by return to the farm, by the clergy, who exerted a strong influence, and by legislation. This family studied in 1909-10, consisted of the head, (47), his wife (46), 3 sons (18, 17, and 14), and 3 daughters (20, 12, and 11). The members of this family could all read and write, and the family was exceptional in its moderate use of liquor and its socialist beliefs. Health conditions were good. The children contributed to the family income, the father, two eldest sons, and the eldest daughter being weavers. The third son was apprenticed as a shoemaker. The parents tended a garden. Recreations were little commercialized. Well-being was protected by economy, skillful work, good health, compulsory accident insurance, and the weavers' union. Property consisted of money valued at 838 francs, tools at 118 francs, animals at 590 francs, and furniture and clothing at 2,545 francs. Income was 2,833 francs, of which 2,511 francs was in money. Property was credited with 43 francs income; subventions, 6 francs; and labor, 2,783 francs. Food cost 1,665 francs; household, 331 francs; clothing, 609 francs; moral, recreative, and health needs, 209 francs; and all other expenses, 18 francs, there being no savings. Notes are given on the work, the workers' union, and on wage legislation.

KELLOGG, VERNON (543)  
 FIGHTING STARVATION IN BELGIUM. 219 pp., illus. Garden City, N. Y.  
 1918.

This first-hand account of Belgian relief work during the World War describes actual dietaries and tells the effect of malnutrition on the population such as loss of weight, increased mortality, spread of tuberculosis, etc., especially in the mining districts. A special study was made in 1917 of the income, expenditures, and living condition of a number of workmen's families in the Province of Liège. The average family numbered 5 to 6 persons; the average family income was 20.81 francs per week. Of this income 72.7 percent went for food, 2.7 percent for rent, 7.2 percent for clothing, and 6.5 percent for heat and light. The energy value of the food averaged 1,500 calories per day per person.

BELGIUM, MINISTÈRE DE L'INDUSTRIE ET DU TRAVAIL. (544)  
 ENQUÊTE SUR LA SITUATION DES EMPLOYÉS PRIVÉS. Rev. Travail (July-  
 December 1923): 1420-1436, 1596-1613, 1846-1867, 2092-2154, 2357-2362  
 2533-2536, illus. 1923.

Salaries, appointments, education, and general welfare of engineers, technicians, overseers, accountants, office employees, and salesmen in the chief industrial centers of Belgium in 1920 are dealt with. These groups were arranged in 7 categories according to occupation, and in 3 divisions according to locality. The results are based on information gathered from 30,381 questionnaires, and are tabulated according to salaries, terms of employment, civil status, sanitary conditions including working hours, and occupation. No information is given regarding expenditures or consumption.

LE COÛT DE LA VIE EN BELGIQUE EN 1922-23. Rev. Travail 24: 1886-1902,  
 illus. 1923.

This study was initiated in 1921 to supplement the Belgian food inquiry of the same year in order to set up a new and more accurate price index. Expense accounts were kept for at least a year by families all over Belgium. The heads of these families belonged either to the working or the lower middle class; their incomes ranged from under 20 to over 40 francs per fortnight per Engel unit (3.5 quets). Expenditures for many categories of commodities are listed, but the raw data are not given here. The data corroborate Engel's law that the lower the income, the higher the proportion of the workman's expenditure which goes for food. The proportion of expenditure for clothing, on the other hand, increased with increasing revenue.

BELGIUM, MINISTÈRE DE L' INDUSTRIE ET DU TRAVAIL. (546)  
UNE ENQUÊTE SUR LA NATURE ET LE COÛT DE L'ALIMENTATION DES CLASSES  
LABORIEUSES. Rev. Travail 23: 690-697, illus. 1922.

The conclusions of this study are based on food records kept in 1921 for 2 weeks by 848 representative Belgian families, of which 673 were families of workmen in various industries and 175 were families of the lower middle class. The laborers' families spent 75 percent of their total income for food; the lower middle class families 71 percent. Using Engel's law (the lower the income of a family, the greater the proportion of that income spent for food) as an index of prosperity, the middle-class families might be said to have had a higher standard of living than the workers' families. This assumption is confirmed by the fact that the former ate more varied and richer food than the latter; i. e., more meat, sugar, eggs, whole milk, etc., and less bread and potatoes. Nevertheless, the comfort of the family does not depend entirely upon the size of the income, but on the way in which it is used. A comparison with the study made in 1909 by Slosse and Waxweiler (540) showed that the dietary of the working classes had improved in quality during the interval. These records were used, in a subsequent series of articles, for the computation of a price index.

GOTTSCHALK, MAX (547)  
LE POUVOIR D'ACHAT ET LA CONSOMMATION DES OUVRIERS BELGES À DIFFÉ-  
RENTES ÉPOQUES. Rev. Internatl. Trav. 25 (6): 1-20, illus. 1932.

An inquiry was made in 1928-29 by the Minister of Industry (Labor and Social Welfare) of Belgium, based on the expenditures of lower class laboring families and tradesmen in the five great industrial centers of the realm—Brussels, Liège, Charleroi, Ghent, and Courtrai. The purpose was to compare the average income and expenditure of these classes with the average income and expenditure of the same classes in 1853 and 1891. The survey covered food costs and complementary costs. Food costs were ascertained from the expense records of 809 industrial families (3,563 persons) and 224 tradesmen's families (825 persons). These records covered four periods, a fortnight in each season of the year. The second inquiry was based on a year's expenditure as shown by the expense records of 116 industrial families (538 persons) and 57 tradesmen's families (194 persons). Ten classes of expenditure, exclusive of food, were tabulated. Distinction was made between nominal and real income; the latter, based on the number of days of labor required for some prime necessity, was taken as standard. The average daily salary of each head of a household was 41.5 francs, which meant that in 1928-29 he must work 4.2 days of 8 hours each for his monthly allowance of food, as against 4.9 days of 10 hours each required in 1891. The unit of consumption was 3.5 quets per month. Of the 11 foods used, the amount consumed in 1928-29 was considered equal to that consumed in 1891, the total cost of all kinds of food being 172 francs a month for each adult.

BUDGETS OUVRIERS EN 1891 ET EN 1929. Rev. Inst. Sociol. 1931. October-  
December: 748-775, illus. Bruxelles. 1931. (548)

This study is based on material gathered from a survey of expense records for 1929 kept by lower class industrialists and tradesmen of Belgium. The specific localities are not given, but were probably Liège, Charleroi, Ghent, Brussels, and Courtrai. The survey for 1891 was printed in the report of the Minister of Agriculture (Industry and Public Works) for that year; the survey for 1928-29 was made under the direction of the Minister of Industry (Labor and Social Welfare) who turned over to the author of this study the records he had collected. These records cover two classes of expenditure, that for food and that for complementary commodities. The former represents 809 laboring-class families (3,563 persons) and 224 tradesmen's families (825 persons). The complementary survey represents 116 laboring-class families (538 persons) and 57 tradesmen's families (194 persons). The food survey covers four periods, a fortnight in each of the four seasons; the complementary survey covers the entire year. For the food survey there are four groups classified according to income: less than 200 francs per quet; 200 to 300 francs; 300 to 400 francs; and over 400 francs for the four fortnights. The complementary survey consists of five groups classified according to annual income: less than 15,000 francs; 15,000 to 20,000 francs; 20,000 to 25,000 francs; 25,000 to 30,000 francs; and over 30,000 francs. The survey verified the terms of Engel's law as to food. The quet is the unit of income and expenditure.



BRUSSELS, INSTITUTE DE SOCIOLOGIE SOLVAY.

(549)

ENQUÊTE SUR LES CONDITIONS DE VIE DE CHÔMEURS ASSURÉS. I. LE BUDGET DE DIX-NEUF FAMILLES DE CHÔMEURS DANS L'AGGLOMÉRATION BRUXELLOISE EN FÉVRIER-MARS 1932; II. LE BUDGET DE VINGT ET UNE FAMILLES DE CHÔMEURS DANS L'AGGLOMÉRATION BRUGEOISE EN AVRIL-MAI 1932. 102 pp. Liège. 1933.

The purpose of this study was to show the ill effects of unemployment on the families of workers, especially in those cases in which a family was forced to move into poorer quarters, to sell their furniture, and to spend their time in unaccustomed ways. Household accounts for a period in 1932 were given for each family, with individual classifications of their mental and physical status. Forty families were included.

## CZECHOSLOVAKIA

CZECHOSLOVAKIA, STATISTISCHES STAATSAMT.

(550)

MITTEILUNGEN DES STATISTISCHEN STAATSAMTES DER CZECHOSLOVAKISCHEN REPUBLIK. No. 9, 8 pp., illus. 1922.

In this report for 1922 domestic accounts of 10 workingmen's families for 1 year were given in detail. Families ranged in size from 3 to 7, and workers included bakers, brickmakers, founders and textile workers in the Provinces of Böhmen and Mahren. The income list gave earnings of husband and wife, advance wages, board from children, amounts drawn from savings, and cash on hand. In addition to food, drink, rent, heating, lighting, and furnishings, the expenditure list included fares, lectures, club dues, trade-union fees, sick insurance, taxes, debts, and hotel bills. Both percentages and monetary amounts were given. For each item of income and expenditure, the sum for all families was given in koruny, and the averages per consumption unit and per capita. Incomes ranged from 8.210 to 31.826 koruny. Food and drink headed the list of average per capita consumption at 1.973·28 koruny. Clothing was next highest at 501·51 koruny. An analysis of food expenditures for each of the 10 families was presented, stating amounts consumed and price in koruny.

CZECHOSLOVAKIA ZPRÁVY STÁTNÍHO ÚRADU STATISTICKÉHO 1922 (9); 1923 (1 and 77); 1924 (105), 1925 (115).

(551)

[ORIGINAL NOT SEEN. Summarized in International Labour Office, Methods of Conducting Family Budget Enquiries, pp. 77-78. Geneva. 1926.]

The statistical office of the Czechoslovak Republic conducted a series of family expense-record inquiries. The period covered by the inquiries was 12 months. Detailed records of income and expenditure were obtained from small numbers of families: In 1922, 10 families of workers; in 1923, 18 families of workers and 25 of officials; again in 1923, 15 families of workers and 10 of officials; in 1924, 13 families of workers and 8 of officials; and in 1925, 15 families of workers and 11 of officials. The results of these studies are tabulated separately for workers and officials. The German consumption unit was used. The caloric value as well as the quantity and cost of the different items of food are given.

CZECHOSLOVAKIA, STATISTISCHES STAATSAMT.

(552)

MITTEILUNGEN DES STATISTISCHEN STAATSAMTES DER CZECHOSLOVAKISCHEN REPUBLIK. No. 1, 8 pp., illus. 1923.

Two tables in this report published in 1923, dealt respectively with the household accounts of 18 workingmen's families and 25 officials' families, showing income, expenditure, and averages per consumption unit and per capita. Workingmen's incomes ranged from 11.844 to 28.716 koruny and officials' incomes ranged from 19.479 to 58.444 koruny. The officials represented both the political and academic classes. A detailed analysis of expenditures for food was given for each of the two groups, stating the total consumption of each article of food for all families, together with quantity, price in koruny, and caloric values. The report contained also the account of a Prague metal worker's income and expenditures for the 3 years 1918, 1919, and 1920. The total incomes for the 3 years were respectively, 5.869, 12.685, and 21.547 koruny, of which 67.9 percent, 52.5 percent, and 53.4 percent were spent for food in the 3 respective years.

(553)

MITTEILUNGEN DES STATISTISCHEN STAATSAMTES DER CZECHOSLOVAKISCHEN REPUBLIK. No. 77, 8 pp., illus. 1923.

In this report published in 1923, accounts of 15 workers' families and 10 officials' families for 52 weeks were given. Workers were distributed through the metal trades, and the sugar, paper, and glass industries in Böhmen and

Mahren. The officials were teachers, post officials, and state and province officers in Prague and Böhmen. Incomes of workers ranged from 10.207 to 49.807 korunany; those of officials from 15.183 to 38.807 korunany. An analysis of food expenditure showed that the largest amount per capita was spent for milk for both groups of families and the next largest amount for beef.

CZECHOSLOVAKIA, STATISTISCHES STAATSAMT. (554)  
MITTEILUNGEN DES STATISTISCHEN STAATSAMTES DER CECOSLOVAKISCHEN  
REPUBLIK. No. 105, 8 pp., illus. 1924.

Incomes and expenditures of the families of 13 workingmen and 8 officials were presented and summarized in this report published in 1924. Workers' families ranging in size from 2 to 10 persons represented the mining, the sugar, and the glass industries and had an income range of from 10.727 to 45.127 korunany. The officials were teachers, tax officers, and factory officers, with family size ranging from 1 to 6 persons, and incomes ranging from 22.324 to 36.179 korunany. The highest average expenditures for both groups are for food, with clothing second highest. The figures are for the workers, 1.963·96 korunany for food and 581.13 korunany for clothing; for the officials, 3.858·14 for food and 1.502·32 korunany for clothing.

(555)  
MITTEILUNGEN DES STATISTISCHEN STAATSAMTES DER CECOSLOVAKISCHEN  
REPUBLIK. No. 115, 8 pp., illus. 1925.

Household accounts of the families of 15 workers and 11 officials in Prague, Böhmen, and Mahren, constituted this report published in 1925. The workers represented the sugar and metal trades and included helpers, overseers, and foremen. Officials were teachers, and tax and military officials. Officials' families ranged from 1 to 5 persons; workers' families consisted of from 2 to 10. Two tables were given for each class, one showing income and expenditure in detail for each family, with averages per consumption unit and per capita and the other, a table of food expenditures distributed among 40 articles of food and drink, with totals for all families and averages per consumption unit and per capita.

CZECHOSLOVAKIA, ACADEMY OF AGRICULTURE. (556)  
PRACOVNÍ A MZDOVÉ POMÉRY SEMEDELSKÉHO DÉLNÍETVA V REPUBLICE  
CESKOSLOVENSKÉ. [AN INQUIRY INTO CONDITIONS OF WORK AND WAGES OF  
AGRICULTURAL WORKERS IN CZECHOSLOVAKIA.] Prague. 1928. [Original  
not seen. Summary in Internatl. Labour Rev. 21: 855-867, illus. 1930.]

In 1926 the fifth section of the Czechoslovakian Academy of Agriculture decided to make an inquiry into conditions of work and wages in agriculture throughout the republic. Detailed questionnaires were sent to agricultural inspectors, directors of agricultural schools, representatives of agricultural organizations, and owners of large farms. Over 1,000 of these were returned and form the basis of the present study. Because of too low wages, the attractions of the towns, long hours of work, the instability of agricultural employment, defective housing, and the absence of old-age insurance and agrarian reform, there was a shortage of agricultural labor. The average wage in Bohemia was 167 korunany a month on small farms and 128 korunany on large. Plowmen received 144 and 105 korunany, respectively, and female domestic servants 143 and 102 korunany. Wages in Moravia and Slovakia were lower. Near industrial centers the wages of men were higher and of women lower. Farm laborers were given full board, including houses.

CZECHOSLOVAKIA, STATISTISCHES STAATSAMT. (557)  
MITTEILUNGEN DES STATISTISCHEN STAATSAMTES DER CECOSLOVAKISCHEN  
REPUBLIK. Nos. 112-117, 49 pp., illus. 1926.

This report, published in 1926, contains accounts for the families of 51 workers, 115 officials and 17 employees, for 52 weeks. The workers' families represented the mining, distillery, and metal and glass industries throughout Prague, Böhmen, and Mahren, and consisted of from 2 to 10 persons. Incomes ranged from 10.112 to 38.543 korunany. The officials were Government and state officers, teachers and foremen, with an income range of from 10.103 to 49.553 korunany. The 17 employees were railway conductors and workers in Government offices and commercial establishments. The income range for the employees was from 13.610 to 28.652 korunany. A summary table gave the average of expenditures per consumption unit for each of the three groups as a whole and for divisions of the workers' and officials' groups.



CZECHOSLOVAKIA, STATISTISCHES STAATSAMT. (558)  
MITTEILUNGEN DES STATISTISCHEN STAATSAMTES DER CZECHOSLOVAKISCHEN  
REPUBLIK. Nos. 225-229, 36 pp., illus. 1931.

Tables in this report dealt with consumption in 1927-28 in official workers' families, according to the size of the family income and according to per capita units in the family. Income and expenditure tables were given with regard to income groups beginning with 13.000 to 16.000 koruny, and ending with the 30.001 to 40.000 koruny group. A series of graphs and drawings showed food consumption and proportions for rent, clothing, and sundries.

CZECHOSLOVAKIA, ZPRÁVY STÁTNÍHO ÚRADU STATISTICKÉHO REPUBLICKY  
ČESKOSLOVENSKÉ. (559)  
VERBRUCH IN BEAMTEN- UND ARBEITERFAMILIEN NACH KOPFZAHL UND VER-  
BRAUCHSEINHEITEN, JUNI 1927 BIS JUNI 1923. Prague. 1931.

CZECHOSLOVAKIA, STATISTISCHES STAATSAMT. (560)  
MITTEILUNGEN DES STATISTISCHEN STAATSAMTES DER CZECHOSLOVAKISCHEN  
REPUBLIK. Nos. 37-42, 49 pp., illus. 1928.

Household accounts for the families of 113 officials, 53 workers, and 20 employees for 52 weeks were given in this report published in 1928. The officials were private secretaries, bookkeepers, Government officers, and bank officials in Prague, Pilsen, and Schlesien, with incomes ranging from 13.972 to 50.949 koruny. Workers' families covered the tailoring, mining, brewing, and metal trades with incomes ranging from 10.394 to 42.896 koruny. Employees were firemen, conductors, attendants, and overseers. Incomes for the employees' group ranged from 12.150 to 29.143 koruny. A summary table gave the average of expenditure per consumption unit for each of the three groups as a whole and for divisions of the workers' and officials' groups.

(561)  
MITTEILUNGEN DES STATISTISCHEN STAATSAMTES DER CZECHOSLOVAKISCHEN  
REPUBLIK. Nos. 61-64, 31 pp., illus. 1929.

In this report published in 1929 domestic accounts for 122 officials' families including mine officials, bookkeepers, and teachers in Schlesien, Brunn, Prague, and Böhmen were tabulated as to income and expenditure and as to food items. The average expenditure for all families was 11.695'79 koruny per consumption unit and 8.484'84 per capita. Separate distribution tables were given for the 75 Prague families of the group.

(562)  
MITTEILUNGEN DES STATISTISCHEN STAATSAMTES DER CZECHOSLOVAKISCHEN  
REPUBLIK. Nos. 156-159, 31 pp., illus. 1929.

This report, published in 1929, dealt with the household accounts and detailed food expenditures of 79 workers' families and 28 employees' families for 52 weeks. The workers' families represented among others the tailoring, cabinet-making, and electrical trades; the employees were professional firemen, postal clerks, and government employees. Workers' incomes range from 10.488 to 48.546 koruny. Employees were railway engineers, police officers, and government clerks, with incomes ranging from 12.765 to 29.908 koruny. Tables of average expenditure per consumption unit were given for both groups.

(563)  
MITTEILUNGEN DES STATISTISCHEN STAATSAMTES DER CZECHOSLOVAKISCHEN  
REPUBLIK. Nos. 158-159, 17 pp., illus. 1932.

Consumption in workers' families in the years 1929-30 was dealt with in this report. Income and expenditure for 1,009 persons or 662.324 consumption units were given together with tables for food expenditure. Family groups in Prague, Kladno, Böhmen, Mahren, and Schlesien were summarized. Tables were given for 13 sport-participating families, 16 families partly sport-participating, and 78 families which indulged in no sports.

(564)  
MITTEILUNGEN DES STATISTISCHEN STAATSAMTES DER CZECHOSLOVAKISCHEN  
REPUBLIK. Nos. 52-53, 15 pp., illus. 1931.

The accounts of 53 employees' families, representing transportation, the electrical industry, and the Government were handled in this report published in 1931. Incomes ranged from 13.048 to 28.014 koruny, and families were distributed

throughout Prague, Böhmen, and Mahren. Distribution of food expenditures was summarized by families and for the entire group.

CZECHOSLOVAKIA, STATISTISCHES STAATSAMT. (565)

MITTEILUNGEN DES STATISTISCHEN STAATSAMTES DER CZECHOSLOVAKISCHEN REPUBLIK. Nos. 211-215, 42 pp., illus. 1931.

In this report published in 1931 accounts for the families of 180 workers, including miners, chauffeurs, glass-workers and carpenters, were presented for each family with separate tables for food expenditures. A list of explanations of the items classified as income and expenditure was included. Incomes ranged from 5.256 to 42.572 korunany. Böhmen, Prague, and Kladno were represented in the geographical distribution of families.

#### DENMARK

JENSEN, ADOLF

(566)

IL CONSUMO DELL'OPERAIO DANESE. [FOOD CONSUMPTION OF THE DANISH LABORER.] Riforma Sociale 2: 498-506. Torino. 1895.

Research conducted by a seminar in the University of Copenhagen was directed towards discovering the relative food consumption of the Danish laboring classes. The basic assumption was that every head of a family worked every day with full pay in prosperous times, but certain deviations from this are considered independently. The class considered was the upper class of workmen. Few household account books were available. The estimates are based on a family of 5 with 2 adults. Laborers are divided into four groups: (1) Those in Copenhagen; (2) laborers and day laborers in the cities of the amt of that name, (3) workmen in the country; and (4) day laborers in the country. All raised part of their own food. The countrymen used more bread, less meat and wines, and more milk. Consumption of sugar, butter, and cheese was approximately the same in city and country. The annual total expenses in 1894 for the four groups were 1,448, 1,359, 970, and 923 lire, respectively. The first group spent 49.5 percent for food, the others about 61 percent; the first spent 18 percent for clothing, the others about 16 percent; heat and light were about the same. Rent for the first group was 19.1 percent of the income; for the others about half as much. Each group earned about 18 percent more than it spent.

WESTERGAARDE, H.

(567)

361 SCHEDULES OF WORKMEN'S EXPENDITURES IN DENMARK. 1894.

RUBIN, MARCUS

(568)

CONSUMMATION DE FAMILLES D'OUVRIERS DANOIS. Bull. Inst. Internatl. Statis. 13 (3): 21-80, illus. Budapest. 1903.

Weekly household accounts were kept for 1 year (between 1896 and 1898) by 251 workers' families in Denmark. This article is a French summary of the main conclusions and principal tables of two studies of these families published in Danish in 1900 and 1901. The families were all fairly well situated. The average income of the 27 families living in Copenhagen was 1,623 krone; their average size was 4.89 persons. The average income of 23 families living in smaller cities was 967 krone; their average size was 5.61 persons. Two hundred and fifty-one families living in the country had an average income of 787 krone. The study is particularly concerned with the way in which the proportion of expenditure for the various classes of commodities varied with varying incomes. A number of conclusions drawn are consistent with Engel's law. The lower the income, the higher the percentage of the total expenditure which went for food, and the higher the expenditure for vegetable food, the lower the expenditure for animal food. The average account showed about 50 percent for food, 12 percent for clothing, and 13 percent for habitation. M. Rubner's consumption unit was used. The value of all food purchased and furnished was estimated both at the average prices of the cities and of the rural communities studied.

VEDEL, ANNETTE

(569)

DANSKE ARBEIDERFAMILIERS FORBRUG. [CONSUMPTION OF DANISH WORKMEN'S FAMILIES.] Natl.-Økonom.-Tidsskr. 40 (4): 321-370, illus. København. 1902.

This study is based on the data collected by Vedel and Rubin which were published in French by Rubin (568). Weekly household accounts were kept for 1 year (between 1896 and 1898) by 251 workers' families in Denmark.



## DENMARK, STATISTISKE DEPARTEMENT.

(570)

DANSKE ARBEIDER FAMILIERS FORBRUG. [FAMILY BUDGET INQUIRY.] Statis. Meddel. 4 (6, 11). København. 1901. [Original not seen. Summarized in International Labour Office, Methods of Conducting Family Budget Enquiries, p. 61. Geneva. 1926.]

Data on expenditures were obtained for a whole year (1897) for 251 Danish working-class families, both in the city and in the country.

## DENMARK, STATENS STATISTISKE BUREAU.

(571)

DANSKE HUSHOLDNINGSREGNSKABER. [DANISH HOUSEHOLD ACCOUNTS.] Statis. Meddel. 4 (1, 2, 3): 113, 77, and 173 pp., illus. København. 1914. [Tables also in French.]

This study made in 1909 covered 536 families, of whom some lived in the city and some in the country. Of the families, 310 belonged to the laboring class and 226 to the small holders and crofters.

## DENMARK, STATISTISKE DEPARTEMENT.

(572)

DANSKE HUSHOLDNINGSREGNSKABER. [DANISH HOUSEHOLD ACCOUNTS.] Statis. Meddel. (4): 40, 173 pp., illus. København. 1914. [Summarized in Italy, Ufficio del Lavoro. Ministero de Agricoltura, Industria e Commercio, Boll. Uffic. Lavoro 22 (4): 360-365, illus. 1914. Also in Lepelletier, F., La Réforme Sociale 69: 422-426. 1915.]

The purpose of this investigation was to ascertain the minimum expenditures necessary to maintain a workman's family, both in the city and in the country. Data for the year 1909 were secured from 175 urban working families, 76 of which lived in Copenhagen, and from 135 rural families, headed either by farmers or by agricultural laborers. The average number of members composing the families investigated was 4.6 in the capital, 5 in the provincial cities, 4.7 in the families of farmers, and 4.5 in the families of farm hands. The average annual receipts were 604 krone for the Copenhagen families, 489 for those living in provincial cities, 924 for the farmers, and 1,052 for the workers; the agricultural workers' incomes included goods furnished. The families were classified by expenditures, rather than by receipts. In general, the data confirm Engel's law. The Italian summary describes the cases studied, the methods used, and the main results of the investigation. The summary by Lepelletier is merely an account of the Italian report.

(573)

HUSHOLDNINGSREGNSKABER FOR AARET 1922. Statis. Efterretninger 1924 (3). København. 1924.

(574)

STATISTISK AARBOG 1926. [STATISTICAL YEARBOOK.] 100 pp., illus. København. 1926.

One table is included which is based on information furnished by expense records for 1922 from 379 families of different sections of Denmark. The annual incomes ranged from 800 krone or less to 3,200 krone or more. The size of the family varied from 2.8 to 4.6, and the units of consumption from 2.8 to 3.7. The unit was that of an adult male.

## HEIBURG, PAUL

(575)

HAS ENGEL'S LAW ITS LIMITATIONS? Jour. Amer. Statis. Assoc. 26: 175-179. 1931.

The purpose of this article is to show that the figures obtained in a Copenhagen study of family expenditures in 1922 do not follow Engel's law. There is a surprising uniformity of percentage expenditure on food in the various income groups. Chapin's New York study is cited as disproving Engel's law. Engel's law was found not to apply to these urban studies, because he dealt with rural workers whose rent expenditure was relatively low, their taxes purely nominal, and savings of no importance. In the Copenhagen studies, the savings item is of great importance, for percentage distributions are materially altered if they are based first on income and then on expenditure. The article contains no new material.

## ESTONIA

ESTONIA, RIIGI STATISTIKA KESKBÜROO.

(576)

EESTI TÖÖLISE BÜDZHET. [EXPENSE ACCOUNTS OF WORKMEN'S FAMILIES.]

108 pp., illus. 1925. [Original not seen. Summarized in International Labour Office, Methods of Conducting Family Budget Enquiries, pp. 62-63. Geneva. 1926.]

Working-class families in Tallinn and Narva in 1925 were covered in this inquiry. Detailed records of food consumption were kept for 1 month (October-November) by 283 families. Of these families 187 filled out special forms telling what they remembered of their income and expenditure during the past year. Information was also obtained with regard to the composition of the household, the nature of the menus, and housing conditions. The workers' organizations aided in the selection of the families, which were chosen from different income groups. The consumption unit used was that of the Russian Department of Vologda (male of 18 to 60 years=1.0, female of 17 to 55 years=0.8, etc.).

## FINLAND

FINLAND, INDUSTRISTYRELSEN.

(577)

UNDERSÖKNING AF YRKESABETARETS LEFNADSVILLOR I FINLAND 1908-1909.

[INVESTIGATION OF THE COST OF LIVING OF WORKERS IN FINLAND, 1908-9.] 213 pp., illus. Helsingfors. 1911. [Original not seen. Summarized in International Labour Office, Methods of Conducting Family Budget Enquiries, pp. 64-65. Geneva. 1926.]

The Finnish Central Statistical Office used with slight modification the results of the inquiry into family expenditures in 1908-9 made by Hjelt (578) in order to calculate cost-of-living index numbers.

HJELT, VERA AUGUSTA

(578)

TUTKIMUS AMMATTITYÖLÄISTEN TOIMEENTULOEHDOISTA SUOMESSA 1908-1909.

[FAMILY BUDGET INQUIRY.] 213 pp., illus. Helsinki. 1912. [Original not seen. Summarized in International Labour Office, Methods of Conducting Family Budget Enquiries, pp. 64-65. Geneva. 1926.]

This study of family expenditures in 1908-9 was conducted by a factory inspector, under authorization of the Finnish Board of Industry.

FINLAND, STATISTISKA CENTRALBYRÅN.

(579)

ELINKUSTANNUKSET TILINPITOKAUDELLA, 1920-21. [HOUSEHOLD ACCOUNTS, 1920-21.] 183 pp., illus. Helsinki. 1925. [Summary in French in Rev. Sociale, pp. 801-817, illus. Helsingfors. 1924.]

This Government survey of living costs is based on account books from 16 towns and 8 rural centers, and covers the period March 1, 1920, to February 28, 1921. Records were collected from 437 workmen with an average income of 16,911.2 markka and 117 employees with an average income of 34,420.6 markka. Of the workmen, 60 percent received 5,000 to 7,000 markka a year, while 70 percent of the employees received over 9,000 markka. The laborers' families averaged 3.6 adult units; those of the employees, 3.3 adult units. Wages for labor constituted 93.1 percent of the income of the workmen and 89.2 percent of that of the employees. A larger number of children were employed from laborers' than from employees' families. The workmen spent 61.2 percent of their income for food, the employees 36.8 percent. Clothing averaged 15 and 14 percent of the income, respectively, and lodging 3.9 percent and 5.4 percent. The workmen spent 3.5 percent of their income for insurance, the employees 6.9 percent. The chief articles of food for both groups were cereals, milk, and potatoes, but the employees spent more for meat, fish, and sugar than the workmen. The tabulations confirm Engel's law and Wright's version of Engel's law, but not Schwabe's law. The summary in Revue Sociale does not cover all the report.



## FRANCE

## FARM FAMILIES

BAUDRILLART, H. J. L., and BAUDRILLART, A. (580)  
 LES POPULATIONS AGRICOLES DE LA FRANCE. 3 v. Paris. 1885-93.

An incomplete survey, made under the direction of the Academy of Moral and Political Science, is given of the agricultural classes of France. The purpose was to discover what factual knowledge actually existed regarding the agricultural classes since the eleventh century. The survey was intended to cover all of France; but the volume relating to the southeastern departments has not been completed. The small farmers or day laborers are considered, but not the large land owners. The average size of the family, the average income, and the average size of the holding are given for certain sections. The estimates are based on information contained in royal inquiries, cahiers, and statistics. The work consists largely of generalities, with occasional bits of source material. Only for Tarn (v. 3, pp. 436-448) is there a record of income and expenditures for different individuals. The chapters vary widely in the completeness and the definiteness of information contained.

AVENEL, GEORGES D' (581)  
 HISTOIRE ÉCONOMIQUE DE LA PROPRIÉTÉ, DES SALAIRES, DES DENRÉES ET DE  
 TOUS LES PRIX EN GÉNÉRAL DEPUIS L'AN 1200 JUSQU'EN L'AN 1800. 7 v.  
 Paris. 1894-1926.

These seven volumes constitute an economic history for France from 1200 to 1800, attention being devoted chiefly to property, income, and food. Both rich and poor people are included. Many detailed tables, divided into 30 main groups, give the values of principal moneys, land, land returns, grains, meat, drinks, and other foods, clothing, furniture, lighting, heating, building materials, metals, transportation, wages, etc. These figures, wherever enough material could be obtained, covered all territory which was included in France in 1895. All money and measures were changed into francs of 1910 value and metric measurements. In order that the prices might be exact, as far as possible only the prices resulting from an actual sale were used. Volume 1 deals with the purchasing power of money; the types of coinage and precious metals; interest and rental rates; credit and exchange of moneys; the changes in wealth and in the wealthy classes; property in persons; property in lands; feudal rights; modern property rentals; the methods of agriculture and use of the soil; the value and revenue of lands; the value and rent of houses; and a number of tables concerning the values of moneys, lands, and a few products at different dates. Volume 2 has tables giving the prices of houses in Paris and in the provinces; the value of shops and urban land in Paris and in the provinces; the value of receipts from the land according to whether it is in field crops, wood, vineyards, or gardens; rentals paid for fish ponds and game preserves; renting of pastures; revenues from mills; house and apartment rentals; prices of grains, wheat, rye, barley, buckwheat, oats, millet, bread, flour, and bran in France compared with England (Rogers' figures being used for England); and tables on average prices. Volume 3 analyzes peasant and domestic wages; wages and profits of tradesmen; prices of wheat and bread; prices of meat, drinks and other foods; costs of clothing, rent, lighting, and heating; influence of population on wage levels; state regulation of labor; rates paid for piecework; and military pay, honorariums, and ransoms. Volume 4 is composed entirely of tables covering professional salaries; prices of animals on the hoof, meat by the piece, wines and other drinks, poultry and game, salt- and fresh-water fish, butter, cheeses, milk, fruits, vegetables, groceries, clothing; and tables of average prices. Volume 5 describes the wealthy of former times and tells what their fortunes comprised; gives descriptions of the work and salaries of soldiers, magistrates, priests, state officers, and private administrators; earnings of doctors, surgeons, painters, sculptors, lawyers, and men of letters; remarks on books and their profits; earnings of authors and dramatists; distribution of French receipts between workers and capitalists; and tables of prices on clothing, lighting, heating, linens, and furniture. Volume 6 describes the level of pleasure (standard of living); nutrition; table service and cooking; lodging; chateaux and gardens; urban houses; building expenses and regulations; upkeep of large houses (servants, etc.); and tables of prices for furniture, building materials, horses and carriages; roads, bridges, speed, and expenses of traveling on foot and on horse, barges, postal wagons, tariffs, inns; letters and letter writing; costs of transporting merchandise, wool and cotton, clothing from gold cloth to

wool, hairdressing, furs, gloves, perfumes, armor, jewelry; costs of furniture (beds, tapestries, chests, etc.); means of lighting and heating; art objects; conclusions on what was superfluous and what was necessary; and tables on costs of paper, books, and sundries. D'Avenel's work parallels that of Rogers for England. It has received more adverse criticism, particularly his conclusions and assumptions. However, with Roger's work it furnishes the only long-time analyses now available made on a comprehensive basis of first-hand materials on wages and prices. It was granted the Rossi prize by the French Academy in 1890 and 1892.

BEZARD, YVONNE

(582)

LA VIE RURALE DANS LE SUD DE LA RÉGION PARISIENNE DE 1450 À 1560. 382 pp., illus. Paris. 1929.

The life of the French living just south of Paris in the period from 1450 to 1560 is described—the land, the feudal customs, agriculture, industry, commerce, and home life. Changes in rents and in the prices of numerous commodities are listed. No individual cases are presented. The value of the study lies in its analysis of peasant expenditures.

BIOLLAY, LÉON

(583)

LES PRIX EN 1790. 508 pp., illus. Paris. 1886.

Wages and the cost of provisions and of merchandise in 1790, as listed in national surveys, are collected and analyzed in this study. Wages of all classes of citizens are tabulated according to localities and are given by day, month, or year, income in kind being sometimes included and sometimes not. Farmers, shepherds, and day laborers are considered separately.

VILLENEUVE-BARGEMENT, ALBAN DE

(584)

ÉCONOMIE POLITIQUE CHRÉTIENNE, OU RECHERCHES SUR LA NATURE ET LES CAUSES DU PAUPÉRISME EN FRANCE ET EN EUROPE. v. 1. Paris. 1834.

The estimated expense accounts in 1832 for 2 French families, 1 in a large city and 1 in the country, are included in a footnote of this study. Each family consisted of five persons. The income of the urban worker was 760 francs; that of the rural worker 620 francs. The city family's expenses were 859 francs, with a deficit due largely to the high price of bread. The villager could live on his income, provided the entire family worked to bring it up to 620 francs (pp. 288-293).

SAINT-LÉGER, A. DE, and LE PLAY, F.

(585)

MANŒUVRE-AGRICULTEUR DU MORVAN (NIVERNAIS). OUVRIER-JOURNALIER DANS LE SYSTÈME DES ENGAGEMENTS MOMENTANÉS, AVEC UN PRÉCIS DE LA MONOGRAPHIE AYANT POUR OBJET LE FONDEUR (AU BOIS) DU NIVERNAIS, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX DE 1839 À 1855. In *Les Ouvriers Européens*, ed. 2, v. 5, pp. 259-322. Paris. 1878.

This study made during the period from 1839 to 1855, illustrates the disruption of the social structure by increased communication and economic change. The family described was preserved by the old patronage customs. The household consisted of the head (36), his wife (33), 1 son (12), 3 daughters (10, 8, and 5), and a child from a foundling institution. Nuns administered free medical care. The worker and his wife cultivated a garden. The son was a domestic laborer. The two younger daughters attended school. Recreation was noncommercialized. Well-being was based on patronage and the regularity of agricultural work. Property consisted of animals and tools valued at 62 francs and furniture and clothing at 361 francs. Income was 570 francs, of which 254 francs was in money. Property accounted for 3 francs income; subventions, 47 francs; labor, 404 francs; and industries, 116 francs. Food cost 383 francs; household, 56 francs; clothing, 99 francs; moral, recreative, and health needs, 25 francs; and all else, 8 francs, there being no savings. Notes are given on social disorganization in Morvan; instability due to the inheritance laws; the conditions of the French agricultural laborers; ancient family communities of Bas-Nivernais; the French forest policy; the early social organization of Nivernais.

A summary is given of a monograph on an iron founder of Nivernais. This day laborer was attached to a patron in a system of voluntary but permanent engagements. He lived in Vandenesse where the principal occupations were agriculture, animal raising, and manufacture of cast iron. New civil laws, individualism, and decrease in religious sentiments were undermining paternal authority and reducing family size. The family consisted of the worker (36),



his wife (32), a son (10), and 2 daughters (9 and 6). Their plan was to buy property with their savings. The children attended school. Fevers were common in the district. The wife cared for the animals and made the clothing. Recreations were noncommercialized. The family had 210 francs, domestic animals valued at 39 francs, and working equipment at 10 francs. From his employer the man received free rent, a garden of 2 ares, a hemp field of 3 ares (for their clothing), rights to gather firewood, fish, collect fodder, and the right of pasturage. Clothing and furniture were valued at 490 francs. Income was 836 francs, 14 francs from property, 88 francs from subventions, 742 francs from salaries, and 41 francs from industries. Food cost 474 francs; household, 77 francs; clothing, 219 francs; moral, recreative, and health needs, 55 francs; and all else, 11 francs. Savings were 49 francs. Individuality was here being substituted for solidarity through the transformation of the industrial organization. If the new tendency really gained a foothold, the assurances for future well-being of this family, dependent chiefly on the benevolent patron and various subventions, would be undermined.

BARIVE, M. DE (586)

BORDIER-ÉMIGRANT DU LAONNAIS. OUVRIER-PROPRIÉTAIRE ET JOURNALIER DANS LE SYSTÈME DES ENGAGEMENTS MOMENTANÉS, AVEC UN PRÉCIS DE LA MONOGRAPHIE AYANT POUR OBJET LE MANŒUVRE-AGRICULTEUR DU MAINE, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX DE 1848 À 1850. *In* Le Play, F., *Les Ouvriers Européens*, ed. 2, v, 6, pp. 84-142. Paris. 1878.

This study, data for which were collected in 1848-50, illustrates a social structure undermined by a decline in religious sentiments, in paternal authority, and in mutual obligations of the classes, aided by the compulsory division of farms by inheritance laws and the contact with urban demoralization through the sugar-beet factories. Countervailing influences arose from home ownership, family life, and religion. This home-owning worker belonged to one of the semi-stable families. He worked as an agricultural laborer 7 months of the year, as a coal miner 3 months, and as a harvest hand 2 months. The family included the husband (35), his wife (32), 2 sons (12 and 8), and a daughter (1). Sex life began before marriage, which was not unusual. Health conditions were good. Recreation was not commercialized. The children attended school. Well-being was protected by economy, work, and temperance. Property consisted of animals valued at 145 francs, working materials at 37 francs, and furniture and clothing at 812 francs. Income was 978 francs, of which 710 francs was in money. Property contributed 119 francs income; subventions, 46 francs; labor, 536 francs; and industries, 277 francs. Food cost 517 francs; household, 89 francs; clothing, 138 francs; moral, recreative, and health needs, 34 francs; and all else, 17 francs. Savings were 184 francs.

Notes describe the disorganization of the population; the influence of the wife on the worker; the benefits of small farms; the subventions accorded the poor in Maine; the common pasture lands; the rural-credit institutions; and a summary of a monograph on an agricultural day laborer of Maine in a system of momentary engagements.

This household consisted of the man (38), his wife (34), 1 son (12), and 2 daughters (10 and 6). Natural children were common and not always legitimized. This family lacked foresight. The man's salary, advances by the banker, and private charity were the only assurances of well-being. The worker cared for his own garden and collected firewood. The wife cultivated the garden, gathered and carried fuel, and sometimes worked out as a laundress. The children were shepherds. Cabarets formed the chief recreation of the worker. Property consisted of 8 francs in domestic animals and 17 francs in working equipment. Subventions consisted of pasturage for geese, deadwood for fuel, manure from the road, medical aid, and the right to send the children to school. Clothing and furniture were valued at 303 francs. Income was 598 francs; 1 franc from revenues, 28 francs from subventions, 537 francs from salaries, and 32 francs from industries. Food cost 436 francs; the household, 59 francs; clothing, 80 francs; moral, recreative, and health needs, 20 francs; and all else, 3 francs.

DUCHATELLIER, A.

(587)

BORDIER DIT PEN-TY DE LA BASSE-BRETAGNE. OUVRIER JOURNALIER, ASSOCIÉ AU PATRON DANS LE SYSTÈME DES ENGAGEMENTS VOLONTAIRES PERMANENTS, AVEC UN PRÉCIS DE LA MONOGRAPHIE AYANT POUR OBJET LE BRASSIER DE L'ARMAGNAC, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN 1851. *In* Le Play, F., *Les Ouvriers Européens*, ed. 2, v. 4, pp. 336-389. Paris. 1877.

This study depicts a stable family of industrialized western Europe. The head worked for an independent farmer and had money saved for a home. In 1851 the family consisted of the head (32), his wife (30), a son (5), and a daughter (3). They were illiterate, but polite and hospitable, with good morals, and an inclination to save. Health was excellent. The wife did agricultural work for a neighbor besides work on a small piece of land they rented. Religious fetes, smoking, and drinking formed the principal recreations. Family well-being was protected by good morals, savings, good employer-employee relations (common in Brittany), and an abundance of natural products. Property consisted of money at interest, 600 francs; animals, 64 francs; working equipment, 6 francs; and furniture and clothing, 149 francs. Income was 460 francs, of which 325 francs was in money. Property accounted for 34 francs income; subventions, 32 francs; labor, 356 francs; and industries, 37 francs. Food cost 140 francs; household, 65 francs; clothing, 45 francs; moral, recreative, and health needs, 15 francs; savings were 95 francs.

Notes are added on the introduction of primary instruction among the illiterate population, labor conditions, the regime of the land and community, and a summary of a monograph on an independent hand laborer of the vineyards of Armagnac (central France).

This laborer, who furnished an example of social stability, was attached to a landed proprietor by voluntary but permanent engagements. The household consisted of the laborer (35), his wife (32), 2 sons (8 and 6), and 1 daughter (4). The children, shepherds at 6, had robust physiques. The wife and eldest son helped with the vineyards, garden, and animals. Typical occupational histories of children were given from birth to adulthood. The patron provided medical aid, food, and lodging, the family having no property or money. Domestic animals were valued at 85 francs, working equipment at 41 francs. Subventions contributed the major part of the family necessities. Clothing and furniture were valued at 419 francs. The total yearly receipts were 697 francs; 7 francs from property, 183 francs from subventions, 386 francs from salaries, and 141 francs from household industries. The expenditures for food were 476 francs; the household, 81 francs; clothing, 109 francs; moral, recreative, and health needs, 12 francs; and all else, 20 francs; nothing for savings. Family well-being rested essentially on the abundance of work, subventions from the patron, and the permanence of their position.

DELBET, M. E.

(588)

MANOEUVRE-AGRICULTEUR DE LA CHAMPAGNE POUILLEUSE (MARNE-FRANCE). JOURNALIER-TÂCHERON-PROPRIÉTAIRE, DANS LE SYSTÈME DES ENGAGEMENTS MOMENTANÉS D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN MAI 1856. *Les Ouvriers des Deux Mondes* (1) 1: 69-106. Paris. 1857. [Reprinted in Le Play, F., *Les Ouvriers Européens*, ed. 2, v. 5, pp. 323-371. Paris. 1878.]

This analysis was taken largely from *Les Ouvriers Européens* as showing the social disorganization arising out of mobility and economic change in western Europe. This particular family was preserved from destruction by the wife's good qualities and the love of landed property. When the study was made in 1856 the household consisted of the head (43), his wife (34), and 2 daughters (15 and 13). An illegitimate child had died. Morals were lax, but the family was hard working, interested in the education of the children, and thrifty. Health was good. When there was no agricultural work, the laborer found work on the canal earthworks or made bricks. The woman was a successful seamstress, and helped in the fields and garden. The eldest daughter was a part-time apprentice in a linen shop receiving board as pay. Recreations were noncommercialized. Property consisted of dwelling, land, money, animals, and tools valued at 1,542 francs, and furniture and clothing at 779 francs. Income was 1,425 francs, of which 1,004 francs was in money. Property was credited with 72 francs income;



subventions, 60 francs; labor, 1,121 francs; and industries, 172 francs. Food cost 905 francs; household, 168 francs; clothing, 154 francs; moral, recreative, and health needs, 82 francs; and all else, 13 francs. Savings were 102 francs. Notes are added on social disorganization and on the migratory laborers and their influence on rural morals.

LE PLAY, F.

(589)

PAYSANS EN COMMUNAUTÉ DU LAVEDAN (HAUTES-PYRÉNÉES—FRANCE). PROPRIÉTAIRES-OUVRIERS DANS LE SYSTÈME DU TRAVAIL SANS ENGAGEMENTS, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN AOÛT 1856. *Les Ouvriers des Deux Mondes* (1) 1: 107-160. 1857. [Reprinted in *Les Ouvriers Européens*, ed. 2, v. 4, pp. 444-510. Paris. 1877.]

A stable family of western Europe is described. The worker owned 18 hectares of land and spent his spare time weaving, making shoes or agricultural implements, or working in the forest. The family lived 20 kilometers from the Spanish border. At the time of this study, 1856, it consisted of the worker (74), a daughter (45), a son-in-law (60), 7 grandchildren, 4 adult unmarried relatives, and 1 domestic servant. The family was of the *famille-souche* type. Health was excellent. Well-being was supported by the characteristics of the *famille-souche*. Property consisted of 32,117 francs in land, money, and agricultural equipment, and 5,465 francs in clothing and furniture. Income was 4,244 francs, of which 2,375 francs was in money. Property contributed 1,070 francs, subventions 669 francs, labor 1,481 francs, and industries 1,023 francs. Food cost 2,261 francs; household, 289 francs; clothing, 748 francs; moral, recreative, and health needs, 140 francs; and all else, 66 francs; 736 francs were saved. Notes are given on the transmission of wealth from one generation to another, the ancient social organization, the annual employment of savings, the exchange of labor, and the system of agriculture.

SAINT-LÉGER, A. DE, and DELBET, E.

(590)

PAYSAN-BASQUE DU LABUORD (FRANCE). PROPRIÉTAIRE-OUVRIER, À PASTURAGES COMMUNAUX, DANS LE SYSTÈME DU TRAVAIL SANS ENGAGEMENTS, AVEC UN PRÉCIS DE LA MONOGRAPHIE AYANT POUR OBJET LE MINEUR-ÉMIGRANT DE LA GALICIE, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX, EN JUIN 1856. *Les Ouvriers des Deux Mondes* (1) 1: 161-220. 1857. [Reprinted in *Le Play, F., Les Ouvriers Européens*, ed. 2, v. 5, pp. 192-258. Paris. 1878.]

This is one of a series of studies on western European families showing social disorganization arising from the inheritance law for equal distribution. In this case, investigated in 1856, the mores had partly contravened the law. The worker owned 5 hectares and spent his spare time pasturing cattle and trading at the fairs and markets. The household consisted of the head (51), his wife (56), 2 daughters (16 and 12), 1 son (8), the man's mother (95), and his sister (50). Education was scanty, and the family used only the Basque language. Health conditions were good, although the wife and daughters were frail. A physician cared for them at 8 francs per year. Recreations included playing ball, traveling, and feast-day celebrations. They saved nothing, but the homestead was still a unit and offered some security. Property consisted of dwelling, land, animals, and tools valued at 8,102 francs, and furniture and clothing at 2,157 francs. Income was 1,656 francs, of which 518 francs was in money. Property was credited with 314 francs income; subventions, 142 francs; labor, 284 francs; and industries, 916 francs. Food cost 981 francs; household, 165 francs; clothing, 325 francs; moral, recreative, and health needs, 111 francs; and all else, 74 francs. Notes are given on the *famille-souche* among the French Basques; cultivation; the sheep fed on the communal pasturage; mutual aid in the district; the trans-Atlantic and Spanish emigration of the French Basques; and a summary of a monograph on an emigrant miner of Galicia (Spain), found only in *Les Ouvriers Européens*, and illustrating the conditions of the migratory rural laborers in Europe.

The miner played a double role. In Galicia he was a proprietary laborer in a system of work without engagements, and in Andalusia he was a pieceworker in a system of momentary engagements. In the summer he lived with his family in Galicia doing agricultural work; in the winter he worked in the mines in Andalusia. He bought and sold mules and horses on the way to and from work. He typified the workers who migrated to earn money with which to buy agricultural property in their own province. The household consisted of the miner (30), his

wife (25), 3 children (3 years, 2 years, and 6 months). The parents were illiterate. Health conditions were excellent; physicians and medicine were free. The worker was temperate, saving, and on the way to becoming a proprietor. Property was valued at 1,620 francs, animals 308 francs, working equipment 153 francs, and operating funds 150 francs. Subventions provided almost all the necessities of life. The wife cultivated the garden and cared for the animals. Furniture and clothing were valued at 218 francs. Moderate drinking, smoking, and gambling, with occasional fishing, were the only forms of recreation. Property accounted for 112 francs income; subventions, 142 francs; labor, 645 francs; and industries, 491 francs. Food cost 645 francs; household, 119 francs; clothing, 146 francs; moral, recreative, and health needs, 43 francs; and all else, 73 francs. All savings (364 francs) were put into land. Family well-being rested on communal subventions, land holding, morality, temperance, and love of work. Complete historical data are given on the children from birth to adulthood.

TOUSSAINT, P. A.

(591)

MANOEUVRE-VIGNERON DE L'AUNIS (CHARENTE-INFÉRIEURE—FRANCE). OUVRIER-PROPRIÉTAIRE DANS LE SYSTÈME DU TRAVAIL SANS ENGAGEMENTS D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX DE 1858 À 1860. Les Ouvriers des Deux Mondes (1) 3: 206-246. 1861. [Reprinted in Le Play, F., Les Ouvriers Européens, ed. 2, v. 6, pp. 145-192. Paris. 1878.]

This monograph describes a family in a disorganized social structure in 1858-60. The family consisted of the husband (58), his wife (50), his son (13), and the wife's mother (70). They were superstitious, ignorant, and immoral, and the husband, who was frequently drunk, beat his wife and ill-treated his mother-in-law. The son attended school irregularly. Health conditions were good. Drinking, attending fairs, and gambling were the principal recreations. Their home (including house, garden, and vineyard owned by the mother-in-law) and public and private charity formed the only bases of well-being. The worker cultivated grapes very well for others but not for himself. Their parents had been proprietors but lacked adherence to the conventional mores, and in such an atmosphere the head of this family grew up debauched in character. Property consisted of 2,228 francs, and furniture and clothing 390 francs. Income was 1,186 francs, 706 francs of which was in money. Property contributed 69 francs; subventions, 88 francs; labor, 832 francs; and industries, 196 francs. Food cost 777 francs; household, 100 francs; clothing, 162 francs; moral, recreative, and health needs, 134 francs; and all else, 13 francs. Notes are given on the disorganization of the mores of the rural people of Aunis, the methods of grape cultivation, the state of agriculture, resources from fishing, the salt marshes, and the means of remedying the change in the ancient mores there.

AVALLE, E.

(592)

MANOEUVRE-VIGNERON DE LA BASSE-BOURGOGNE (YONNE—FRANCE). JOURNALIER-TÂCHERON-PROPRIÉTAIRE DANS LE SYSTÈME DES ENGAGEMENTS MOMENTANÉS D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN SEPTEMBRE 1860. Les Ouvriers des Deux Mondes (1) 4: 195-240. 1862.

The family in this study (carried on in 1860) consisted of the husband (56), his wife (45), 5 daughters (21, 15, 12, 9, and 7 months), and 3 sons (18, 14, and 7). Two other children had died. Husband and wife were illiterate; the children attended school. Their health was excellent. The family owned house, garden, and field as a result of hard labor and economy. The head's spare time went for agricultural work for different neighbors. Recreations were few, chiefly religious ceremonies. Family well-being was protected by habits of work, sobriety, order, economy, and the patronage of a rich family. There were no mutual-aid societies. Institutions for public assistance were available but had not been used. The children contributed to the family income. Property consisted of 3,550 francs in real property, 50 francs in money, 527 francs in domestic animals, 273 francs in working equipment, and 1,278 francs in furniture and clothing. The income was 2,356 francs, of which 832 francs was in money. Property contributed 199 francs; subventions, 116 francs; labor, 1,831 francs; and industries, 210 francs. Food cost 1,238 francs; the household, 376 francs; clothing, 442 francs; moral, recreative, and health needs, 49 francs; and all else, 46 francs. Savings were 205 francs. Notes deal with moral and religious conditions, migration to cities, public instructions, rights of common pasturage, former factories, and some ancient customs.



CHEVERRY, VICTOR DE

(593)

FERMIERS À COMMUNAUTÉ TAISIBLE DU NIVERNAIS (SAONE-ET-LOIRE, FRANCE).  
 OUVRIERS-TENANCIERS DANS LE SYSTÈME DES ENGAGEMENTS VOLONTAIRES  
 PERMANENTS, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX  
 EN OCTOBRE 1860. Les Ouvriers des Deux Mondes (1) 5: 1-50. 1885.

The household which was the subject of this study, made in 1860, farmed 114.7 hectares of land in a form of organization developed under the feudal system and unchanged in important details since the fifteenth century. Rent amounted to 2,346 francs annually. The master and mistress (who could not be husband and wife) were selected by election, subject to the owner's veto. This position had no pecuniary advantage. Primogeniture generally dominated election of the master. The family household or community consisted of 23 individuals with 4 branches working cooperatively. There was the head (42), his wife (36), 3 sons (18, 9, and 4), widow of the former head, now mistress (44), her daughters and son, 24, 20, and 9), husband of the eldest (30), their daughter and son (8 and 2), sister of the head and her husband (44 and 53), brother-in-law of the head (47), his wife (39), their 2 sons and 2 daughters (20, 17, 9, and 7), the mother-in-law of the head (65), and a stepson (20). There were 2 male and 1 female servants. Morals were exemplary and community relationships happy. Health conditions were excellent; only home remedies were used. Hired labor was paid for by produce. The master guided the men in outdoor work and did all buying and selling. The mistress guided the women who tended the animals, performed the household duties, and oversaw the children. Recreations were noncommercialized. Well-being was protected by joint property and family solidarity. Property consisted of animals valued at 10,921 francs, tools at 1,398 francs, money 10,600 francs, and furniture and clothing at 5,928 francs. Income was 10,199 francs, of which 5,616 francs was in money. Property accounted for 1,116 francs, work 3,514 francs, and industries 5,568 francs. Food cost 3,429 francs; household, 462 francs; clothing, 844 francs; moral, recreational, and health needs, 107 francs; and all else, 2,391 francs (mostly the annual rent). Savings were 2,967 francs. Notes are given on the origin and customs of the traditional family community, the physical condition of the people, the use of the common goods, and the choice of heads.

CALLAY.

(594)

PAYSAN D'UN VILLAGE A BANLIEU-MARCELÉE DU LAONNAIS (AISNE—FRANCE).  
 PROPRIÉTAIRE-OUVRIER DANS LE SYSTÈME DU TRAVAIL SANS ENGAGEMENTS  
 D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN MAI 1861.  
 Les Ouvriers des Deux Mondes (1) 4: 37-82. 1862.

This monograph shows the influence of compulsory division of land (French law of 1789) upon agricultural social conditions, the conclusion being that it broke up family solidarity. The inhabitants sought sterility to avoid land division. The study presented here was made in 1861, of a family that possessed 4.14 hectares of land in 19 strips. They worked only for more land because of the continual division. They did hemp dressing in addition to farming. The household consisted of the worker (54), his wife (52), and 2 sons (15 and 13). There were also 2 married daughters not living at home, and 3 others dead. The parents tempered neither their speech nor songs before the children, nor did they reprimand them for their actions. The wife lied to the husband to secure money. Health conditions were fair, but skin diseases and dysentery were common. Both sons started working when about 11. The worker found recreation in cabarets. Well-being was protected by economy and incessant labor. Property consisted of real property valued at 6,862 francs, money 10 francs, animals at 709 francs, working equipment at 621 francs, and furniture and clothing at 1,089 francs. The income was 1,897 francs, of which 1,077 francs was in money. Property contributed 304 francs; labor, 973 francs; and industries, 620 francs. Food cost 756 francs; household, 215 francs; clothing, 214 francs; moral, recreative, and health needs, 10 francs; and all else, 68 francs, 633 francs being saved. Notes describe the economic and social results of land subdivision, the moral and physical decadence of the population, the insufficient education of the children, and the use of ligneous pyrite and peat in Laon.

SAINT-JEAN, M. D'ESTIENNE DE

(595)

PAYSAN MÉTAYER DE LA BASSE PROVENCE (BOUCHES-DU-RHÔNE). OUVRIER-PROPRIÉTAIRE DANS LE SYSTÈME DES ENGAGEMENTS VOLONTAIRES MOMENTANÉS, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN 1861 ET 1862, AVEC DES NOTES DE 1886. *Les Ouvriers des Deux Mondes* (2) 2: 173-228. 1890.

This study, made in 1861-62, shows the decline in the fortune of a family, an old famille-souche, which continued the customs of integral transmission of real property after the passage of the law for equal property partition. In 1862 the man was comfortably situated. The household consisted of the head (57), his wife (54), 2 sons (27 and 20), a daughter (24) by a first wife, and 1 son (27) of the second wife by a first husband. Only the 27-year-old son could read or write. Health conditions were excellent. The father bought and sold mules. Recreations comprised drinking, dancing, smoking, and bowling. The future seemed assured by their savings, habits of work, and good reputation. Property consisted of land valued at 16,200 francs, orchard at 1,000 francs, vineyard at 1,200 francs, animals at 1,974 francs, tools at 1,598 francs, money in mortgages at 5,700 francs, floating capital at 1,600 francs, and furniture and clothing at 2,260 francs. Income was 9,495 francs, of which 7,312 francs was in money. Property was credited with 835 francs; subventions, 706 francs; labor, 1,520 francs; and industries, 6,424 francs. Food cost 2,578 francs; household, 577 francs; clothing, 303 francs; moral, recreative, and health needs, 283 francs. Savings were 5,754 francs. By 1886 the family was destitute. The father had become extravagant and lost his reputation, the property was divided, and then the father died destitute. The two sons undertook to work the land, but the ill health of the elder and the presumption of the younger necessitated giving it up. Notes are given on the regime of forced partition of property and the state of agriculture in Provence.

TOUNISSOUX, L'ABBÉ, and DAVID, R. G.

(596)

MÉTAYER DE CORRÈZE (BAS-LIMOUSIN—FRANCE). OUVRIER TENANCIER DANS LE SYSTÈME DES ENGAGEMENTS VOLONTAIRES PERMANENTS, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN 1863 ET 1864 AVEC NOTES SUR LA SITUATION EN 1897. *Les Ouvriers des Deux Mondes* (2) 5: 501-566. 1899.

The métayer is between the farm laborer and owner. This study, made in 1863-64, concerns a worker who was highly respected and was striving to become a property owner. The household consisted of the head (68), his wife (75), their oldest son (44), his wife (38), 3 granddaughters (15, 11, and 9), 4 grandsons (13, 7, 5, and 2), and the head's father (94). There were 2 other sons, a farmer and a clogmaker, not at home. The family had good family relations and morals, and were hospitable and contented. The parents could neither read nor write. Health conditions were good. The women helped in the fields only at harvest time. The family cultivated a garden and raised a few animals. Recreations were noncommercialized. Well-being was protected by ability to work and by the family solidarity. Property consisted of dwelling and land valued at 3,500 francs, animals at 120 francs, tools at 275 francs, money 50 francs, and furniture and clothing at 1,506 francs. Income was 2,684 francs, of which 934 francs was in money. Property contributed 210 francs income; subventions, 241 francs; labor, 2,139 francs; and industries, 94 francs. Food cost 1,235 francs; household, 301 francs; clothing, 726 francs; moral, recreative, and health needs, 73 francs; and all else, 122 francs. Savings were 227 francs. Notes are given on morals, religion, and education in Corrèze; local indifference to agricultural improvements; migration; the laborers and tenants; the chestnut groves; community customs; inheritance of property; economy; and this family's history since 1864.

BIGOT, MAXIMILIEN

(597)

PAYSANS CORSES EN COMMUNAUTÉ. PROCHERS-BERGERS DES MONTAGNES DE BASTELICA, PROPRIÉTAIRES OUVRIERS DANS LE SYSTÈME DU TRAVAIL SANS ENGAGEMENTS, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN 1869, CONTRÔLES ET CONFIRMES EN 1887 PAR F. ESCARD. *Les Ouvriers des Deux Mondes* (2) 2: 433-524. 1890.

This study, made in 1869, and supplemented and confirmed in 1887, illustrates social security under the famille-souche regime. The worker was greatly respected because of his character and blood ties. The household consisted of the



head (55), his wife (45), 3 sons (23, 18, and 15), and 2 daughters (20 and 17). Respect for paternal authority and traditional morals and customs (including integral succession and temporary migration) was strong. The children attended school. Health conditions were good; the doctor was paid by yearly subscriptions. The head supervised all housework and made the butter and cheese, the eldest son was the cultivator, the second the swineherd, and the third the shepherd. Recreations consisted of religious festivals, dancing, smoking, cards, drinking, hunting, and reading. Family well-being was protected by observance of traditional customs and morals. Property was valued at 10,904 francs, animals at 3,160 francs, tools at 460 francs, money 100 francs, and furniture and clothing at 1,670 francs. Income was 3,324 francs, of which 2,014 francs was in money. Property contributed 572 francs; subventions, 160 francs; labor, 1,298 francs; and industries, 1,294 francs. Food cost 1,228 francs; household, 385 francs; clothing, 317 francs; moral, recreative, and health needs, 137 francs; and all else, 391 francs. Savings were 866 francs. Twenty years later, another study found conditions practically the same. Notes deal with the people of Bastelica; the raising of sheep, goats, and swine; the law against common pasturage; grain cultivation; gathering chestnuts and olives; retting and dyeing linen; silkworms and bees; migratory Italian workers; sheep malaria; renting of oxen; the church of Bastelica; marriage and funeral customs; dancing; bandits; Corsican history; and family organization.

ARTIGUES, BARON D' (598)

MÉTAYER À FAMILLE-SOUCHE DU PAYS D'ORTE (GASCOGNE). TENANCIER-MÉTAYER ET CHEF DE MÉTIER DANS LE SYSTÈME DES ENGAGEMENTS VOLONTAIRES PERMANENTS, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN 1879. *Les Ouvriers des Deux Mondes* (2)1: 341-408. 1887.

The family dealt with in this study, made in 1879, was typical of Gascony, where most of the farms were small. The household consisted of the head (69), his wife (64), their daughter (38), her husband (49), their one daughter (21), two sons (11 and 3), and brother of the wife (58). They preserved the traditions of a united family, respect toward superiors, belief in native equality, hospitality, and pride of race. Health conditions were excellent. Magic and prayers were used for some sickness. Sex division of labor was based principally upon the degree of difficulty, except that the men did the milking. Tempo of work and life was slow. Recreation came chiefly through working together and through community festivals. Family well-being, based on home production of much of the necessary food supply, was furthered by the education given the children, and by respect for parents and for tradition. Property consisted of animals valued at 1,560 francs, tools at 1,576 francs, money 1,400 francs, and furniture and clothing at 4,431 francs. The income was 3,829 francs, of which 508 francs was in money. Property accounted for 148 francs; subventions, 804 francs; labor, 1,264 francs; and industries, 1,611 francs. Food cost 2,531 francs; the household, 316 francs; clothing, 617 francs; moral, recreative, and health needs, 93 francs; and all else, 134 francs. Savings were 137 francs. Notes deal with the rental contracts, the "neighborhood" (sociological concept), the payment of the clergy, the local origin of property rights, and the symptoms of prosperity and decadence in this community.

GUÉRIN, URBAIN (599)

PAYSAN-RÉSINIER DE LÉVIGNACQ (LANDES). PROPRIÉTAIRE-OUVRIER DANS LE SYSTÈME DU TRAVAIL SANS ENGAGEMENTS, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN 1881. *Les Ouvriers des Deux Mondes* (1) 5: 315-386. 1885.

This study deals with a district where the chief industry was the gathering of resin from pine trees. The worker belonged to one of the oldest families and was greatly respected. More than three-fourths of his property was planted in pine trees. In 1881 at the time of the study the household consisted of the grandfather (76), the father (50), the mother (46), 6 sons (26, 24, 22, 19, 17, and 15), 2 daughters (18 and 11), and a shepherd (63). They were generous and hospitable. Family relations and health were good. The great vices were drunkenness and moral laxity. All read and wrote except the grandfather. He cared for the animals, the father gathered resin, the mother did the housework, and the eldest son worked with the mules. Recreations comprised Sunday trips, reading, cards, smoking, attending fairs, and hunting. Their well-being rested on their religion and the integral transmission of property to one child. Property consisted of dwelling valued at 1,000 francs, 100 hectares of land valued

at 57,500 francs, stables at 1,500 francs, animals at 4,460 francs, tools 2,040 francs, money 1,000 francs, and furniture and clothing valued at 7,101 francs. Income was 10,481 francs, of which 5,428 francs was in money. Property accounted for 2,160 francs income; labor, 3,598 francs; and industries, 4,724 francs. Food cost 3,631 francs; household, 728 francs; clothing, 1,275 francs; moral, recreative, and health needs, 169 francs; and all else, 487 francs. Savings were 4,292 francs. Notes are given on the results of the law of June 19, 1857, sanitation and improvement of lands of Gascogne, income from the pine trees, distribution of agricultural work, the administrative division of France, the religious societies and religious history of Levignacq, prostitution, customs of hunting preserved by the inhabitants, the division of property before death, and the causes which tended to change the customs of the landed population.

DELAIRE, A.

(600)

PAYSAN PALUDIER DU BOURG DE BATZ (LOIRE-INFÉRIEURE). TENANCIER-PROPRIÉTAIRE DANS LE SYSTÈME DES ENGAGEMENTS VOLONTAIRES PERMANENTS D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN 1883. *Les Ouvriers des Deux Mondes* (2) 1: 1-56. 1887.

The salt marshes of Batz showed division of property carried to the point where it could no longer support a family. The marsh considered in this study sometimes united the proprietors and the salt makers for several generations, although the relation was not permanently stable. The household here considered consisted, at the time of the study in 1883, of the head (64), his wife (53), daughter (31), and son (23). All were active workers, and the family was in unusually good circumstances. Moral, educational, and health conditions were good. The father and son worked chiefly at salt making, the profits from which were shared with the owner. The mother cultivated the garden and kept the accounts. Recreations were noncommercialized. Well-being depended on the spirit of thrift, foresight, and the fact that there were four workers and no dependents. Income varied yearly, according to the amount of salt produced. Property consisted of 4,500 francs in dwelling, 14,850 francs in land, 1,610 francs in outbuildings, 1,079 francs in animals, 1,492 francs in tools, 150 francs in money, and 4,766 francs in furniture and clothing. Income for the year studied was 4,402 francs, of which 3,221 francs was in money. Property was credited with 847 francs; subventions, 230 francs; labor, 944 francs; and industries, 2,381 francs. Food cost 1,237 francs; household, 430 francs; clothing, 352 francs; moral, recreative, and health needs, 150 francs; and all else, 246 francs. Savings amounted to 1,987 francs. Notes are furnished on the geography of the lower Loire and the origin of the population, intermarriage at Batz, salt making and its future, the salt tax, and condition of the salt makers.

GUÉRIN, URBAIN

(601)

CULTIVATEUR-MARAICHER DE DEUIL (SEINE-ET-OISE). PROPRIÉTAIRE-OUVRIER DANS LE SYSTÈME DU TRAVAIL SANS ENGAGEMENTS D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN 1885. *Les Ouvriers des Deux Mondes* (2) 1: 339-384. 1887.

This is a study, made in 1885, of a stable middle-class family in a slightly demoralized community. The household consisted of the head (46), his wife (45), 3 sons (21, 20, and 10), and a daughter (14). The family was morally outstanding in the community. Health conditions were good. There was a doctor at Deuil. The whole family worked in the garden, and the mother marketed the produce biweekly, which was the practice of the gardeners of the district. No irrigation was used. The family enjoyed few commercialized recreations. Their well-being rested on professional traditions, love of work, and the value of their land. The many divisions of the land did not force the owners to the poverty level so long as the families remained small. Property consisted of a dwelling valued at 15,000 francs, land at 64,000 francs, animals at 706 francs, tools at 3,215 francs, money 200 francs, and furniture and clothing valued at 6,171 francs. Income was 13,624 francs, of which 11,947 francs was in money. Property was credited with 2,866 francs income; labor, 3,212 francs; and industries, 7,547 francs. Food cost 2,611 francs; household, 1,317 francs; clothing, 300 francs; moral, recreative, and health needs, 451 francs; and all else, 1,086 francs. Savings amounted to 7,859 francs. Notes are given on the population of Deuil, its history, day laborers, religion, and division of land; on Parisian markets; the distribution of work among the different seasons; market gardening; and small property holdings in France.



HOMMELL, CHARLES

(602)

VIGNERONS DE RIBEAUVILLÉ (ALSACE). OUVRIERS PROPRIÉTAIRES ET TÂCHERONS DANS LE SYSTÈME DES ENGAGEMENTS MOMENTANÉS ET DU TRAVAIL SANS ENGAGEMENTS, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN SEPTEMBRE 1888. Les Ouvriers des Deux Mondes (2) 3: 69-124. 1892.

This study was made in 1888 and deals with a family that owned about 1 hectare of land and did piecework on 3 hectares for a large proprietor. Economic opportunities were good, but family solidarity was declining in the neighborhood. The family consisted of the head (60), his wife (56), and 3 sons (28, 24, and 21). A daughter (26) was a member of a religious community. The family was well liked, respected, and honest, with orderly and economical habits. The father and 2 older sons cultivated the grapes. Their morals were good. The boys all stayed in school until 14. Family health was excellent. Midwives took care of childbirth. Recreations consisted of smoking and occasional religious and patronal festivals. Their well-being was protected by their habits, their desire for saving, and the 2 aid societies to which they belonged, 1 covering sickness, 1 death. Property consisted of 20,200 francs in land and house, 400 francs in money, 450 francs for wine in cellar, 964 francs in animals, 1,421 francs in working equipment, and 2,945 francs in furniture and clothing. Income was 6,996 francs, of which 5,646 francs was in money. Property contributed 1,142 francs, subventions, 190 francs; labor, 2,806 francs; and industries, 2,857 francs. Food cost 2,086 francs; household, 350 francs; clothing, 234 francs; moral, recreative, and health needs, 94 francs; and all else 146 francs, 4,086 francs being saved. Notes are given on the day laborers and particular characteristics of the grape industry of Alsace, and on the parceling of the land.

MAROUSSEM, PIERRE DU

(603)

MÉTAYERS EN COMMUNAUTÉ DU CONFOLENTAIS (CHARENTE—FRANCE). PROPRIÉTAIRES-OUVRIERS DANS LE SYSTÈME DES ENGAGEMENTS MOMENTANÉS, D'APRÈS RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN 1888. Les Ouvriers des Deux Mondes (2) 3: 1-68. 1892.

A stable organization, which easily bridges a periodical agricultural crisis, is described in this study made in 1888. The community consisted of 4 family groups, including 10 people: the chief (55), his wife (51), 4 males (81, 35, 28, and 11), and 4 females (28, 24, 17, and 2). The reputation of the family was excellent. Premarital sex relations were severely censured and were rare. These peasants had two moral codes—one among themselves, of honesty, loyalty, and charity; and another, toward the upper classes, of lying and cheating. Health was good. There were three doctors.

The group farmed its own  $3\frac{1}{2}$  hectares and also carried on some domestic industries. The chief's wife, more intelligent than her husband, was the true head. The father of the family loved work, was saving, owned cattle, and was highly respected. Pilgrimages, fairs, and the cabaret furnished the main recreations. The equal division of land tended to create instability, while love of work and economy were the chief bases of well-being. Property consisted of 18,955 francs total for the four groups. The first had a house and garden valued at 1,200 francs, and 6,200 francs in money; the second had land valued at 6,000 francs, 100 francs in money, 11 francs in domestic animals, and 292 francs in working equipment; the third had land valued at 1,200 francs, 2,300 francs in money, 1 franc in animals, and 320 francs from the wife's dowry; and the fourth had land at 450 francs, 700 francs in money, 1 franc in animals, and 320 francs from wife's dowry. Income was 3,382 francs, of which 2,218 francs was in money. Property contributed 960 francs; subventions, 31 francs; labor, 2,081 francs; and industries, 308 francs. Food cost 1,389 francs; household, 127 francs; clothing, 441 francs; moral, recreative, and health needs, 136 francs; and all else, 280 francs. Savings amounted to 1,008 francs. Notes are given on exchanges and economic regime in Chabanaais, land division, the religious question in Confolentais, share tenantry, the Confolentais community, and the usage which dispensed with salaries.

MAROUSSEM, PIERRE DU

(604)

FERMIERS MONTAGNARDS DU HAUT-FOREZ (LOIRE—FRANCE). OUVRIERS-CHEFS DE MÉTIER DANS LE SYSTÈME DES ENGAGEMENTS MOMENTANÉS, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN AOÛT 1892 ET AOÛT 1893. *Les Ouvriers des Deux Mondes* (2) 4: 397-476. 1895.

The family in this study, which was made in 1892-93, carried on typical industries of an isolated community—forestry, dairying, and ribbon manufacturing. The household consisted of the head (46), his wife (40), 2 daughters (14 and 12), and 4 sons (10, 9, 7, and 1). They belonged to the famille-souche type. Health conditions were excellent. A physician was paid from public funds. The man worked his rented farm without help, worked as a woodcutter by day, and performed other tasks. The older daughter worked in the ribbon factory. The other daughter and the three oldest sons attended school in the winter and in the summer cared for the animals for their father or a neighbor. Recreations were chiefly dancing or drinking, or connected with religion. Well-being was protected by their solidarity, spirit of work and saving, and devotion to traditional customs. Property consisted of animals, tools, and a small sum of money valued at 1,317 francs, and furniture and clothing, 1,125 francs. Income was 1,700 francs, of which 859 francs was in money. Property accounted for 65 francs income; subventions, 153 francs; labor, 1,075 francs; and industries, 407 francs. Food cost 1,017 francs; household, 116 francs; clothing, 379 francs; moral, recreative, and health needs, 64 francs; and all else, 26 francs. There were no savings. Notes are given on religious instruction; parental respect; status of the church; religion; sovereignty; the community; patronage; the community of Saint-Genest; the forestry, ribbon, and dairy industries.

KÉRAVIC, YAN'

(605)

AGRICULTEUR DU PAS-DE-CALAIS—FRANCE. PROPRIÉTAIRE-OUVRIER DANS LE SYSTÈME DE TRAVAIL SANS ENGAGEMENTS, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN NOVEMBRE 1893. *Les Ouvriers des Deux Mondes* (2) 5: 283-316. 1899.

The worker of this study tilled 95 acres in general farming. In 1890-92 he suffered such losses that he had to borrow 1,300 francs. The household, at the time of this study in 1893, consisted of the head (59), his wife (51), 2 sons (26 and 16), and 2 daughters (22 and 18). The worker was better educated than the average in his class. He disliked the idea of forced partition of property and hoped that one of the children would take it over and that he and his wife could live with that one. The family was well disciplined and united. Their health was good. All worked in the fields except the eldest son, who was a miner, and the mother, who did the housework. The eldest son belonged to a mutual-aid society for miners. Recreations were few. Family future rested on hard work, good morals, and economy. Property consisted of dwelling, land, and stables valued at 12,400 francs, animals at 1,515 francs, tools 875 francs, money 60 francs, and furniture and clothing valued at 1,602 francs. Income was 4,500 francs, of which 3,070 francs was in money. Property contributed 559 francs; subventions, 85 francs; labor, 2,289 francs; and industries, 1,568 francs. Food cost 1,870 francs; household, 265 francs; clothing, 523 francs; moral, recreative, and health needs, 153 francs; and all else, 199 francs. Savings were 1,491 francs, applied to the mortgage. Notes are given on population, education, and financial conditions; the seasonal distribution of agricultural work; and the income and expenses of a miner as compared with the above-mentioned agriculturalist.

MAROUSSEM, PIERRE DU

(606)

BOUILLEUR DE CRU DE BAS-PAYS DE COGNAC (CHARENTE, FRANCE). OUVRIER CHEF DE MÉTIER ET PROPRIÉTAIRE DANS LE SYSTÈME DU TRAVAIL SANS ENGAGEMENTS, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN 1897-1898-1899. *Les Ouvriers des Deux Mondes* (3) 1: 133-210. 1904.

This study of agriculture in the cognac-making district was made in 1897-99, and deals with a family which owned about 10 hectares of vines, a distillery, and other property. It belonged to the class which, because of growing wealth, was rising socially. The household consisted of the head (62), his wife (59), their son (29), his wife (27), their daughter (7), and son (3), and 2 servants (24 and 16). They considered wealth to be the supreme good, education taking second place.



Morals were lax. Health conditions were average. The work was done by a mixture of old and modern methods. Recreations were noncommercialized. The fertile land, resolute work, and the love of saving probably protected the well-being of the family unless overbalanced by physical decadence and the lack of moral education. Property consisted of land and dwellings valued at 94,900 francs, animals at 2,542 francs, money 32,000 francs, wine valued at 2,400 francs, tools at 3,744 francs, and furniture and clothing at 5,713 francs. Income was 9,831 francs, of which 7,526 francs was in money. Property contributed 4,944 francs income; subventions, 63 francs; labor, 782 francs; and industries, 4,042 francs. Food cost 3,762 francs; household, 730 francs; clothing, 669 francs; moral, recreative, and health needs, 769 francs; and all else, 363 francs. Savings were 3,539 francs. Notes are given on cognac, the history of the town and its trade, the agent distiller, the wine business, the peasant proprietor, the attempts for cooperative marketing, and the alcohol monopoly.

ESCARD, FRANÇOIS

(607)

JARDINIER-PLANTIER DE GASSERAS, COMMUNE DE MONTAUBAN (TARN-ET-GARONNE). PROPRIÉTAIRE-OUVRIER DANS LE SYSTÈME DU TRAVAIL SANS ENGAGEMENTS D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN 1902-03. *Les Ouvriers des Deux Mondes* (3) 2: 301-376. 1904.

The family of this study, made in 1902-3, was undisturbed by ideas of social change. The household consisted of the head (61), his wife (53), their daughter (30), her husband (35), and their two children (6 and 1). Family health was excellent. There was no doctor. The family owned about 1 hectare of land, and all four adults worked in the garden, the very small piece of land supplying their needs because of its neutral fertility and the intensive cultivation it received. Their cooperation, under a system of family and religious solidarity, gave economic well-being and an honorable station in life. Recreation was noncommercialized. Property consisted of dwelling and land valued at 9,250 francs, money 740 francs, animals valued at 574 francs, tools at 1,410 francs, and furniture and clothing at 1,899 francs. Income was 3,604 francs, of which 2,414 francs was in money. Property contributed 466 francs income; subventions, 71 francs; labor, 2,388 francs; and industries, 678 francs. Food cost 1,404 francs; household, 392 francs; clothing, 488 francs; moral, recreative, and health needs, 85 francs; and all else, 33 francs. Savings amounted to 1,202 francs. Notes are added on Montauban, its municipal constitution, public education, old industries, and the condition of a family of day laborers; on the straw-hat industry and raising of fruit trees and grapevines in Tarn-et-Garonne; and on pigeons and pigeon houses.

HALBWACHS, MAURICE

(608)

BUDGETS DE FAMILLES OUVRIÈRES ET PAYSANNES EN FRANCE EN 1907. *Bull. Statist. Gén. France*: 47-83, illus. 1914.

This survey of living conditions of lower-class laborers and peasants covers April and May 1907. The results given are less satisfactory than those in studies for later years because (1) in these months certain foods were more expensive than during the remainder of the year, (2) the expense accounts represent so small a sample of the population, and (3) in the case of the peasants, the value of houses and food furnished is not estimated. The two groups are considered separately. The peasant accounts could not be analysed or grouped. Of the families studied (of whom 33 made returns, 27 of which were complete) 8 owned their own land, 10 were tenants, 6 laborers, 4 métayers, 1 domestic, and 1 day laborer. The size of families among the peasants was larger than among urban laborers. Expenditures are listed separately.

ANTONELLI, ÉTIENNE

(609)

UNE ENQUÊTE RÉGIONALE SUR LE COÛT DE LA VIE. *Rev. Écon. Polit.* 35: [606]-625. 1921.

This inquiry conducted in and around Lyons in 1920 dealt with 236 families ranging in size from 1 to 5 persons and extending over a social range which included farmers, workers, merchants, and officers. Annual expenditures for food, clothing, light, heat, laundry, furnishings, and sundries were given for a typical family of 4 persons for 1914 and 1920. Indexes were compared.

## FAMILIES OF WAGE-EARNERS, LOW-SALARIED WORKERS, AND SMALL PROPRIETORS

AVENEL, GEORGES D' (610)

HISTOIRE ÉCONOMIQUE DE LA PROPRIÉTÉ, DES SALAIRES, DES DENRÉES ET DE TOUTS LES PRIX EN GÉNÉRAL DEPUIS L'AN 1200 JUSQU'EN L'AN 1800. 7 v. Paris. 1894-1926.

These seven volumes constitute an economic history for France from 1200 to 1800, attention being devoted chiefly to property, income, and food. Both rich and poor people are included. Many detailed tables, divided into 30 main groups, give the values of principal moneys, land, land returns, grains, meat, drinks, and other foods, clothing, furniture, lighting, heating, building materials, metals, transportation, wages, etc. These figures, wherever enough material could be obtained, covered all French territory in 1895.

LE NIVELLEMENT DES JOUISSANCES. 332 pp. Paris. 1913. (611)

This is an historical account of the following items from 1200 to 1914: Nourishment, transformation of food items, service of the table, lodgings, rents in the cities, building costs, domestic servants, the evolution of private expenses, etc. It includes many actual figures. In chapter 4 the author takes up the famous account of Madame de Maintenon for 1679 as quoted in M. G. Mulhall's Dictionary of Statistics and elsewhere and shows that it is spurious. Instead of an income of 41,000 francs, he shows by other records that Charles d'Aubigne really had an income of 122,000 francs. Former expenditures have disappeared, diminished, or increased, sometimes in quantity, sometimes in price. One cannot define luxury in itself, because it is purely a comparative term. A piece of cheese was a great luxury in Paris at the end of 1871. Luxuries and utilities changed throughout the century. Pearls were owned by the middle class in the fourteenth century, costing from 6 to 7 francs each, according to their size. Tapestries, which cost 200,000 to 300,000 francs, sold for 400 to 500 francs in 1850. For all the social classes, the nature of the diverse needs varied very much, and at the same time, their respective importance among expenditures was modified under a thousand influences. Many old expenses disappeared; others diminished or increased, and new ones appeared. In the household expenses, the same needs were satisfied with things of different names, and the same names given to objects differing in their substance. One can say in many cases that the former luxuries of the rich had become necessities, while the new needs of the people were at one time luxuries. From the economic point of view, the greatest benefactors of humanity are not those who work for social reform but the employers of labor.

THIERRY, J. N. A. (612)

RECUEIL DES MONUMENTS INÉDITS DE L'HISTOIRE DU TIERS ÉTAT. Ser. 1, v. 4, pp. 524-525, illus. Paris. 1870.

In this collection of documents is found the record of expenditures of a weaver, living in Abbéville in 1764. He was married and had two children, 8 and 10 years of age. Both husband and wife were employed. The husband earned 6 livres a week, the wife 1 livre, 10 sous. The expenses for husband, wife, and children for bread, meat, vegetables, butter, etc., are given separately; expenditures for rent, heat, oil are listed for all. The entire expenditure for the week was 6 livres, 1 sou, 3 deniers, leaving a balance of 1 livre, 8 sous, 9 deniers for clothing, etc.

BIOLLY, LÉON (613)

LES PRIX EN 1790. 508 pp., illus. Paris. 1886.

Wages and the cost of provisions and of merchandise in the year 1790, as listed in national surveys, are collected and analyzed in this study. Wages of all classes of citizens are tabulated according to localities and are given by day, month, or year, income in kind being sometimes included and sometimes not. Farmers, shepherds, and day laborers are considered separately. The costs of provisions include foodstuffs and raw materials, likewise classified by localities.



FRANCE, MINISTÈRE DU TRAVAIL.

(614)

LES COMMISSIONS D'ÉTUDE DU COÛT DE LA VIE. Bull. Ministère du Travail  
27 (11-12): 525-537. 1920.

A description is given here of the organization and methods of work of the central and regional commissions for studying the cost of living in France. The original data presented is based upon various case studies which had been made from time to time since 1800.

VILLENEUVE-BARGEMENT, ALBAN DE

(615)

ÉCONOMIE POLITIQUE CHRÉTIENNE, OU RECHERCHES SUR LA NATURE ET  
LES CAUSES DU PAUPÉRISME EN FRANCE ET EN EUROPE. v. 1, pp. 288-293.  
Paris. 1834.

This study included farm as well as wage-earning families and is annotated as (584).

VILLERMÉ.

(616)

TABLEAU DE L'ÉTAT PHYSIQUE ET MORAL DES OUVRIERS EMPLOYÉS DANS LES  
MANUFACTURES DE COTON, DE LAINE ET DE SOIE. 2 v., illus. Paris. 1840.

The author, whose work supplements that of Benoiston de Châteauneuf, visited the factories and homes of the workers in wool, cotton, and silk, in all the Departments of France where these industries were prominent. The working and living conditions of the laborers in 1835-37 are described in great detail. Average expenditure accounts are estimated for the various manufacturing districts studied, but the actual accounts presented are few and brief. The average daily wage was 2 francs for a man and 1 franc for a woman. Potatoes formed the base of the diet; only the comfortably situated families had meat. The living conditions among urban workers were worse than those among rural workers, because the former were more addicted to liquor, they demanded greater luxuries of dress, and they had no garden produce to supplement their income.

BLANQUI, JÉRÔME A.

(617)

DES CLASSES OUVRIÈRES EN FRANCE PENDANT L'ANNÉE 1848. 255 pp.  
Paris. 1849.

This study of rural and factory laborers is based largely on the Government survey undertaken to discover the causes of social unrest, particularly among the lower classes, during the revolution of 1848. Few raw data are given in the book. The author says that in Seine-Inferieure 110,000 factory workers received 17,000,000 francs a year; that 40,000 tradesmen received 23,000,000 francs a year; and that 70,000 rural laborers received 6,000,000 francs a year. In Bordeaux 10,000,000 artisans (masons, bricklayers, builders, etc.) received a uniform salary of from 3 to 3.5 francs a day. The account of an industrial laborer of Lille is also given. His weekly income was 12 francs; his wife earned 3 to 3.5 francs, and the expenditures for food and lodging were 12.8 francs a week.

SAINT-LÉGER, A. DE, and PÉLISSON.

(618)

TISSERAND DE MAMERS (MAINE). OUVRIER-TÂCHERON DANS LE SYSTÈME  
DES ENGAGEMENTS MOMENTANÉS AVEC UN PRÉCIS DE LA MONOGRAPHIE  
AYANT POUR OBJET LE TISSERAND DES VOSGES, D'APRÈS LES RENSEIGNEMENTS  
RECUEILLIS SUR LES LIEUX DE 1848 À 1850. In *Le Play, F., Les  
Ouvriers Européens*, ed. 2, v. 6, pp. 193-256. Paris. 1878.

This monograph describes a study made in 1848-50 of a family in a disorganized social structure, where industry was not allied with agricultural labor. For 30 years the population had been on the increase, while the means of work remained stationary or diminished. The family consisted of the husband (36), his wife (33), 3 sons (12, 9, and 4), and a daughter (7). The children attended school. Their health was poor, and the family was in an habitual state of misery and degradation. Free medical service was provided. The family was more or less dependent on charity. Recreations were noncommercialized. Property consisted of 45 francs in working equipment, and 402 francs in furniture and clothing. Income was 544 francs of which 482 francs was in money. Property contributed 2 francs income; subventions, 77 francs; labor, 461 francs; and industries, 4 francs. Food cost 370 francs; household, 88 francs; clothing, 56 francs; moral, recreative, and health needs, 13 francs; and all else, 17 francs, there being no savings. Notes are given on disorganization in the households and collective manufacturing in Mamers; the abuse of competition; a summary of a

monograph on a weaver of the Vosges Mountains, which is introduced here to show the influence of credit at the stores upon the imprudence of the workers, and which may also be found in *Les Ouvriers des Deux Mondes* (1) 4: 363-404; on a factory for colored fabrics at Sainte-Maine-aux-Mines (Alsace); inconveniences attached to issuing "livrets"; the law guaranteeing the reimbursement of advances made by the patrons; the urban workers at Mulhouse (Haut-Rhin); and the mutual-aid societies in France.

COCHIN, A., LANDSBERG, E., and LE PLAY, F. (619)

CHIFFONNIER DE PARIS. OUVRIER-CHEF DE MÉTIER DANS LE SYSTÈME DU TRAVAIL SANS ENGAGEMENTS, AVEC UN PRÉCIS DE LA MONOGRAPHIE AYANT POUR OBJET LA LINGÈRE DE LILLE, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN 1849 ET EN 1851. *In Les Ouvriers Européens*, ed. 2, v. 6, pp. 257-326. Paris. 1878.

This study, made in 1849 and 1851, shows a family in a disorganized social structure. The family lived near the merchants who bought the collected junk, as did 4,000 similar junkmen in Paris. The household consisted of the husband (47), his wife (42), and a daughter (8). The husband was educated, honest, very religious, and loved to read the Bible aloud. The parents were devoted, and fond of their child. The husband and child were healthy, the wife was sickly and received free medical services. High religious, moral, and intellectual qualities did not seem to be exceptional among the workers in Paris. Recreations were noncommercialized. Well-being lay in high moral character, assistance of the St. Vincent-de-Paul Society and a mutual-aid society. The head was in a society where the symptoms instead of the cause of social disorganization were treated. Property consisted of 3 francs in working equipment, and 429 francs in furniture and clothing. Income was 970 francs, of which 711 francs was in money. Subventions contributed 174 francs and labor 795 francs. Food cost 460 francs; household, 177 francs; clothing, 185 francs; moral, recreative, and health needs, 147 francs; and all else, 2 francs; with nothing left for savings. Notes are given on the life of Paris junkmen and the elements in it of social disorganization; the mores of the settled and immigrant workers in Paris; the working class at Lille; influence of Belgian immigration on the salaries of these workers; "Broquelet"; various laws on seduction; and a summary concerning a laundress in Lille, showing a demoralized family, which is also found in *Les Ouvriers des Deux Mondes* (1) 3: 247-284. 1861.

LANDSBERG, E. (620)

MINEUR DES FILONS ARGENTIFÈRE DE PONTGIBAUD (AUVERGNE). OUVRIER-PROPRIÉTAIRE ET TÂCHERON DANS LE SYSTÈME DES ENGAGEMENTS MOMENTANÉS, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN 1850. *In Le Play, F., Les Ouvriers Européens*, ed. 2, v. 5, pp. 150-191. Paris. 1878.

This is a study showing the influence of property division upon the social structure, through its destruction of the *famille-souche*. In this case, however, the laws had been set aside by the local regulations of the mining company. The worker owned his home and produced some of his garden food. At the time of the study, in 1850, the household consisted of the head (32), his wife (30), 3 sons (10, 8, 5), and a daughter (4). Morals and health conditions were good. Sickness was usually due to malnutrition. The eldest son cared for geese for several farmers. There were no formal recreations. Well-being was protected by early savings which the parents expected to resume when the children were no longer a burden. The mine owners were beginning to make some provision for the moral and intellectual development of the people. Property consisted of dwelling and land valued at 1,250 francs, animals at 12 francs, tools at 5 francs, and furniture and clothing at 584 francs. Income was 718 francs, of which 523 francs was in money. Property contributed 63 francs; subventions, 25 francs; labor, 553 francs; and industries, 76 francs. Food cost 436 francs; household, 107 francs; clothing, 148 francs; moral, recreative, and health needs, 19 francs; and all else, 8 francs; there were no savings. Notes are given on the causes of social disorganization in Basse-Auvergne, difficulties encountered in working the French metal mines, the advantages of free emigration and working of the mines, and the ancient family communities of rural Auvergne.



LANDSBERG, E.

(621)

MAÎTRE-BLANCHISSEUR DE CLICHY (BANLIEUE DE PARIS). OUVRIER CHEF DE MÉTIER ET PROPRIÉTAIRE DANS LE SYSTÈME DU TRAVAIL SANS ENGAGEMENTS, AVEC UN PRÉCIS DE LA MONOGRAPHIE AYANT POUR OBJET LE MARÉCHAL-FERRANT DU MAINE, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN 1852. *In* Le Play, F., *Les Ouvriers Européens*, ed. 2, v. 5, pp. 372-423. Paris. 1878.

This study illustrates the social disorganization produced by the mobility and economic change of the nineteenth century. This laundryman served about 20 families. His household in 1852, when the study was made, consisted of himself (40), his wife (40), two daughters (16 and 13), and a domestic laborer (15). Their morals and health were excellent. The worker cultivated a garden. Recreations were few. Their well-being rested on personal habits of industry and saving. Property consisted of animals valued at 32 francs, money 16,000 francs, tools valued at 802 francs, working capital at 500 francs, and furniture and clothing at 3,389 francs. The 16,000 francs was to be used to buy a farm. Income was 4,958 francs, of which 4,792 francs was in money. Property accounted for 702 francs; labor, 3,982 francs; and industries, 274 francs. Food cost 1,772 francs; household, 138 francs; clothing, 477 francs; moral, recreative, and health needs, 246 francs; and all else 247 francs. Savings were 2,076 francs.

Notes are given on the causes of social disorganization in Paris; the work done by launderers; morals of small property owners; the integral transmission of property and clientele of market gardeners, dairymen, and washermen; the operations of a mutual insurance society near Clichy; the good morals among rural workers; the vices developed among money lenders, peddlers, and tavern keepers; and a summary of a monograph of a farrier of Maine, which is introduced to show the substitution of property values for religious and social constraints as productive drives.

The farrier was a landowning taskmaster, with one apprentice, in a system of work without engagements. The household consisted of the farrier (37), his wife (33), 4 children (11, 7 and 4 years, and 6 months), and a domestic (20). Morals were good, and there was a strong saving tendency. Health was excellent. The family all helped to care for the household, garden, and animals. The forge was in the house. Recreations were unimportant. Their house was valued at 1,450 francs, orchard at 350 francs, garden at 1,100 francs, money 250 francs, animals valued at 29 francs, working equipment at 818 francs, furniture and clothing at 775 francs. Property accounted for 172 francs income; subventions, 1 franc; labor, 1,041 francs; and industries, 374 francs. Food cost 707 francs; household, 153 francs; clothing, 173 francs; moral, recreative, and health needs, 67 francs; and all else, 178 francs; 310 francs were saved. Their existence depended on their work, sobriety, and economy. Historical summary is given of the boys from birth to adulthood.

AVALLE, E., and FOCILLON, A.

(622)

CARRIER DES ENVIRONS DE PARIS (SEINE). JOURNALIER DANS LE SYSTÈME DES ENGAGEMENTS MOMENTANÉS D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN AOÛT ET SEPTEMBRE 1856. *Les Ouvriers des Deux Mondes* (1) 2: 63-104. 1858.

This study, made in 1856, deals with a day laborer who lived 8 kilometers southwest of Paris, where people either worked in the quarries or did gardening. The family consisted of the laborer (33), his wife (33), a prenuptial son (5), two legitimate sons (4 and 1), and a legitimate daughter (2). He helped support his wife's father and mother, who lived in the same village. They were apparently industrious and honest, although saving but little money. The parents were illiterate. Health was good. The worker was a straw boss in the quarry, having worked 12 years for one employer. Recreations consisted of drinking, visiting, and feast-day celebrations. There were few guarantees of well-being, and accidents were frequent in the quarry. Property consisted of furniture and clothing valued at 623 francs, and working equipment at 4 francs. The income was 1,986 francs, of which 1,825 francs was in money (this was from labor). The garden produced 18 francs of food. The worker was allowed 251 francs extra for supervision of the work. Food cost 1,291 francs; the household, 212 francs; clothing, 323 francs; moral, recreative, and health needs, 108 francs; and all else, 52 francs; there being nothing left for savings. Notes discuss the quarrying industry around Paris and the mutual-aid societies among the quarrymen.

FOCILLON, A.

(623)

TAILLEUR D'HABITS DE PARIS (SEINE—FRANCE). TÂCHERON DANS LE SYSTÈME DES ENGAGEMENTS MOMENTANÉS ET CHEF D'INDUSTRIE D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN AOÛT ET SEPTEMBRE 1856. *Les Ouvriers des Deux Mondes* (1)2: 145-192. 1858. [Reprinted in *Le Play, F., Les Ouvriers Européens*, ed. 2, v. 6, pp. 387-441. Paris. 1878.]

This monograph is reprinted in *Les Ouvriers Européens* to show a family in a disorganized social structure, a complete antithesis of those in eastern Europe. It typified more than 2,000 owners of small clothing shops in Paris. This tailor had an assistant who was also his common-law wife. In 1856, the time of the study, the family consisted of himself (40), his wife (31), and 2 sons (3 and 2). Two others had died. The worker looked on religious institutions as chains for the workers; he was immoral, dissolute, and always in debt. Family health was fair; they received a little free medical care. The husband was an excellent craftsman, but his impecunious habits kept him from rising. Cheaper garments from the sweatshops had also cut into the industry. The worker's chief forms of recreation, aside from short walks with his family, were connected with dissipation—such as cheap public dances, the frequenting of houses of prostitution, and as a paid applauder at cheap theaters. The only guarantee of well-being was the physical impulse for survival. Property consisted of 31 francs in tools, and 717 francs in furniture and clothing. Income was 3,346 francs, of which 3,271 francs was in money, most of which came from his tailoring business. Food cost 1,819 francs; household, 315 francs; clothing, 368 francs; moral, recreative, and health needs, 828 francs; and all else, 17 francs; there were no savings. Notes are given on economic organization and demoralization of Paris tailors, and on certain cabaret practices.

LE PLAY, F., and FOCILLON, A.

(624)

CHARPENTIER DE PARIS (SEINE—FRANCE) DE LA CORPORATION DES COMPAGNONS DU DEVOIR. JOURNALIER DANS LE SYSTÈME DES ENGAGEMENTS MOMENTANÉS D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN AVRIL ET MAI 1856. *Les Ouvriers des Deux Mondes* (1)1: 27-68. 1857. [Reprinted in *Les Ouvriers Européens*, ed. 2, v. 5, pp. 278-424. Paris. 1878.]

The following is taken chiefly from the reprint. It illustrates the social disorganization arising from the economic change and mobility in nineteenth-century Europe and shows how labor organizations of the old semiguild type preserved some families from absolute disruption. The household at the time that this study was made, in 1856, consisted of the head (41), his wife (42), son (12), and daughter (7). The worker had been an overseer for some years; the wife sewed for several people; the children attended public school. Health was fair. Recreations consisted of walks, yearly trips to the theater, visits, and occasional drinking festivals. Having little foresight or desire to save, they lacked assurance for the future. Property consisted of money and tools valued at 221 francs, and furniture and clothing at 1,870 francs. Income was 2,104 francs, of which 1,835 francs was in money. Property was credited with 10 francs income; subventions, 169 francs; labor, 1,718 francs; and industries, 207 francs. Food cost 1,335 francs; household, 275 francs; clothing, 324 francs; moral, recreative, and health needs, 153 francs; and all else, 16 francs. Notes are given on the social mores, ceremonies, and trade practices of Paris carpenters; the society of mutual aid of the Agrichons; the strike of the Paris carpenters in 1845; the organization of labor in the carpenter shops; a legacy of the above described family; the salads in the diet of Parisian workers; and the concierge authority on the apartment houses of Paris.

HEBERT, E. F., and DELBET, E.

(625)

TISSEUR EN CHÂLES DE LA FABRIQUE URBAINE COLLECTIVE DE PARIS (SEINE—FRANCE). TÂCHERON CHEF D'ATELIER DANS LE SYSTÈME DES ENGAGEMENTS VOLONTAIRES PERMANENTS D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX DE JANVIER À MARS 1857. *Les Ouvriers des Deux Mondes* (1) 1: 299-372. 1857.

The weavers of shawls were either attached directly to the merchant or worked in groups under leaders called "chefs de métier". These leaders carried out the business arrangements, furnished work for the laborers, and received one-third of the pay for weaving. The master dealt with in this study had four weavers



under him and also worked himself. His family at the time of this study in 1857 consisted of himself (40), his wife (35), 2 daughters (8 and 6), and 2 sons (10 and 4). The children had poor health because of the humidity; they resorted to the local hospital and used scientific medicines. Their well-being depended on savings and friendly relations with the head of the industry. The property consisted of 4,069 francs in working equipment, and 1,426 francs in furniture and clothing. Income was 2,208 francs, of which 2,075 francs was in money. Property contributed 204 francs income; subventions, 459 francs; salaries, 1,150 francs; and industries, 765 francs. Food cost 1,263 francs; household, 161 francs; clothing, 482 francs; moral, recreative, and health needs, 134 francs; all else, 29 francs. Savings were 138 francs. Notes are given on the shawl-weaving industry in Paris: its history, its industrial processes, its tariff, condition of workers, employer-employee relations, organization of labor, and mutual assistance.

LE PLAY, F.

(626)

FERBLANTIER COUVREUR ET VITRIER D'AIX-LES-BAINS (SAVOIE—ÉTATS SARDES). OUVRIER CHEF DE MÉTIER ET SUBSIDIAIREMENT JOURNALIER, TÂCHERON ET OUVRIER TENANCIER DANS LE SYSTÈME DU TRAVAIL SANS ENGAGEMENTS D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN AOÛT 1857. *Les Ouvriers des Deux Mondes* (1) 2: 9-62. 1858. [Reprinted in *Les Ouvriers Européens*, ed 2, v. 4, pp. 183-246. Paris. 1877.]

This study was reprinted in *Les Ouvriers Européens* to show a stable industrial family of western Europe living amid social disorganization. It consisted of typical working people in a small but growing industrial city. The worker had a small shop run by his wife, in which he sold small objects of metal or glass made by himself or purchased for sale. In 1857 when the study was made the family consisted of himself (32), his wife (28), and 2 sons (5 and 4). They had almost no important relationships with past generations or collateral branches. They were fairly industrious, and slightly antagonistic to more successful upper classes—a sentiment which, according to the Le Play school, is symptomatic of the enfeeblement of the social constitutions. Family health was fair; free medical service was often secured. The family belonged to a mutual-aid society. Visiting was the main recreation. Well-being was protected by their own industry and moral qualities. Property consisted of money 4,938 francs, merchandise and tools valued at 1,385 francs, and furniture and clothing at 1,807 francs. Income was 1,820 francs, of which 1,482 francs was in money. Property contributed 316 francs income; subventions, 201 francs; labor, 936 francs; and industries, 366 francs. Food cost 700 francs; household, 248 francs; clothing, 350 francs; moral, recreative, and health needs, 85 francs; and all else, 76 francs, 357 francs being saved. Notes are given on the antagonism between the social classes in Savoie, methods of inheriting property there, their mutual-aid societies, and the bird-catching industry at Aix-Les-Bains.

AUVRAY, L.

(627)

LINGÈRE DE LILLE (NORD—FRANCE). OUVRIER-TÂCHERON DANS LE SYSTÈME DU TRAVAIL SANS ENGAGEMENTS D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN JUILLET 1858. *Les Ouvriers des Deux Mondes* (1) 3: 247-284. 1861.

The subject of this study had been seduced by a locksmith and had a son 7 years old, at the time of the study in 1858. She was 39, intelligent, and devoted to the child. She read some but could not write. Both she and the child lacked energy, were in poor health, and undernourished. They lived in a poor section and had no future prospects. She would not marry on account of the child. There was no guarantee for her well-being except her own labor and initiative. Poverty forbade recreative expense. Property consisted of 1 franc for working materials and 177 francs in clothing and furniture. Income was 603 francs, of which 388 francs was in money. Subventions contributed 152 francs, labor 451 francs. Food cost 311 francs; household, 127 francs; clothing, 87 francs; moral, recreative, and health needs, 72 francs; all else, 6 francs, there being no savings. Notes deal with working conditions in Lille, the Belgian influence on salaries, the seduction of female workers, seduction laws, drinking, and local festivals.

AVALLE, E.

(628)

PORTEUR D'EAU DE PARIS (SEINE—FRANCE). OUVRIER CHEF DE MÉTIER DANS LE SYSTÈME DU TRAVAIL SANS ENGAGEMENTS D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN AVRIL 1858. *Les Ouvriers des Deux Mondes* (1) 2: 321-362. 1858.

This monograph describes rural migrants who had lost their traditional beliefs and practices and regarded these earlier traditions as youthful fantasies. The worker was, like most Parisian carriers, a migrant from Auvergne. In 1858, when the study was made, the family consisted of himself (46), a wife (34), 2 sons (12 and 2), and a daughter (5). Two other children had died. The man was honest, laborious, sober, and thrifty. The parents were illiterate; the children went to school. There was little medical aid. The worker had once been a small retail merchant of coal and wood but lost his money and returned to water carrying. All recreation was taken as a family unit and was noncommercialized. They belonged to no mutual insurance societies, but the local water carriers helped each other informally. The chief guarantees of well-being were good health and individual moral qualities. Property consisted of 1,800 francs, 67 francs in working equipment and 769 francs in furniture and clothing. The income was 1,961 francs, of which 1,858 francs was in money. Property contributed 123 francs; subventions, 141 francs; labor, 1,411 francs; and industries, 290 francs. Food cost 1,158 francs; the household, 298 francs; clothing, 259 francs; and moral, recreative, and health needs, 80 francs. Savings were 163 francs. Notes deal with water carrying; the mores, agricultural organization, and characteristics of immigrants from the mountains of Auvergne, and inheritance laws there.

CHALE, T.

(629)

DÉBARDEUR ET PIOCHEUR DE CRAIE DE LA BANLIEUE DE PARIS (SEINE—FRANCE). JOURNALIER DANS LE SYSTÈME DES ENGAGEMENTS MOMENTANÉS D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN NOVEMBRE ET DÉCEMBRE 1858. *Les Ouvriers des Deux Mondes* (1) 2: 447-488. 1858. [Reprinted in *Le Play, F., Les Ouvriers Européens*, ed. 2, v. 6, pp. 442-492. Paris. 1858.]

This is a study of a family in a disorganized social structure. The laborer unloaded boats, dug in the chalk quarry, and did some gardening. At the time of the study in 1858 the family consisted of the husband (40), his wife (30), 4 daughters (14, 10½, 9, and 4), and a son (7). Two others had died. The husband's excessive drinking and the number of children had drained family finances. Health was good. Recreations included drinking, visiting, and occasionally the theater. Well-being depended on the wife's thriftiness, later contributions from the children, and help from charitable institutions. Property consisted of 400 francs in an unsettled estate, 26 francs in working equipment, and 1,125 francs in furniture and clothing. Income was 1,842 francs, of which 1,556 francs was in money. Property contributed 1 franc; subventions, 73 francs; labor, 1,688 francs. Food cost 1,182 francs; household, 116 francs; clothing, 467 francs; moral, recreative, and health needs, 46 francs; all else, 24 francs, there being no savings. Notes are given on social disorganization in Paris and nearby, and the symptoms of approaching change; the indifference to religion; deprivation of the mores and its effect on work; the obtaining of necessary commodities at Port-Marly; the influence of certain economic theories (*laissez-faire*) on employer-employee relations; fecundity as a form of saving for poor families; mores of the immigrant workers; and changes in the mores which would reintroduce the good influences of religion and patronage among the Parisian workmen. This analysis follows the interpretation in *Les Ouvriers Européens*.

ROBERT, C.

(630)

DÉCAPEUR D'OUTILS EN ACIER DE LA FABRIQUE D'HÉRIMONCOURT (DOUBS—FRANCE). JOURNALIER-PROPRIÉTAIRE DANS LE SYSTÈME DES ENGAGEMENTS VOLONTAIRES PERMANENTS, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN AOÛT ET SEPTEMBRE 1858. *Les Ouvriers des Deux Mondes* (1) 2: 233-284. 1858

The workman dealt with in this study had been with the same firm for 30 years and was a sort of pensioner working part time. His duties consisted of polishing tools near sulphuric acid baths. He was exceedingly competent and faithful.



When the study was made in 1858 his family consisted of himself (72), his wife (64), and a son (23) who boarded with them. They were temperate and honest. Health conditions were good except for the contact with the sulphuric acid. They paid 19.11 francs annually to a society which guaranteed them free medical aid. His being an old soldier and of good repute gave him a social position above the rank of unskilled laborer. Recreations were noncommercialized. Well-being rested on the energy and thriftiness of the worker, the mutual aid society at the factory, good employer-employee relations, and a public and religious charitable society. Property consisted of 3,000 francs in home and garden, 122 francs in working equipment, and 566 francs in furniture and clothing. Income was 1,461 francs, of which 944 francs was in money. Property accounted for 146 francs; subventions, 88 francs; labor, 974 francs; and industries, 252 francs. Food cost 785 francs; household, 183 francs; clothing, 111 francs; moral, recreative, and health needs, 50 francs; and all else, 61 francs. Savings were 271 francs. Notes are given on the combination of industrial labor and rural proprietorship; the extreme subdivision of landed property and the principle of inheritance; the permanence of employment, the society for mutual insurance, the savings bank, and the industrial accidents at the factory; the current high rents; gratuities; methods used to keep down the cost of food; and the influence of cabarets upon the morals of the workers.

ROBERT, C.

(631)

MONTEUR D'OUTILS EN ACIER DE LA FABRIQUE D'HÉRIMONCOURT (DOUBS—FRANCE). TÂCHERON CHEF D'INDUSTRIE DANS LE SYSTÈME DES ENGAGEMENTS VOLONTAIRES PERMANENTS, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN AOÛT ET SEPTEMBRE 1858. *Les Ouvriers des Deux Mondes* (1) 2: 285-320. 1858.

The man with whom this study deals was manager of an assembly room having four pieceworkers; his pay depended upon the amount done by these four. In 1858 when the study was made, the family consisted of the husband (30), his wife (30), and daughter (3½). In this district sex relations were customary before marriage. In case of pregnancy, the couple generally married, so there were few illegitimate children. Health conditions were good, and payment of 16.38 francs a year guaranteed the man medical treatment. His wife helped in the piecework. Recreations consisted of family and village festivities and drinking. Well-being was protected by good character, family life, excellent employer-employee relations, and mutual aid societies. Property consisted of 736 francs in money and working equipment and 1,217 francs in furniture and clothing. Income was 1,516 francs, of which 1,284 francs was in money. Property accounted for 7 francs; subventions, 47 francs; labor, 1,020 francs; and industries, 442 francs. Food cost 643 francs; household, 228 francs; clothing, 279 francs; moral, recreative, and health needs, 108 francs; and all else, 5 francs. Savings were 252 francs. Notes are given on elementary education, the free library established by the factory owners, and the religious society which cares for indigent children. This study should be read in connection with one by the same author entitled, "Décapeur d'outils en acier de la fabrique d'Hérimoncourt", in *Les Ouvriers des Deux Mondes* (1) 2: 233-284. 1858.

COCHIN, AUGUSTIN

(632)

BRODEUSES DES VOSGES (VOSGES—FRANCE). TÂCHERON DANS LE SYSTÈME DES ENGAGEMENTS MOMENTANÉS D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN SEPTEMBRE 1859. *Les Ouvriers des Deux Mondes* (1) 3: 25-66. 1861.

The family of this study made in 1859, lived where there were four main types of work: (1) In the quarry; (2) at the forges; (3) connected with the bathing season in the mineral waters; and (4) embroiderin. The household consisted of the husband (58), his wife (53), 2 sons (23 and 10), 3 daughters (21, 17, and 14), and the husband's sister (47). Two other children were dead, and a daughter 28 years old was married. The husband worked in the quarries, was a drunkard, lazy, and inclined to evil. The wife was laborious and long-suffering. The father and older son could read and write. There was a convent in the mountains, but it was very inaccessible for the children's education. The daughters began embroidering when 10 years old. With more intelligence and thrift, this family could have been one of the richest in the district. Recreations consisted of smoking, drinking, and village and church festivities. Well-being was protected by the combination of agriculture and industry, home ownership, and the dominance of the moral habits which maintained a simple standard of living. Property consisted of house, barn, and garden and field valued at 800 francs, animals at 150

frances, working equipment at 29 francs, and furniture and clothing at 499 francs. The home was being bought on the installment plan and 400 francs were still to be paid. Income was 2,039 francs, of which 1,675 francs was in money. Property contributed 49 francs; subventions, 41 francs; labor, 1,793 francs; and industries, 156 francs. Food cost 1,378 francs; household, 164 francs; clothing, 259 francs; moral, recreative, and health needs, 48 francs; and all else, 49 francs. Forty-one francs were saved. Notes are given on the origin, current state, organization, advantages, inconveniences, and improvements in the embroidery industry; the small landowner and the common property of Plombières; and an institution assuring patronage to the lace makers at Cevennes, which was lacking at Vosges.

FOCILLON, A. (633)

PAYSAN-SAVONNIER DE LA BASSE-PROVENCE. PROPRIÉTAIRE ET JOURNALIER DANS LE SYSTÈME DES ENGAGEMENTS VOLONTAIRES PERMANENTS D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN FÉVRIER 1859. Les Ouvriers des Deux Mondes (1) 3: 67-144. 1861. [Reprinted in *Le Play, F., Les Ouvriers Européens*, ed. 2, v. 4, pp. 390-444. Paris. 1877.]

This is a study, made in 1859, of a stable industrial family combining industry and agriculture, who lived amid the social disorganization of western Europe. The head was a foreman in a soap factory at Marseilles. His family cultivated 6 hectares of land. The household consisted of the father (51), his wife (48), 4 daughters (25, 17, 9, and 3), and 2 sons (14 and 7). Two other children were away from home. The family were economical, but did not begrudge necessary expenditures. Paternal authority was strong; and employer-employee relations were good, as were morals and health. The worker sold wine to the other workers in the factory. The wife superintended the cultivation, the eldest daughter was a milliner, the older son did agricultural work, and the youngest children were in school. Recreations were noncommercialized. Family well-being was based on strong moral habits, economy, the combination of agriculture and industry, and local systems for keeping land undivided. Property consisted of dwelling, land, animals, tools, and money valued at 24,661 francs and furniture and clothing at 3,420 francs. Income was 4,541 francs, of which 3,625 francs was in money. Property accounted for 450 francs income; subventions, 114 francs; labor, 2,412 francs; and industries, 1,562 francs. Food cost 1,849 francs; household, 324 francs; clothing, 411 francs; moral, recreative and health needs, 108 francs; and taxes, 28 francs. Savings were 1,821 francs. Notes are given on the alliance of agriculture and manufacturing, the system of cultivation, the ancient municipal institutions, the early land regime, the consequences of the new regime of inheritance, and the organization of mutual assistance.

REYBAUD, LOUIS (634)

ÉTUDES SUR LE RÉGIME DES MANUFACTURES. CONDITIONS DES OUVRIERS EN SOIE. 393 pp. Paris. 1859.

The purpose of this study was to examine the moral, intellectual, and material condition of silk workers both in the cities and in the country. Conditions were investigated in Germany, Switzerland, and France. Data were collected by personal interviews with manufacturers and workers. Although the period to which such data apply is not stated, it probably closely preceded 1859, the date when the work was published. The author says (p. 35) that for expenditure as well as income all is approximation. He adds that he is certain he dealt with strictly honest people who were very well informed. He concludes that in the countries investigated wages of the worker were just adequate for the most urgent necessities of life. Silk districts of the three countries were considered separately, conditions presented in a general way, and wages given. In Switzerland the state, and in Lyons the factory, watched over the education of the young workers. Expenses, reckoned per individual, are given for families in Lyons. Except for these, which are very general, no data except wages are given.

COURTEILLE, and GAUTIER, J. (635)

MANŒUVRE À FAMILLE NOMBREUSE DE PARIS. OUVRIER-JOURNALIER DANS LE SYSTÈME DES ENGAGEMENTS MOMENTANÉS AVEC UN PRÉCIS DE LA MONOGRAPHIE AYANT POUR OBJET L'Auvergnat-Brocanteur (en Bou-tique) de Paris, d'après les renseignements recueillis sur les lieux en juillet et août 1860. Les Ouvriers des Deux Mondes (1) 3: 373-412. 1861.

This study, made in 1860, deals with a family which was disorganized and lacked foresight. Residence was in a cheap tenement of 65 households where rent averaged 200 francs. The head smuggled food into the city without paying taxes



and ate all meals at home. The family consisted of the husband (59), his wife (43), 4 sons (17½, 13, 7½, and 6), 4 daughters (16, 14, 9½, and 3), and the wife's mother (75). There were 7 other children (27, 25, 23, 20, 19, 11½, and 10½) not at home, 4 others dead, and the mother was again pregnant. Two of the children contributed to the family income. High fecundity was characteristic of their native land (Alsace) and encouraged by their religion and their moral habits. They were loyal and affectionate to each other. Recreations were noncommercialized. This worker started out as a soldier, became a successful butcher, married, lost all by fire, and at the time of the study was a coal man whose earnings were supplemented by public charity. Future well-being depended on their high morals, their industry, and the number of children. They belonged to no mutual-aid societies. Property consisted of 1,460 francs in furniture and clothing. The income was 2,469 francs, 1,994 francs of which was in money. Subventions contributed 732 francs and labor 1,738 francs. Food cost 1,348 francs; household, 369 francs; clothing, 460 francs; moral, recreative, and health needs, 283 francs; and all else, 9 francs, there being no savings. Notes are given on the disorganization of the family; the fecundity of some Parisian workmen; the foundations for Parisian poor families with many children; the improvidence and lack of foresight of this family; and a summary of a monograph about a second-hand dealer of Paris, also found in *Les Ouvriers des Deux Mondes* (1) 4: 283-330. 1862.

BADIER, A. F.

(636)

COMPOSITEUR-TYPOGRAPHE DE PARIS (SEINE—FRANCE). OUVRIER-TÂCHERON DANS LE SYSTÈME DES ENGAGEMENTS MOMENTANÉS D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN JUIN 1861. *Les Ouvriers des Deux Mondes* (1) 4: 241-282. 1862.

The subject of this study had been in the same printing shop for 34 years. At the time when the study was made in 1861, the family consisted of the head (55), his wife (44), daughter (7), and son (4). Another daughter (25) was married, and 5 others were dead. The worker was charitable, economical, and a moderate drinker. He knew Latin, Greek, and the classics, but his wife was illiterate. Health conditions were excellent. The principal recreations were walking and family gatherings. The well-being of the family was based on a desire to save, and the prospects of a pension, help from the children, and some day an inheritance from an aunt. The worker had always saved but ran into tremendous expenses. He belonged to three mutual-insurance companies. Property consisted of 3,662 francs in money, 68 francs in working equipment, and 2,443 francs in furniture and clothing. Income was 1,751 francs, of which 1,419 francs was in money. Property contributed 205 francs; subventions, 162 francs; labor, 1,316 francs; and industries, 68 francs. Food cost 762 francs; household, 352 francs; clothing, 332 francs; moral, recreative, and health needs, 251 francs; and all else 53 francs, there being no savings. Notes are added on Parisian typography; the organization of work, character of workers, festivals, and mutual-aid societies.

GAUTIER, F.

(637)

AUVERGNAT BROCANTEUR EN BOUTIQUE À PARIS (SEINE—FRANCE). OUVRIER CHEF DE MÉTIER PROPRIÉTAIRE DANS LE SYSTÈME DU TRAVAIL SANS ENGAGEMENTS D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN MAI 1861. *Les Ouvriers des Deux Mondes* (1) 4: 283-330. 1862.

This study, made in 1861, deals with a business among poor people in Paris and throws light on social mobility. The family consisted of the husband (59), his wife (55), and her sister (38). A son (34) and daughter (26) were married. This particular man had risen high in his profession from a humble beginning, starting his children successfully with 5,000 francs each. He could read and write. The second-hand dealers formed a distinct class in Paris and did not mix with others. Family health was excellent. Recreations were noncommercialized. Well-being was protected by economical habits and self-dependence. Property consisted of house and shop valued at 60,000 francs, money 1,500 francs, merchandise valued at 18,500 francs, working equipment at 219 francs, and furniture and clothing at 5,187 francs. Income was 10,765 francs, of which 9,950 francs was in money. Property contributed 6,061 francs; subventions, 60 francs; labor, 2,538 francs; and industries, 2,107 francs. Food cost 1,620 francs; household, 1,296 francs; clothing, 758 francs; moral, recreative, and health needs, 684 francs; and all else, 244 francs, 6,163 francs being saved. Notes are given on the second-hand industry and its workers, the history and description of the temple market in Paris, the emigration habits of Auvergne second-hand dealers, the

improved products in this industry, the use of children by the master chimney sweepers, and the police regulations of the second-hand dealers.

VALLIN, CHARLES

(638)

PRÉCIS D'UNE MONOGRAPHIE D'UN PÊCHEUR CÔTIER, MAÎTRE DE BARQUE, D'ÉTRETAT (SEINE-INFÉRIEURE). OUVRIER-PROPRIÉTAIRE ET CHEF DE MÉTIER DANS LE SYSTÈME DU TRAVAIL SANS ENGAGEMENTS (1861). Les Ouvriers des Deux Mondes (2) 2: 153-172. 1890.

This study, made in 1861, illustrates the social stability of the occupational group concerned, which was almost devoid of marks of social stratification. The household consisted of the head (47), his wife (48), 4 sons (26, 19, 13, and 9), and 3 daughters (23, 20, and 17). The parents were uneducated, but the children had attended school. Morals were good, and health conditions were excellent. The father mended his nets and equipment when on land. The wife often assisted with the boats. The oldest son went to sea for 9 months in the year, the next two worked with their father, and the youngest was still in school. The eldest daughter helped with the housework, the second did outside laundry work, and the third was a weaver. Recreations comprised religious feasts and fishing festivals. A pension and a financial interest in the boat would support the couple in their old age. Property consisted of dwelling, money, tools, and boat valued at 5,105 francs, and furniture and clothing at 1,611 francs. Income was 2,985 francs. Property accounted for 440 francs; subventions, 25 francs; labor, 1,950 francs; and industries, 570 francs. Food cost 1,400 francs; household, 225 francs; clothing, 255 francs; moral, recreative, and health needs, 330 francs; and all else, 455 francs. Savings were 300 francs. Notes give some details of social organization. Many details ordinarily given in Le Play case studies are missing.

GOGUEL, L.

(639)

TISSERAND DES VOSGES (HAUT-RHIN, FRANCE). OUVRIER TÂCHERON DANS LE SYSTÈME DES ENGAGEMENTS MOMENTANÉS D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN MAI 1862. Les Ouvriers des Deux Mondes (1) 4: 363-404. 1862.

The subject of this study, which was made in 1862, lived in the city of Sainte-Marie-aux-Mines. The principal industry was weaving. The family consisted of the weaver (44), his wife (48), 2 sons (19 and 17), and 2 daughters (10 and 6). An older daughter (20) was a domestic away from home. Two others had died. A poor and invalid worker boarded with them. The children went to school until 14. Family health was good. The weaver, who had worked for the same firm 25 years, was greatly respected. Recreations were noncommercialized. Family well-being was protected by economy, hard work, the number of children, three mutual-aid and insurance societies, and the fact that this industry permitted men to work out nearly their whole span of life. Property consisted of 100 francs in money, 60 francs in working equipment, and 1,293 francs in furniture and clothing. Income was 1,913 francs, of which 1,722 francs was in money. Property contributed 30 francs; subventions, 26 francs; labor, 1,801 francs; and industries, 55 francs. Food cost 1,094 francs; household, 208 francs; clothing 410 francs; moral, recreative, and health needs, 122 francs; and all else, 24 francs. Savings amounted to 54 francs. Notes are given on the organization of this weaving factory; the social disorganization arising from the personal possession of working permits by miners; the arguments for suppressing the legal guarantee for advances made by the patrons; the agencies preserving the morals here; the mutual-aid societies and mutual organizations of France in general.

REYBAUD, LOUIS

(640)

LE COTON—SON RÉGIME—SES PROBLÈMES. 465 pp., illus. Paris. 1863.

A detailed description of living conditions among cotton workers in industrial districts of France, Switzerland, and England is given, also 10 budgets of French families living in the suburbs and the rural environs of Mulhouse in Alsace. The heads of these households, selected to represent the different divisions of labor in the cotton industry, were interviewed personally. In 1862, their approximate monthly incomes ranged from 39 to 104 francs. Four of the accounts showed a surplus, and 6 a deficit, at the end of 10 months. The income figure is incomplete, not including the wages for spare-time work, nor the proceeds from farmed land. Bread, milk, meat, and potatoes formed the basis of the diet, though very sparing quantities of meat were bought. Clothing was reduced to the strictly necessary, and the sum which remained to go to the bank or the cabaret was very small.



DUVELLEROY, M.

(641)

L'OUVRIER ÉVENTAILLISTE DE SAINTE-GENEVIÈVE (OISE—FRANCE). OUVRIER-TÂCHERON DANS LE SYSTÈME DES ENGAGEMENTS VOLONTAIRES PERMANENTS, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN NOVEMBRE 1863. Les Ouvriers des Deux Mondes (1) 5: 109-144. 1885.

Two-thirds of the inhabitants of the district made fans, each person being trained to make one detail. Payment was by the piece. Nearly all owned their houses and gardens. The people dressed well, were independent financially, and were literate. This particular family at the time of the study, in 1863, had built themselves a house, and had given another, which they inherited, to their daughter as a dowry. The household consisted of the head (65) and his wife (64). One child had died, and another was married. Morals and health were excellent. Both husband and wife made fans, and he also cultivated a garden. He was a respected citizen and a church beadle. Recreations were noncommercialized. Family well-being depended on steady work, economy, and the daughter's affection. Property consisted of a dwelling valued at 4,500 francs; land at 950 francs; money 5,025 francs; animals at 9 francs; tools at 146 francs; and furniture and clothing at 1,852 francs. Income was 1,605 francs, of which 1,197 francs was in money. Property accounted for 483 francs income; subventions, 30 francs; labor, 971 francs; and industries, 121 francs. Food cost 603 francs; household, 318 francs; clothing, 349 francs; moral, recreative, and health needs, 15 francs; and all else, 60 francs, savings being 261 francs. Notes are given on property partitioning and its physical and moral influence on the family, and on the fan-making industry.

TOYTOT, ERNEST DE

(642)

FAIENCIERS DE NEVERS (NIÈVRE). TÂCHERONS-PROPRIÉTAIRES, DANS LE SYSTÈME DES ENGAGEMENTS VOLONTAIRES PERMANENTS, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN 1864, AVEC UNE ÉTUDE COMPARATIVE SUR LA MÊME FAMILLE EN 1885. Les Ouvriers des Deux Mondes (2) 1: 177-228. 1887.

The worker in this study, made in 1864 and in 1885, was employed in the pottery industry of Nevers, where people were contented and of good character. The household consisted of the head (68), his wife (66), two sons (31 and 28), and a daughter (20), who had an illegitimate child; 4 sons and 1 daughter were away from home, and 10 others had died. This fecundity was unusual, although many workers had 6, 7, or 8 children. They were industrious and thrifty, with good morals. Health conditions were good. The father and older son were molders, and the younger a painter of designs. The daughter worked by the day as a seamstress. The mother worked about half time as a polisher. Recreations were noncommercialized. Barring unforeseen demands, family well-being was assured by their work and thrift, by the mutual-aid society to which all four potters belonged, and by the number of children. Property consisted of dwelling valued at 6,000 francs, tools at 90 francs, money 154 francs, and furniture and clothing at 1,580 francs. Income was 2,261 francs, of which 1,904 francs was in money. Property was credited with 427 francs; subventions, 10 francs; labor, 1,766 francs; and industries, 58 francs. Food cost 957 francs; household, 316 francs; clothing, 335 francs; moral, recreative, and health needs, 272 francs; and all else 228 francs. Savings were 154 francs. Notes are given on cattle raising, the history and making of pottery, the material and moral condition of the potters, and on the same family 21 years later. The 3 men were dead, and the 3 women lived with a married daughter. The eldest married son lived in much the same conditions as the father 21 years before, but with more money.

(643)

GANTIER DE GRENOBLE (ISÈRE). OUVRIER TÂCHERON DANS LE SYSTÈME DES ENGAGEMENTS MOMENTANÉS D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN AOÛT 1865, PUIS EN 1886 ET 1887. Les Ouvriers des Deux Mondes (2) 1: 465-520. 1887.

In this study, made in 1886 and 1887, and dealing with a worker who had an agricultural background and was an average earner, the household consisted of the head (30), his wife (21), and daughter (8 months). The worker drank and was lacking in foresight. Both adults made gloves. Recreations were non-commercialized. Well-being depended chiefly on a mutual-aid society. Property consisted of 2,000 francs in land, 600 francs in money, 10 francs in animals, 214 francs in tools, and 2,768 francs in furniture and clothing. Income was 1,924 francs, of which 1,762 francs was in money. Property was credited with

125 francs income; subventions, 157 francs; labor, 1,570 francs; and industries, 73 francs. Food cost 830 francs; household, 211 francs; clothing, 369 francs; moral, recreative, and health needs, 79 francs; and all else, 63 francs. Savings were 372 francs. These details are for 1865.

In 1886 the family was barely subsisting. The father had died, and the mother was still a glovemaker. The daughter was a domestic in Marseilles, and there were in addition 1 daughter (19) who was a domestic and 2 sons (16 and 10) who had attended school. Extravagance had led to hardship. The father had left his trade to establish a restaurant which did not pay and which consumed their small capital. The future of the family in 1886 depended on the children. Notes are given on agriculture and the division of property in Isère, the decreasing fecundity, the moral and economic conditions of the glove industry, the mutual insurance and cooperative society, the traditional restrictions of apprenticeship, and the recent extension of Grenoble.

GUÉRIN, URBAIN

(644)

OUVRIER CORDONNIER DE MALAKOFF (SEINE—FRANCE). TÂCHERON DANS LE SYSTÈME DES ENGAGEMENTS MOMENTANÉS, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN 1876. Les Ouvriers des Deux Mondes (1) 5: 145-200. 1885.

The shoemaker reported weekly to his employer for pay and materials. In 1876 when this study was made, the household consisted of the head (31), his wife (27), and one son (8). One infant had died. They were of good morals. Both parents were from well-to-do farms and were thrifty and contented. Health conditions were good. The man was a first-class worker but lacked proprietorial aggressiveness and initiative. The woman assisted her husband and cared for the house. Recreations were noncommercialized. Family well-being rested on steady work, property, economical habits, and strong family ties. Property consisted of a house valued at 4,000 francs, money 600 francs, tools valued at 45 francs, and furniture and clothing at 1,682 francs. Income was 2,132 francs, of which 2,095 francs was in money. Property accounted for 102 francs; subventions, 32 francs; labor, 1,876 francs; and industries, 122 francs. Food cost 1,110 francs; the household, 348 francs; clothing, 521 francs; moral, recreative, and health needs, 115 francs; and all else, 38 francs, nothing being saved. Notes are given on the village, the community, the circulation of newspapers, trade unions, the retiring fund founded by the employer, the failure of public charity, the consequences of low prices, and the isolation of the Parisian worker.

A summary of a monograph on a junkman, as arranged by E. Demolins and B. Pocquet, is attached. This junkman was formerly a leather dresser but had gone steadily down to the lower occupation. The household consisted of the father (43), his wife (40), 2 sons (17, and 18 months), and 2 daughters (12 and 9). Four children had died young. Health conditions were good. The parents were illiterate. The husband drank and caroused, and at one time had left home for 1½ months to live with a 16-year-old girl. Mother-child relationships held the family together. The older son (a bricklayer) helped support the family and protected them from the father. The mother assisted her husband in his work. There was little recreation. Working equipment was valued at 16 francs and household goods at 70 francs. There was no patronage. Public charity, which the family often received, amounted to 55 francs. Exact expenditures were not given.

PIEQUET, M. O.

(645)

L'ALIMENTATION DE L'OUVRIER AU DÉBUT DU XXE SIÈCLE. Bull. Soc. Indus. Rouen 34: 426-434, illus. 1906.

The writer's own experiences in various parts of western Europe are used to illustrate this investigation of the influence of nourishment upon the worker's personal habits and the quality of his work. The writer presents two of the budgets which he collected in the chemical plant where he worked for the Société Industrielle de Mulhouse in 1878. One printer who was head of a family, earned 2,020 francs per year, of which he spent 1,026 francs for food (bread took up about 21 percent of this and meat 23 percent). The other family, whose head was a painter, earned 1,088 francs, of which 798 francs were spent for food (of this bread took 40 percent and meat 10 percent). Each family had five members. No other primary statistical data are given. Percentage distributions are given in some detail for all expenditures and for types of food. The figures indicate that as income increased, a good part of the increase was used to improve the nourishment both quantitatively and qualitatively.



REVIER, VICOMTE JACQUES DE

(646)

SERRURIER-FORGERON DE PARIS (SEINE—FRANCE). JOURNALIER DANS LE SYSTÈME DES ENGAGEMENTS MOMENTANÉS, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN 1878. Les Ouvriers des Deux Mondes (1) 5: 201-259. 1885.

The worker here described was highly paid and respected by his employers but had little ambition to advance. At the time of this study in 1878 the household consisted of the worker (42), his wife (36), 3 daughters (7, 5, and 3), and 2 sons (1½, and 6 months). Their morals were good. They could read and write. Health was excellent except for one child who was under medical care outside Paris at 40 francs per month. The man worked daily, including Sundays. The woman made gaiters. Walking was the chief recreation. The only assurance of future well-being lay in honesty and industrious conduct. Property consisted of tools valued at 852 francs, and furniture and clothing at 2,096 francs. Income was 3,647 francs, of which 3,364 francs was in money. Property accounted for 43 francs; subventions, 35 francs; labor, 3,278 francs; and industries, 293 francs. Food cost 2,092 francs; household, 648 francs; clothing, 597 francs; moral, recreative, and health needs, 168 francs. Savings were 142 francs. Notes are given on infant mortality in Paris, the use of machinery in needlework, the prejudices against charity, and a summary of a monograph of a Parisian bronze worker.

The bronze worker worked daily at home adjusting, mounting, and coppering articles. The household consisted of the worker (56), his wife (47), 2 daughters (24 and 13), and 2 sons (22 and 20). Two others had died. They were of poor morals. The wife was intelligent, orderly, and economic. They often helped needy friends. The parents had some education, and the children attended religious schools. The worker was the only healthy member; he and his wife received free medical aid from a mutual-aid society. The older daughter made artificial flowers and paid 10 francs board per week; the older son was away; and the other son made holsters and gave all he earned to the family. Walking, visiting, and drinking wine constituted the recreations. Working equipment was valued at 59 francs, furniture and clothing at 2,163 francs. Property contributed 4 francs income; labor, 4,497 francs; and industries, 144 francs. Food cost 2,692 francs; household, 619 francs; clothing, 885 francs; moral, recreative, and health needs, 445 francs; and all else, 4 francs. All their savings had been spent on a consumptive daughter. In case of a reverse or prolonged sickness, their only hope was public or private charity.

ESCARD, F.

(647)

PÊCHEUR-CÔTIER, MAÎTRE DE BARQUE, DE MARTIGUES (BOUCHES-DU-RHÔNE). OUVRIER CHEF DE MÉTIER DANS LE SYSTÈME DU TRAVAIL SANS ENGAGEMENTS, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN 1879. Les Ouvriers des Deux Mondes (2) 1: 285-340. 1887.

This study, made in 1879, illustrates the stability achieved when the social hierarchy had been preserved. The household consisted of the head (51), his wife (50), 4 sons (24, 23, 14, and 10), 2 daughters (17 and 7), and the wife's sister (34). Both parents were children and grandchildren of fishermen. Paternal authority was respected, moral habits were strong, and health good. The community had an endowed hospital and several doctors. The eldest son commanded the boat with the second son, and the father worked on equal shares with another fisherman. The mother repaired the nets, the older daughter was a seamstress, and the younger children went to school. Recreations were non-commercialized. Family well-being rested on customs and institutions of foresight, private virtues, and the united family. There were three mutual-aid societies for fishermen. Property consisted of a dwelling valued at 5,500 francs, money 5,840 francs, boats and equipage valued at 6,869 francs, and furniture and clothing at 2,107 francs. Income was 8,417 francs, of which 6,934 francs was in money. Property accounted for 1,321 francs income; subventions, 185 francs; labor, 3,422 francs; and industries, 3,489 francs. Food cost 2,053 francs; household, 384 francs; clothing, 889 francs; moral, recreative, and health needs, 602 francs; and all else, 756 francs. Notes are given on historic ideas of Martigues, the society for arbitration (Prud'hommes), a form of patronage among the fishermen of the Gulf of Lyon, fish selling, and the condition of the fishers and the maritime registry.

PAVIEZ, JOSEPH

(648)

BRIGADIER DE LA GARDE RÉPUBLICAINE DE PARIS (SEINE). AGENT DE LA PAIX URBAINE, SOUS LE RÉGIME DES ENGAGEMENTS VOLONTAIRES PERMANENTS, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN 1881. *Les Ouvriers des Deux Mondes* (1) 5: 261-313. 1885.

This study concerns a member of the police force who, because he was a respected property owner, could face retirement cheerfully. In 1881 the household consisted of the head (43), his wife (29), daughter (5), and son (3½). Health conditions were fair; medical care was free. The worker could not supplement his earnings by manual labor because of the dignity of his uniform. The woman sewed for customers. Recreations were noncommercialized. Well-being was based on thrift, property, and the worker's pension. Property consisted of house and land valued at 1,800 francs, money 796 francs, tools valued at 254 francs, and furniture and clothing at 2,316 francs. Income was 3,195 francs, of which 2,654 francs was in money. Property was credited with 33 francs income; subventions, 664 francs; labor, 2,195 francs; and industries, 302 francs. Food cost 1,200 francs; household, 642 francs; clothing, 1,054 francs; moral, recreative, and health needs, 298 francs. There were no savings. Notes are given on savings of urban populations, the paternal spirit of the aimies, the feeding of an army, the difficulties of defending the capitals, the stability of the provincial police force.

A summary is given of a monograph about a Parisian bachelor municipal guard, who worked under a regime of voluntary but permanent engagements in the infantry, with a pension on retirement. His conduct was irreproachable. He had an elementary education. His health was good. With his three brothers and sisters he owned a house valued at 12,000 francs, and had saved 3,000 francs. His work was varied. Moderate drinking was his chief recreation. Property contributed 230 francs income; subventions, 74 francs; and labor, 1,318 francs. Food cost 767 francs; dwelling, 10 francs; clothing, 304 francs; and all else, 121 francs. Yearly savings amounted to 422 francs. He planned to remain single until he retired and then to return to the country and marry.

BERTHEAULT, M.

(649)

CHARRON DES FORGES ET FONDERIES DE MONTATAIRE (OISE). JOURNALIER DANS LE SYSTÈME DES ENGAGEMENTS VOLONTAIRES PERMANENTS, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN 1884. *Les Ouvriers des Deux Mondes* (2) 1: 133-176. 1887.

This study, made in 1884, deals with an unstable family strengthened by good labor relations. The household consisted of the head (42), his wife (38), 4 sons (16, 9, 6, and 4), and 2 daughters (11 and 7). The parents could read and write. Morals and health conditions were good. The worker built and repaired wheelbarrows to supplement his regular wages. The wife and children cared for the garden. The eldest son worked in the foundry. Recreations consisted of walks and reading. Well-being was protected by permanent employment, good wage relations, and additional income from secondary work. The wife was economical but lacked foresight. Property consisted of animals, tools, and money valued at 225 francs, and furniture and clothing at 863 francs. Income was 2,980 francs, of which 2,491 francs was in money. Property contributed 47 francs income; subventions, 212 francs; labor, 2,650 francs; and industries, 71 francs. Food cost 2,071 francs; household, 275 francs; clothing, 566 francs; moral, recreative, and health needs, 92 francs; and all else, 31 francs, there being no savings. Notes discuss institutions for the moral well-being of the workers, mutual aid funds, the workers' dwellings and gardens, the employers' market, the financial situation of workers, and a comparison of an early nineteenth century family budget with the above.

GUÉRIN, URBAIN

(650)

AJUSTEUR-SURVEILLANT DE L'USINE DE GUISE (AISNE.) TÂCHERON-EMPLOYÉ DANS LE SYSTÈME DES ENGAGEMENTS VOLONTAIRES PERMANENTS, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN 1884 ET EN 1890. *Les Ouvriers des Deux Mondes* (2) 4: 1-52. 1895.

In this study, made in 1884 and in 1890, the employee received a substantial addition to money wages in the form of benefits. The family lived in a large establishment, erected by the head of the factory and called a "familistère", where there were bath facilities, gas, store, theater, library, school, and gardens. There was also a park, where festivities were held. The family consisted of the



head (37), his wife (30), 2 daughters (11 and 7), and a son (9). The children would all go to school until they were 14. The school gave the boys technical instruction for future work in the factory, home economics to the girls, and also made much of moral and civic instruction. The family was indifferent to religion. Their health was excellent; both parents had sickness insurance. The worker drank moderately. A tendency to extravagance was shown by furniture and clothing. The man cultivated a garden. Two great feast days had been established by the proprietor; other recreations comprised smoking and reading. The family future was assured by hard work, permanent engagement, good conditions in the industry, and sickness insurance. Property consisted of money in factory stock 5,401 francs, tools valued at 52 francs, and furniture and clothing at 2,184 francs. Income was 2,314 francs, of which 2,188 francs was in money. Property contributed 271 francs; subventions, 8 francs; labor, 2,026 francs; and industries, 8 francs. Food cost 1,375 francs; household, 401 francs; clothing, 291 francs; moral, recreative, and health needs, 58 francs; and all else, 19 francs. Savings were 169 francs. Notes are given on the factory, the familistere, the nursery, the insurance, the cooperative society selling necessities, participation in the benefits and transmission of property, the direction and administration of the company, and the familistere of Laeken (Belgium).

CACHEUX, E.

(651)

LE BUDGET DE L'OUVRIER À PARIS. Réforme Sociale 9: 273-277. 1885.

The author of this article states that he examined the expenditure records of about 1,000 working families in 1885 with the object of finding out whether it would not be advantageous for them to add their savings to their rent in order to purchase their homes. He concludes that it is so difficult for a small employee to keep an equilibrium between receipts and expenses that this would not be feasible. Of the 1,000 families, 129 had an annual surplus of 50 to 600 francs. As a sample of the expense records of a great many working people he presents that of a French railway guard of Ceinture, who had four children and an income of 2,350 francs, of which 1,800 was spent for food.

PARINET, L'ABBÉ EM

(652)

PRÉCIS D'UNE MONOGRAPHIE D'UN PAYSAN ET MAÇON ÉMIGRANT DE LA MARCHE (CREUSE). OUVRIER-PROPRIÉTAIRE DANS LE SYSTÈME DU TRAVAIL SANS ENGAGEMENTS (DURANT LE PÉRIOD D'ÉMIGRATION LE TRAVAIL DE MAÇON S'EXÉCUTE DANS LE SYSTÈME DES ENGAGEMENTS VOLONTAIRES MOMENTANÉS). 1885. Les Ouvriers des Deux Mondes (2) 2: 229-244. 1890.

This is a study, made in 1885, of workers who made periodic migrations to the cities to augment the scanty income received from the land. The rest of the family cultivated the land. The contact with the city had caused the gradual decline of the traditional mores. The family consisted of the head (48), his wife (43), 2 sons (22 and 10), 1 daughter (20), and the grandfather (75). The eldest son had accompanied his father for 3 years. Family relations were cold, little respect being shown the grandfather. The family had all attended school. Their health was excellent. Recreations were mostly noncommercialized and not taken in common. The worker had been able to decrease his debts, and hoped for a financially good marriage for his son. The land would furnish a living in case of illness or lack of work. Property consisted of dwelling valued at 2,000 francs, outbuildings at 2,100 francs, land at 18,570 francs, animals at 1,284 francs, tools at 587 francs, and furniture and clothing at 2,574 francs. Income was 3,194 francs, of which property was credited with 428 francs, labor 2,187 francs, and industries 578 francs. Food cost 1,719 francs; household, 221 francs; clothing, 262 francs; moral, recreative, and health needs, 285 francs; and all else, 130 francs. A saving of 577 francs was used to pay off debts. Many details ordinarily given in a Le Play monograph are absent.

SIMON, EUGENE

(653)

LA SITUATION DES OUVRIERS DANS LES CAMPAGNES. Réforme Sociale (2) 4: 79-93. 1897.

The author of this article discusses the importance and the gradual decline of small-scale farming carried on by the industrial worker and his family. He also describes the family of a French factory worker of the suburbs of Pamiers about 1885. The household was composed of six persons. They owned property worth 2,120 francs, and their income was formerly 1,800 francs per year, of which they

spent 12 francs a month at the butcher's and 25 francs at the grocer's. At the time of the investigation the industrial crisis had cut down their income and they ate only cereal foods and potatoes. Another family in very similar circumstances would have been unable to survive the crisis without its agricultural produce. A third family of four persons in the same district is described. Unemployment obliged this family to live entirely from its little plot of land. Only potatoes and a few green vegetables were eaten. The author recommends that the population be given a practical education in agriculture suitable to its needs.

GIBON, FÉNELON

(654)

TAILLEUR DE SILEX ET VIGNERN DE L'ORLÉANAIS (LOIR-ET-CHER—FRANCE). PROPRIÉTAIRE-TÂCHERON DANS LE SYSTÈME DES ENGAGEMENTS MOMENTANÉS D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN SEPTEMBRE 1887. *Les Ouvriers des Deux Mondes* (2) 2: 337-384. 1890.

This study, made in 1887, depicts a worker in a once thriving industry which was on the decline. His skill insured him permanent engagements, and the family was much respected in the community. The household consisted of the head (35), his wife (31), and two daughters (10, and 1 month). They were of excellent habits. The parents were practically illiterate. Their methods of cultivation were somewhat backward. Family health was good; use was made of simple remedies. Both husband and wife cut flint and cultivated the garden and vineyard. Recreations consisted chiefly of visiting and dancing. Their well-being was assured as long as the flint cutting and good health continued, and the lands remained undivided. Property consisted of a dwelling valued at 1,200 francs, outbuildings at 525 francs, vineyard at 1,850 francs, garden at 200 francs, flint land at 300 francs, animals at 178 francs, tools at 366 francs, and furniture and clothing at 1,101 francs. Income was 1,523 francs, of which 1,269 francs was in money. Property was credited with 186 francs income; subventions, 10 francs; labor, 1,068 francs; and industries, 259 francs. Food cost 465 francs; household, 207 francs; clothing, 117 francs; moral, recreative, and health needs, 65 francs; and all else, 58 francs. Savings were 611 francs. Separate notes are given on the history of the flint industry, local religious practices, costumes, language, the division of the small property, and the social position of the above laborer.

UNITED STATES DEPARTMENT OF LABOR.

(655)

COST OF PRODUCTION: IRON, STEEL, COAL, ETC. U. S. Dept. Labor, Commr. *Labor Ann. Rept.* (1890) 6: 605-1376. 1891.

In addition to the summary of 2,490 schedules of families living in America and employed in the iron, steel, and coal industries (226), this report contains data on the incomes and expenditures of 40 workers living in France who were employed in the bar-iron industry. These employees were selected because they had been employed in the industry from which cost of production and pay-roll accounts previously had been obtained. The data covered the period 1888-89 and are presented for each family. Averages per family and per individual are also given. The employees were either French or Belgian.

The average size of the families was 5.3 persons. Their total incomes averaged \$465 and their total expenditures, including insurance, \$401. Twenty-nine families had a surplus of income over expenditures, and 11 had deficits. Rent paid averaged \$31; expenditures for food, \$196; for fuel and lighting, \$15; and for furniture and utensils, \$5. Forty families reported expenditures for husbands' clothing averaging \$24, 38 families expended an average of \$17 for wives' clothing, and 36 families expended an average of \$49 for children's clothing. Life-insurance payments of three families averaged \$5.

Separate analysis is presented covering the incomes and expenditures of seven normal families—families including no boarders or lodgers and having five or fewer children, none of whom was over 14 years of age. Incomes of these families averaged \$353 a year and expenditures \$354. Expenditures for rent averaged \$27, for fuel \$7, for lighting \$4, for clothing \$50, and for food \$202.

Incomes and expenditures per family and per person are contrasted with figures for families living in other European countries and in the United States. Information is also given showing the quantities and costs per 100 units of consumption for 18 articles of foods—the unit of measure being the adult-male equivalent calculated by the United States Bureau of Labor Statistics. Figures are also presented showing proportionate decrease in food expenditures with an increase in size of family.



Remarks on various points relative to the living conditions of the families, as well as information regarding life in the localities from which the material was obtained, are included.

UNITED STATES DEPARTMENT OF LABOR.

(656)

COST OF PRODUCTION: THE TEXTILES AND GLASS. U. S. Dept. Labor, Commr. Labor Ann. Rept. (1891) 7 (v. 2, pt. 3): 2048. 1892.

This report includes, along with similar data for wage earners of other foreign countries and the United States (228, 518, 777, 979, 1311), income and expenditure figures gathered during the period 1888 to February 1891, from 295 families living in France. The fathers of these families were employed in the cotton and woolen industries. Revised figures from the commissioner's sixth annual report covering seven "normal" families in the pig-iron industry are also presented. Normal families were those which included no boarders or dependents, rented their homes, and recorded expenditures for rent, fuel, lighting, clothing, and food, and had a husband, wife, and not more than five children, none of whom was over 15 years of age. Individual records for each of the families in the textile group cover the following points: Family description (age, sex, size, occupational status); sources of income; home ownership; expenditure for food (qualities of 11 and costs of 22 staple articles of diet); expenditure for rent (number of rooms), fuel and lighting (kind), clothing (husband and wife separate, children grouped), furniture and utensils, taxes, insurance (property and life), organizations, religion, charity, books and newspapers, amusements and vacations, intoxicating liquors, tobacco, sickness and death, and unclassified expenses; contrasted income and expenditure, showing surplus or deficit; and descriptive remarks concerning conditions and furnishings of homes. The entries for any one family can be traced through the various tables of expenditures of commodities.

The average size of the 295 families, including boarders, etc., was five persons, the average total family income \$401, and the average total family expenditure for all purposes, including insurance, \$364.

Separate computations are presented for 143 normal families in the cotton and woolen industries in addition to compilations, by size of family and income group, of the percentage of total expenditure for each classification for 150 normal families in the textiles and bar-iron industries combined.

Quantities and costs of food consumed for each of the normal families are given for nine food articles in terms of 100 units of consumption and in tabular form showing decreasing per capita cost with increasing size of family.

Of the total average expenditure of the 150 normal families, 49 percent was spent for food, 15 percent for clothing, and 11 percent for rent.

The total annual income of the 143 normal families in the cotton and woolen industries combined averaged \$304. Their total average yearly expenditure for all items, including insurance, was \$283; for food \$136, for clothing \$42, and for rent \$30. The total annual income of the seven normal families in the bar-iron industry averaged \$353. Their total average yearly expenditure for all items, including insurance, was \$354; for food, \$202; for clothing, \$50; and for rent, \$27.

GIBON, FÉNELON

(657)

ÉTAMEUR SUR FER-BLANC DES USINES DE COMMENTRY (ALLIER—FRANCE). OUVRIER-PROPRIÉTAIRE DANS LE SYSTÈME DES ENGAGEMENTS MOMENTANÉS, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN SEPTEMBRE 1889 AND EN AOÛT 1890 AVEC NOTES SUR LA SITUATION EN 1905. Les Ouvriers des Deux Mondes (3) 2: 433-495. 1908.

This study, made in 1889-90 and in 1905, is of a workman (head of a shop), who had been with the same employer 38 years and was greatly respected by employers and fellow workers. He was outstanding for his moral integrity and thriftiness. The household consisted of the head (50), his wife (49), and two daughters (22 and 18). An older daughter was married. They were of excellent morals and good health. Medical care was free. The worker cultivated a garden for his son-in-law. The women did all the family sewing. Recreations were noncommercialized. Family well-being was protected by the permanency of work, foresight, and economy. Property consisted of a home valued at 5,012 francs, personal property at 5,200 francs, animals at 17 francs, tools at 144 francs, and furniture and clothing at 4,100 francs. Income was 2,934 francs, of which 2,464 francs was in money. Property contributed 573 francs; subventions, 138 francs, and labor, 2,223 francs. Food cost 1,294 francs; household, 326 francs; clothing, 991 francs; moral, recreative, and health needs, 59 francs; and all else,

108 francs. Savings were 156 francs. Notes are given on the origin and history of Commentry, the tin industry and its wages, the consumers' cooperative society, and the factors assuring the physical and moral well-being of the workers.

MAROUSSEM, PIERRE DU

(658)

CHARPENTIER INDÉPENDANT DE PARIS (SEINE—FRANCE). JOURNALIER DANS LE SYSTÈME DES ENGAGEMENTS MOMENTANÉS, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN DÉCEMBRE 1889 ET JANVIER 1890. *Les Ouvriers des Deux Mondes* (2) 3: 325-368. 1892.

This study, made in 1889-90, was of an independent carpenter, a foreman. The family consisted of the worker (42), his wife (40), and three daughters (13½, 10½, and 5). They distrusted current social organization. Social inequalities had been made very real to the worker, and the first part of his life was spent fighting trade unions, the second part in attacking patrons. He was an excellent carpenter, intelligent and educated, and dominated his family and the political club to which he belonged. He lacked the stamina of a successful man, however, and the willingness to save in order to become a patron.

For 13 years the wife had been cook for, and the family had lived at, a school for young girls; hence the family morals were necessarily high. Family health was fair; the worker received insurance in case of accident. His love of work and ignorance of costly vices permitted him to balance his annual budget. There being no savings, future security depended chiefly on public and private charity. Property consisted of 100 francs in money, 89 francs in working equipment, and 1,423 francs in furniture and clothing. Income was 4,144 francs, of which 3,479 francs was in money. Property contributed 3 francs income; subventions, 263 francs; labor, 3,806 francs; and industries, 71 francs. Food cost 2,280 francs; household, 534 francs; clothing, 602 francs; moral, recreative, and health needs, 724 francs; and all else, 2 francs. Notes are given concerning the carpentry workshops in Paris, carpenters' salaries since 1791, the rites of the "Compagnonnage du Devoir", the Councils of Prud'hommes, the workers' associations, the different social schools in the industry of the carpenter, and how the preceding generation had become patrons.

GUÉRIN, URBAIN

(659)

OUVRIER-EMPLOYÉ DE LA FABRIQUE COOPÉRATIVE DE PAPIERS D'ANGOULÊME (CHARENTE) DANS LE SYSTÈME DES ENGAGEMENTS VOLONTAIRES PERMANENTS, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN 1890. *Les Ouvriers des Deux Mondes* (2) 4: 273-322. 1895.

The employee considered in this study received an addition to real wages in the form of benefits in a cooperative company. The company was installing better machinery to meet the competition of paper mills in Saxony, and in other parts of France. This particular worker was at the top of the factory hierarchy. At the time of the study in 1890 the household consisted of the head (47), his wife (41), and three sons (20, 18, and 17). Two brothers and a sister of the worker were also in the paper mills. The sons were following their father's occupation and eventually would become members in the corporation. The woman also worked in the factory. The two eldest sons worked by the month in the sales department, and each had a small interest in the business. Family spirit was good, and their health was excellent. They all helped to cultivate a garden. Recreations included smoking, hunting, fishing, concerts, theater, attendance at the circus, and the raising of homing pigeons; the two eldest boys played violins, and the youngest a flute. Family well-being was protected by the good characteristics of its members, by the long time they had been employed in the mill, by the money invested, and by membership in a society for mutual aid. Property consisted of money, tools, and shares in the factory valued at 13,853 francs, and furniture and clothing at 5,013 francs. Income was 5,619 francs. Property contributed 691 francs income; subventions, 716 francs; labor, 4,195 francs; and industries, 18 francs. Food cost 2,059 francs; household, 336 francs; clothing, 575 francs; moral, recreative, and health needs, 249 francs; and all else, 15 francs. Savings were 2,385 francs. Notes are given on the cooperative organization of the factory of Laroche-Joubert, on salaries, the cooperative bakehouse of Angoulême, and the participation in the benefits and the transmission of the factory property to the workers.



MAROUSSEM, PIERRE DU

(660)

LA QUESTION OUVRIÈRE. 4 v., illus. Paris. 1891.

Volume 1 of this study deals with the carpenters of Paris, who were chiefly French, though a few were foreigners and temporary residents. No distinction as to race is made in the tabulations. The conclusions are derived from family expense accounts of different classes of carpenters—owners, day workers, foremen, and apprentices—for the year 1890. The working year is estimated at 300 days, though actually it averaged 200 to 225. Most of the laborers were married. Wages ranged from 5.38 francs per day to 2,400 francs per year. The wives usually worked also. Food costs averaged 56 percent of the income, lodging 12 percent, and clothing 15 percent. All of these costs had nearly doubled in the past 30 years.

The second volume gives similar information regarding furniture makers. Their incomes averaged about the same, and their expenditures were divided in practically the same percentages. In the past decade, this class had been largely unemployed because of the wide use of factory-made furniture.

The third volume concerns the toy makers, the poorest of all classes. These workers were largely victims of sweatshop methods. The maximum salary was 150 francs a month, the average much less (actual figures not given). Food costs averaged 1,298 francs, lodging 483 francs, and clothing 113 francs a year.

The fourth volume deals with the great markets, wholesale and retail merchants, and those who engage in illicit selling, as well as commission merchants. The average income of these groups was 2,754 francs a year. Food costs averaged 1,327 francs, lodging 412 francs, clothing 400 francs a year. For each group considered, there are inventories of all possessions. Very few owned their homes or their shops. The tabulation of expenses includes all details for each group and subdivision. Engel's law, Schwabe's law, and Wright's version of Engel's law about increasing advancement expenditures, are confirmed.

(661)

ÉBÉNISTE PARISIEN DE HAUT LUXE (SEINE—FRANCE). OUVRIER-JOURNALIER DANS LE SYSTÈME DES ENGAGEMENTS MOMENTANÉS, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN JANVIER ET FÉVRIER 1891. Les Ouvriers des Deux Mondes (2) 4: 53-100. 1895.

This study of conditions among the cabinetmakers in the Saint-Antoine section of Paris was made in 1891 and deals with a worker who occupied a high rank as the result of both the quality of his work and his political interests. The family consisted of the head (42), his wife (40), two sons (18 and 8), and a daughter (13). They were indifferent to religion. The family life was harmonious. The father was in poor health, but the rest were robust. The man was secretary to 2 societies, 1 political and 1 mutual aid. The woman was a tailor. The eldest son was an apprenticed sculptor. The daughter helped the mother in the house. Recreations for the worker were mainly political talks with friends over wineglasses or between cigarettes, as well as walking, occasional concerts, theaters, or billiards. The spirit of work and order was the mainstay of this family, since they saved nothing, although they did have insurance against fire and sickness. Property consisted of money and tools valued at 787 francs and furniture and clothing at 2,690 francs. Income was 3,489 francs, of which 3,293 francs was in money. Property contributed 22 francs; subventions, 19 francs; labor, 3,171 francs; and industries, 277 francs. Food cost 1,897 francs; household, 436 francs; clothing, 815 francs; moral, recreative, and health needs, 229 francs; and all else, 112 francs. Notes are given on the physical, economic, and social organization in furniture factories.

FRANCE, MINISTÈRE DU COMMERCE, DE L'INDUSTRIE, ET DES COLONIES. (662)

LA PETITE INDUSTRIE (SALAIRES ET DURÉE DU TRAVAIL). 2 v., illus. Paris. 1893.

This two-volume report deals with the wage incomes of various working groups in France, and only indirectly with expenditures. The expenditures for two families in 1892 are included incidentally. The first is that of the family of a baker whose income was 3,600 francs a year, and whose wife also worked as a doorkeeper in a private home. This family spent about 1,500 francs for its food, which was light and appetizing. The second is that of a woman who delivered bread for a baker. She and her husband, who was a bricklayer, had

an income of about 2,200 francs. They had a baby which they put out to board. They spent 1,400 francs for food. The data are very incomplete (v. 1, pp. 86-87).

GILBERT, R.

(663)

UNE FAMILLE OUVRIÈRE D'ORLÉANS. *Réforme Sociale* (3, 7) 27: 787-796. 1894.

Similar in form to a Le Play monograph, this study describes the life of a French family of six in a remote and sanitary corner of Orléans in 1892. The father was a woolcomber and the proprietor of a poorhouse and garden. The annual income was 910 francs, of which 611 francs were spent for food. Very little meat was consumed, and the family was poorly nourished. Their condition would have been miserable had they not owned their house and garden; this ownership was also a great moral stimulus.

MAROUSSEM, PIERRE DU

(664)

OUVRIÈRE MOULEUSE EN CARTONNAGE D'UNE FABRIQUE COLLECTIVE DE JOUETS PARISIENS (SEINE—FRANCE). OUVRIER CHEF DE MÉTIER DANS LE SYSTÈME DES ENGAGEMENTS MOMENTANÉS, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN JANVIER 1892. *Les Ouvriers des Deux Mondes* (2) 4: 173-224. 1895.

This study, made in 1892, illustrates an industry in which most of the workers were women, and in which wages were lowered by the sweatshop system and the large factories. The household consisted of the mother (40) and two sons (17 and 13). The father (48), an habitual drunkard, was separated from the mother. The family possessed high ideals. Health was fair, but the sons were described as delicate because of their alcoholic inheritance. The state furnished medical assistance. The mother, who was greatly respected because of her skill and taste, worked 14 hours a day from September to March. She worked by contract with manufacturers and hired what help she needed. The eldest son was apprenticed to a portfolio maker and also helped his mother. The younger son was apprenticed to his mother. Recreations consisted of the theater, the museums, concerts, lectures, the library, newspapers, and visiting. The only assurance for the future lay in family unity, the ability to work, and public assistance. Property consisted of money and tools valued at 66 francs and furniture and clothing at 1,308 francs. Income was 2,879 francs, of which 2,594 francs was in money. Property contributed 3 francs income; subventions, 261 francs; labor, 2,390 francs; and industries, 225 francs. Food cost 1,409 francs; household, 702 francs; clothing, 530 francs; moral, recreative, and health needs, 237 francs; and all else, 2 francs, there being no savings. Notes are given on some recent changes in industries, the role of the great factories, the factories for costly dolls and toys, royal assistance, religious apostleship among the workers of Paris, and social work and religious conditions among the toy makers.

CHASSIGNET.

(665)

ALLUMEUR DE REBERBERES DE NANCY (MEURTHE-ET-MOSELLE). JOURNALIER DANS LE SYSTÈME DES ENGAGEMENTS VOLONTAIRES PERMANENTS, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN 1893. *Les Ouvriers des Deux Mondes* (2) 4: 477-512. 1895.

This study shows the struggle for existence in a rapidly growing city where wages did not keep pace with the increasing high cost of living. The lamplighter, a respected worker, also did some shoemaking. In 1893 when the study was made, the household consisted of the head (35), his wife (31), 3 sons (12, 11, and 2), and 3 daughters (7, 5, and 1). Morals were good, but foresight was lacking. Health conditions were fair. The wife helped with the shoemaking and cultivated the garden, in addition to the housework. Recreation consisted chiefly of reading. Well-being was protected by hard work and regularity of conduct. Property consisted of animals and tools valued at 222 francs, and furniture and clothing at 785 francs. Income was 2,102 francs, of which 1,813 francs was in money. Property contributed 9 francs; subventions, 80 francs; labor, 1,985 francs; and industries, 28 francs. Food cost 1,278 francs; household, 343 francs; clothing, 404 francs; and moral, recreative, and health needs, 26 francs. Savings were 51 francs. Notes are given on the fixity of salaries and the need of subventions, and on how the patronal institutions here were supplemented.



KÉRAVIC, YAN'

(666)

MINEUR DES MINES DE HOUILLE DU PAS-DE-CALAIS—FRANCE. JOURNALIER DANS LE SYSTÈME DES ENGAGEMENTS MOMENTANÉS D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN NOVEMBRE 1893. *Les Ouvriers des Deux Mondes* (2) 5: 253-282. 1899.

This study, made in 1893, deals with a miner working for a well-established company where lay offs were infrequent, subventions were assured, and a reduced wage was paid in case of sickness. The household consisted of the head (36), his wife (29), son (10), and daughter (8). Morals and health were good. In case of sickness, a mutual-aid society would furnish all medical care. The worker cultivated a garden and raised rabbits and poultry. The wife made over clothes. Recreations were few. Family well-being was protected by membership in two mutual-aid societies, by accident insurance from the company, by habits of saving, and the prospect of help from the children. Property consisted of animals, tools, and money valued at 121 francs, and furniture and clothing at 1,263 francs. Income was 2,465 francs, of which 2,097 francs was in money. Property contributed 4 francs; subventions, 153 francs; labor, 2,280 francs; and industries, 29 francs. Food cost 1,327 francs; household, 255 francs; and moral, recreative, and health needs, 222 francs. Savings were 297 francs. Notes are given on the general spirit of the miners and their attitudes on working conditions, and on the linen-making industry in this community.

BEAURIN-GRESSIER.

(667)

L'IMPÔT DANS UNE FAMILLE PARISIENNE. *Jour. Soc. Statis. Paris* 36: 234-245, 329-355, illus. 1895.

The author of this monograph, a Parisian public official with an income of 20,000 francs, presents the annual expense record for 1894 for his own bourgeois household consisting of nine persons. Expenditures are given for 150 different categories of articles; the writer's purpose, however, was to show the importance of taxes in the cost of living; other important phases of the living are, therefore, only lightly touched upon. It is an original study of the incidence of taxation and the influence of this on the content and the standard of living.

GUÉRIN, URBAIN

(668)

FILEUR EN PEIGNÉ ET RÉGLEUR DE MÉTIER DE LA MANUFACTURE DU VAL-DES-BOIS (MARNE). OUVRIER DANS LE SYSTÈME DES ENGAGEMENTS VOLONTAIRES PERMANENTS, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN 1894. *Les Ouvriers des Deux Mondes* (2) 5: 73-136. 1899.

The owner's advanced ideas in the factory considered in this study had aroused public interest. His motto was, "All for the worker and all by the worker." The employees worked under as ideal conditions as possible. This particular worker was greatly respected by all. When this study was made in 1894, his household consisted of the head (48), his wife (33), daughter (14), and son (12). Health conditions were excellent. The fund for mutual aid furnished medical care and medicine free. The worker was paid monthly for examining and repairing the machines. The wife and daughter knitted stockings. The father and children cultivated the small garden. Recreations were noncommercialized. Family well-being was protected by steady work, savings, long employment, and excellent employer-employee relations. Property consisted of money valued at 4,578 francs, stocks and bonds at 568 francs, 4 rabbits at 7 francs, tools at 1,559 francs, and furniture and clothing at 2,738 francs. Income was 2,782 francs, of which 2,621 francs were in money. Property contributed 254 francs; labor, 2,475 francs; and industries, 54 francs. Food cost 1,332 francs; household, 323 francs; clothing, 296 francs; moral, recreative, and health needs, 64 francs; and all else, 19 francs. Savings were 748 francs. Notes are given on the moral and religious associations and cooperative and economic institutions of workers, family income, a Christian workers' conference, and the family which owned the spinning industry and its future personal interest in the workers.

FANJUNG, NICOLAS

(669)

SERRURIER-FORGERON DU QUARTIER DE PICPUS À PARIS. OUVRIER CHEF DE MÉTIER DANS LE SYSTÈME DU TRAVAIL SANS ENGAGEMENTS D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN 1895. *Les Ouvriers des Deux Mondes* (2) 5: 317-346. 1899.

This study, made in 1895, deals with a worker in business for himself who was esteemed by all and who was typical of the successful worker under the capitalist system. The household comprised the worker (34), his wife (32), and two sons (4 and 2). They were of excellent morals and health. The worker, a believer

in political reform, was from a fairly well-to-do family of farmers and small shopkeepers. His locksmith's trade was growing, and he also made blades for swordsticks. The quality of his work assured the family well-being. Recreations were noncommercialized. Property consisted of money valued at 500 francs, tools at 1,977 francs, and furniture and clothing at 2,366 francs. Income was 4,125 francs, of which 3,677 francs was in money. Property contributed 99 francs; subventions, 18 francs; labor, 3,122 francs; and industries, 887 francs. Food cost 1,707 francs; household, 427 francs; clothing, 770 francs; moral, recreative, and health needs, 694 francs; and all else, 59 francs. Savings were 468 francs.

MAROUSSEM, PIERRE DU

(670)

PIQUEUR SOCIÉTAIRE DE LA "MINE AUX MINEURS" DE MONTHIEUX (LOIRE—FRANCE). OUVRIER CHEF DE MÉTIER ASSOCIÉ AVEC D'AUTRES OUVRIERS CHEFS DE MÉTIER D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN AOÛT ET SEPTEMBRE 1895. *Les Ouvriers des Deux Mondes* (2) 5: 365-436. 1899.

This study, made in 1895, deals with cooperative control of the means of production by workers, capital being furnished by public and private subscription. No benefit was paid to the miner, because of inefficient organization. This particular miner was a member of the corporation, but his wages were less than those in many private mines. The household consisted of the head (45), his wife (40), 2 sons (16, and 6 months), and 3 daughters (11, 9, and 6). The worker had been a miner since 16. The family was robust due to its heredity. The family had a potato garden. Recreations comprised only smoking and drinking wine. Family well-being was doubtful, depending at the time solely on the wages of the eldest son. Property consisted of tools and two shares in the mine, valued at 167 francs, and furniture and clothing at 734 francs. Income was 2,284 francs, of which 2,125 francs was in money. Subventions were credited with 159 francs, income and work 2,125 francs. Food cost 1,534 francs; household, 164 francs; clothing, 184 francs; moral, recreative, and health needs, 312 francs; and all else, 47 francs. There were no savings. Notes are given on the small entrepreneur units in the coal mines, the current trend toward large companies, and the mine for the miners of Rive-de-Gier and Monthieux.

FANJUNG, NICOLAS

(671)

PRÉCIS D'UNE MONOGRAPHIE DE SERRURIER POSEUR DE PERSIENNES EN FER DE PARIS. OUVRIER DANS LE SYSTÈME DES ENGAGEMENTS MOMENTANÉS, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN 1897. *Les Ouvriers des Deux Mondes* (2) 5: 347-364. 1899.

The worker of this study was endowed with a love of work and foresight, and was contented with his lot. The household at the time of the study in 1897 consisted of the head (25), his wife (24), daughter (3½), and the wife's great aunt (82). Family relationships were good. The worker was interested in politics and had some socialistic leanings. Health conditions were excellent. The aunt cared for the house, and the wife made vests, sometimes for a tailor and sometimes for a factory. Their savings and an inheritance from the worker's father placed them in the middle class; the savings and inheritance plus good earnings seemed to assure future well-being. Recreations were noncommercialized. Property consisted of dwelling valued at 6,000 francs, money 11,000 francs, tools valued at 211 francs, and furniture and clothing at 4,946 francs. Income was 4,470 francs. Property contributed 741 francs; subventions, 200 francs; labor, 3,377 francs; and industries, 152 francs. Food cost 1,985 francs; household, 686 francs; clothing, 555 francs; moral, recreative, and health needs, 383 francs; and all else, 27 francs. Savings amounted to 833 francs. Notes are given on the woman's work. Many details ordinarily given in a Le Play study are absent.

FORTS, JACQUES DES

(672)

AVEUGLE ACCORDEUR DE PIANOS DE LEVALLOIS-PERRET (SEINE, FRANCE). CHEF DE MÉTIER ET TÂCHERON DANS LE SYSTÈME DES ENGAGEMENTS MOMENTANÉS, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN 1899. *Les Ouvriers des Deux Mondes* (3) 1: 88-132, illus. 1904.

In this study, made in 1899, the worker dealt with was 1 of 66 blind piano tuners in Paris. The household consisted of the head (35), his wife (39), and five daughters (8, 7, 6, 4, and 6 months). They seemed very happy and of high moral standards. Health conditions were good. The man worked partly for an agent and partly for himself. The wife did only household tasks. Recreations were noncommercial. Family well-being was protected by two associations for the



blind, and by the man's earning capacity. Property consisted of money valued at 22 francs, tools at 187 francs, and furniture and clothing at 2,361 francs. Income was 3,113 francs, of which 2,888 francs was in money. Property contributed 10 francs income; subventions, 169 francs; labor, 2,927 francs; and industries, 7 francs. Food cost 1,809 francs; household, 498 francs; clothing, 527 francs; moral, recreative, and health needs, 156 francs; and all else, 83 francs. Savings were 41 francs. Notes are given on blind piano tuners, the national institution for blind children and its placement and aid of the pupils, the Braille school and library, the Valentin Haüy Association, the crafts practiced by the blind, and homes for the blind in France.

HOUDOY, JULES

(673)

LA FILATURE DE COTON DANS LE NORD DE LA FRANCE. 453 pp., illus. Paris. 1903.

This survey of the cotton-spinning industry deals especially with the great industrial centers: Lille, Donai, Cambrai, and Calais. The wages paid the operatives in northern France constituted 28 to 30 percent of the cost of production. Wages varied in different regions, higher wages being generally associated with higher cost of living. From a study of 1,800 workmen, around the year 1900, it was determined that men formed one-third of the number of employees and earned five-twelfths of the amount paid for wages; that women formed one-half of the workers and were paid one-third of the wages; and that children, who composed only one-sixth of the workers, received one-fourth of the wages. Expense accounts are given for families of: 7 persons, 4 of whom contributed to the expenses; 9 persons, 4 of whom contributed; 4 persons, 2 of whom contributed; and 5 persons, 1 of whom contributed.

PELLOUTIER, FERNAND, and PELLOUTIER, MAURICE

(674)

LA VIE OUVRIÈRE EN FRANCE. 344 pp., illus. Paris. 1900.

Labor conditions in France are used as an argument against capitalism; the data furnished are therefore somewhat limited in range and are incomplete. Poor sanitary conditions in the homes, the lack of proper nourishment, the high cost of living which had not been accompanied by increase of salary, the long working day (12 to 14 hours), the death rate of factory workers, the high rate of infant mortality (52 percent), the high proportion of women employed in industry (32 percent of the female population), and the prevalence of alcoholism are all discussed. Budgets are given for 8 families—6 French, 1 American of French ancestry, and 1 Swiss family, in 1900: (1) A family of 4 which spent 28.70 francs a week for food, 7.63 francs for rent, 3.85 francs for clothing, and 1.85 francs for light, heat, etc., on an income of 969.80 francs with a deficit of 414.70 francs; (2) a family of 5 whose weekly deficit was 2.74 francs; (3) a family of 6, with a weekly deficit of 2.35 francs; (4) a family of 1 with a balanced budget; (5) an American family of 4 (miners) with an annual deficit of 129 francs; (6) a family of 1 with a balance of 802.50 francs; (7) a family of 8 with a credit of 2,477.35 francs (the last two were employed in Germany); and (8) a Swiss family of 4 with a balance of 147.15 francs. The incomes were so nearly the same that no application of Engel's law is possible. The author's conclusions are that wages were too low, hours of work too long, and nourishment inadequate for the laborer.

BRANTS, V.

(675)

TISSERAND D'USINE DE GLADBACH (PRUSSE RHÉNANE). OUVRIER-TÂCHERON DANS LE SYSTÈME DES ENGAGEMENTS MOMENTANÉS, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN SEPTEMBRE 1901. Les Ouvriers des Deux Mondes (3) 1: 337-390. 1904.

The family worked in a well-organized factory where the social fabric was strong and wages were high. When the study was made in 1901, the household consisted of the head (43), his wife (37), two sons by a previous marriage (8 and 7), and a daughter and son by this marriage (3, and 6 months). The worker was an ardent believer in labor unions. Health conditions were poor; a wife and five children had died. Subventions took care of part of this extra expense. The man cultivated a garden and did some paid mowing. Recreations were simple, consisting of moderate smoking and two communal feasts yearly. Well-being was protected by the church influence, state funds, labor unions, and similar organizations. Property consisted of money valued at 84 francs, tools at 114 francs, animals at 15 francs, and furniture and clothing at 733 francs. Income was 1,738 francs, of which 1,616 francs was in money. Property contributed 7 francs; subventions, 63 francs; labor, 1,578 francs; and industries, 62 francs. Food cost 955 francs; household, 257 francs; clothing, 293 francs; moral, recreative, and health needs,

191 francs; and all else, 42 francs, there being no savings. Notes are given on the factory social organization, the moral and religious characteristics of the population, the professional organization of the textile workers in Gladbach, and the principles of the worker's union at the factory at Aeltesten-Collegium.

FRANCE, CONSEIL SUPÉRIEUR DU TRAVAIL.

(676)

ENQUÊTE FAITE PAR LE MANUEL GÉNÉRAL DE L'INSTRUCTION PRIMAIRE SUR LES CONDITIONS DE LA VIE DES INSTITUTEURS. Paris. 1901. [Original not seen. Summarized in Great Britain, Board of Trade. Memoranda, Statistical Tables, and Charts with Reference to Various Matters Bearing on British and Foreign Trade and Industrial Conditions. Cd. 1761, app. VI, pp. 249-250. London. 1903.]

This study showed detailed records of expenditure of French working-class families of schoolmasters, with incomes approximating those of workmen for 1901. The families ranged in number from 1 to 6 persons and over, and were classified in three groups according to weekly expenditures. Less than 18s. 6d. was spent weekly by 392 of the families; 488 families spent from 18s. 6d. to £1 3s. 1d., and 1,035 families spent from £1 3s. 1d. to £1 9s. 10d. The tables covered weekly amounts and percentage expenditures on rent, fuel, light, clothing, and sundries.

MAILLARD, L. DE

(677)

DÉCOREUSE DE PORCELAINE DE LIMOGES (HAUTE-VIENNE—FRANCE). JOURNALIÈRE DANS LE SYSTÈME DES ENGAGEMENTS VOLONTAIRES PERMANENTS, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN 1901. Les Ouvriers des Deux Mondes (3)1: 391-434, illus. 1904.

This study deals with an urban family attached to an historic French industry. The family had been set back by the loss of the husband, but was now recuperating by means of the children's work. It consisted, when the study was made in 1901, of the mother, a burnisher (57), and three daughters (34, 30, and 22). The two older daughters were decorators, and the youngest, a "fleur", was the best paid of all. Health conditions were fair; free hospital care was being received by the youngest. They made their own clothes and hats. Recreations consisted of walks and excursions into the country. Family well-being was protected by their solidarity and thrift. Property consisted of money valued at 2,950 francs, tools at 50 francs, and furniture and clothing at 1,086 francs. Income was 3,364 francs, of which 2,954 francs was in money. Property contributed 91 francs income; subventions, 274 francs; labor, 2,979 francs; and industries, 20 francs. Food cost 1,092 francs; household, 281 francs; clothing, 560 francs; moral, recreative, and health needs, 392 francs; and all else, 85 francs, 954 francs being saved. Notes are given on the porcelain industry in Limoges, the work of the women and the corporations; and on the corporation of Saint-Antoine.

LOUIS, CLÉMENT-EUGÈNE

(678)

CANTONNIER-POSEUR DE VOIE DU CHEMIN DE FER DU NORD À PARIS. OUVRIER À L'ANNÉE DANS LE SYSTÈME DES ENGAGEMENTS VOLONTAIRES PERMANENTS, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN 1901-1902. Les Ouvriers des Deux Mondes (3)1: 435-506. 1904.

This study, made in 1901-2, deals with a worker who was faithful and happy on a small salary. The household consisted of the head (33), his wife (25), son (4), and daughter (3). They were of excellent morals. Health conditions were good. The woman sewed on women's coats. Recreations comprised mainly walking, reading, and three yearly excursions to their birthplace. Well-being was based on regular work and a retiring pension. Property consisted of money valued at 200 francs, tools at 249 francs, and furniture and clothing at 2,383 francs. Income was 2,669 francs, of which 1,813 francs was in money. Property contributed 7 francs income; subventions, 544 francs; labor, 1,999 francs; and industries, 119 francs. Food cost 1,204 francs; household, 344 francs; clothing, 601 francs; moral, recreative, and health needs, 402 francs; all else, 54 francs. Savings were 63 francs. Notes are given on the history and operation of the railways of France—their dividends, institutions for employee aid, labor associations, railroad legislation—and on the economic and social situation at Abbeville.

FRANCE, MINISTÈRE DU TRAVAIL.

(679)

ENQUÊTE SUR LE TRAVAIL À DOMICILE DANS L'INDUSTRIE DE LA LINGERIE, 5 v., illus. Paris. 1907.

This descriptive survey deals with wholesale and retail houses, factories, and entrepreneurs. It also gives, in less detail and less systematically, living conditions of entrepreneurs and workers, all of whom were women making under-



wear, sheets, etc., at home or in small workrooms where 1 or 2 workers were employed. Visits were made to 2,012 families, and the data of 1,783 schedules are presented. These data, very general in nature, apply to 1904-5. They tell size of the family, annual income and its sources, and nature and condition of the housing. Size of family ranged from 1 to 7. Incomes ranged from 167.75 to 3,919 francs per year. Conditions of the most abject poverty were common, and aid from various charitable associations was often one of the sources of income. Workers included girls under 18 and women over 70. From these 1,783 questionnaires, 137 monographs, expense accounts, and books of daily earnings have been compiled. Monographs of the entrepreneurs present only details of the business and condition of homes and workrooms. Monographs of workers present, in an unsystematic fashion, some estimated expense accounts. Dates are given for only three of them and the items included are not identical.

LEBRUN, P.

(680)

CORSETIÈRE DU RAINCY, BANLIEUE DE PARIS. VEUVE TRAILLANT À DOMICILE AVEC SES ENFANTS, OUVRIÈRE À LA TÂCHE. PROPRIÉTAIRE DANS LE SYSTÈME DES ENGAGEMENTS VOLONTAIRES PERMANENTS, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN 1904-1905. Les Ouvriers des Deux Mondes (3) 2: 377-431. 1908.

The family considered in this study, which was made in 1904-5, had risen to comfort from the poverty brought about by the loss of the father when the children were young. Its members were not afraid of work and rigid economy and possessed admirable traits of character. The household consisted of the widow (48) and two daughters (28 and 17). A son was married and owned a small house in the same street. Health was good. All three women made corsets and cultivated a garden. Recreations were very simple, consisting chiefly of walking or visiting. Family well-being rested on their spirit of cooperation, hard work, economy, and wise expenditures. Property consisted of land and dwelling valued at 4,600 francs, animals at 124 francs, tools at 539 francs, and furniture and clothing at 2,491 francs. Income was 4,311 francs, of which 3,276 francs was in money. Property contributed 217 francs; subventions, 30 francs; labor, 3,726 francs; and industries, 337 francs. Food cost 1,723 francs; household, 326 francs; clothing, 900 francs; moral, recreative, and health needs, 82 francs; and all else, 206 francs. Savings were 1,074 francs. Notes are given on the corset industry in Paris, on schools for corset makers, and on the situation of the isolated worker.

MAILLARD, L. DE

(681)

TEINTURIER DE GANTERIE ET GANTIERS DE SAINT-JUNIEN (HAUTE-VIENNE, FRANCE). TÂCHERON DANS LE SYSTÈME DES ENGAGEMENTS VOLONTAIRES PERMANENTS, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN 1904 ET 1905. Les Ouvriers des Deux Mondes (3) 2: 257-298. 1908.

This study, made in 1904-5, is of a family who lived in a small manufacturing city and worked partly at home. Socialistic teachings had made them discontented. The family consisted of the head (52), his wife (49), two daughters (19 and 10), and a son (12). Another daughter, a glovemaker, was not included. Morals were good and health fair. Hospital care was furnished by the employer. During the 115 working days he might have been idle, the man worked as a day laborer at 2 francs per day. The mother and daughter worked on separate parts of gloves, and the youngest daughter sewed on buttons after school. Recreations consisted of local rural festivals, occasional theater, dancing, cards, and drinking. Only the two younger children could read. Their well-being grew out of hard work and the spirit of cooperation. Property consisted of money and tools valued at 258 francs, and furniture and clothing at 642 francs. Income was 1,904 francs, of which 1,717 francs was in money. Property contributed 7 francs; subventions, 46 francs; labor, 1,826 francs; and industries, 25 francs. Food cost 923 francs; household, 336 francs; clothing, 485 francs; moral, recreative, and health needs, 93 francs; and all else, 27 francs. Savings were 40 francs. Notes are given on the glove industry of Saint-Junien: factory organization, leather dressing, social conditions, and unemployment and strikes from 1902 to 1905.

## GREAT BRITAIN BOARD OF TRADE.

(682)

COST OF LIVING IN FRENCH TOWNS. REPORT OF AN ENQUIRY INTO WORKING CLASS RENTS, HOUSING AND RETAIL PRICES, TOGETHER WITH THE RATES OF WAGES IN CERTAIN OCCUPATIONS IN THE PRINCIPAL INDUSTRIAL TOWNS OF FRANCE. 484 pp., illus. London. 1909.

Questionnaires for 1 normal week in 1905, filled in by the families of 5,605 workers in all kinds of industries living in 30 different French towns, formed the basis of this study. The families are arranged in income groups ranging from less than 20 to more than 40 shillings a week. The earnings of wives and children were found to form an important part of the family income. The percentage of the total income spent for food and for rent both declined as the income increased. Potatoes played the largest role in the dietary of the very poor. The consumption of bread (which was rarely baked at home) rose slightly as the income increased. As compared with the English, the French rents were lower, but the type of housing was not so good; the French dietary was more varied, containing more vegetables, fruits, meat, fish, eggs, and fats.

## HALBWACHS, MAURICE

(683)

BUDGETS DE FAMILLES OUVRIÈRES ET PAYSANNES EN FRANCE EN 1907. Bull Statist. Gén. France 4: [47]-83. 1914.

This survey of living conditions of lower class laborers and peasants covers April and May 1907. The results given are less satisfactory than those in studies for later years because (1) in these months certain foods were more expensive than during the remainder of the year, (2) the expense accounts represent so small a sample of the population, and (3) in the case of the peasants, the value of houses and food furnished is not estimated. The two groups are considered separately. Urban laborers sent in 52 usable records. These represented factory workers, miners, tanners, etc., whose incomes ranged from 40 francs or less a week to 280 francs or more. The *quet* is the unit of measurement used. Among these workers, the father contributed 76 percent of the income, the mother 11.7 percent, and the children 9.9 percent. Several of the lowest class families depended partly on charity. Food and lodging only were listed in 22 of the records; 5 did not mention lodging; 11 households had a balance at the end of the 4 weeks ranging from 0.95 to 32.15 francs; 16 had an average deficit of 24.02 francs. Of the 23 families listing all expenditures, the average expenditure for food was 70.5 percent of the income, for lodging 11.5 percent, and for all other expenses, 18 percent. The amount spent for lodging increased rapidly and regularly with the increase of income. In all classes studied the food was insufficient. Laborers with 21 francs or less a week spent 16.23 francs for food; those having 21 to 32.50 francs a week spent 17 francs for food; and those with more than 32.50 francs spent an average of 30.08 francs.

## MARTIAL, RENÉ

(684)

L'ALIMENTATION DES TRAVAILLEURS. Rev. Hyg. et Police Sanit. 29: 514-528. 1907.

Hat manufacturers in Paris, who worked from 4 to 8 months a year at a minimum salary of 45 francs per week for unskilled labor and 8 to 10 francs a day for skilled labor are the subject of this study in 1907. This class lived on the outskirts of the city and so had to allow 4.20 francs a week for transportation and 2.75 francs a day for the noon meal. That left a minimum of 5.80 francs a day for food, clothing, and rent. The diet, according to Landouzy's survey, seemed adequate. The range of salary was too small to admit application of Engel's law. No original data are presented.

## HALBWACHS, MAURICE

(685)

REVENUES ET DÉPENSES DES MÉNAGES DES TRAVAILLEURS. Rev. Écon. Polit. 35: 50-59. 1921.

The expenditure records of 1,101 workers' households and 221 households of salaried employees made in 1913-14 are compared in this study with those of 54 workers and 33 peasant households made in 1907. The 1914 data were collected by questionnaire, that of 1907 by schedule during 4 weeks. The accounts collected in 1914 were from families composed of 2 adults and 4 children under



13 years of age, who lived in cities of under 30,000 population; the 1907 data were collected in large cities from families of 2 adults, and 3 children whose ages totaled 20 years. Average workers' income was 1,969 francs in 1914 and 1,700 francs in 1907. Salaried employees with a family of 3.3 persons averaged 2,201 francs yearly income in 1914. Average workers' expenditures for food was in 1907 between 67 and 78 percent of the budget and in 1914 about 70 percent; rent averaged 193 francs (10.5 percent) and 166 francs (8 percent), respectively. Salaried officials spent 64.7 percent of their income on food and 10.9 percent on rent in 1914. As income increased, the proportion spent for food decreased, but increased as the family grew; the amount spent for rent increased with a slightly increasing percentage until it reached the 2,500 francs in the salaried-employee group, but formed a constantly decreasing percentage in the expenditures of the workers.

BEROT-BERGER, and LEBRUN.

(686)

TISSEUR D'USINE DE SAINT-QUENTIN (AISNE-FRANCE). TÂCHERON DANS LE SYSTÈME DES ENGAGEMENTS MOMENTANÉS D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN 1908. *Les Ouvriers des Deux Mondes* (3) 3: 77-109. 1910.

This is a study of individualism and social stratification among laborers; it also illustrates nonassortative mating. The wife was the head of the house, being more literate and socially adequate. When the study was made in 1908, the household consisted of the husband (36), his wife (34), 4 sons (15, 12, 11, and 4), 2 daughters (8 and 7), and the wife's mother (71). Three infants had died. Health conditions were fair; ailments were due largely to malnutrition. The father and eldest son had been out of work nearly all the year of the study and had made small pay at odd jobs. The mill had recently reopened. The family received gifts from private charity, and the mother earned from 5 to 6 francs each week by winding wool for flannel. The chief recreations were gardening and fishing. With no insurance and many dependents, the future seemed uncertain. Property consisted of animals valued at 52 francs, tools at 291 francs, and furniture and clothing at 1,353 francs. Income was 4,125 francs, of which 1,615 francs was in money. Property was credited with 14 francs income; subventions, 1,341 francs; labor, 2,398 francs; and industries, 358 francs. Food cost 2,000 francs; household, 406 francs; clothing, 1,470 francs; moral, recreative, and health needs, 246 francs; and all else, 4 francs, with no savings. In 1909 the father was out of work again and so discouraged that he deserted his family. He was later brought back, and help was granted them from municipal charity.

MOLL-WEISS, AUGUSTE

(687)

LE LIVRE DU FOYER. 514 pp., illus. Paris. 1910.

A few expense accounts for 1908-9, furnished by laborers and professional persons in Paris and the provinces, appear in this manual of household economy. The salaries ranged from 1,982.45 to 20,000 francs per year. Engel's law is confirmed and Schwabe's law approximated. The other items are not grouped.

MONESTIER, R.

(688)

AVEUGLE BROSSIER DE BUÉ (CHER.—FRANCE). OUVRIER CHEF DE MÉTIER D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN 1909. *Les Ouvriers des Deux Mondes* (3) 3: 145-213. 1911.

Bué, the scene of this study made in 1909, was comprised of small independent farmers and a few tradesmen. The principal source of income was from goat's-milk cheese. The brushmaker of this study, blind since 18, had gained the respect of the people by his character and industry. He was 30, his mother 56. His family had been small farmers for many years. He had consistently refused public aid. His surplus money he put into his vineyard, which he paid a worker to cultivate. He used braille; and his mother acted as his guide. His principal recreation was contact with his many friends. His well-being was protected by work, economy, good relations with his relatives, and friends. Property consisted of dwelling valued at 400 francs, shop at 450 francs, vineyard at 400 francs, money and credit at 516 francs, tools at 216 francs, and furniture and clothing at 1,406 francs. Income was 1,071 francs of which 826 francs was in money. Property was credited with 313 francs income; subventions, 189 francs; labor, 529 francs; and industries, 40 francs. Food cost 612 francs; household, 142 francs; clothing, 140 francs; moral, recreative, and health needs, 60 francs; and all else, 88 francs, 30 francs being saved. Notes are given on brush making, trades of the blind in France and other countries, competition with prison labor, and the welfare of the blind.

BERTILLON, JACQUES

(689)

LA DÉPOPULATION DE LA FRANCE. pp. 327-342. Paris. 1921.

This article constitutes a plea for the reform of conditions which make it impossible for poor French families to support adequately more than a few children. Among several family monographs quoted to illustrate these conditions, two appear to be based upon information collected by the author about 1910. A complete account of the expenses of the first family for a year is given. The father and mother, who were once rich but had lost their money, spent 10,000 francs a year; they rented a house in the suburbs of Paris and gave their 11 children a good education, but economized on food, for which they spent only 212 francs annually per person. The second expense account is that of a teacher in a small French town, who had nine children, and whose income was only 42 centimes per person per day. Nearly half of his expenditure went for food. He had an annual deficit of 350 francs.

BONNEF, LÉON, and BONNEF, MAURICE

(690)

LA CLASSE OUVRIÈRE. 398 pp., illus. Paris. 1912.

The living conditions of 10 classes of French workmen are here described in detail. Actual accounts for the year 1911 are given for the households of two French fishermen, one of which consisted of 6 persons and had an income of from 700 to 1,235 francs; the other consisted of 8 persons with an income of 785 francs. Potatoes formed the base of the diet for the fishermen. They had difficulty in securing credit during the slack season in the industry. Fuel for cooking was expensive, hence the home production of food was a problem. The women often entered gainful employment. The case or typological method is used.

PORTE, MARCEL

(691)

BUDGETS DE FAMILLES ET CONSOMMATIONS PRIVÉES. 119 pp. Grenoble. 1913.

ANTONELLI, ÉTIENNE

(692)

UNE ENQUÊTE RÉGIONALE SUR LE COÛT DE LA VIE. Rev. Écon. Polit. 35: [606]-625. 1921.

This study included farm and professional as well as wage earning families, and is annotated as (609), and also listed as (707).

BITSCH, MARCEL

(693)

LA HAUSSE DES SALAIRES ET LA CHERTÉ DE LA VIE EN FRANCE. 69 pp., illus. Paris. 1920.

The increase in wages from 1914 to 1918 was not sufficient to balance the contemporaneous rise in the cost of living, according to this study. The author includes expense accounts for two families (presumably French) for the year 1918, which he says were provided by the "cahier de revendications du Syndicate des Metallurgistes du Cresusot." The first of these is for a family of 2 persons, whose average daily expenses were 8.75 francs for food and 1.87 francs for all other purchases; the second is for a family of 4, but expenditures were but little greater than for the first one. The cost of living is shown to have been much less in 1918 than in 1919.

FRANCE, COMMISSION CENTRALE D'ÉTUDES RELATIVES AU COÛT DE LA VIE.

(694)

RAPPORT GÉNÉRAL SUR LES TRAVAUX DE LA COMMISSION CENTRALE, ET DES COMMISSIONS RÉGIONALES DANS LE COUR DE L'ANNÉE 1920. 635 pp., illus. Paris. 1921.

The purpose of this study was to find the influence of the war on the cost of living by comparing 1914 with 1920 prices. Questionnaires were distributed in 1920 among all classes of workers in various industries by the prefects of 20 typical cities. The replies to these questionnaires showed expenditures, not receipts. Food expenditures formed more than half of the total output; clothing expenditures constituted, in most of the cities, 15 to 20 percent of the total. The proportion of the whole expense for food was slightly higher in 1920 than in 1914; that for rent noticeably lower. The rise in the cost of living due to the war was found to be more pronounced in the devastated regions. The study is chiefly concerned with cost of living.



VALDOUR, JACQUES

OUVRIERS PARISIENS D'APRÈS-GUERRE \*\*\* 191 pp. Paris. 1921.

(695)

The author gives here a narrative description of working and living conditions in different quarters of Paris, including housing and clothing, hours of work, rates of pay, and expenditures for food and other items. The data probably apply to a period closely preceding 1921, the date when the study was published.

FRANCE, UNION SOCIALE D'INGÉNIEURS CATHOLIQUES.

(696)

ECHO DE L'UNION SOCIALE D'INGÉNIEURS CATHOLIQUES. Paris. 1923.

[Original not seen. Summarized in International Labour Office, Methods of Conducting Family Budget Enquiries, p. 65. Geneva. 1926.]

By this unofficial inquiry conducted during 1923 on the family and labor, data were obtained on family expenditures in different parts of France.

CLOUET, H.

(697)

LE BUDGET DE LA FAMILLE OUVRIÈRE AU TEMPS PRESENT. Réforme Sociale 87: 145-156, illus. 1927.

A year's household accounts, around 1926, of seven French workers' families are presented, together with a plea for social insurance. The families chosen were honest and economical. The data were obtained by interview. The size of the household ranged from 3 to 8 persons; the annual income from 12,480 to 30,000 francs. Not one family was able to balance its budget and still make any provision for accidental misfortune. Outside aid was needed if there was more than one child. The morale of the household, as well as its pecuniary condition, appeared to be better if the mother did not leave the home to work.

ROUSSEL, LOUIS

(698)

MONOGRAPHIE D'UNE FAMILLE OUVRIÈRE DE LORRAINE. Réforme Sociale 88: 289-320. 1928.

The procedure followed is that of the Le Play method, describing in detail the living conditions of a French railway repair man's family in Hagondage, Lorraine, about 1926. Two of the six children lived at home; the others were married. They had an income of 17,400 francs a year, supplemented by products from the garden, etc., which are not evaluated. The stability of this family was based on the regularity of the husband's work and the wife's presence in the home.

(699)

AJUSTEUR AU CHEMIN DE FER DES USINES DE WENDEL À MOYEVRE-GRANDE (MOSELLE). OUVRIER JOURNALIER DANS LE SYSTÈME DES ENGAGEMENTS VOLONTAIRES PERMANENTS, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN 1926 ET 1927. Les Ouvriers des Deux Mondes (3) 3: 1-36. 1928.

This study made in 1926 and 1927, shows social stability arising from continuous employer-employee engagements, and describes a worker who had been 45 years with his firm, and who was respected by his fellow workmen, as shown by his membership in 3 societies, 1 patriotic, 1 musical, and 1 religious. The household consisted of the head (64), his wife (63), 1 son (28), and 1 daughter (27). Three daughters and one son were married and away from home. Health conditions were good. The workers lived in a village having large kitchen gardens and were transported to work by train. In his spare time the man did odd jobs and tended to the garden. The wife and son helped with the garden. The son also worked at the steel plant. Commercialized recreations were on the increase after the war, but this family still confined itself to the old free ways. Their well-being was protected by work, economy, and savings. Property consisted of house and garden valued at 50,000 francs, money invested 12,000 francs, and tools valued at 3,600 francs. Income was 23,880 francs. Property was credited with 3,280 francs income; subventions, 200 francs; and labor, 20,400 francs. Food cost 15,575 francs; household, 2,888 francs; clothing, 1,570 francs; moral, recreative, and health needs, 980 francs; and all else, 600 francs. Savings were 3,463 francs.

DURAND, PAUL

(700)

EMPLOYÉ AUX CHEMINS DE FER FRANÇAIS À BOIS-COLOMBES (SEINE). OUVRIER JOURNALIER DANS LE SYSTÈME DES ENGAGEMENTS VOLONTAIRES PERMANENTS, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN 1928. Les Ouvriers des Deux Mondes (3) 3: 1-62. 1930.

This study, made in 1928, deals with the influence of the war and with suburban dwellers. The railway worker described was the average type commuting daily to Paris. The household consisted of the head (43), his wife (41), daughter (16),

and two sons (14 and 9). The children were in excellent health, the father had an ailment contracted during the war, and the mother was becoming blind. The worker was employed in the central office of the Paris railway, and had only a 12-day holiday yearly. He received a bonus at Christmas. Recreations were confined entirely to reading and talking in the family group. Family well-being depended upon the good character of the worker, his devotion to his work, and economy, in all of which he was ably seconded by his wife. If the post-war value of the franc is compared with its pre-war value, his beginning salary was slightly higher, but the maximum was not so high. Property consisted of dwelling and garden valued at 20,000 francs and tools at 1,260 francs. Income was 29,795 francs, of which property was credited with 1,045 francs, and work 28,751 francs. Food cost 12,000 francs; household, 4,500 francs; clothing, 6,100 francs; moral, recreative, and health needs, 3,150 francs; and all else, 1,656 francs. Savings were 1,344 francs.

## OTHER INDEPENDENT FAMILIES

AVENEL, G. D'

(701)

LES RICHES DEPUIS SEPT CENT ANS. 387 pp. Paris. 1909.

This history of private fortunes treats of salaries and has something to say about prices but does not deal directly with the level of living. The data apply to France since the eleventh century. It is a study of time as a factor in the level of living. Historical material on family expenditures, so far as available, is analyzed. "There are more who possess exceptional wealth in our time than in preceding ages, and, though the general welfare of the entire population has greatly increased, the contrast between the condition of the average family and that of the richest classes is more marked than formerly." Examination of the nature and amount of incomes of different professions—the military, the legal, the medical, the clerical, the scholastic, the artistic, and the literary—affords opportunity for supplying many illuminating details of the kind of service rendered and the relations between classes, as well as for setting forth actual figures of incomes and payments, legacies, dowries, and ransoms. In all the comparisons of different ages, the amounts of income or of capital possessed by individuals are expressed in their equivalent in modern money, as indicated by the relative purchasing power of money at different times, determined by the author in his earlier investigations. "The very wealthy of our day are six times richer, or, comparing the possessors of equal wealth, twelve times more numerous than the richest of the ancient regime; they are ten times richer, or twenty times more numerous than the wealthiest princes of feudal times."

LE CORBEILLER, ÉDOUARD

(702)

UN BUDGET FÉODAL AU XVE SIÈCLE. *Réforme Sociale* (2) 2: 115-116. 1886.

On May 5, 1495, 7 clergymen, 14 nobles, and 30 vassals met and reported what they knew regarding the annual receipts and expenditures of the feudal Comté de Longueville. The data, which are incomplete, concern state and household finances. The data are particularly valuable because they cover a period for which such information is very scanty.

ROGUÉS, A.

(703)

INSTITUTEUR PRIMAIRE D'UNE COMMUNE RURALE DE LA NORMANDIE (EURE—FRANCE). CHEF DE MÉTIER, DE CONDITION MODESTE, SE RATTACHANT PAR PLUSIEURS TRAITS À LA CLASSE DES OUVRIERS, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN JUIN 1860. *Les Ouvriers des Deux Mondes* (1) 3: 327-372. 1861.

There were 46 families, with an average of 4 children, in the commune which forms the subject of this study, made in 1860. The family described consisted of the husband (60), his wife (47), and one son (18). Three others had died. The head, a teacher, was loved and respected by all. Health conditions were excellent. Medical services and medicine were received free of charge. The family dressed and lived like the other villagers but they did no agricultural labor. Recreation was noncommercialized. Well-being was assured by their labor, economy, strong beliefs, honesty, a retirement pension, and the son's guaranteed position as a teacher. Property consisted of 70 ares of land worth 1,500 francs, money 200 francs, working equipment valued at 28 francs, and furniture and clothing at 862 francs. Income was 1,273 francs, of which 931 francs was in money. Property contributed 47 francs; subventions, 184 francs; labor, 984 francs; and industries, 58 francs. Food cost 751 francs; household, 117 francs; clothing, 233 francs; moral, recreative, and health needs, 37 francs; and all else, 30 francs. Savings were 105 francs. Notes are given on the condition of rural public-school



teachers; the favorable effects in a rural community of patronage by a large land-owner; the physical and moral contrast between two neighboring communities; an ancient mutual burial association; old religious customs; the decadence of agriculture in the community; and the unfavorable influence of annual assemblies for employing farm and domestic servants.

MAROUSSEM, PIERRE DU (704)  
SITUATION D'UNE FAMILLE FRANÇAISE AU TEMPS DE LE PLAY ET DE NOS  
JOURS. *Réforme Sociale* 82: 410-417. 1922.

The household accounts of two families are compared in this study: one of an elite bourgeois pensioned official in 1882, the second of his son 40 years later. Both families dwelt in Paris part of the year, and in the country the remainder of the time. The earlier family, consisting of five persons, had an annual income of 12,000 francs, a quarter of which was spent for food (the proportion was low because of the wealth of the family). The modern household, composed of six persons, spent about 47,000 francs a year, as compared with 10,000 francs for its predecessor. Food expense for the four persons living at home came to 12,000 francs. The head of the family had a university training and had high positions in several industrial societies. The author stresses the importance for family stability of immobile property.

BÉRANGER, HENRY (705)  
LES PROLÉTAIRES INTELLECTUELS EN FRANCE. pp. 1-51, illus. Paris. 1901.

The incomes and expenses of the professional classes are analyzed in this article. In 1900 there were 12,000 to 13,000 physicians in France. Of these 5 to 6 earned 200,000 to 300,000 francs a year, 10 to 15 earned 100,000 to 150,000 francs, 100 earned 40,000 to 60,000 francs, 300 earned 15,000 to 30,000 francs, 800 earned 8,000 to 15,000 francs, and 1,200 earned less than 8,000 francs. Inadequate incomes were supplemented when possible by officeholding. Of the 3,000 advocates less than 250 earned from 10,000 to 50,000 francs a year; professors' salaries ranged from 1,000 to 3,000 francs a year; engineers' salaries from 1,200 to 4,000 francs a year; army officers', 2,500 to 3,800 francs a year; directors' and administrative officers', 1,800 to 3,900 francs a year. The incomes of artists varied with their popularity. Senators and representatives had incomes of 9,000 francs and necessary expenditures of 25,000 francs per year. The increase of students from 1814 to 1896 is tabulated. According to the data furnished in this survey, the incomes of all political officials, of all students and teachers, of 90 percent of the advocates, and of 80 percent of the physicians were inadequate and were supplemented by teaching, officeholding, and manual labor.

MOLL-WEISS, AUGUSTE (706)  
LE LIVRE DU FOYER. 514 pp., illus. Paris. 1910.

This study included wage-earning as well as professional families and is annotated as (687).

ANTONELLI, ÉTIENNE (707)  
UNE ENQUÊTE RÉGIONALE SUR LE COÛT DE LA VIE. *Rev. Écon. Polit.* 35:  
[606]-625. 1921.

This study included farm and wage-earning as well as professional families and is annotated as (609) and also listed as (692).

#### DEPENDENT FAMILIES

HAUSSONVILLE, GABRIEL P. V. DE CLÉRON (708)  
MISÈRE ET REMÈDES. 552 pp., illus. Paris. 1886.

This study of the indigent classes particularly in Paris is based on personal investigation by the author both of records and of individual cases. In 1886 there were 465,260 indigents in Paris, some of them habitual paupers, and some paupers by accident. These are listed by arrondissements, the districts farthest from the center of the city having the greatest number. Some of these were able to earn part of their expenses. The minimum cost of living in Paris ranged from 850 to 1,200 francs per annum. Of this sum one-eighth went for lodging, five-eighths for food, one-eighth each for clothing and other necessary expenses. The earnings of this class ranged from 15 francs per month to 7 francs per day. The amount of assistance given by public charities is averaged for each group. Two endowed restaurants furnished dinners for 14 sous, wine included.

## GERMANY

## FARM FAMILIES

NEUMANN, ANNA (709)

DIE BEWEGUNG DER LÖHNE DER LÄNDLICHEN FREIEN ARBEITER IM ZUSAMMENHANG MIT DER GESAMTWIRTSCHAFTLICHEN ENTWICKLUNG IN KÖNIGREICH PREUSSEN GEGENWÄRTIGEN UMFANGS VOM AUSGANG DES 1STEN JAHRHUNDERTS BIS 1850. 400 pp., illus. Berlin. 1911.

This study deals almost exclusively with wages. A history is given of the development of the rural labor system from the time before the freeing of the peasants. It quotes from many sources wages in the different parts of the country from 1780 to 1850, also, from various sources, wages and prices of foodstuffs in the different Provinces of Prussia from 1800 to 1850. An appendix gives a number of household accounts quoted from different sources.

LENGERKE, ALEXANDER VON (710)

DIE LÄNDLICHE ARBEITERFRAGE. Berlin. 1849. [Original not seen. Summary in Albrecht, Gerhard, *Haushaltungssstatistik*, pp. 16-17, 60. Berlin. 1912. Also in Hampke, Carl, *Das Ausgabebudget der Privatwirtschaften*, pp. 11-14. Jena. 1888.]

Von Lengerke's inquiry was concerned with the means of ameliorating conditions among agricultural workers. It included workingmen's families of five members from various Prussian States in 1848. The questionnaires were answered largely by the landlords. Expenditures ranged from 96 to 204 thaler a week and included clothing, heat and light, food, rent, and miscellaneous items.

GOLTZ, THOMAS VON DER (711)

BUDGET EINES LÄNDLICHEN ARBEITERS IN OSTPREUSSEN. *Concordia Ztschr. Arbeiterfrage*. 1872. [Original not seen. Summary in Albrecht, Gerhard, *Haushaltungssstatistik*, p. 60. Berlin. 1912. Also in Hampke, Carl, *Das Ausgabebudget der Privatwirtschaften*, p. 25. Jena. 1888.]

The expense account of an ordinary farm hand in Holstein in 1872 is given. For food he spent 486 marks 50 pfennig, for clothing 120 marks, and for rent 60 marks. His total expenditures for the year were 829.75 marks.

(712)

DIE LAGE DER LÄNDLICHEN ARBEITER IM DEUTSCHEN REICHE. 503 pp., illus. Berlin. 1875.

Included in this book are expense accounts of six farm laborers' families in various parts of Germany in 1872. Goods raised or furnished were evaluated, but the method is not given. The sources and nature of the incomes of seven similar laborers are also given, together with 254 estimated budgets, supposedly typical of the cost of living of rural workers in as many districts of Germany. They give approximate expenditures for food, clothing, dwelling, heating and lighting, and miscellaneous items. The bulk of the work deals in detail with the conditions of the rural class throughout Germany and indicates that economic conditions had improved since about 1865, that the use of insurance had increased, and that migration to the city was marked.

VEREIN ZUR FÖRDERUNG DES WOHELES DER ARBEITER. (713)

BUDGET EINES LÄNDLICHEN ARBEITERFAMILIE IM MAGDEBURGISCHEN, 1872. *Concordia Ztschr. Arbeiterfrage*. 1873. [Original not seen. Partly summarized in Hampke, Carl, *Das Ausgabebudget der Privatwirtschaften*, pp. 25, XIV. Jena. 1888.]

The income of this family in 1872 was 729 marks per annum; the expenditures, 900.17 marks. Of this, 54 marks were for rent, 153.33 marks for clothing, 586.12 marks for food.

SCHNAPPER-ARNDT, GOTTLIEB (714)

FÜNF DORFGEMEINDEN AUF DEM HOHEN TAUNUS. EINE SOCIALSTATISTISCHE UNTERSUCHUNG ÜBER KLEINBAUERTUM, HAUSINDUSTRIE UND VOLKSLEBEN. *Staats- u. Sozialwiss. Forsch.*, v. 4, 322 pp., illus. Leipzig. 1883.

This study deals with five villages on the highest northeastern part of the Taunus or Hohengebirge. The last observations were made during a stay of several months in the spring and fall of 1881. The author gives a detailed historical and statistical account of the development and status of the district since 1806. In two appendixes he presents household data and in this connection states



clearly how his method differs from that of Le Play. He criticizes Le Play's system because it does not show consumption for a given time since he records the price of articles bought in a certain period which might last years beyond that period. Schnapper-Arndt records the consumption value of possessions from the year before and proportional yearly value of articles which were to last longer. Thus, one can obtain the yearly consumption value as well as the yearly total expenditures. Appendix 7 is the monograph of the family of a road worker who owned no property. The data were collected during many visits in the spring and autumn of 1877. The family consisted of a man, his wife, and 5 children from 2 to 16 years of age. Two boys of 16 and 15 worked with their father at road building. A daughter of 9 made filet lace. Their income was about 1,300 marks. A complete inventory of all possessions even to one handkerchief is given.

ANONYMOUS.

(715)

ZUR LAGE DER LÄNDLICHEN FREIEN ARBEITER IN EINER DER REICHSTEN UND FRUCHTBARSTEN GEGENDEN DES PREUSSISCHEN STAATES IN MAGDEBURGISCHEN. *Arbeiterfreund* 22 (4): 446-456. 1884.

This was a study of average farm workers' income and expenditures in Magdeburg in 1883. Yearly income was as follows: 250 days in the fields at 1 mark 50 pfennig per day and 50 days in the sugar factory at 2 marks per day was 475 marks per man; 60 days at 80 pfennig and 36 at 2 marks per day for the wife was 120 marks; two children earned 40 marks; total income per family was 635 marks. Expenditures were food, 519 marks; rent, 72 marks; heating, 36 marks; shoes, 70 marks; clothing, 85 marks; taxes and gifts, 21 marks; total, 803 marks. With great economies this could be cut down to 674 marks. Owing to rising land rents, production of food and flax for subsistence from home gardens had been done away with during the previous 20 years. With no insurance or pensions from the landlords, the workers were dependent on town charity in times of need. Laws against Sunday work were not enforced.

BADEN, MINISTERIUM DES INNERN.

(716)

ERHEBUNGEN ÜBER DIE LAGE DER LANDWIRTSCHAFT IN GROSSHERZOGTUM BADEN 1883. Karlsruhe. 1884. [Original not seen. Summary in Albrecht, Gerhard, *Haushaltungsstatistik*, pp. 40, 60. Berlin. 1912. Also in Hampke, Carl, *Das Ausgabebudget der Privatwirtschaften*, pp. 18-19, IV-V. Jena. 1888.]

The rent of agricultural lands was the chief object of inquiry in this investigation. A questionnaire designed to indicate what part of the food was bought and what part raised at home, was sent to representative farmers in the Grand Duchy of Baden. Each record covered a month's expenses in 1883. A typical family consisted of parents, 3 children, 1 maid, and 1 day laborer. Food costs were 979.70 marks, clothing 150 marks, heat and light 20 marks.

RUDLOFF, HANS L.

(717)

WIRTSCHAFTSERGEBNISSE EINES MITTLEREN BÄUERLICHEN BETRIEBES IM HESSISCHEN BERGLAND (1888-1909). *Jahr Gesetzgebung, Verwalt und Volks im Deutschen Reiche* 35 (1): 251-283, illus. 1911.

The family described here consisted of the owner, his wife, 5 grown children and 3 still in school. Accounts were kept and balanced each year. The income varied from 993.08 to 3,871.26 marks per year. Most of the data presented are business data of the farm. The household data refers to the years 1888 to 1909, and consist of total cash expenditures for the household, expenditures for doctors and medicine (this item includes the veterinary's services), and quantities and value of food produced by the farm and consumed in the household.

HINTZE, ULRICH

(718)

DIE LAGE DER LÄNDLICHEN ARBEITER IN MECKLENBURG. 110 pp. Rostock. 1894.

The purpose of this work was to discover why so many peasants left the farms to go to the city, and to find a method of combating this tendency. The author uses an historical approach, distinguishing six kinds of workers. To the money wages of each of these is added an estimate of the value of land or produce furnished. Tables give income and expenses of a day laborer's family of 5 or 6 persons in 1891-92. Expenses were compiled from estimates given the author by day laborers on various estates. The income was estimated on the bad harvest year of 1891-92.

MAY, MAX

(719)

WIE DER ARBEITER LEBT. ARBEITER-HAUSHALTUNGSRECHNUNGEN AUS STADT UND LAND. 75 pp., illus. Berlin. 1897.

The author of this study, whose purpose was to compare living conditions in urban and rural districts, publishes 20 household accounts with short monographs on each family. Skilled and unskilled workers are represented from large- and small-scale industries, handwork, and farming. The families lived in large, medium-sized, and small cities, villages, and rural industrial districts. The period to which the data apply was probably just prior to 1897, the date when the study was published.

HEISER-HARTTUNG, FRANZ

(720)

LÄNDLICHE UND STÄDTISCHE ARBEITER. EIN VERGLEICH IHRER BUDGETS. 95 pp., illus. Merseburg. 1902.

The theory that greater earnings and an easier life are to be obtained by migrating from the country to the city is discredited in this study. The data were obtained by questionnaires circulated among rural workers in various districts, especially in Prussia, and among urban workers in Berlin, Hamburg, and a few smaller Prussian towns. Expenditure accounts for 1900-1 are given for (1) the clothing of 1 unmarried rural workman, (2) families of 4 rural workmen, (3) clothing of 6 city workmen, (4) combined expenses of 6 city workmen, (5) a childless railroad worker's family, (6) 24 city mothers, (7) family of 1 shepherd, (8) family of 1 railroad worker, (9) 63 unmarried workers, and (10) 137 married workers. The classifications of expenditures vary from simple to very detailed statements. Produce raised on the farm is valued, but the method is not stated. Living was found to be dearer in the city than in the country, and jobs scarcer. While the total amount expended for food is greater for larger families than for smaller ones, the total amounts expended for rent and clothing were found to be considerably smaller for larger families.

HAGEMANN, H.

(721)

30 WIRTSCHAFTRECHNUNGEN VON KLEINBÄUERN UND LANDARBEITERN. Bonn. 1911.

WELKER, GEORG

(722)

DIE MÜNCHENER ERHEBUNG ÜBER DEN LEBENSMITTELVERBRAUCH IM FEBRUAR 1915. 201 pp., illus. München. 1916.

The purpose of this work was to study the requirement of food to nourish the individual properly—a knowledge necessary for successful waging of war. Household accounts for February 1 to 26 were obtained from 4,616 (München) families representing all social classes and varying in size from 1 to 15 members. Classes represented included farmers, miners, officials, innkeepers, industrial owners and workers, house servants, day laborers, war workers, professional men, and people living on their incomes. There are many tables in which the families are grouped according to size and social standing, showing the relative importance of different types of food, quantities consumed, calorie consumption, and total food expenditures, showing the rise in food prices since 1914.

MÜNZINGER, ADOLF

(723)

DER ARBEITSERTRAG DER BÄUERLICHEN FAMILIEN WIRTSCHAFT; SINE BÄUERLICHE BETRIEBSERHEBUNG IN WÜRTTEMBERG. 2 v. Berlin. 1929. [Original not seen. Listed in Kayser's Bücher-Lexikon.]

FAMILIES OF WAGE EARNERS, LOW-SALARIED WORKERS, AND SMALL PROPRIETORS

SCHNAPPER-ARNDT, GOTTLIEB

(724)

STUDIEN ZUR GESCHICHTE DER LEBENSHALTUNG IN FRANKFURT A. M. WÄHREND DES 17 UND 18 JAHRHUNDERTS. AUF GRUND DES NACHLASSES VON DR. GOTTLIEB SCHNAPPER-ARNDT. Vöreffentlichungen der Historischen Kommission der Stadt Frankfurt a. m. 2 v., illus. Frankfurt a. m. 1915.

This study is based on three account books found in the city or state archives kept by (1) Johann Maximilian zum Jungen, 1642-48; (2) Johann Balthasar Kaib, 1685-95; and (3) Nikolaus von Uffenbach, 1734-36. Certain entries are analyzed in an effort to reconstruct a picture of living conditions at the time. Volume 1 is descriptive but volume 2 presents in detail the expense accounts of the three families (of which Nikolaus von Uffenbach alone recorded income).



An appendix to this volume gives modern values for the old money and measures. The expenditures of (1) varied from 2,863 to 4,814 florins per year; the expenditures of (2) from 1,417 to 3,082 florins; while the income of (3) varied from 2,033 to 8,815 florins per year. The family of Johann Maximilian zum Jungen consisted in 1642 of wife, son of 15, and daughter of 14. Johann Kaib in 1686 had 6 children, and 2 daughters were born during the period 1686-95; neither ages nor dates are given. Nikolaus von Uffenbach married in 1721; there were 11 children, but size of family between 1734 and 1736 could not be determined.

SCHNAPPER—ARNDT, GOTTLIEB

(726)

AUS DEM BUDGET ZWEIER SCHUHMACHERGESELLEN DES 17. JAHRHUNDERTS.

Vorträge u. Aufsätze, pp. 145-153, illus. Tübingen. 1906.

Some items of expenditure are listed here from the accounts of the guardian of these German journeymen from 1692 to 1697. There is no classification of data, and the entries are scanty.

ZUR THEORIE UND GESCHICHTE DER PRIVATWIRTSCHAFTS-STATISTIK. Vorträge u. Aufsätze, pp. 16-59, illus. Tübingen. 1906. [Also published in Bull. Inst. Internatl. Statis. 13 (2): 284-321. Budapest. 1902. Also in a special pamphlet. Leipzig. 1903.]

(725)

In this lecture the author gives a history of the development of household statistics, citing such workers as C. D. Wright, and especially Le Play. As to method he states definitely that if at all possible, monographs should be based on household-account books. When these are not available, the carefully worked out monograph is one of the best means of getting at living and economic conditions of a group. He advocates giving gifts if one must to get the books kept but thinks it better to arouse scientific interest. It is not possible to say how long the study should be continued. A year is best, but exact bookkeeping for a month or a week is not without value. "To observe most carefully, separate the evidence of one's own senses from other evidence, test all evidence for the degree of probability and report this; that is all that is humanly possible." In the working up of the data he starts from Le Play's scheme but insists that all data must be for the same period of time. He changes the method of giving an inventory by arranging objects according to kind and time of purchase. He urges strongly that every investigator record his material by double-entry bookkeeping. In appendix 1 the business and a few household accounts of a master baker of Nürnberg in 1695 are presented from records found in the Germanic Museum of that city. Data include expenditures for different types of food, quantities consumed, servants employed, and education. In appendix 1a a few expenses of the prioress of a convent at Sanct Clarn are given for the year 1574. They are taken from old records in the Germanic Museum. The quantities of different types of food consumed, with their money value, are given, together with a description of household furnishings and some description of medical care. Appendix 3 quotes one household account from Le Play's *Ouvriers des Deux Mondes*. Appendix 4 presents a household account taken from Le Play, rearranged according to the Schnapper-Arndt method of classification.

DIETZ, ALEXANDER

(727)

FRANKFURTER BÜRGERBUCH MITTHEILUNGEN ÜBER 600 BEKANNTE FRANKFURTER FAMILIEN AUS DER ZEIT VOR 1806. 197 pp. Frankfurt-am-Main. 1897.

EHRENBERG, RICHARD, ed.

(728)

KOSTEN DER HAUSHALTUNG IN TELLOW. Arch. Exacte Wirtschafts-Forsch. 2: 554-567, illus. 1909.

According to Dr. Ehrenberg, the tables on these pages, which seem to be the accounts of a large estate, are the first work of Johann Heinrich von Thünen, which is based on material from the estate Tellow. It bears the date of autumn 1810. The editor furnishes no statement as to the location of the estate. Some of the entries appear to be estimates. Some household data are reckoned for one person, distinction being made between the master's and the servants' table.

SAINT-LÉGER, A. DE, and LE PLAY, F.

(729)

MINEUR DES CORPORATIONS DE MINES D'ARGENT ET DE PLOMB DU HAUT-HARTZ (HANOVRE). TÂCHERON ET OUVRIER-PROPRIÉTAIRE DANS LE SYSTÈME DES ENGAGEMENTS VOLONTAIRES PERMANENTS, D'APRÈS LES DOCUMENTS RECUEILLIS SUR LES LIEUX EN 1829 ET EN 1845. *In* Les Ouvriers Européens, ed. 2, v. 3, pp. 99-152. Paris. 1877.

This study, made in 1829 and 1845, describes a worker who enjoyed the increased social solidarity secured under the famille-souche. He was paid by quantity, although in fact the employer raised or reduced the rate to give a steady weekly income. The household consisted of the head (40), his wife (35), two sons (14 and 8), and a daughter (11). The climate was healthful, but not the working conditions. Medical service was financed partly by a sick fund from the workers but chiefly by the employer. The worker also cultivated the garden and helped with the housework. The wife shopped biweekly for herself and others, took in washing, and cultivated the garden. The eldest son worked by the day at a mechanical workshop. The principal recreation was smoking. Family well-being rested on their connection with the corporation of mines, ownership of a home and garden, a low and fixed price on foodstuffs, and a guarantee against unemployment. Property consisted of house, garden, tools, and insurance funds valued at 2,402 francs, and furniture and clothing at 494 francs. Income was 943 francs, of which 683 francs was in money. Property accounted for 94 francs; subventions, 116 francs; labor, 697 francs; and industries, 37 francs. Food cost 510 francs; household, 134 francs; clothing, 157 francs; moral, recreative, and health needs, 32 francs; and all else, 109 francs, there being no savings. Notes are given on the corporation of mines, the principles of property ownership, and the administration of the forests of Haut-Hartz; the social constitution of Hannover and Lüneburg; New Hermannsburg in South Africa; and the studies pursued here by Le Play from 1829 to 1855.

FLOR, AUGUST

(730)

ARBEITSLÖHNE UND GEHÄLTER IN DER LANDWIRTSCHAFT, DEN GEWERBEN, BEIM LEHRPERSONAL UND BEI DER GEISTLICHKEIT IN NIEDERBÄYERN. Ztscher. Ver. Deut. Statis. 1. 1847. [Original not seen. Summary in Albrecht, Gerhard, Haushaltungsstatistik, p. 53. Berlin. 1912.]

An account is given of the most necessary expenditures at current prices, of a family living on the margin of poverty. The data are probably for the period just prior to 1847, the date of the study.

(731)

ARBEITSLÖHNE UND LEBENSMITTELPREISE, AUCH WOHLTÄTIGKEITANSTALTEN IN ALTONA. Ztschr. Ver. Deut. Statis. 1. 1847. [Original not seen. Summary in Albrecht, Gerhard, Haushaltungsstatistik, p. 53. Berlin. 1912.]

The household expenses, probably around 1847, of an average family of laborers was estimated from consumption at various meals and from the prices of necessary articles.

SAINT-LÉGER, A. DE, and COCHIN, A.

(732)

TISSERAND DE GODESBERG (PROVINCE RHÉNANE). OUVRIER-TÂCHERON DANS LE SYSTÈME DES ENGAGEMENTS MOMENTANÉS, AVEC UN PRÉCIS DE LA MONOGRAPHIE AYANT POUR OBJET LE LUTHIER DU WERDENFELS, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN 1848. *In* Le Play, F., Les Ouvriers Européens, ed. 2, v. 5, pp. 60-102. Paris. 1878.

This is a study of workers of western Europe in a social structure beginning to crumble as a result of the introduction of steam machinery. In 1848 when the study was made, the household consisted of the head (39), his wife (32), two sons (12 and 6), and a daughter (9). Morals and health were good. Medical service was paid for by the visit. The worker cultivated a garden. The woman cared for the cow, made and sold butter and cheese, helped to cultivate the garden, and gathered fuel. The eldest son attended public school. Recreations included smoking, drinking, and dancing. Family well-being rested partly on the rights over public land which permitted pasturage of the cow and furnished fuel and



much of their food. Property consisted of the cow and garden tools valued at 115 francs, and furniture and clothing at 154 francs. Income was 587 francs, of which 486 francs was in money. Property accounted for 7 francs income; subventions, 59 francs; labor, 421 francs; and industries, 101 francs. Food cost 386 francs; household, 75 francs; clothing, 92 francs; moral, recreative, and health needs, 30 francs; and all else, 5 francs, there being no savings. Notes are given on the former social stability in the Rhine Valley and causes of its disappearance; the influence of forestry subventions on the workers; the comparative situation of semiagricultural weavers in northwest Germany and factory weavers; methods of preparation of sauerkraut and various vegetables; and the violin maker of Werdenfels.

The latter study illustrates the influence of the law of equal property division upon the breaking down of a social structure formed about the *famille-souche*. The violin maker was a land-owing pieceworker in a system of momentary engagements. Violin makers were required to be members of the commune and to have the approbation of the police. This family consisted of the worker (47), his wife (48), and 3 sons (20, 16 and 8), 11 other children having died. Such fecundity is common in Mittenwald. Typhoid (to which the death of the 11 children was ascribed), rheumatism, colds, and other pulmonary diseases were common in the vicinity. The parents were not strong, but the remaining children were healthy. The Government provided a doctor.

The father was respected for his regular conduct, his wise exercise of paternal authority, love of work, and careful provision for the future. He and the children farmed and cared for the cows. The eldest son helped with the household duties, the garden, and the care of the animals, and also made violins in the winter. The second son was apprenticed, making violin necks, and also worked 10 days a year for the communal hydraulic works. The third son was still in school. Recreations included moderate drinking, smoking, cards, and village and religious festivities. Subventions included the right to collect firewood, valued at 62 francs, pasture rights at 105 francs, litter for animals 32 francs, religious instruction 3 francs, wood chips from the violins 2 francs, and gifts 4 francs. House and garden were valued at 1,724 francs; 112 acres of land, 1,379 francs; money, 22 francs; animals, 329 francs; working equipment, 272 francs; furniture and clothing, 1,372 francs. Property accounted for 165 francs of income; subventions, 208 francs; labor, 1,388 francs; and industries, 265 francs. Food cost 914 francs; household, 182 francs; clothing, 405 francs; moral, recreative, and health needs, 105 francs; and all else, 20 francs, 400 francs being saved. State patronage assured the family firewood, a fence, pasture, and public garden lands. Good morals and habits of saving helped to insure family well-being. Division of land by inheritance menaced the stability of this section of Germany.

DEHN, PAUL

(733)

DEUTSCHE HAUSHALTUNGSBUDGETS. Ann. Deut. Reich. 1880: 577-589, illus. Leipzig. 1880.

This article, the second in a series concerning the material condition of German working people, contains no original or unpublished material, but it gives the program for the collection of German household data drawn up by the directors of the statistical bureaus of German cities in 1879; and it gives in some detail the conclusions of the main studies already conducted in Silesia. Some actual accounts are presented from von Lengerke's *Die Ländliche Arbeiterfrage*, 1849 (710); Schwedler's *Arbeitslöhne in der Schlesischen Textilindustrie und Unterhaltsbedarf in den Letzten Zehn Jahren, 1874* (743); Jacobi's *Die Arbeitslöhne in Niederschlesien 1868, (746)*, etc. All these accounts showed deficits and indicated a low level of living.

HIRSCHBERG, E.

(734)

DIE SOZIALE LAGE DER ARBEITENDEN KLASSEN IN BERLIN. 311 pp., illus. Berlin. 1879.

This study, covering the period 1848-96, is limited primarily to the lower laboring classes, and the emphasis is put on the last decade covered by the investigation. The average unskilled laborer earned from 1.80 to 2.50 marks a day; women received from 1 to 2 marks. Of the skilled laborers, machinists were the best paid, receiving as much as 6 to 7 marks a day. Several workmen's budgets are included. The incomes ranged from 1,400 to 1,650 marks a year, and the expenditures usually equaled the incomes. Rents were approximately the same in all cases. Engel's law receives only partial confirmation, the size of the family causing variations in the proportion of total food expenditure.

## LE PLAY, F.

(735)

FONDEUR AU BOIS DU HUNDSRUCKE (PROVINCE RHÉNANE). JOURNALIER-PROPRIÉTAIRE DANS LE SYSTÈME DES ENGAGEMENTS VOLONTAIRES PERMANENTS, AVEC UN PRÉCIS DE LA MONOGRAPHIE AYANT POUR OBJET LE LUTHIER DE L'ERZGEBIRGE EN SAXE, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN 1851. *In Les Ouvriers Européens*, ed. 2, v. 4, pp. 68-120. Paris. 1877.

This study illustrates a stable industrial family of western Europe living amid social disorganization. The worker was a day laborer connected with the feudal iron foundry, who also cultivated a small piece of land. At the time of the study in 1851 the household consisted of the father (47), his wife (48), and 3 sons (17, 15, and 8); 4 others were said to have died because of the climate. The family had good morals. Health was excellent. The woman was thrifty and industrious, washing 40 days yearly for more affluent citizens, and by her earnings and savings she had made them property owners. The two older sons worked at the foundry and helped in the garden. Family well-being was protected by private property, a share in community goods, feudal patronage, family moral qualities, and the wife's energy and thriftiness. Property consisted of dwelling and land valued at 2,430 francs, animals 10 francs, working equipment 46 francs, and furniture and clothing 845 francs. Income was 1,349 francs, of which 886 francs was in money. Property was credited with 129 francs; subventions, 56 francs; labor, 925 francs; and industries, 238 francs. Food cost 597 francs; household, 155 francs; clothing, 282 francs; moral, recreative, and health needs, 84 francs; and all else, 87 francs; savings were 143 francs (used to buy property). Notes are given on stability in the social structure of the German states; resistance to dangerous innovations in Bavarian Palatinate; the population in Sayn; the exaggerated subdivision of the land in Sayn, and means of reform adopted in several German states; the method in Hohenhaida to remedy land division; the Scheibenschlagen; the Passion Play of Oberammergau; and a summary of a lute-maker of Erzgebirge, a master craftsman and property owner in a system of momentary engagements.

This household consisted of the father (46), his wife (44), 3 sons (14, 12, and 10), and 3 daughters (15, 7, and 5). Saxon families were often very prolific. These people were of good morals. Love of work and habits of saving furthered their well-being. The government and mutual-aid societies provided medical aid. They lived in a small, poorly built but clean house, built on state land, which they could not sell without rights on the land. Dwelling and land were valued at from 1,800 to 2,000 francs, domestic animals at 65 francs, working equipment at 95 francs, and clothing at 197 francs. This worker hired day laborers. Smoking and attending cabarets were the principal recreations. Primary school education was compulsory to the age of 14. Income was 1,900 francs; labor contributed 1,500 francs; subventions, 170 francs; domestic industries, 140 francs; and land, 90 francs. Spendings amounted to 1,700 francs, savings 200 francs (principally for dowries). The state provided (1) use of land for dwelling, (2) subventions of fodder, horse litter, and articles of fuel, and (3) institutions preventing the division of land and dwelling.

— and HOELLER, M. E.

(736)

ARMURIER DE LA FABRIQUE DEMI-RURALE COLLECTIVE DE SOLINGEN (WEST-PHALIE). TÂCHERONS DANS LE SYSTÈME DES ENGAGEMENTS MOMENTANÉS, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN SEPTEMBRE 1851. *In Les Ouvriers Européens*, ed. 2, v. 3, pp. 153-203. Paris. 1877.

In this study, made in 1851, the worker lived in northern Europe, where a strong social structure was combined with a stable industrial organization. He was a finisher for military sabers, working for the same merchants constantly. The household consisted of the father (50), his wife (52), 2 sons (23 and 9), and 2 daughters (20 and 17). The eldest son (28) was married and not at home. Morals and health were good. The wife and 2 daughters helped the worker and cared for the house, garden, and animals. The younger son was still in school. Recreations included tobacco, drinking brandy, attending village fairs, and gossiping. Well-being was founded on the increasing demand by foreign consumers, good craftsmanship, excellent morals, the stem family, part-time farming, and good-employer-employee relationships. Property consisted of animals and tools valued at 266 francs, and furniture and clothing at 1,607 francs. Income was 2,351 francs, of which 2,174 francs was in money. Property accounted for 18 francs; subventions, 3 francs; labor, 1,802 francs; and industries, 529 francs.



Food cost 1,127 francs; household, 257 francs; clothing, 461 francs; moral, recreative, and health needs, 409 francs; and all else, 31 francs; savings were 65 francs. Notes are given on the earlier social structure on the German coast; the history and nature of the semirural domestic manufacturing of side arms, cutlery, and steel tools in Solingen; emigration near the North Sea and its influence; mutual relations of employers and workers of Elberfeld; and the symptoms of trouble in 1855 in the social constitution of the plain of Saxony.

ENGEL, E.

(737)

DAS GESETZ DER DICHTIGKEIT. Ztschr. K. Sächs. Landesamt. Nos. 8, 9. November 1857.

DEHN, PAUL

(738)

DEUTSCHE HAUSHALTUNGSBUDGETS. III. BÄYERISCHE BUDGETS. Ann. Deut. Reich. 1880: 843-855, illus. Leipzig. 1880.

This article, the third of a series summarizing the material previously collected throwing light on the level of living of German laboring classes, contains no original material. It includes a number of records of the actual expenditures of Bavarian families, and descriptions of the dietaries and nutrition of the people of that province. This material was taken largely from Lipowsky's *Darstellung des Sozialen und Wirthschaftlichen Volkslebens des Königlichen Bäyerischen Landgericht Bezirks Moosburg, 1861*; Riehl's Bavaria and other works, of which brief summaries are given. These studies showed that the Munich population consumed more meat and alcohol and less bread per capita than were required in prison or army dietaries.

GEORGEN, D.

(739)

DAS HAUSHALTUNGS-RECHNUNGSBUCH FÜR HANNOVER. Hannover. 1861.

PARISSET, M.

(740)

BUCHERON USAGER DE L'ANCIEN COMTÉ DE DABO (LORRAINE ALLEMANDE). OUVRIER-PROPRIÉTAIRE ET TÂCHERON DANS LE SYSTÈME DES ENGAGEMENTS VOLONTAIRES MOMENTANÉS, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN 1863 AVEC UN ÉPILOGUE DE 1884. Les Ouvriers des Deux Mondes (1) 5: 387-458. 1885.

This study, made in 1863, with an epilogue in 1884, describes a woodcutter who lived in a community where agriculture was just being established. Social status being measured by virtue rather than by wealth, this worker ranked first. The household consisted of the head (40), his wife (40), daughter (10), four sons (8, 6, 4 and 2), and the head's father (81), who lived with them 6 months of the year. Old customs and traditions were strong. The parents could read and write. Health was excellent. The man worked long hours at his woodcutting and the wife cared for the garden. The two eldest children helped at home outside of school hours. Recreations were chiefly noncommercialized. Well-being was protected by the love of work, economy, and the good example given to the children. The house was insured against fire. In 11 years, the family had doubled the amount of its inheritance. Property consisted of dwelling valued at 1,300 francs, nine-tenths hectare at 1,930 francs, animals at 341 francs, tools at 116 francs, money 15 francs, and furniture and clothing valued at 590 francs. Income was 1,261 francs, of which 575 francs was in money. Property accounted for 121 francs income; subventions, 170 francs; labor, 748 francs; and industries, 222 francs. Food cost 510 francs, household 200 francs, clothing 240 francs, moral, recreative, and health needs, 32 francs, and all else, 51 francs, savings were 228 francs. Notes are given on the customs and their influence on the moral and material situation of the people of Dabo; the cantonment; the first operation of cantonment at Abreschwiller; inheritance and division of property in Dabo; the depreciation of dry wood; birth control; "pata"; the origin of the population; and Dabo 14 years after its annexation to the German Empire.

GROSSHERZOGLICHEN STATISTISCHEN BUREAU ZU SCHWERIN.

(741)

BEITRÄGE ZUR STATISTIK MECKLENBURGS. v. 4 (1 and 2). 428 pp., illus. Schwerin. 1865.

This report contains a table showing the yearly values of the various types of income accruing to a day laborer living on the domain of Mecklenburg-Schwerin. The list included rent, garden land, livestock (sheep and geese), medical service, transportation, school fees, as well as wages for the men and women of the household. The data probably apply to a period not long before 1865, the date when the work was published.

PFEIFFER, E.

(742)

DIE STAATSEINNAHMEN. 2 v., illus. Stuttgart. 1866. [Original not seen. Summary in Albrecht, Gerhard, *Haushaltungsstatistik*, pp. 53, 61. Berlin. 1912. Also in Hampke, Carl, *Das Ausgabebudget der Privatwirtschaften*, p. 42. Jena. 1888.]

The expenses around the year 1865 of five heads of families are here tabulated: A state official whose expenses were 25,000 thaler; a banker, 17,000 thaler; a merchant, 20,000 thaler; a minor official, 900 thaler; and a laborer, 1,300 thaler. Food costs constituted 18.02, 14.02, 26.5, 33.37, and 54.4 percent, respectively, of the total, thus confirming Engel's law. Rents absorbed 8, 10.5, 15, 20, and 19 percent, respectively, which does not confirm Schwabe's law. Neither does the study confirm the two propositions of the American version of Engel's law, which maintain that proportions of expenditures for clothing, rent, fuel, and light stay approximately the same with increasing incomes.

SCHWEDLER, KARL

(743)

ARBEITSLÖHNE IN DER SCHLESISCHEN TEXTILINDUSTRIE UND UNTERHALTSBEDARF IN DEN LETZTEN ZEHN JAHREN. *Arbeiterfreund*. 1874. [Original not seen. Summary in Albrecht, Gerhard, *Haushaltungsstatistik*, p. 53. Berlin. 1912. Also in Hampke, Carl, *Das Ausgabebudget der Privatwirtschaften*, pp. 43-44, XXXIII-XXXIV. Jena. 1888.]

This record is for a laboring family of 4 persons, parents and 2 children, from 1865 to 1874. The total annual expenditures ranged from 715.18 marks to 966.07 marks. The purpose of the study was to observe the movements in price of staple articles.

DEHN, PAUL

(744)

DEUTSCHE HAUSHALTUNGSBUDGETS. IV. BERLINER BUDGETS. *Ann. Deut. Reich*. 1881: 540-551, illus. Leipzig. 1881.

The author, in this article, gives a series of expenditure records of Berlin families. The accounts of 3 workers' families, of 3 workers living alone, and of 2 middle-class families were taken as characteristic examples from the records of the statistical bureau of the city of Berlin and some other German cities. The expense accounts of five families reproduced here were taken from Pfeiffer's *Die Staatseinnahmen*. 1866.

SCHWABE, H.

(745)

DIE VERHÄLTNISS VON MIETHE UND EINKOMMEN IN BERLIN. *In Berlin und seine Entwicklung*, v. 2, pp. 265-267, illus. 1868.

In 1867 surveys were undertaken in Berlin by the statistical bureau to determine the connection between incomes and the amounts paid for rent. Two classes of families were used: Those of 4,281 government officials, both state and communal, with salaries less than 1,000 thaler (3,000 marks); and those of 9,741 other citizens with incomes less than 1,000 thaler and subject to taxation by the law of 1851. The incomes are divided into 20 classes and the results tabulated. Those living in furnished rooms were omitted and the earnings of the wife were not counted. From the tabulated results, Schwabe considered that Engel's law was applicable to rent as well as to food costs. In 1868 he formulated a law to this effect; mathematically speaking, the poorer a person is, the greater must be the part of his income used for housing. Schwabe's first group comprised those with an income of 300 thaler; his second group 1,000 thaler or less. The results in the two cases coincided. For incomes of 325 to 925 thaler, the percentage of income spent for lodging by the 11 groups ranged from 24.18 to 17.42 percent. For incomes of 1,100 to 3,200 thaler or more by 18 groups, the percentages ranged from 27.55 to 8.57. While the percentages paid for rents in the case of incomes of 1,100 to 1,300 thaler are higher than for an income of 325 thaler, the rate of decrease is constant. The percentages of income used for rent in the case of incomes between 325 and 925 thaler run parallel to those between 1,300 and 2,000 thaler. Schwabe then continued his investigation of families with incomes of more than 1,000 thaler to discover the proportion spent for rent with increasing incomes. He held that his law on rent costs was absolute and not relative. He divided his people according to income, disregarding industries and social classes. A workingman with an income of 1,000 thaler could live under the same conditions as a clerk with that income. Schwabe compared his Berlin statistics with those collected in Hamburg by Von Bruch and found no inconsistencies.



JACOBI, L.

(746)

DIE ARBEITSLÖHNE IN NIEDERSCHLESIESEN. *Ztschr. Preuss. Statis. Bur.* 8: 326-351, illus. 1868.

The author has the declared aim of showing that the condition of workingmen's families had improved. He quotes from Von Lengerke's *Die Ländliche Arbeiterfrage* the necessary expenditures for different items. A table gives the prices of food for two decades. Since wages had risen at least one-third and prices not so much, he concludes that the worker's condition had improved. He then discusses conditions in Lower Silesia, district by district. For each he gives wages in the various industries and estimates the necessary expenditure for the various items of living for a worker's family, usually man, wife, and three children. No statement is made as to his method of making these estimates; nor is it definitely stated to what period the data apply, although probably it was not long before 1868, the date when the article was published. The items differ somewhat in the various districts. Usually food, clothing, etc., are estimated as a whole. In 1 or 2 cases costs and quantities of types of food and clothing are given.

BERLIN STATISTISCHES AMT.

(747)

STATISTISCHES JAHRBUCH DER STADT BERLIN. 10 v., illus., issued annually. Berlin. 1874-84.

These complete annual reports give detailed descriptions and figures for the population of Berlin, its property, trade, and industry, its total consumption of various articles of food, etc. In volume 7, the expense accounts of 14 Frankfurt workers are compared with those of 14 Berlin workers. In volume 8, the expense accounts of two unmarried apprentices are given. These accounts were kept weekly for food and monthly for all other expenditures, and represent periods between 1872 and 1882.

SAMTER, A.

(748)

13 HANDWERKER UND ARBEITERBUDGETS AUS KÖNIGSBERG IN PREUSSEN. *Concordia, Ztschr. Arbeiterfrage.* 1875. [Original not seen. Summary in Albrecht, Gerhard, *Haushaltungsstatistik*, p. 54. Berlin. 1912. Also in Hampke, Carl, *Das Ausgabebudget der Privatwirtschaften*, pp. 26, XIV. Jena. 1888.]

In 13 expense accounts for 1874, here summarized, the food costs averaged 181 thaler; clothing, 33 thaler; rent, 52 thaler; and total expenses, 324 thaler.

VEREIN ZUR FÖRDERUNG DES WOHLER DER ARBEITER.

(749)

*Concordia Ztschr. für die Arbeiterfrage.* 1874. [Original not seen. Partly summarized in Hampke, Carl, *Das Ausgabebudget der Privatwirtschaften*, p. X. Jena. 1888.]

Three expenditure accounts of average families are here constructed. The first is a Schwalzfeld family of 5 persons; the second, 5 persons of Beckenstadt; and the third, 7 persons of Langeln. The expenditures total 876.45, 891.39, and 921.68 marks respectively, and refer probably to a period just prior to 1874, the date when the study was published.

ALSACE SOCIÉTÉ INDUSTRIELLE.

(750)

ENQUÊTE DÉCENNALE SUR LES INSTITUTIONS D'INITIATIVE PRIVÉE DESTINÉES À FAVORISER L'AMÉLIORATION DE L'ÉTAT MATÉRIEL ET MORAL DE LA POPULATION DANS LA HAUTE-ALSACE. 310 pp., illus. Mulhouse and Paris. 1878. [Also summarized in Dehn, Paul, *Elsässische Arbeiterbudgets*. *Ann. Deut. Reich.* 1879: 100-109, illus. Leipzig. 1879.]

The following notes are derived entirely from Paul Dehn's work, as the original was not available. The hope of the authors was, by the revelation in these studies of the condition of the working classes, to promote social legislation in Germany. Since Upper Alsace was the most advanced district in respect to social legislation, 16 Alsatian budgets for 1875 were studied. The workmen considered had from 3 to 6 children, and their incomes ranged from 1,184 to 3,043 francs. On the average, 15 percent of the total expenditure went for housing, 16 percent for clothing, 61 percent for food, and 8 percent for miscellaneous expenditures. A rise in wages from 1867 to 1877 had been accompanied by a per capita increase in the consumption of meat, although prices had also risen to some extent. Of the expenditure for food, 33 percent went for bread-

stuffs, 14 percent for meat, 13 percent for milk, and 20 percent for other foods. The actual expenditure accounts are given in both sources.

HASSE, ERNST (751)  
DAS VERHÄLTNISS ZWISCHEN WOHNUNGSMIETHE UND EINKOMMEN IN LEIPZIG  
IM SOMMER, 1875. Ztschr. K. Sächs. Statis. Bur. 1875: 70-73, illus.  
Dresden. 1875.

Hasse here presents income and rent figures for 4,021 cases taken from data collected for income-tax purposes in the summer of 1875. The cases exclude a large percentage of the poorer class by eliminating all families renting rooms. Under these conditions he finds that Schwabe's law is confirmed and that the proportion of total expenditure going for housing falls with increasing income.

JACOBI, L. (752)  
ÜBER DEN NEUESTEN STAND DER GEWERBLICHEN ARBEITSLÖHNE IN NIEDER-  
SCHLESSEN. Der Arbeiterfreund. 1875. [Original not seen. Summary  
in Albrecht, Gerhard, Haushaltsstatistik, pp. 40, 54. Berlin. 1912.  
Also in Hampke, Carl, Das Ausgabebudget der Privatwirtschaften, pp. 31,  
XVIII. Jena. 1888.]

Two expenditure accounts for 1875 are given here, one of a bricklayer in Liegnitz, whose family consisted of his wife and 2 children, one of a prosperous laborer of the Gebirgsgegend, who had a wife and 4 children. The former spent 812.90 marks a year, of which 466 marks were for food, 150 marks for clothing, and 90 marks for rent. The latter spent 187 marks a year for food.

LASPEYRES, ÉTIENNE (753)  
STATISTISCHE UNTERSUCHUNGEN ÜBER DIE WIRTSCHAFTLICHE UND SOZIALE  
LAGE DER SOGENANNTEN ARBEITENDEN KLASSEN. Concordia Ztschr. Ar-  
beiter frage. 1875.

Laspeyres, in this study published in 1875, claims that Schwabe has found a law applicable to rent costs similar to the one Engel found for food. He holds that the law is relative and not absolute; Schwabe says it is absolute and not relative. Laspeyres undertook to adjust the percentage of increase to expenditures and not to income. He divided his groups into categories according to income and worked out percentages of rent in relation to other expenditures, using the metal workers as examples. He attempted to show that Schwabe's law of the percentages spent for rent applied within social classes but not between them. Among laborers or clerks, increases of income are associated with decreased proportions for rent, but a laborer and a clerk with the same incomes do not necessarily spend the same proportion of that income for rent.

FRIEF. (754)  
DIE WIRTSCHAFTLICHE LAGE DER FABRIKARBEITER IN SCHLESSEN UND DIE  
ZUM BESTEN DERSELBEN BESTEHENDEN EINRICHTUNGEN. Breslau. 1876.  
[Original not seen. Summary in Albrecht, Gerhard, Haushaltsstatistik,  
pp. 39-40, 55. Berlin. 1912. See also Hampke, Carl, Das Ausgabebudget der Privatwirtschaften, pp. 31-32, XX. Jena. 1888.]

Frief's survey was motivated by a desire to improve labor conditions in Silesia. He collected information from employers, workmen's societies, etc., regarding 235 workmen's families in Silesia (excluding Breslau), in 1876. Four typical families consisted of 3, 5, 6, and 4 members, respectively; their food expenditures were 529 marks, 810 marks, 1,041 marks, and 649.64 marks, respectively; rents were 52.32 marks, 60 marks, 60 marks, and 72 marks; clothing 105 marks, 134 marks, 165 marks, and 120 marks; and total expenditures 827.92 marks, 1,195.60 marks, 1,495.60 marks, and 932.27 marks.

LASPEYRES, E. (755)  
VERHÄLTNISS DER MIETHE ZUM EINKOMMEN IN LEIPZIG, VERGLEICHEN MIT  
HAMBURG UND BERLIN. Ztschr. Sächs. Statis. Bur. 22: 24-29, illus. 1876.

From the data collected by Hasse, Nessmann, and others, the author, in this article published in 1876, confirms Schwabe's law for rent in the three cities. No new material is included.

SCHEFFER, HERMANN (756)  
BETEILIGUNG AM GEWINNE UND NATIONAL VERSORGUNG. Brunswick. 1876.



SCHNAPPER-ARNDT, GOTTLIEB

(757)

BESCHREIBUNG DER WIRTSCHAFT UND STATISTIK DER WIRTSCHAFTSRECHNUNGEN DER FAMILIE EINES UHRSCILDMALERS IM BADISCHEN SCHWARZWALD. Vorträge und Aufsätze, pp. 168-189, illus. Tübingen. 1906. [Originally published in *Ztschr. für die Gesam. Staatswiss.* 1880: 133-156.]

This family was studied for the year 1877-78. It consisted of four members; the annual income was 1,302 marks. The expenditures were itemized in accordance with the author's refinement of a Le Play expense record. The Le Play method of evaluating goods furnished is used. A complete inventory of all the family possessions was taken with net increase or loss for the year.

BÖCKH, RICHARD

(758)

ERFORSCHUNG DER ARBEITERBUDGETS AUCH IN DIE HAND GENOMMEN. Konferenz der Direktoren der Statistischen Bureaux deutschen Städte unter Vorsitz des Direktors des Statistischen Amtes von Berlin. 1878.

MAX, R. E.

(759)

KOSTEN DER LEBENSHALTUNG UND ENTWICKLUNG DER EINKOMMENSVERHÄLTNISSE IN HAMBURG SEIT 1890. *Schr. Ver. Sozialpolitik.* 145 (4): 260-524, illus. München und Leipzig. 1915.

In this study prices of food and rent, as well as wages in different industries, are cited from various sources. The author presents data of household accounts of 179 Hamburg families collected in the survey, made in 1907 by the Kaiserliches Statistisches Amt and published in *Sonderheft 2* of the *Reichs-Arbeitsblatt* in 1909, and of 285 Hamburg families for the year 1907, taken from the Hamburg Jahresbericht for the year 1909. He also presents original data based on the household accounts of one well-to-do family in which the wife kept books from 1878 through 1913. The family varied in size from 2 to 6. The income is not given, but the total expenditure ranged from 6,569 to 20,814 marks per year.

ANONYMOUS.

(760)

AUSGABEN EINER FAMILIE VON 6 PERSONEN AUF EINER HALLIG. *Ztschr. Staatswiss.* 35: 147-167, illus. 1879.

Though no author's name is given, the system of presentation of these data is easily recognized as that of Schnapper-Arndt. The man described was a carpenter by trade. Through his wife they possessed property valued at 4,000 marks consisting of house, outbuildings, dockyard, and  $6\frac{3}{4}$  sheers of land (a sheer is enough land to provide pasture and hay for 1 cow, or 4 sheep). They had 2 cows and 11 sheep. The land on these low undiked islands could not be cultivated because it was all frequently covered by the sea. The family consisted of the man and his wife, a daughter 15, and sons 12, 9, and 3. The money value of products of cows and sheep is entered as income, no description of method of obtaining values being given. The total income was 1,147.40 marks. The data probably refer to a period just prior to 1879, the date when the study was published.

SCHNAPPER-ARNDT, GOTTLIEB

(761)

NÄHRKELE, EINE SOZIALSTATISTISCHES KLEINGEMÄLDE AUS DEM SCHWÄBISCHEN VOLKSLEBEN. In his Vorträge und Aufsätze, pp. 190-257, illus. Tübingen. 1906.

The life of a poor seamstress who sewed for the author's wife is here described in very great detail. She lived in a German village; her net earnings for a year were about 386 marks. The sources for the essay were conversations, letters, bills, savings-bank book, and an account book kept for about 13 years. There is a detailed inventory of her possessions, an expenditure account for the years 1879-82, and complete data about the living of the household for the year 1882. Expenditures are itemized in detail. The accounts are presented according to a complicated system of bookkeeping, and in some cases totals must be found by computation. The diet by periods of the day is given in detail; and the amounts of protein, fat, and carbohydrates contained in the diet are determined.

HOFMANN, FRANZ

(762)

DIE BEDEUTUNG VON FLEISHNAHRUNG UND FLEISCH CONSERVEN MIT BEZUG AUF DIE PREIS VERHÄLTNISSE. Leipzig. 1880.

BALLIN, PAUL

(763)

DER HAUSHALT DER ARBEITENDEN KLASSEN. 136 pp. Berlin. 1883. [Original not seen. Summary in Albrecht, Gerhard, *Haushaltungsstatistik*, p. 54. Berlin. 1912. See also Hampke, Carl, *Das Ausgabebudget der Privatwirtschaften*, pp. 26-27, XV-XVI. Jena. 1888.]

Expense accounts for 1882 of two gardeners in Charlottenburg, reconstructed from the household account books, are given in this study. The first family consisted of parents and four children. Their income was 1,043 marks; their expenditures, 1,041.48 marks. Food costs were 650 marks, clothing, 100 marks; rent, 132 marks; heat, 89.60 marks. This family had no savings and no debts. The second family, with an income of 891.75 marks, spent 540.80 marks for food, 96 marks for clothing, 132 marks for rent, 72.60 marks for heat, and 48.20 marks for incidentals. The total expenditures were 889.60 marks. The evidence tends to confirm Engel's law, but not Schwabe's.

DEHN, PAUL

(764)

DEUTSCHE HAUSHALTUNGSBUDGETS. V. RHEINLÄNDISCHE BUDGETS. Ann. Deut. Reich. 1882: 163-177, illus. Leipzig. 1882.

This fifth study, published in 1882, in the series relating to the social and living conditions of German workingmen's families, like the others contains no original data, but presents several expenditure accounts of Rhenish families taken from the works of Schnapper-Arndt, from the statistics collected by Dr. Von Obernberg, and from other sources.

ENGEL, ERNST

(765)

DAS RECHNUNGSBUCH DER HAUSFRAU UND SEINE BEDEUTUNG IM WIRTSCHAFTSLEBEN DER NATION. 48 pp., illus. Berlin. 1882.

This pamphlet, published in 1882, discusses the advantages of household accounts and gives detailed directions for keeping them. The instructions include lists of sources of income and classification of expenditures; a sample inventory listing assets and liabilities, the former by way of land, dwellings, and effects, the latter by way of debts; a balance of accounts, showing income from various sources, and expenditures in detail, month by month, with the amount for that month of the previous year; a percentage table of expenditures for necessities of life for three salary groups, representing respectively the poor, the middle-class, and the well-to-do workers. A scheme for the rapid reckoning of income and expenditure by the week, month, quarter year, half year, and year is given. The keeping of accounts is recommended as a stimulus to thrift. A review of the chief data in his 1857 study for the Saxony Statistical Bureau is included along with a forecast of some of the new materials in the study of the living of Belgian families published 13 years later.

VEREIN ZUR FÖRDERUNG DES WOHLER DES ARBEITER.

(766)

ARBEITER BUDGETS. Concordia. No. 72/73. Mainz. 1882. [Original not seen. Partly summarized in Hampke, Carl, *Das Ausgabebudget der Privatwirtschaften*, pp. 36, XXV, lvii. Jena. 1888. Also in Albrecht, Gerhard, *Haushaltungsstatistik*, p. 54. Berlin. 1912.]

Two household accounts for 1882 are given here; one of a Berlin apothecary's assistant whose wife was a laundress, and one of a factory worker in Wallwitzhafen in Dessau. The former had two children; his income was 1,365 marks per year; his expenditures, 1,206.45 marks. For food he spent 724.45 marks; for clothing, 176.20 marks; for rent, 126 marks. The latter had an income of 624 marks a year and spent 666 marks. The deficit was covered by his wife's income. Food cost 403 marks, clothing 72.80 marks, and rent 104 marks per year. Engel's law is confirmed.

HAMPKE, CARL

(767)

DAS AUSGABEBUDGET DER PRIVATWIRTSCHAFTEN. 148 pp., illus. Jena. 1888.

Through use of the expense accounts of six German families living at Halle and a comprehensive review of many previous investigations of standards of living, Hampke studied the effect of price changes upon the expenditures of the different social classes from 1850 to 1870. No laws were revealed as controlling expenditures exactly enough to justify the author in recommending an ideal



budget. The expenditure accounts for a year of six families (a painter, a railway switchman, and a tailor of the laboring class, with incomes ranging from 800 to 1,250 marks; a rentier of the lower middle class with an income of 3,000 marks; a manufacturer of the upper middle class with an income of 7,900 marks; and a high government official of the upper class with an income of 18,200 marks) show that the percentage of total expenditure devoted to food decreased with increasing income. The output for various items of food indicated that the richer the family, the greater the consumption of wheat, rather than rye, bread; of butter rather than other fats; of cocoa and other luxuries of diet, rather than coffee. The rise in all prices except those of food from 1850 to 1870 raised the cost of living of the three upper classes but made that of the lowest class relatively less. Detailed figures make it possible to draw many other conclusions.

Three expense accounts collected by Joseph Conrad are presented for the first time. One is for the household of an artisan in Mulhouse in 1872, one for an official in Jena in 1871, and one for a hired laborer in Jena in 1864. Size of family is given, as well as total income and total expenditures, and itemized accounts for a number of expenditures, particularly food.

ENGEL, ERNST

(768)

DER KOSTENWERTH DES MENSCHEN. Berlin. 1883. [Original not seen.

Summarized in Williams, Faith M., Scales for Family Measurement. Amer. Statis. Assoc. Proc. (n. s. 169a) 25: 135-139. 1930.]

In this pamphlet, published in 1883 and now very rare, Engel described his procedure in calculating the unit of consumption to which he later gave the name "quet." Counting the babe at birth as 100, he added 10 value units each year until maturity (relative scale).

SCHNAPPER-ÄRNDT, GOTTLIEB

(769)

FÜNF DORFGEMEINDEN AUF DEM HOHEN TAUNUS. EINE SOZIALSTATISTISCHE UNTERSUCHUNG ÜBER KLEINBÄUERTUM, HAUSINDUSTRIE UND VOLKSLEBEN. Staats- u. Sozialwiss. Forsch., v. 4, 332 pp., illus. Leipzig. 1883.

Appendix 8 gives the consumption and cash expenditures of the family of a farmer and nailsmith. The family consisted of the man, his wife, and 3 children, 13 to 20 years of age. A complete inventory of all possessions even to 1 wooden spoon and 1 cotton handkerchief bought 3 years before is given. Most of the data were obtained in conversations, and probably apply to a period just prior to 1883, the date when the study was published. For the sake of control, books were kept for a month.

SCHLIEBEN, RICHARD VON

(770)

UNTERSUCHUNGEN ÜBER DAS EINKOMMEN UND DIE LEBENSHALTUNG DER HANDWEBER IM BEZIRKE DER AMTSHAUPTMANNSCHAFT ZITTAU. Ztschr. K. Sächs. Statis. Bur. 31: 156-190, illus. 1885.

This study furnishes census data concerning the weavers, income data gained from tax lists and books of employers and complete household data of 52 families gained from questionnaires covering the year 1884-85. The table which gives the incomes of the families gives also in parallel columns the expenditures for necessities—food, housing, and clothing—for which 24 of the families spent more than their total income. The questionnaires, completely filled out, of 10 of the 52 families are also printed separately. From the tables the total expenditures must be obtained by computation. The size of the families varied from 2 to 10 persons and their incomes ranged from 286 to 1,307 marks a year.

SAXONY, GEWERBE- UND BERGINSPEKTION.

(771)

BUDGET EINES SCHLOSSERS. Jahresber. Sächs. Gewerbe- u. Berginspektoren. 1885. [Original not seen. Partly summarized in Hampke, Carl, Das Ausgabebudget der Privatwirtschaften, pp. 39-41, xxxii. Jena. 1888.]

The single weekly expense account in 1885, given here, is that of a locksmith whose annual income was 1,200 marks. The itemized expenditures cover fire, light, fire insurance, and laundry; the total was 22.73 marks a week, or 1,181.96 marks per year. The family included the parents and two children, 11 and 13 years of age.

## UNITED STATES BUREAU OF LABOR.

(772)

EARNINGS AND EXPENSES OF WAGE RECEIVERS IN EUROPE. U. S. Commr. Labor Ann. Rept. 1 (app. B): 444-452, illus. 1886.

Budgets of 13 workmen from south Württemberg, Göppingen, Cologne, Heidelberg, and Frankfurt are presented here. The incomes for the year 1885 ranged from \$68 to \$370, of which between 65 and 85 percent went for food. In most cases the amount spent for beer was over half of the food allowance. Frequently all members of the family contributed to its support. Only four of the budgets showed a surplus. The data contradicted Schwabe's law but confirmed Engel's law.

FÈVRE, L.

(773)

MINEUR SILÉSIEEN DU BASSIN HOULLER DE LA RUHR (PRUSSE-RHÉNANE—ALLEMAGNE). OUVRIER-TÂCHERON DANS LE SYSTÈME DES ENGAGEMENTS MOMENTANÉS, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN OCTOBRE 1886. Les Ouvriers des Deux Mondes (2) 2: 245-280. 1890.

This study, made in 1886, and dealing with immigrant laborers in a rapidly expanding mining industry, describes a worker who was earning the highest wage possible but who lacked the spirit and habit of saving to better his position. The family consisted of the head (45), his wife (31), three sons (10, 3, and 1), and a daughter (7). They were of good morals and health. The worker received medical attention from a mutual-aid society. The parents cultivated a small garden. Recreations comprised smoking and attending fairs. The only assurances of well-being lay in the continued ability to work and the mutual-aid society. Property consisted of animals valued at 65 francs; tools, 3 francs; funds in the mutual-aid society, 98 francs; and furniture and clothing, 1,434 francs. Income was 1,727 francs, of which 1,486 francs was in money. Property was credited with 3 francs income; subventions, 69 francs; labor, 1,591 francs; and industries, 63 francs. Food cost 997 francs; household, 255 francs; clothing, 341 francs; moral, recreative, and health needs, 76 francs; and all else, 58 francs. There were no savings. Notes are given on the economic and social conditions of the coal industry in the Ruhr Valley; the organization of the work in the mines; the institutions for the benefit of the miners; and the social state of the population in the Ruhr Valley.

MEINERT, C. A.

(774)

WIE NÄHRT MAN SICH GUT UND BILLIG? Eigenthum der Concordia. Mainz. 1886. [Original not seen. Summarized from Engel, E., Die Lebenskosten. 1895.]

Food expenditures were estimated for three families of four persons each, the families having annual incomes of 800 marks, 1,100 marks, and 1,500 marks, respectively. Allowing 3.5 quets for an adult male, the quet allotment in the three families was 74.8, 102.9, and 140.2 marks per year. These figures were based on a rational menu estimate for a period of 14 days, around the year 1886. Amounts of protein, fat, and carbohydrate were computed. Annual food expenditures amounted to 60.3, 57.1, and 53.5 percent of the income, averaging 56.96 percent for the three families. The norm of food consumption stated in this book agreed with that of W. Henningsen, who estimated from 45.069 to 48.57 pfennig as a proper daily working cost for a mature man.

MEHNER, H.

(775)

DER HAUSHALT UND DIE LEBENSHALTUNG EINER LEIPZIGER ARBEITERFAMILIE. Jahr. Gesetzgebung, Verwalt. u. Volksw. im Deut. Reiche 11 (1): 301-334, illus. 1887.

The author's purpose was to describe how a workingman's family lived. He collected his own data by repeated visits and put his findings into the form of household accounts, which in many cases had to be estimated. The man and his wife were employed in the fertilizer works of a village near Leipzig. There were three children aged 11, 8, and 4 years. Estimating the overtime work of the man, full time for the wife, and the occasional earnings of the children, the income amounted to 22 to 24 marks a week. The author describes a typical day, also Sunday, including food. It is a vivid picture of the most extreme poverty. The cost of the very inadequate food—chiefly potatoes, bread, and coffee—



equals the earnings of the man. The period to which the data refer was probably just prior to 1887, the date when the article was published.

UNITED STATES DEPARTMENT OF LABOR.

(776)

COST OF PRODUCTION: IRON, STEEL, COAL, ETC. U. S. Dept. Labor, Commr.

Labor Ann. Rept. (1890) 6: 605-1376. 1891.

In addition to the data for 2,490 families living in the United States (226) information is also given on the incomes and expenditures of 104 families living in Germany. The heads of these families were employed in the bar-iron, steel, bituminous coal, coke, and iron-ore industries. The employees were selected for study, because they were engaged in industries from which cost of production and pay-roll accounts had been obtained previously. The facts gathered covered the period 1888-89 and are presented for each family. Averages per family and per individual are also given by industries. The employees were either Polish or native German.

The average size of 32 families in the bar-iron industry was 6 persons. Income from all sources averaged \$282 and expenditures, including insurance, \$288. Food expenses averaged \$148; clothing, \$55; and fuel and lighting, \$10. Nineteen families reported an average rent of \$17, 20 families reported expenditures for furniture and utensils averaging \$7, and 1 family paid \$19 for life insurance. The average size of the 35 families in the steel industry was 4.9 persons. Their total income averaged \$250 and their average expenditure for current living was \$252. Expenditures for food averaged \$128; for rent, \$10; for fuel and lighting, \$11; for furniture and utensils, \$9; and for husbands' clothing, \$24. Thirty-four families reported purchases of wives' clothing averaging \$11, and 31 families reported children's clothing at \$12. The 18 families in the bituminous-coal industry were composed of 7.1 persons on an average. Their total average income was \$391 and their average expenditure, including insurance, was \$369. Expenditures for rent averaged \$39; for food, \$194; for furniture and utensils, \$5; for fuel and lighting, \$14; for insurance, \$14; and for clothing of husbands and wives, \$27. Purchases of children's clothing by 17 families averaged \$39. The average income of 19 families in the iron-ore industry, comprising 6.6 persons on an average, was \$349 and their average expenditure, including life insurance, \$365. Expenditures for food averaged \$175; for rent, \$31; for clothing, \$65; for fuel and lighting, \$15; and for insurance, \$7.

Separate analyses of incomes and expenditures are presented for 18 normal families—that is, families including no lodgers and having five or fewer children, none of whom were over 14 years of age. Fifteen normal families in the bar-iron and steel industries had total incomes averaging \$247 and total expenditures averaging \$258. Expenditures for food averaged \$127, for clothing \$47, for rent \$16, and for fuel and lighting \$10. These normal families in the iron-ore industry had average incomes of \$302 and average expenditures of \$292. Their expenditures for food averaged \$155, for rent \$33, for fuel and lighting \$11, and for clothing \$34.

The data for Germany are contrasted with living expenditures and incomes of families living in other European countries and in the United States. Information is also given showing the quantities and costs per 100 units of consumption for 18 separate food items—the unit of measure being the adult-male equivalent calculated by the United States Bureau of Labor Statistics. Figures are presented showing relative decreasing costs for food with increasing size of family.

Remarks relative to the living conditions of the families studied are included.

(777)

COST OF PRODUCTION: THE TEXTILES AND GLASS. U. S. Dept. Labor, Commr.

Labor Ann. Rept. (1891) 7 (v. 2, pt. 3): 2048. 1892.

This report includes, along with similar data for wage earners of other foreign countries and the United States (228, 518, 656, 979, 1311), income and expenditure figures gathered during the period 1888 to February 1891 from 96 families living in Germany. The fathers of these families were employed in the cotton and woolen industries. Revised figures from the Commissioner's sixth annual report cover 10 families in the bar-iron industry, 5 in the steel, and 3 in the iron-ore industry. Individual records for each family in the textile industry cover the following points: Family description (age, sex, size, occupational status); sources of income; home ownership; expenditure for food (quantities of 11 and costs of 22 staple articles of diet), expenditure for rent (number of rooms), fuel and lighting (kind), clothing (husband and wife separate, children grouped), furniture and utensils, taxes, insurance (property and life), organizations, religion,

charity, books and newspapers, amusements and vacations, intoxicating liquors, tobacco, sickness and death, and unclassified expenses; contrasted income and expenditure, showing surplus or deficit; and descriptive remarks concerning conditions and furnishings of homes. The entries for any one family can be traced through the various tables of expenditures of commodities.

The average size of the 96 families was five persons. Total annual income averaged \$296, and total yearly expenditure averaged \$232.

Separate computations are given for 27 normal families in the cotton and woolen industries in addition to compilations, by size of family and income group, of the percentages of total expenditure for each classification for 45 normal families in the textile and the iron and steel industries combined. Normal families were those which included no boarders or dependents, rented their homes, and recorded expenditures for rent, fuel, lighting, clothing, and food, and included a husband, wife, and not more than five children, none of whom were over 15 years of age. Quantities and costs of food consumed for each of the normal families are given for nine food articles in terms of 100 units of consumption and in tabular form showing decreasing per capita cost with increasing size of family.

Of the total average expenditure of the 45 normal families, 49 percent was spent for food, 17 percent for clothing, and 9 percent for rent.

The total annual income of the 27 normal families in the cotton and woolen industries combined averaged \$249. Their total yearly expenditure for all items, including insurance, averaged \$231; for food, \$113; for clothing, \$39; and for rent, \$24. The total annual income of the 15 normal families in the bar-iron and steel industries combined averaged \$247. Their total yearly expenditures for all items, including insurance, averaged \$258; for food, \$127; for clothing, \$47; and for rent, \$16. The total income of the three normal families in the iron-ore industry averaged \$302. Their total yearly expenditure for all items, including insurance, averaged \$292; for food, \$155; for clothing, \$34; and for rent, \$33.

BECK, HERMANN

(778)

LOHN- UND ARBEITSVERHÄLTNISSE IN DER DEUTSCHEN MASCHINENINDUSTRIE AM AUSGANG DES 19TEN JAHRHUNDERTS. 71 pp., illus. Berlin. 1902.

The main part of this work is an analysis of the general working conditions in the machine industry. The last part is, however, concerned with a 10-year (1888-98) study of two German factories, the benefits which they allowed their employees, and the living conditions of their workers. This study is based on questionnaires, personal discussions with employers and representative workers, and observation. A table gives the incomes (ranging from 1,060 to 1,820 marks) and the classified expenditures (based on questionnaires) of a locksmith and four manual laborers. A more detailed account of the living conditions of one of these laborers is given in the text. The size of these five families ranged from 3 to 7 members.

MULERT, OSKAR

(779)

VIERUNDZWANZIG OSTPREUSSISCHE ARBEITER UND ARBEITERFAMILIEN. EIN VERGLEICH IHRER LÄNDLICHEN UND STÄDTISCHEN LEBENSVERHÄLTNISSE. 228 pp., illus. Jena. 1908.

In the years 1895 to 1900 the country districts of East Prussia lost a population of 200,000. The purpose of this study is to find an explanation of this excessive emigration from the country. Unskilled workers in Königsberg who had formerly been farm workers were considered. The author chose only the best workers who had been in the same position at least 1 year. From these he chose only those who had been, as rural workers, under contract for a year. Only 24 satisfied these requirements. The data were procured by weekly conferences and friendly conversations. The author says the workmen knew their figures, but complete and exact statements could not be obtained. He verified wages in the city and pay of farmers, and controlled statements of expenditure by later questioning, and by questioning of the wife. Data for the country are given in each case for the year preceding emigration, which varied from 1888 to 1901; those for the city are for the year 1902. The author presents the objections to the various methods of estimating the value of payments in kind, and concludes that it is not possible to estimate fairly. Data are given for each family first in the country, then in the city. Size of family is given in number of persons and in some tables in terms of Engel's consumption unit. Consumption is reckoned in kilograms per family, or per quet. For establishing nutritive content of the diet he uses the minimum of various foods necessary for proper nutrition as given by Grotjahn, and the amounts of protein, fat, and carbohydrates given by Rubner. The size of 20 of the families ranged from 3 to 8 persons. Their income ranged



from 783 to 1,263 marks per year. The author concludes that unmarried workers bettered their condition decidedly by going to the city, and that married workers did not.

BUSCH, AUGUST

(780)

PREISBEWEGUNG UND KOSTEN DER LEBENSHALTUNG IN FRANKFURT A. M.  
Schr. Ver. Sozialpolitik 145 (2): 91-140, illus. München und Leipzig.  
1914.

Prices of food were taken from incomplete records of market prices in the city. Records of rent costs were also incomplete. Household data came from three sources: (1) Baumann, Opificius, and Uhlfelder, 3 Haushaltsrechnungen aus dem Jahre, 1888, Schr. Freien Deutschen Hochstifts; (2) 10 Haushaltsrechnungen des Frankfurter Gewerkschaftskartells in den Jahren 1905 und 1906, Jahresber. Frankfurter Arbeitersekretariats, v. 8; (3) 10 household account books taken from the survey made in 1907 by the Kaiserliches Statistisches Amt.

WÖRISHOFFER, F.

(781)

DIE SOZIALE LAGE DER ZIGARRENARBEITER IM GROSSHERZOGTUM BADEN.  
Jahresber. Grossh. Badischen Fabrikinspektors. Karlsruhe. 1889.  
[Original not seen. Summary in Albrecht, Gerhard, Haushaltungsstatistik,  
p. 56. Berlin. 1912.]

Data are given for 41 families and 12 unmarried persons. Weekly household accounts of 14 families are included, and the nutritive value of the food consumed is analyzed. The data were secured by personal investigation and household accounts, and in all likelihood, refer to a period just prior to 1889, the date when the study was published.

FLESCHE, KARL

(782)

FRANKFURTER ARBEITERBUDGETS. Schr. Freien Deutschen Hochstiftes.  
Frankfurt a. M. 1890. [Original not seen. Summary in Albrecht,  
Gerhard, Haushaltungsstatistik, pp. 43-44, 58. Berlin. 1912.]

The three families selected for analysis illustrated the propertyless class living close to the margin of existence and able to supply only their immediate material needs. The period of the study is not stated, but was probably just prior to 1890, the date when the study was published. The household accounts presented for these families might well serve as a model for the presentation of such statistics. They give itemized receipts and expenditures, arranged by months, and quantities as well as values. A household inventory is supplied, and the accompanying text describes housing and living conditions and analyzes the tables.

RADEMANN, OTTO

(783)

WIE NÄHRT SICH DER ARBEITER? Frankfurt-am-Main. 1890. [Listed in  
Kayser's Bücher-Lexikon.]

HARTWIG, J.

(784)

DIE ÄNDERUNGEN IN DEN KOSTEN DER LEBENSHALTUNG IN LÜBECK VON  
1891-1912. Schr. Lübeck Ver. Sozialpolitik 145: 119-136, illus. München  
und Leipzig. 1914.

This study of changes in the cost of food and rent in Lübeck compares the accounts of 12 families with incomes under 3,000 marks from the survey of the Kaiserliches Statistisches Amt of 1908-9 with those of three families with incomes of over 5,000 marks. Of these families, 1 was that of a jurist in 1891, 1 that of a merchant in 1890, 1900, and 1905, and a third that of a merchant in the years following 1901.

WÖRISHOFFER, F.

(785)

DIE SOZIALE LAGE DER FABRIKARBEITER IN MANNHEIM UND DESSEN NÄCHSTER  
UMGEBUNG—1891. [Original not seen. Summarized in Schr. Ver. Sozial-  
politik 145 (2): 173-238, illus. München und Leipzig. 1914.]

WURM, EMANUEL

(786)

DIE LEBENSHALTUNG DER DEUTSCHEN ARBEITER. Dresden. 1892. [Listed  
in Kayser's Bücher-Lexikon.]

MAY, MAX

(787)

WIE DER ARBEITER LEBT. ARBEITER-HAUSHALTUNGSRECHNUNGEN AUS STADT  
UND LAND. 75 pp., illus. Berlin. 1897.

The author in this study conducted between 1892 and 1897 makes a comparison of living conditions in urban and rural districts, and gives 20 household accounts with short monographs on each family. Skilled and unskilled workers are repre-

sented, from large- and small-scale industries, handwork, and farming. The families lived in large, medium-sized, and small cities, villages, and rural industrial districts.

FEIG, JOHANNES

(788)

HAUSGEWERBE UND FABRIKBETRIEB DER BERLINER WÄSCHEINDUSTRIE.

Schmollers Staats- u. Sozialwiss. Forsch. 14 (2): 1-149, illus. 1896.

Such details of the industry as the number of factories and workers, working conditions, hours of work, wages, organizations for control of working conditions, insurance, and protective laws furnish most of the material in this study. Accounts are given of two unmarried women workers—a seamstress and an ironer. An appendix contains tables purporting to give total income of family, expenditure for rent, and percentage of income spent for rent of 28 seamstresses working at home, 14 male cutters, and 47 women factory workers in the year 1894. The last-mentioned table is very incomplete, giving in the majority of cases only the percentage of the women's earnings spent for rent.

GRUBER, MAX

(789)

ZUR FRAGE DER ERNÄHRUNGSVERHÄLTNISSE DER SCHLESISCHER INDUSTRIE-ARBEITER. Sozialpolitisches Zentb. 3 (42): 497-500, illus. 1894.

The author of this study utilizes data on nutrition drawn from the household accounts of 406 workers in Upper Silesia, which were collected and published by Bergassessor Kuhna in *Die Ernährungsverhältnisse der industriellen Arbeiterbevölkerung in Oberschlesien* (Leipzig, 1894). He states that while the general opinion was that these workers of Upper Silesia belonged to the most poorly nourished people of the German Empire, Kuhna believes he has proved that their nourishment is almost extravagantly rich in nutritive qualities. The author discusses Kuhna's errors in detail, concludes that Kuhna knew nothing of the physiology and hygiene of nutrition, and therefore that his whole computation was most superficial.

KINDERMANN, CARL

(790)

ZUR ORGANISCHEN GÜTERVERTEILUNG. II. DIE GLASARBEITER DEUTSCHLANDS UND DER VEREINIGTEN STAATEN VON AMERIKA IN IHRER ALLGEMEINEN MATERIELLEN LAGE. 304 pp., illus. Leipzig. 1896.

The author of this study had access to 1,080 household accounts of American glass workers furnished by the United States Bureau of Labor Statistics in Washington, D. C., and other material furnished by the labor bureaus of various States of the United States. The German household data were collected by trade unions for the year 1894. Of 300 questionnaires sent out, 75 were returned and the author presents expenditures of 70 families. The study contains full comparative data of the trade of glass making in the two countries. Size of families ranged from 4 to 6 persons.

In an appendix three accounts are presented separately for comparison with families of the same size and kind of workers in the United States. The size of these families varied from 3 to 5 persons and incomes ranged from 650 to 1,470 marks a year.

KUHNA.

(791)

DIE ERNÄHRUNGSVERHÄLTNISSE DER INDUSTRIELLEN ARBEITERBEVÖLKERUNG IN OBERSCHLESIE. Leipzig. 1894. [Original not seen. Summary in Albrecht, Gerhard, *Haushaltsstatistik*, pp. 41, 55. Berlin. 1912.]

This investigation, made in 1894, was concerned chiefly with the wages and the quality of the food purchased by laborers, but as a group rather than as individuals. The questions asked were very general. Over 450 families were studied, and estimates are made for the year and for the month, on the basis of a standard consumption unit. Quantities of food consumed are given.

NEUMANN, F. J.

(792)

ZUR GEMEINDESTEUERREFORM IN DEUTSCHLAND. 303 pp. Tübingen. 1895. [Listed in Kayser's *Bücher-Lexikon*.]

KELLER, K. V.

(793)

WIRTSCHAFTSRECHNUNGEN, 1895-1907. Leipzig. 1903.



ABELSDORFF, WALTER

(794)

BEITRÄGE ZUR SOZIALSTATISTIK DER DEUTSCHEN BUCHDRUCKER. Volksw. Abhandl. Badischen Hochschulen 4 (4): 1-66, illus. 1900.

Household accounts kept for the months of October and November 1917 are here presented for 15 families of printers or workers in the printing trade. These families represented 11 cities in various parts of Germany. The average income was 1,677.58 marks per year. Expenditures are reckoned per family. Thirteen families had 4 members; 2 had 5 members.

FÜRTH, HENRIETTE

(795)

DIE LEBENSHALTUNG DES GROSSSTÄDTISCHEN ARBEITERS. NACH DEN AKTEN DES HAUSPFLEGEVEREINS. FRANKFURT A. M. Neue Zeit 16 (20): 629-635, illus. Berlin. 1898.

The purpose of this association was to assist families in time of temporary need such as sickness, childbirth, etc. From January 1, 1890, to December 31, 1894, 1,489 families, chiefly those of workers, were helped. The author uses data only of workingmen and men paid daily wages, making no distinction of class. The wages of the man only are considered, except where income of small independent workers—shoemakers, tailors, and basket makers—would naturally include work of the wife. Of 472 families with 4 and more children, 25 percent had weekly incomes of less than 15 marks, 63 percent had from 15 to 20 marks, 9 percent had 20 to 25 marks, and only 2 percent had over 25 marks. Rents in Frankfurt were so high that they regularly absorbed 25 to 35 percent of monthly earnings. The author gives one weekly expense account for a man, wife, and four children with a weekly income of 16 marks.

LORENZ, EUGEN

(796)

EINE ARBEITER-HAUSHALT. Monatsschr. Christliche Sozialreform, v. 28. 1898. [Later in Ztschr. Christliche Sozialreform u. Caritas.]

VEREIN FÜR SOZIALPOLITIK.

(797)

UNTERSUCHUNGEN ÜBER DIE LAGE DER ANGESTELLTEN UND ARBEITER IN DEN VERKEHRSGEWERBEN. Schr. Ver. Sozialpolitik 99: 1-563, illus. 1902.

This whole volume deals with the condition of men working in different parts of Germany in the various branches of transportation—railway, street-car, omnibus, and cab service. There are articles by five men on different parts of Germany and one on France by Comte Léon de Seilhac. These articles all give details of labor conditions. One article only contains household data (for 1899): Deichen, Fritz. Erhebungen über die Verhältnisse der Bediensteten und Arbeiter in Strassenverkehrsgewerbe Berlins. There are given here household accounts of 14 workers—3 motormen, 8 conductors, 1 cab driver, 1 omnibus driver, and 1 track cleaner.

KRIEGEL, FRIEDRICH

(798)

DAS HAUSHALTUNGSBUDGET ZWEIER HEIMARBEITERINNEN. Ztschr. Sozialwiss. 5: 747-748, illus. 1902.

This work gives the household accounts for 3 years (1899-1901) of two sisters living in Berlin and working at home on children's garments for an average of 12 hours a day. Their work provided sufficient food for their needs, but the length of the working day and confinement to the house showed their effects on the physical well-being of the workers.

MOMBERT, PAUL

(799)

DIE VERSCHLECHTERUNG DER ERNÄHRUNGSVERHÄLTNISSE DER ARBEITERKLASSE IN DEN LETZTEN JAHREN. Arch. Soziale Med. u. Hyg. 1904: 311, illus. 1904.

The conclusions presented here are derived from expenditure records referring to the period 1899-1902, and collected from lower-class laborers, stonecutters, printers, glove makers, coppersmiths, lithographers, and cigar sorters. They came from different sections of Germany: the Ruhr and Saar regions and Upper Silesia. Prices varied widely even for prime necessities, and economic crises since 1900 had increased costs, without increasing salaries. Tabulations are based on the size of the family, the average expenditure, and the average wages, which ranged from 2.60 marks a day or less to 5 marks a day or more. The percentage of laborers in the lower paid groups had increased. The amount of meat consumed had fallen about 2 kg a year per person; the amount of potatoes had increased from 67.77 to 83.93 kg; of fruit and vegetables, from 52.18 to 60.81

kg. In all classes the amount of nourishment had decreased with the increase of food costs, and this decrease had been larger proportionately in the lower categories.

ACKERMANN, ERNST (800)  
ÜBER TYPISCHE HAUSHALTUNGSBUDGETS DEUTSCHER ARBEITER-FAMILIEN  
UND DEREN ERGEBNISSE FÜR DIE FRAGE NACH DEN PRODUKTIONSKOSTEN  
DER ARBEIT. Freiburg. 1900.

BAVARIA, KÖNIGLICHE BAYRISCHEN FABRIK- UND GEWERBE-INSPEKTOREN. (801)  
JAHRESBERICHT FÜR DAS JAHRE 1900 MIT EINEM ANHANGE BETREFFEND DAS  
MAUERGERWERBE. 280 pp., illus. München. 1901.

A table of prices in 1893 and in 1900 for the Province of Schwaben is given in this report. The prices are for fuel and for foodstuffs, including meats, wild game, fish, and flour. The appendix contains records of the household expenditures of 2 families of masons in Pfalz, 1 couple without children and 1 couple with 2 children. The total income of the childless family was 1,300 marks, the total expenditure 1,284 marks. The family with two children had an income of 1,312 marks and expenditures of 1,325 marks. The household accounts of two masons' families in Schwaben are also given, showing weekly as well as yearly expenditures. Both of these families had a deficit for the year.

BÖHMERT, C. V. (802)  
WIE WIRTSCHAFTET MAN GUT UND BILLIG BEI EINEM JÄHRLICHEN EINKOMMEN  
VON 800-1000 M.? Dresden. 1900.

FRENTZEL, JOHNS (803)  
ERNÄHRUNG UND VOLKSNÄHRUNGSMITTEL AUS NATUR UND GEISTESWELT.  
Leipzig. 1900. [Listed in Kayser's Bücher-Lexikon.]

BAVARIA, KÖNIGLICHE BAYRISCHEN FABRIK- UND GEWERBE-INSPEKTOREN. (804)  
JAHRESBERICHT: DAS MAUERGERWERBE. Pfalz und Schwaben. 1900.

PIEPER, LORENZ (805)  
DIE LAGE DER BERGARBEITER IM RUHRREVIER. Münchener Volkswirt-  
schaftliche Studien 58th Stück, 266 pp., illus. Stuttgart und Berlin.  
1903.

This study deals primarily with housing conditions but presents also data on wages, population, accidents, working conditions, and unions and clubs. For the housing data 130 houses in eight adjoining streets in Gelsenkirchen-Ückendoif were investigated, around the year 1900. These houses contained living quarters for 595 families. A table shows the number in the family, including the ages of the children, the number of rooms, number of sleeping rooms and beds.

BAVARIA, KÖNIGLICHE BAYRISCHEN FABRIK- UND GEWERBE-INSPEKTOREN. (806)  
JAHRESBERICHT FÜR DAS JAHRE 1901 MIT EINEM ANHANGE BETREFFEND DAS  
MÜLLERGEWERBE. 300 pp., illus. München. 1902.

The four records of family expenditures in 1901, considered in this report, are those of millers' helpers of upper Bavaria, and comprise 3 couples, 2 of which had children; also 1 unmarried person. Two of the records cover a period of 6 months, 1 covers 3 months, and 1 is for 1 month. The expenditures include items for taxes, disability insurance, and dues, and outgo for repairs for shoes and clothing, as well as the usual items for rent, food, and other necessities. At the end of the tables, figures for income and expenditure are set over against each other, showing in 2 cases a deficit and in 2 cases a balance.

FUCHS. (807)  
DIE SOZIALE LAGE DER PFORZHEIMER BIJOUTERIEARBEITER. Jahresber.  
Grossh. Badischen Fabrikinspektion. Karlsruhe. 1901. [Original not  
seen. Summary in Albrecht, Gerhard, Haushaltsstatistik, p. 57.  
Berlin. 1912.]

This study contains the household accounts of jewelry workers for a period of 6 weeks. These craftsmen also engaged in farming on a small scale. The study emphasizes the physiological aspects of the diets. The material was collected according to a carefully worked out plan; although the period to which it applies is not stated, it probably was just prior to 1901, the date when the study was published.

BAVARIA, KÖNIGLICHE BAYRISCHEN FABRIK- UND GEWERBE-INSPEKTOREN. (808)  
JAHRESBERICHT: DAS MÜLLERGEWERBE. Pfalz und Schwaben. 1901.



- MAURER. (809)  
DIE LAGE DER BRAUEREIEN-ARBEITER IN MÜNCHEN IM JAHRE 1901. München.  
1901.
- MOMBERT, PAUL (810)  
DIE BELASTUNG DES ARBEITSEINKOMMENS DURCH DIE KORNZÖLLE. 60 pp.  
Jena. 1901. [Listed in Kayser's Bücher-Lexikon.]
- BRAUN, ADOLF (811)  
AMTLICHE HAUSHALTUNGSRECHNUNGS-STATISTIK. Neue Zeit 25 (1, 9): 310,  
313. 1906.

One table presented in this article is based on data collected around the year 1902 by the author in his study of household accounts of wage earners in Nurnberg. It shows the monthly variation in total expenditures within certain income ranges. Braun's purpose is to show the inadequacy of the plans that had been made for an official survey to be based on household account books. He criticizes in great detail the account book the official bureau intended to use, and particularly the statement in the instructions, designed to accompany the book, that complete accounts should be kept for at least a month. His table, based on his own Nurnberg data, by the variations indicated in total expenditures from month to month, shows how incorrect would be the results for a year computed on the basis of accounts kept for 1 month.

- 
- HAUSHALTUNGSRECHNUNGEN DER ARBEITER. Neue Zeit 20: 148-155. 1902. (812)

This article, published in 1902, contains no original data on household accounts. The author discusses the difficulties met in securing statistics of any value from workmen and advises against imitating the procedure he followed in Nurnberg, where not even 80 out of 800 carried the accounts through a whole year. He warns trade unions and syndicates against trying to collect such data. The cost of collecting, working up, and printing the data makes such surveys prohibitive for these organizations; furthermore, the material secured is not an adequate sample. Data from only a small percentage of workmen can be used because many keep roomers or boarders or have adult relatives living with them. He was unable to draw conclusions, from the 80 account books which he secured in his survey in Nurnberg, for 261,022 workmen. Furthermore, it was usually impossible to ascertain quantities purchased, for the housewife bought by value rather than by quantity. Braun contends that yearly results, obtained by multiplying 1 month's results by 12, or 1 week's results by 52, are worthless and only bring discredit on household statistics. In general, he claims, too much is undertaken upon insufficient reflection, and too little is carried through for a sufficiently long period. It was his hope that this criticism of his own work would impress trade unions and syndicates with the need of greater foresight in undertaking surveys of family expenditure.

- GROTJAHN, ALFRED (813)  
ÜBER WANDLUNGEN IN DER VOLKSERNÄHRUNG. Staats- u. Sozialwiss.  
Forsch. 20 (2), illus. Leipzig. 1902.

This study, published in 1902, makes use of existing records of household expenditures chiefly those by Le Play and his followers. The Engeleinheit (3.5 quets) is used as the basis of consumption. The conclusions drawn are: (1) The poorer a family is, the greater the percentage of the total expenditure for nutrition which it must devote to the purchase of vegetable foods; (2) the proportion of the expenditure for vegetable foods to total expenditures for nutrition is an unequivocal measure of the material well-being of a population; (3) it is more exact to indicate the actual nutritional units, not in calories, but in kilograms of the main foodstuffs for 1 year and for one adult person; (4) the diet of the urban workman imitates that of the well-to-do classes, and the industrial proletariat eat too little dark bread and vegetables, yet cannot afford to eat enough meat, white bread, butter, and sugar; and (5) the rural working population also tends towards malnutrition, because many of their products instead of being consumed at home are sent to the city markets.

- HEISER-HARTTUNG, FRANZ (814)  
LÄNDLICHE UND STÄDTISCHE ARBEITER. EIN VERGLEICH IHRER BUDGETS.  
95 pp., illus. Merseburg. 1902.

The theory that greater earnings and an easier life are to be obtained by migrating from the country to the city is discredited in this study. The data were obtained by questionnaires circulated among rural workers in various

districts, especially in Prussia; and among urban workers in Berlin, Hamburg, and a few smaller Prussian towns. The period to which such data apply is not stated, but probably it was just prior to the year 1902, the date when the study was published. Expenditure accounts are given for (1) the clothing of 1 unmarried rural workman; (2) families of 4 rural workmen; (3) clothing of 6 city workmen; (4) combined expenses of 6 city workmen; (5) a childless railroad worker's family; (6) 24 city mothers; (7) family of 1 shepherd; (8) family of 1 railroad worker; (9) 63 unmarried workers; and (10) 137 married workers. The classifications of expenditures vary from simple to very detailed statements. Produce raised on the farm is valued, but the method is not stated. Living was found to be dearer in the city than in the country, and jobs scarcer. While the total amount expended for food is greater for larger families than for smaller ones, the total amounts expended for rent and clothing were found to be considerably smaller for larger families.

BAVARIA, KÖNIGLICHE BAYRISCHEN FABRIK- UND GEWERBE-INSPEKTOREN. (815)  
JAHRESBERICHT: DAS BRAUEREIGEWERBE. Oberbayern, Pfalz, und Unterfranken. 1902.

ROEPKE, WILLIAM (816)  
EIN BEITRAG ZUR VOLKSERNÄHRUNG. Der Heilstätten-Bote. 1902 (8): 156-160. 1902.

The author in this article, published in 1902, further develops the Engelian law by asserting that the poorer a family is, the greater the share of its expenditures for food that must be devoted to a diet of bread, potatoes, and vegetables. Or, the well-being of a people is in inverse ratio to its expenditures for vegetable foods in proportion to the total food expenditures.

WERNICKE, E. (817)  
ÜBER VOLKSERNÄHRUNG MIT BESONDERER BERÜCKSICHTIGUNG DER POSENER VERHÄLTNISSE. Posen. 1902. [Listed in Kayser's Bücher-Lexikon.]

ANONYMOUS. (818)  
WIE EINE SCHLESISCHE ARBEITER FAMILIE LEBT. Gewerkverein, no. 27. Berlin. 1903.

BADEN, FABRIKINSPEKTION. (819)  
JAHRESBERICHT DER GROSSHERZOGTUMS BADISCHEN FABRIKINSPEKTION, 1903. Karlsruhe. 1904. [Original not seen. Summary in Albrecht, Gerhard, *Haushaltungsstatistik*, p. 57. Berlin. 1912.]

Expenditure accounts are furnished in this yearbook for 1903 for three German laboring-class households in Baden. The same bookkeeping methods were used in all, and between them they covered a period of 13 years. One family was that of a worker from the northern industrial districts, one of a laborer in Pforzheim, and one of a watchmaker in the Black Forest. Albrecht says these accounts contain some highly interesting material.

BERLIN STATISTISCHES AMT. (820)  
LOHNERMITTELUNGEN UND HAUSHALTUNGSRECHNUNGEN DER MINDERBEMITTELTEN BEVÖLKERUNGSKLASSEN IM JAHRE 1903. Berlin. Statistik, v. 3, 61 pp., illus. 1904.

In this survey the Bureau of Statistics of Berlin was aided by trade unions, guilds, and their organizations for sick funds. Wages in the various trades are given. For the household data thousands of questionnaires, covering the year 1903, were sent out; of the 1,155 returned, 908 could be used. These questionnaires were filled out even though household account books had not been kept. It was the author's hope that estimates made by a large number would be as valuable as accurate accounts kept by the few who would be willing to keep books for a year. Individual incomes are not given. The expenditures of families of different sizes are given for the different ranges of income. The size of the household ranged from 1 to 13 and the average income of the families was 1,751 marks per year. Expenditures are also reckoned per person.

BLOCHER, H., and LANDMANN, J. (821)  
DIE BELASTUNG DES ARBEITERBUDGETS DURCH DEN ALCOHOLGENUSS. 53 pp., illus. Basel. 1903.

The authors of this study published in 1903, had investigated 8,700 expenditure accounts of workingmen to see how important a part alcohol played in them. These accounts were taken from studies made by other writers. The results show that with increasing income the expenditure for alcohol increased, not only



absolutely, but also relatively. The study does not show, as is often believed, that there is a definite influence of the nature of the trade on the working-man's expense for alcohol. The unit is the consumption unit used throughout this study. The value of the study lies in its analysis of a single factor in the expenditure account.

HARTWIG, GEHEIMRAT

(822)

HAUSHALTUNGSBUDGETS. IHRE BEDEUTUNG FÜR DIE ARMENPFLEGE. Jahrb. Fürsorge. Dresden. 1906.

The author's purpose in this study was to show the importance to social workers and charitable organizations of an exact knowledge of living conditions among the poor. The data given refer to the year 1903. The expenditure for food of 1.25 marks a day per capita in a family of the better middle class is taken as a norm. In comparison with that, several other weekly and monthly expense records of German families living in Frankfurt-am-Main are presented—two of the middle class and the others of very poor families. The poor households had less to spend per capita on food than the amount allowed by a city home for children and required charitable aid even in good times. The family of a former owner of an estate, now in reduced circumstances, spent an undue proportion of its income for rent and food (which they knew how to select and cook for its nutritive value), and practically nothing for heating. The high rent for poor houses often caused a deficit in the accounts of the poor. Poor children did not have sufficient milk. The efficiency of the wife in a low-class family was shown to be of greater significance than the husband's wages.

HIRSCHBERG, E.

(823)

STATISTIK VON HAUSHALTUNGSRECHNUNGEN DER MINDERBEMITTELTER KLASSEN, 1903. Statis. Jahr. Stadt Berlin 28: 200-204. 1904.

The income and expenditure of 13 groups of Berlin families in 1903 are given here in tabulated form, with no accompanying text. The incomes ranged from an average of 600 to an average of 4,000 marks a year. The housing costs are at variance with Schwabe's law, and the food costs, given by groups, fail to confirm Engel's law.

RAHLSON, HELLMUT

(824)

BESCHREIBUNG SOCIALER ZUSTÄNDE. Ztschr. Armenwesen 6 (11): 321-330. 1905.

Some analysis is given here of the material collected by the Statistisches Amt of Berlin and published under the title "Lohnermittelungen und Haushaltsrechnungen der Minderbemittelten Bevölkerungsklassen im Jahre 1903." (820).

ZIMMERMANN, ERNST J.

(825)

HANAU, STADT UND LAND. Hanau. 1903. [Listed in Kayser's Bücher-Lexikon.]

DRESDEN STATISTISCHES AMT.

(826)

DIE LOHNVERHÄLTNISSE DER STÄDTISCHEN ARBEITERSCHAFT IN DRESDEN IN DEN JAHREN 1904 UND 1905. 93 pp., illus. Dresden. 1905.

This is a wage list of the workers in the various departments of the public works of Dresden and covers both skilled and unskilled laborers, as well as the supervisors. An unskilled laborer on the subway earned 1,200 marks a year; a skilled laborer, from 1,600 to 1,800 marks; an inspector, 1,800 marks. The gas, water, and electrical works, street railways, and street-cleaning departments are included in the survey. The appendix treats the low cost of the most important food articles in Dresden in the last years and the influence of the current price changes on the expenditures of a worker's family. The families of 25 workers composed of from 4 to 7 persons are considered. A family of 4 persons, with an annual income of 1,305 marks, spent 561 marks for food and 1,293 marks for total household expenses; a family of 7 persons, with an income of 1,977 marks, spent 836 marks for food and 1,966 marks for the entire household expenses.

BRANTS, V.

(827)

TISSERAND D'USINE DE GLADBACH (PRUSSE RHÉNANE). OUVRIER-TÂCHERON DANS LE SYSTÈME DES ENGAGEMENTS MOMENTANÉS, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN SEPTEMBRE 1901. Les Ouvriers des Deux Mondes (3) 1: 337-390. Paris. 1904.

This family was in a well-organized factory where social structure was strong and wages high. At the time of the study in 1901 the household consisted of the head (43), his wife (37), 2 sons of a previous marriage (8 and 7), and a daughter

and son of this marriage (3,  $\frac{1}{2}$ ). The worker was an ardent believer in labor unions. Health conditions were poor, a wife and 5 children having died. Subventions partly took care of this extra expense. The man cultivated a garden and did some paid mowing. Recreations were simple, consisting of moderate smoking and two communal feasts yearly. Their well-being was assured by church influence, State funds, labor unions, and similar organizations. Property consisted of money valued at 84 francs, tools 114 francs, animals 15 francs, and furniture and clothing 733 francs. Income was 1,738 francs, of which 1,616 francs was in money. Property contributed 7 francs, subventions 63 francs, labor 1,578 francs, and industries 62 francs. Food cost 955 francs; household, 257 francs; clothing, 295 francs; moral, recreative, and health needs, 191 francs; and all else, 42 francs, there being no savings. Notes are given on the factory social organization, the moral and religious characteristics of the population, the professional organization of the textile workers in Gladbach, and the principles of the worker's union at the factory at Aeltesten-Collegium.

FUCHS, R. (828)

DIE VERHÄLTNISSE DER INDUSTRIEARBEITER IN 17 LANDGEMEINDEN BEI KARLSRUHE. Karlsruhe. 1904. [Listed in Kayers's Bücher-Lexikon.]

KESTNER, FRITZ (829)

DIE BEDEUTUNG DER HAUSHALTUNGSBUDGETS FÜR DIE BEURTEILUNG DES ERNÄHRUNGSPROBLEMS. Arch. Sozialwiss. u. Sozialpolitik 19: 307-347, illus. Tübingen und Leipzig. 1904.

In this article published in 1904 the author's purpose was to determine what can be learned about nutrition from household accounts. He based his discussion on many surveys and the works of other men—19 surveys and 5 or 6 other works. There were no original data. The following generalizations made are perhaps worth mentioning: (1) All the surveys confirm Engel's statement that consumption of animal protein is a measure of prosperity or well-being; (2) there is no measure of an adequate diet for a workingman because of variation in the amount of hard labor—only physical work, not mental, affects metabolism; and (3) in general, Engel's law is confirmed that the smaller the income the greater the proportion of total expenditure spent for food. The author found, however, that only when there is sufficient income to cover physical needs is there any regularity and that "the most that household accounts can prove is that with increasing income the proportion of total expenditure spent for maintenance of life decreases."

BAVARIA, KÖNIGLICHE BAYRISCHEN FABRIK- UND GEWERBE-INSPEKTOREN. (830)  
JAHRESBERICHT: DAS TEXTILGEWERBE. Oberbayern, Ober-, Mittel-, Unterfranken. 1904.

KURELLA, H. (831)

DER NEUE ZOLLTARIF UND DIE LEBENSHALTUNG DES ARBEITERS. Berlin. 1904. [Listed in Kayser's Bücher-Lexikon.]

MOMBERT, PAUL (832)

DAS NAHRUNGSWESEN. Weyl: Handbuch der Hygiene. Jena. 1904. [Listed in Kayser's Bücher-Lexikon.]

TUGENDHAT, OTTO (833)

DIE ARBEITER-WOHLFAHRTS-EINRICHTUNGEN DER BADISCHEN STAATSEISENBAHNEN. 129 pp., illus. Heidelberg. 1905.

In this discussion of German railroad workmen's insurance and welfare institutions, some mention is made of wage rates, rents, and living expenses. Two budgets for a period about the year 1904 are given for families with three little children, of which one is situated in the country, the other in an urban district of the German State of Baden. The city family's expenditure for a year was 1,175.25 marks; the country family's, 824.25 marks. A comparison of the expenses with incomes shows the necessity for railroad welfare institutions. The daily cost outlay for each meal is given.

HIRSCHFELD, F. (834)

ÜBER VERBESSERUNG DER MASSENERNÄHRUNG. Hyg. Rundschau 14: 806-816, illus. 1907.

Soldiers' rations are here analyzed as to quantity provided and nutritive content and are compared with the food consumption of civilian families whose incomes ranged from 800 to 1,400 marks a year. Food distributed to inmates of houses of correction is compared with that of laborers in town and country. Soldiers'



rations are analyzed as lacking in nutritive elements. It is said that increasing the ration on days when the army is marching would increase the endurance of the soldiers. The food supplied those in houses of correction is stated to be inadequate for laborers. The data presented refer to the period 1904-7.

FEUERSTEIN, H. (835)

LOHN UND HAUSHALT DER UHREN FABRIKARBEITER DES BADISCHEN SCHWARZWALDES. Volksw. Abhandl. Badischen Hochschulen 7 (4). Karlsruhe. 1905. [Original not seen. Summary in Albrecht, Gerhard, Haushaltungssstatistik, p. 57. Berlin. 1912.]

This study gives data on food consumption of 20 households in the Black Forest, and an estimate of the real wages as determined by commodity costs. Accounts were kept for several months by each household. They were accompanied by a short descriptive text and by a physiological analysis of nutrition. The data probably refer to the period just prior to 1905, when the study was published.

GREAT BRITAIN BOARD OF TRADE. (836)

REPORT OF AN ENQUIRY INTO WORKING CLASS RENTS, HOUSING AND RETAIL PRICES, TOGETHER WITH THE RATES OF WAGES IN CERTAIN OCCUPATIONS IN THE PRINCIPAL INDUSTRIAL TOWNS IN THE GERMAN EMPIRE. 548 pp., illus. London. 1908.

Questionnaires covering 1 week's expenditures in 1905 and filled in by the families of 5,046 workers in all kinds of industries living in 33 representative German towns, were utilized for this report. The families are arranged in income groups ranging from under 20 to over 40 shillings per week. The proportion of the income spent on food diminished as the income increased. A detailed comparison of British and German standards of living is presented. The German hourly rate of money remuneration was about three-quarters of the corresponding English rate, while the cost of food, rent, and fuel (measured by the English standard) was about one-fifth higher.

KALISKY, KÄTHE (837)

DIE HAUSINDUSTRIE IN KÖNIGSBERG I. PR. 18 pp., illus. Königsberg. 1907. [Part of a large work by the same title printed in Leipzig by Duncker and Humbolt.]

This study presents a few of the data collected by the author in personal investigations concerning the various home industries in Königsberg about the year 1905. Expense accounts are given for three families—that of a married but childless shoemaker who boarded his foster son; that of a widowed seamstress with 3 children; and that of another widowed seamstress with 2 children. The data are very scanty.

BAVARIA, KÖNIGLICHE BAYRISCHEN FABRIK-UND GEWERBE-INSPEKTOREN. (838)

JAHRESBERICHT: GEWERBLICHE ARBEITER. Niederbayern, Pfalz, Ober- und Mittelfranken. 1905.

MECHLENBURG-SCHWERIN, GROSSHERZOGLICHES STATISTISCHES AMT. (839)

BEITRÄGE ZUR STATISTIK MEKLENBURGS. V. 4. Schwerin. 1905.

ZENTRALVERBAND DER BAUGEWERBLICHEN HILFSARBEITER DEUTSCHLANDS. (840)

LEBENSHALTUNG UND ARBEITSVERHÄLTNISSE DER DEUTSCHEN BAUHILFSARBEITER. Hamburg. 1908. [Original not seen. Listed in Albrecht, Gerhard, Haushaltungssstatistik, p. 54. Berlin. 1913.]

The figures supplied here are averages based on official price data for the year 1905 for various districts in Germany.

BÜCHER, KARL (841)

HAUSHALTUNGSBUDGETS ODER WIRTSCHAFTSRECHNUNGEN? Ztschr. Gesam. Staatswiss. 1906: 686-700, illus. Tübingen. 1906.

This article, published in 1906, is a critical theoretical discussion of the methods of studying family expenditures, especially the methods of Schnapper-Arndt, Bücher, and Landolt. The importance of using the account method is emphasized, so that actual monthly irregularities in expenditure will be revealed.

FORCHHEIMER, KARL

(842)

DIE WIRTSCHAFTLICHE LAGE DES PROLETARIERS IN DEUTSCHLAND UND IN DEN  
VEREINIGTEN STAATEN. *Ztschr. Volksw. Sozialpolitik u. Verwal.* 15 (1):  
63-80. 1906.

In this article, published in 1906, comparison is made of the condition of the worker in Germany and the United States based upon (1) the eighteenth annual report of the Commissioner of Labor, which gives the results of a study of 25,440 families of workingmen in the United States chiefly in the year 1901 (274), and (2) a publication of the statistical bureau of the city of Berlin, *Lohnermittelungen und Haushaltsrechnungen der Minder-Bemittelten Bevölkerung im Jahre 1903* (820) which gave wages and household accounts of 908 families. Forchheimer himself presents no original data but makes tables, based on the data of the two works mentioned, comparing wages and expenses per family and per head in the two countries. Similar statistics for the State of New York are included, but the source is not given. The first difficulty in an attempt at a comparison of the data for the two countries lies in the fact that the figures for the United States were collected over an enormous area, whereas the German data describe conditions in the one large city of Berlin. Since the United States data were obtained chiefly in industrial centers, however, comparison is not altogether impossible. Occupations of the people included in the two sets of statistics were very similar. It was found that, with reference to the families studied, in the United States the head of the family earned 82.9 percent of the total family income, in the State of New York, 82.2 percent, and in Berlin 82.7 percent. While the absolute expenditures of the American families studied were in general much higher than those of the German households, one exception was found: the Berlin families spent on an average \$28 for beverages, the American families only \$12. This average, moreover, included only 51 percent of the American families studied who indicated an outlay for drink. The general impression from the comparison is that the American worker tended to luxury in his home furnishing and in his clothing, while the German expended his surplus for other purposes (more beverages, tobacco, etc.). While in Berlin there were only, on the average, 0.3 rooms per member of a family, in the United States the average was 1 room per member of a household. While the income of the American workman was higher than the corresponding income of the immigrant, the total income of the immigrant family, in which wife and children often contributed to the household income, was on the average higher than the income of native American families. In conclusion the author mentions some of the less favorable aspects of the living conditions of American laborers—the great fluctuations in employment conditions, the misery of the unemployed, the lack of social insurance, etc.

GAINSBOROUGH COMMISSION OF BRITISH WORKMEN.

(843)

LIFE AND LABOUR IN GERMANY. 286 pp., illus. London. 1907.

This report contains data on cost of living about the year 1906, as indicated in a few expense accounts selected at random. One is that of a Frankfurt cabinet-maker, with wife and four children, who was anxious to prove that wages in that city were not sufficient to live on. He had an annual income of 2,808 marks, of which about 1,509 marks were spent for food. There was a deficit of 242.80 marks. A Berlin workman, who earned 30s. a week and had a wife and two children, made a rough estimate of his weekly expenses, of which 18s. went for food. An unmarried trammer in Upper Silesia, who earned £5 5s. 8d. in April, gave his expenses for that month, which included £1 14s. 3½d. for food. He had £40 per year with which to clothe and amuse himself.

HEIDEN, J.

(844)

FRANKFURTER HAUSHALTUNGSRECHNUNGEN. Jahresbericht für 1906 nebst  
Jahresbericht des Gewerkschaftssekretärs des Frankfurter Gewerkschafts-  
kartells. Appendix to v. 8. Frankfurt. 1907. [Original not seen.  
Summary in Albrecht, Gerhard, *Haushaltungstatistik*, pp. 46-58. Ber-  
lin. 1912.]

At the instigation of the Gewerkschaftskartell, household account books were given out to 100 workers. Only 10 of them proved usable. There was little supervision of the account keeping, and the results were not very valuable. The data probably apply to a period about 1906.



LAQUEUR, B.

(845)

DER HAUSHALT DES AMERIKANISCHEN UND DEUTSCHEN ARBEITERS. Sammlung Klinischer Vorträge begründet von Richard von Volkmann. Einzel- ausgabe: Wiesbaden. 1906. [Listed in Kayser's Bücher-Lexikon.]

SALOMON, J. H.

(846)

HAUSHALTUNGSRECHNUNGEN ZWEIER FABRIKARBEITER. Altona. 1906.

BARMEN, STATISTISCHES AMT.

(847)

HAUSHALTUNGSRECHNUNGEN UND WOHNUNGSVERHÄLTNISSE VON 10 BARMER ARBEITERFAMILIEN. Beitr. Statis. Stadt Barmen., v. 5, 32 pp., illus. Barmen. 1909.

This is a study of the family expenditures of 10 workmen, with considerable information about their housing conditions in 1907. The householders were engaged in typical town industries, such as cabinetmaking, masonry, and carpentry. The records were given separately for each family, preceded by a short account of the composition of the family, a description of their domicile including sleeping and ventilating arrangements, and the amounts of total income and expenditure. The yearly incomes ranged from 1,183 to 2,244 marks; the expenditures from 1,188 to 2,140 marks. These individual records of expenditure were followed by tables comprising a comparison survey of the distribution of items of income and expenditure per family, per person, month by month, percentages, quantities, proportion of house room, and finally a list of percentages of income expended for rent by workers' families and officers' families of the same income. In every case, the officers' families showed a higher percentage of expenditure for rent. Out of an income of 1,100 to 1,200 marks, a worker's family spent 9 percent for rent; an officer's family 19 percent. Out of an income of over 2,000 marks a worker's family spent 12.1 percent for rent, an officer's family 17.1 percent.

FÜRTH, HENRIETTE

(848)

EIN MITTELBÜRGERLICHES BUDGET ÜBER EINEM ZEHNJÄHRIGEN ZEITRAUM, DIE VERTEUERUNG DER LEBENSHALTUNG IM LICHT DES MASSENKONSUMS. Jena. 1907. [Original not seen. Summarized in Albrecht, Gerhard, Haushaltsstatistik, p. 61. Berlin. 1912.]

The household account is accompanied by an explanatory text. Special emphasis is laid on the physiological aspects of diet. It is probable that the data refer to a period just prior to 1907, the date when the study was published.

(849)

MINDEST EinkOMMEN, LEBENS MITTEL PREISE UND LEBENSHALTUNG. IN ANLEHNUNG ZU DIE VERHÄLTNISSE IN FRANKFURT-AM-MAIN. Arch. Sozialwiss. u. Sozialpolitik 33: 523-542, illus. 1911.

This study presents no household data. The author draws most of her conclusions from 10 household accounts secured in Frankfurt by the imperial survey of less well-to-do families of 1907, from 10 accounts collected by a trade union, and from Johannes Heiden's 10 Frankfurter Haushaltsrechnungen. From record expenditures which she herself published in Jena in 1907 she had concluded that in 1900 one person in a family could be adequately nourished on 84 pfennigs a day. In October 1906, 110 pfennigs were necessary. From this time prices had risen considerably. She concludes that in an overwhelming and constantly increasing number of cases the workingman does not earn enough to support his family, and that as a result the wife must work. There was chronic undernourishment and an utter lack of adequate care of body and mind.

GERMANY, STATISTISCHES REICHSAMT. ABTEILUNG FÜR ARBEITERSTATISTIK.

(850)

ERHEBUNG VON WIRTSCHAFTSRECHNUNGEN MINDERBEMITTELTER FAMILIEN IN DEUTSCHEN REICHE. Sonderheft zum Reichs Arbeitsblatt. 229 pp., illus. Berlin. 1909.

In this survey the Statistisches Reichsamt was assisted by the statistical bureaus of 14 cities, 33 organizations for sick funds, and many unions and clubs. The upper limit of income was set at around 3,000 marks yearly (141 families included had an average income of 3,479 marks a year). The main body of the survey consists of 852 accounts kept for the whole year 1907. An appendix gives the data of 118 accounts kept for more than 6 months but less than a year.

A special table gives the data for 391 so-called "normal" families. Families with boarders and grown children were excluded. In this table income and expenditures are reckoned per adult unit; the male of 15 years being taken as 1, female as 0.8, child up to 4 years as 0.1, between 13 and 15 years as 0.5. The average size of these families was 4.3 persons or 2.34 units. For the 852 families the average size of the family was 4.64 persons, the average income 2,192 marks per year. Families are divided into eight economic groups according to expenditures. From lowest to highest group the food expenditure increases threefold, clothing ninefold, housing fourfold, heating and lighting less than threefold, sundries twentyfold. Engel's law (that the proportion of total expenditure devoted to food decreases with increasing income) is confirmed. The proportion spent for mental development, recreation, and insurance increased with increasing income.

KATZ, J. (851)  
DIE ENTWICKLUNG DER KOSTEN FÜR LEBENSHALTUNG IN DER STADT HANNOVER 1890-1912. Schr. Ver. Sozialpolitik 145: 165-194, illus. München und Leipzig. 1914.

This study of cost of food and rent is based on the data collected for Hannover by the Kaiserliches Statistisches Amt in 1907.

FISCHER, RUDOLF (852)  
LEBENSMITTELPREISE UND WOHNUNGSMIETEN IN KIEL. Schr. Ver. Sozialpolitik 145: 137-164, illus. München und Leipzig. 1914.

This is a study of index numbers of food and rent cost based upon 43 accounts of household expenditures from Kiel for 1907-8, multiplied by the index numbers of prices for 1890-1912. Of 352 families, 43 percent spent 15 to 20 percent of their income on rent, 21 percent spent 20 to 25 percent, and 4.5 percent spent 25 to 30 percent.

NEISSER, ELSE (853)  
PREISBEWEGUNG UND HAUSHALTUNGSKOSTEN IN Breslau 1893-1912. Schr. Ver. Sozialpolitik 145: 437-480, illus. München und Leipzig. 1914.

Most of the data used in this study came from the statistical bureau of Breslau. Prices of food are taken from Breslauer Statistik, v. 15-33. Expenditures for food in the households of a workman, an official, and a teacher are obtained from Breslauer Statistik, v. 40, 1907-8. Wages are quoted from studies made by trade unions. The compilation of material from different sources makes the study valuable.

TÄGMEYER, FR. (854)  
DIE ENTWICKLUNG DER LEBENSMITTELPREISE IN DER STADT LEIPZIG UND IHR EINFLUSS AUF DIE KOSTEN DER LEBENSHALTUNG VON 1894-1912. Schr. Ver. Sozialpolitik 145: 195-278, illus. München und Leipzig. 1914.

Conclusions are based on the study of the Kaiserliches Statistisches Reichsamt in 1907-8, and on the study of German metal workers of 1908-9. The study is of cost of living and presents no new data, but it does segregate the material for this particular city.

TYSZKA, CARL VON (855)  
DIE VERÄNDERUNG IN DER LEBENSHALTUNG STÄDTISCHER FAMILIEN IM KRIEGE. Arch. Sozialwiss. u. Sozialpolitik 43 (3): 841-876, illus. 1917.

This study contains no original data. The author uses the data of three surveys: (1) Wirtschaftsrechnungen minderbemittelter Familien im deutschen Reiche, made in 1907-8 by the Kaiserlicher Statistisches Amt; (2) 320 Haushaltsrechnungen von Metallarbeitern, made and published by the metalworker's union; (3) Lebenshaltung Städtischer Familien im Kriege, made for the month of April 1916 by Der Kriegsausschuss für Konsumenteninteressen. The author compares chiefly the data of the first and third surveys. He concludes that in the last decades before the war animal food to a large extent supplanted bread and potatoes. Food made up 50 percent of the expenditures. During the war a considerably larger percentage was spent for food and food luxuries. The war changed the level of living by increasing the cost of absolute necessities and thus decreasing the amount available for cultural purposes. The war changed the diet, too; there was a large increase of vegetable food at the expense of the physiologically valuable diet rich in animal food and fat.



## DEUTSCHER METALLARBEITERVERBAND.

(856)

320 HAUSHALTUNGSRECHNUNGEN VON METALLARBEITERN. 159 pp., illus. Stuttgart. 1909.

The families of 320 German metalworkers kept expense accounts throughout the year 1908. The object of this study was not to secure propaganda, but rather to construct an objective picture of the standard of living. The families represented were all of the working class, had no servants, and were distributed over 41 cities of different sizes. There were no children in 27 families; and size of family ranged from 1.9 to 9.3 persons. The average income was 1,856 marks. Wage and price statistics are given, but quantities of foods were not asked for. Percentages of total expenditure spent for different items are given and compared with data from other countries. The consumption of vegetable and animal foods, as well as the average amounts of foodstuffs per capita, are given according to income ranges. The work also includes monographs describing the living conditions of the workers and their households. The importance of the relation between the worker and his trade organization is pointed out. Comparisons are made with the data procured by the Statistisches Reichsamt for the year 1907. The author concludes that only a fraction of the families studied could live on the earnings of the man alone.

## GERLOFF, WILHELM

(857)

VERBRAUCH UND VERBRAUCHSBELASTUNG KLEINER UND MITTLERER EINKOMMEN IN DEUTSCHLAND UM DIE WENDE DES 19TEN JAHRHUNDERTS. Jahrb. Nationalökon. u. Statis. 90: 1-44, 145-172, illus. 1908.

The author uses for his computations 180 household accounts taken from seven different sources, and 889 Berlin household accounts which he considers less valuable because the data were obtained by inquiry. The purpose of the study is to show that the federal, state, and local taxes on articles of consumption imposed a far greater burden on the men with medium or small incomes than on those with large incomes. Although the period to which the data refer is not stated, it probably was just prior to 1908, the date when the study was published. From the average amounts of consumption of various articles, all food and drinks and tobacco, in the various income ranges he computes the taxes in marks and in percentages of the incomes. His figures show that the percentage increased rapidly with decreasing income. He concludes that the poor had to pay in taxes three and a half times as large a percentage of their income as did the wealthy.

BAVARIA, KÖNIGLICHE BAYRISCHEN FABRIK- UND GEWERBE-INSPEKTOREN. (858)  
JAHRESBERICHT: DIE PAPIERINDUSTRIE. Pfalz und Unterfranken. 1908.

## LEIPZIG, ARMENAMT.

(859)

BLÄTTER FÜR DAS LEIPZIGER ARMENWESEN. Amtliche Mitt. Leipziger Armenamtes No. 43. 1908. [Original not seen. Summary in Albrecht, Gerhard, Haushaltsstatistik, p. 58. Berlin. 1912.]

In order to ascertain whether the table of costs worked out by the Armenamt in 1899 was still applicable, household accounts were secured from several Leipzig, Frankfurt, and Dresden families. The presentation of the material is not very satisfactory. The household accounts probably refer to a period just prior to 1908, the date when the study was published.

## SCHÖLKENS, JOSEF

(860)

DIE GESTALTUNG DER LEBENSMITTELPREISE IN CÖLN SEIT 1890 UND IHRE BEDEUTUNG FÜR DIE HAUSHALTUNGSKOSTEN. Schr. Ver. Sozialpolitik 145 (2): 240-268, illus. München und Leipzig. 1914.

This study is concerned chiefly with the rise in the cost of food, prices of which for the different years are taken from the city records. Following the survey in 1907 by the Statistisches Reichsamt, one family in Cologne continued to keep books for the year 1908. From this account book the author presents the quantities of food consumed by this one family and computes the cost of those amounts at the prices of the different years, 1890-1908. The family was composed of a locksmith, his wife, and three children, 3, 4, and 10 years old. The income for the year was 2,351 marks.

CONRAD, ELSE

(861)

LEBENSFÜHRUNG VON 22 ARBEITERFAMILIEN MÜNCHENS. 80 pp., illus. München. 1909. [Original not seen. Summary in Albrecht, Gerhard, Haushaltungsstatistik, p. 59. Berlin. 1912.]

This study of household expenditures, published in 1909, was an endeavor to find average living costs among workmen in Munich; the results compared very nearly with the results of the 1909 study made by the Kaiserliches Statistisches Amt.

HENNIG, HERMANN

(862)

DIE ENTWICKLUNG DER PREISE IN DER STADT CHEMNITZ. Schr. Ver. Sozialpolitik 145 (4): 93-234, illus. München und Leipzig. 1915.

The rising prices of various articles of food, fuel, rents, and some raw materials from 1884 or 1889 through 1910, 1912, or 1913, are tabulated in this study. Another table gives percentage of income spent for rent from 1901 to 1910, as drawn from a study made by the statistical bureau of the city of Chemnitz. Another section deals with the influence of the rise in the price of food on the cost of living, as indicated by (1) 26 household accounts of Chemnitz families taken from the study published in 1909, Erhebung von Wirtschaftsrechnungen Minderbemittelter Familien in Deutschen Reiche, and (2) household accounts of 23 families living in Chemnitz taken from the study of 320 families of metalworkers made by the German metalworkers' union and published in Stuttgart in 1909. There are no original data.

HALLE, STATISTISCHES AMT DER STADT.

(863)

WIRTSCHAFTSRECHNUNGEN KLEINER HAUSHALTUNGEN IN HALLE A. S. UND UMGEBUNG, 1909-10. Beitr. Statis. Stadt Halle a. S., v. 13. Halle a. S. 1911. [Original not seen. Summary in Albrecht, Gerhard, Haushaltungsstatistik, p. 62. Berlin. 1912.]

This study for the years 1909-10 was a continuation of that carried out by the Kaiserliches Statistisches Amt, making use of similar account books. It covers 49 households for which records were kept for a year. The Social Democratic Party participated in the investigation. The material is especially valuable because it is so carefully worked over; there is also a discussion of methodology and of the comparableness of accounts of urban and rural households.

HERBIG, ERNST

(864)

WIRTSCHAFTSRECHNUNGEN SAARBRÜCKER BERGLEUTE. 161 pp., illus. Berlin. 1913.

This investigation of the household accounts of Saar miners of native German stock was made chiefly for the purpose of comparing them with the accounts in the Erhebung von Wirtschaftsrechnungen Minderbemittelter Familien in Deutschen Reiche, made in 1907 and published in 1909. Except for one privately owned mine, Hostenback, all the mines on Prussian territory were in the hands of the state. In addition to mining there was a well-developed iron industry and a very old glass industry. The economic status of the families was of a high order, because a rich agricultural region lay to the north and west of the mining district and miners who came from there had a strong desire to own their own homes and some land. Most of those who rented houses had some land under cultivation. Income from these home-raised products was reckoned at market prices. Boys received instruction in trade schools to the age of 18 and girls were instructed in sewing, cooking, and housekeeping. The accounts used were from 92 normal families. There are also special tables for 9 families who kept boarders, 6 families with unusually large incomes, and 36 families who kept books for less than a year. The data for these 143 families refer to the year 1910. Results of two other investigations are given in tabular form. The unit of consumption used is the full person unit of the Statistisches Reichsamts. A table compares this unit with Engel's quotient. The average size of the 92 families was 6.51 persons, the average income 2,462.21 marks per year.

HERBST, RICHARD

(865)

DIE BEWEGUNG DER PREISE IN MAGDEBURG IN DEN JAHREN 1890-1912. Schr. Ver. Sozialpolitik 145: 279-349, illus. München und Leipzig. 1914.

The first two parts of this work are devoted to a discussion of the development of price statistics, the methods of obtaining them, and tables giving the prices of foodstuffs in the various years as far back as 1875. Rent prices are given for the



years 1886 to 1910. The third part deals with household accounts of Magdeburg families; 10 household accounts collected by the Statistisches Reichsamt, and 10 household accounts from the study of German metal workers are presented. The author discusses one family only, that of a typesetter. It was composed of husband, wife, two children 6 and 4 years old, and a baby born in the last half of the report year, 1910-11. There was a total income of 1,884 marks. A table gives prices in the years 1890 to 1912 for the amounts of foodstuffs consumed by this family in the report year.

GÜNTHER, ADOLF (866)  
LEBENSHALTUNG DES MITTELSTANDES. STATISTISCHE UND THEORETISCHE UNTERSUCHUNGEN ZUR KONSUMTIONSLEHRE. MIT EINEM BEITRAG VON HEINRICH NEUMANN. Schr. Ver. Sozialpolitik 146 (2): 1-164, illus. München und Leipzig. 1920.

A detailed study was made of the household accounts of 50 skilled workmen in cities of all sizes scattered throughout Germany for the years 1911-13. Occupation of fathers, fathers-in-law, and grandfathers is given. Fifteen grandfathers were farmers or farm workers; all the grandsons went into the trades. Their education was similar: 7 to 9 years of public school and 4 to 5 semesters of technical training. Their incomes ranged from 1,500 to 6,000 marks per year. Three tables (source not given) for the year 1908 of the expenditures of engineers and men of building trades are used for comparison. Results of other investigations are also quoted. There is a detailed analysis of the amounts of the various constituents of food value and the expenditure is reckoned per consumption unit. The data furnish confirmation of Engel's law.

ALBRECHT, GERHARD (867)  
HAUSHALTUNGSSTATISTIK. 126 pp., illus. Berlin. 1912.

Albrecht summarizes the important methods utilized in studies of family expenditures and discusses the best methods for collecting the data, writing it up, evaluating nonmonetary items, etc. Material collected by others is frequently referred to as illustrating his points; and he supplies an almost complete bibliography of German studies up to 1910, including about 300 titles classified, discussed, and analyzed. Finally, he prepares a model for the presentation of data on family expenditure. The laws of Engel, Laspeyres, Schwabe, and other German investigators are discussed, and detailed information is given on Schwabe's law of rent costs and Laspeyres' modification. This information is then applied to Kuhna's data on 417 expenditure accounts divided into 14 categories of incomes. The percentage variations are irregular especially in the middle groups. Albrecht's investigations tend to confirm Laspeyres' relative rent law rather than Schwabe's absolute law, especially among the higher salaried group. There is too little information on families with incomes under 1,200 marks to justify conclusions. Data on the middle group, whose incomes range from 2,100 to 5,000 marks, seem to confirm both Schwabe and Laspeyres.

BRUTZER, GUSTAV (868)  
DIE VERTEUERUNG DER LEBENSMITTEL IN BERLIN IM LAUFE DER LETZTEN 30 JAHRE UND IHRE BEDEUTUNG FÜR DEN BERLINER ARBEITERHAUSHALT. Schr. Ver. Sozialpolitik 139 (2): 1-87. München und Leipzig. 1912.

In this study published in 1912, the attention of the author is directed almost exclusively to food prices. He brings together data collected from a number of sources.

GERLOFF, WILHELM (869)  
DIE LEBENSHALTUNG DER ARBEITENDEN KLASSEN IN DEN BEDEUTENDEREN INDUSTRIESTAATEN. Jena. 1912.

GÜNTHER, ADOLF (870)  
DIE DEUTSCHEN TECHNIKER. Soziale Praxis u. Arch. Volkswohlfahrt No. 21, 647 pp. Berlin. February 1912.

Wages and working hours of German technical engineers were considered briefly in this study of 1912. Earnings ranged from 1,200 to 1,800 marks for the 16- to 25-year-old group, to 2,400 to 3,600 marks for the 35- to 40-year-old group. The earnings of those over 50 were from 1,800 to 2,400 marks. Hours of work per day varied from less than 8 hours to more than 9. Percentages were given for summer and winter for the building trades and for industries, and the connection between social problems and the problems of the industrial officers was pointed out.

HALBWACHS, MAURICE

(871)

LA CLASSE OUVRIÈRE ET LES NIVEAUX DE VIE. 495 pp., illus. Paris. 1913.

This study, published in 1913, of household accounts kept by members of the German laboring classes is based entirely upon secondary data, largely that from official German statistical inquiries. Two household accounts found in a study by Hofmann, cover a period of 20 years; the others are largely for 1-year periods. The study is valuable for its theoretical conclusions such as the smaller the family the larger the proportion of total expenditure going for rent; with increasing income, clothing expenditures increase proportionately to total expenditures. The work is part way between the Durkheim approach and the American statistical approach to the problems of the level of living.

ALBRECHT, GERHARD

(872)

DIE STRUKTUR DES AUSGABENBUDGETS VERSCHIEDENER BEVÖLKERUNGSSCHICHTEN AUF GRUND NEUERER HAUSHALTUNGSSTATISTISCHER ERHEBUNGEN. Jahrb. Nationalökon. 102 (ser. 3, v. 47): 300-326, illus. Jena. 1914.

This article, published in 1914, is a working over of data collected in a number of German inquiries, the main object being a comparison of the percentages of expenditure of different types as between laborers on the one hand and officials and teachers on the other. The respective percentages of expenditure were as follows: For food, 52.73 and 39.57; for clothing, 11.46 and 13.34; for housing, 14.99 and 18.53; for heating and lighting, 3.93 and 4.31; other expenditures, 16.47 and 24.26. Expenditures are analyzed for both groups with particular care.

EULENBURG, FRANZ, ed.

(873)

KOSTEN DER LEBENSHALTUNG IN DEUTSCHEN GROSSSTÄDTEN. Schr. Ver. Sozialpolitik 145: 1-422, illus. München und Leipzig. 1914.

Eulenburg, in this study published in 1914, edits nine informative articles by different men on prices and cost of living in nine German cities.

MOST, OTTO

(874)

DIE VERTEUERUNG DER LEBENSMITTEL IN DÜSSELDORF WÄHREND DES LETZTEN JAHRZEHNTS. Schr. Ver. Sozialpolitik 145 (2): 307-348, illus. München und Leipzig. 1914.

This study deals chiefly with food prices, using data collected largely from municipal records and reckoning food expenses for households of four persons. The period to which the data refer was probably just prior to 1914, the date when this article appeared. Comparisons are made with the data collected by Brutzer and previously published in Schr. Ver. Sozialpolitik 139 (2): 1-87.

WELKER, GEORG

(875)

DIE MÜNCHENER ERHEBUNG ÜBER DEN LEBENSMITTELVERBRAUCH IM FEBRUAR 1915. 201 pp., illus. München. 1916.

This study included farm and professional as well as wage-earning families and is annotated as (722) and also listed as (917).

GERMANY, STATISTISCHES REICHSAMT. ABTEILUNG FÜR ARBEITERSTATISTIK.

(876)

DIE ERHEBUNGEN DES KRIEGSAUSSCHUSSES FÜR KONSUMENTENINTERESSEN ÜBER DIE LEBENSHALTUNG IM KRIEGE. DIE ERHEBUNG VOM AVRIL, 1916. Reichs-Arbeitsblatt 15 (2): 145-156, illus. 1917. [Summarized in U. S. Dept. Labor, Bur. Labor Statis. Monthly Labor Rev. 6 (3): 13-28, illus. 1918.]

Four thousand questionnaires were sent to regional committees in the various cities. Of the 900 questionnaires returned, 858 were used. These represented 472 families in 27 large cities; 279 in 20 medium-sized cities; and 107 in 8 small cities. There are represented 48 families of higher officials, 114 of officials of medium rank, 63 of lower officials, 166 of salaried employees, 183 of workingmen, 22 of professional men, 31 of soldiers' wives, and 231 of men whose occupations were not ascertained. Food consumption for April was recorded in marks and grams. Averages were reckoned per adult unit (children under 11 years were counted as 0.5) within certain income ranges and also for families of four persons in the two highest income ranges (100 to 200 marks and 200 to 300 marks per month), grouped by professions. The average size of the families was 4.3 persons. Their incomes ranged from less than 100 marks to more than 500 marks a month.



## GERMANY, STATISTISCHES REICHSAMT. ABTEILUNG FÜR ARBEITERSTATISTIK. (877)

DIE ERHEBUNGEN DES KRIEGSAUSSCHUSSES FÜR KONSUMENTENINTERESSEN ÜBER DIE LEBENSHALTUNG IM KRIEGE. DIE ERHEBUNG VOM JULI, 1916. Reichs-Arbeitsblatt 15 (3): 238-245, illus. 1917. [Summarized in U. S. Dept. Labor, Bur. Labor Statis. Monthly Labor Rev. 6 (3): 13-28, illus. 1918.]

In this study of July 1916, the same method and adult unit were employed as in the survey made in April 1916 (876). Of the 146 families, 101 lived in 15 large cities, 39 in 7 medium-sized cities, and 6 in two small cities. There were represented 22 families of high officials, 36 of officials of medium rank, 31 of salaried employees, 48 of working men, and 9 of professional men. The size of the family is not given. The incomes ranged from 100 marks to over 300 marks per month. The average expenditure for food per adult unit and average consumption in grams are reckoned for families within given income ranges. A table compares these results with those of April. The proportion of the whole expenditure spent for food is also worked out for April and July.

(878)

DIE ERHEBUNGEN DES KRIEGSAUSSCHUSSES FÜR KONSUMENTENINTERESSEN. BEITRÄGE ZUR KENNTNIS DER LEBENSHALTUNG IM DRITTEN KRIEGSJAHRE. Reichs-Arbeitsblatt Sonderheft 17, 48 pp. Berlin. 1917.

Data for this study were collected from 342 middle-class families of professional men, government and private officials, skilled workmen, and war widows or soldiers' wives. They represented 27 large, 26 medium-sized, and 23 small cities and country towns in all parts of Germany. The average size of the family was 4.83 consumption units, a consumption unit being equal to 1 adult or child over 11 years, or 2 children between 1 and 11 years of age. Complete household accounts for the month of April 1917 were kept according to instructions and questionnaires sent out by the committee. The average income for this month was 293.51 marks. Special tables also give results for 51 normal families of 4 consumption units. Comparison is made with a similar report for the same month of the preceding year, April 1916. The general conclusion is that, though families have had to economize in their manner of living in this war period, such economy is not of a serious nature and is less than was to be expected.

(879)

DIE ERHEBUNGEN DES KRIEGSAUSSCHUSSES FÜR KONSUMENTENINTERESSEN. BEITRÄGE ZUR KENNTNIS DER LEBENSHALTUNG IM VIERTEN KRIEGSJAHRE. Reichs-Arbeitsblatt Sonderheft 21, 76 pp., illus. Berlin. 1919.

The data in this study cover records from 249 families who filled out questionnaires for April 1918. They were all middle-class families, such as professional men, government officials, and skilled workmen. They represented large and small cities as well as country towns in all parts of Germany. Special emphasis was laid on testing the correctness of the amounts paid for rationed foodstuffs. Quantities are reckoned per unit of consumption (per capita). It was determined that by evading the laws, families had had rationed foodstuffs in larger quantities and at higher prices than had been prescribed. The sharp rise in the cost of living had forced many families to spend more than their income for the necessities of life even though, in comparison with April 1917, the average income had increased.

## DEUTSCHER METALLARBEITERVERBAND.

(880)

BUDGET OF A BERLIN WORKMAN'S FAMILY, LAST SIX MONTHS OF 1922. Metallarbeiter-Ztg. Stuttgart. January 27, 1923. [Summary in U. S. Dept. Labor, Bur. Labor Statis. Monthly Labor Rev. 16 (4): 55-56. 1923.]

This expense account of a Berlin workman's household for the last half of 1922 showed a total expenditure of 283,128 marks of which 1 percent was for rent, 5.5 percent for heat and light, 40.7 percent for food, and 19.3 percent for clothing.

## HAMBURG, STATISTISCHES LANDESAMT.

(881)

DIE LEBENSHALTUNG MINDERBEMITTLER FAMILIEN IN HAMBURG IM JAHRE 1925. Statis. Mitt. Hamburgischen Staat. No. 20, 43 pp., illus. Hamburg. 1926.

The household expenditures in the year 1925 of 80 families of workers were considered in this document. The workers represented many industries, the families were of various sizes, and figures were given for each item of income and expendi-

ture, as well as the totals. The families represented 309 persons with an average per household of 1.74 children and 0.13 other persons. Based upon the accounts, detailed estimates are given of income and expenditure per month for the entire group with averages per household, per person, and on a percentage basis. Other estimates include distribution of the necessities and luxuries by months, with monthly variations and classification of food values as to albumen, fat, carbohydrates, and calories. Tables comparing the figures for these 80 families of greater Hamburg in 1925 with 274 families in 1907 are given. In 1925 the average yearly income per household was 3,355.57 reichsmarks, the expenditure 3,232.74 reichsmarks, of which 1,455.89 reichsmarks was for food and 1,776.85 reichsmarks for other necessities of life. The conclusion stressed the connection between the cost of good meat and the health of industrial workers and city dwellers.

HAMBURG, STATISTISCHES LANDESAMT. (882)

HAMBURGER STATISTISCHE MONATSBERICHTE. AUGUST 1925. pp. 169-192, illus. Hamburg. 1925.

In this report were included maximum and minimum prices of foodstuffs in Hamburg in July and August 1925, with their average price during 1913-14. Wages of skilled and unskilled laborers and apprentices in some typical professions in Hamburg were given for July and August 1925. A mason's wages were 1.22 to 1.26 marks per hour; a coal worker's wages, 6.70 marks per day.

(883)

DIE LEBENSHALTUNG DER WIRTSCHAFTLICH SCHWACHEN BEVÖLKERUNG IN HAMBURG IN DEN JAHREN 1925 BIS 1929, INSBESONDERE IM JAHRE 1927. AUF GRUND DER WIRTSCHAFTSRECHNUNGEN VON HAUSHALTUNGEN. Statis. Mitt. Hamburgischen Staat, No. 26, 64 pp. Hamburg. 1931. [Original not seen. Summarized in The Hamburg Family Budget Enquiry of 1929. Internatl. Labour Rev. 24: 742-747, illus. 1931.]

The data are selected from more extended studies by the Statistisches Landesamt. Household accounts were kept for 5 years, 1925-29, by 26 families of the Hamburg upper working classes. The average size of the families varied from 3.88 to 4.08. The economic condition improved during the period; the average income increased from 3,260 reichsmarks in 1925 to 4,447 reichsmarks in 1929. During this period, the relative expenditure on food decreased; the quantitative consumption of bread decreased, of milk and fruit increased considerably, and of meat increased moderately; expenditures for sundries showed the greatest relative expansion.

BAUER, WILLY

(884)

EINKOMMEN UND FLEISCHVERBRAUCH. Vierteljahrsh. Konjunkturforsch. Sonderheft 28: 20-42, illus. Berlin. 1932.

This study is concerned with the variation in the consumption of meat as associated with varying income. No new material is presented. The author bases his computations and conclusions on data collected in 1927-28 by the Statistisches Reichsamt, Die Lebenshaltung von 2,000 Arbeiter-, Angestellten- und Beamtenhaushaltungen, Einzelschriften zur Statistik des Deutschen Reiches, v. 22, (886).

BLIND, ADOLF

(885)

DIE RICHTIGE BERECHNUNG DER EINNAHMEN- UND DER AUSGABENANTEILE IN DER STATISTIK ÜBER HAUSHALTSRECHNUNGEN. Jahrb. Nationalökön. 136: 574-596, illus. 1932.

The author of this article is concerned with the methods of computation utilized in dealing with data on household expenditures. For illustrative material he turns to the survey made by the German Statistisches Reichsamt in 1927-28 (886). By his first method, total expenditures for a group and expenditures for food are averaged, and the percentage expenditure for food is derived from these averages, the result being 43.76 percent. His second method, by which he arrives at somewhat different results, is to find the percentage expenditure for food of each family in the group and then to average these percentages. By this method, the percentage expenditure for food is 44 percent.



## GERMANY, STATISTISCHES REICHSAMT.

(886)

DIE LEBENSHALTUNG VON 2,000 ARBEITER-, ANGESTELLTEN- UND BEAMTEN-HAUSHALTUNGEN. ERHEBUNGEN VON WIRTSCHAFTSRECHNUNGEN IM DEUTSCHEN REICH VOM JAHRE 1927-1928. Einzelschriften zur Statistik des Deutschen Reichs, v. 22, nos. 1-2, illus. Berlin. 1932.

This is a study of household accounts in 1927-28 in 56 cities all over Germany. City statistical bureaus aided the Statistisches Reichsamt and account books were collected and tested each month. Families were chosen so that the most important trades and professions as well as typical incomes should be represented. Size of the family is given in terms of grown persons (vollpersonen). Income, expenditure, and consumption are reckoned per household and per grown person. To establish the nutritive content of the diet, amounts of protein and calories are reckoned. Averages are easily derived for the many groupings: (1) The 3 classes according to cities, (2) the 3 classes as a whole, (3) the 3 classes according to number of children, and (4) different trades and professions in the 3 classes. It was concluded that (1) families with an increasing number of children spent less per person for the necessities of life, (2) the data confirm Engel's and Schwabe's laws, (3) the nutritive and the protein content of the diet fell with decreasing income, (4) amount spent for housing rose with increased income, though its proportion to the total expenditure decreased, and (5) the proportion spent for heating and lighting increased with decreased income. A comparison is made of the quantities of various articles of food consumed in 1907 and in 1927-28. The influence of unemployment on incomes and expenditures was examined in 54 households. Insurance, aid, gifts, and cash in hand were the chief sources of income during these times; not much money was withdrawn from savings accounts. Retrenchment was not in food. Expenditures for recreation, culture, and repair of clothing were much limited. The average size of families was 4.2 for wage earners, 3.5 for clerical help (Angestellten), and 3.9 for officials. Average incomes varied, those for wage earners averaging 3,325 reichsmarks per year, those for clerical help 4,712 reichsmarks, and those for officials 5,349 reichsmarks per year.

(887)

DIE WICHTIGSTEN ERGEBNISSE DER AMTLICHEN ERHEBUNGEN VON WIRTSCHAFTSRECHNUNGEN VOM JAHRE 1927-1928. Wirtschaft u. Statistik 9 (20): 818-824, illus. 1930.

This summary is made on the basis of the survey by the Statistisches Reichsamt in 1927-28, Die Lebenshaltung von 2,000 Arbeiter-, Angestellten- und Beamtenhaushaltungen (886). Account books furnished monthly by the Statistisches Reichsamt were kept for the period March 1927 to February 1928 by 1,940 households consisting of 896 workers, 546 salaried employees, and 498 officials. The adult unit used provided one scale for food expenditures and another for other expenditures. Incomes and expenditures were given for the average families in certain income ranges, and the average for all families.

The article cited here deals with the most important details for the 896 workers' families, 771 of which lived in 41 large cities, 120 in 16 medium-sized cities, and 5 in a small city. The average size of the families was 4.2 persons, the average income 3,325 reichsmarks. Expenditures are reckoned for the average of families in certain income ranges, as well as for all families. Increase in the family income was associated with (1) a decline in the percentage of the total earned by the head of the family, (2) an absolute increase in income from sources other than earnings, and (3) an increase in age and number of children. Engel's law held for consumption of food, clothing, and luxuries; Schwabe's law for expenditure on rent. These records were from selected households in which the domestic economy was carefully planned.

The incomes and expenditures in the 498 families of officials also are analyzed. Of these, 400 lived in large cities and 98 in medium-sized cities. The average size of the family was 3.9 persons; the average income was 5,349 reichsmarks, ranging from 2,758 to 9,769 reichsmarks. Incomes and expenditures are given for the average of the families in certain income ranges and for the average of all the families. Expenditures are also reckoned per adult unit for these averages. Regular income averaged 96.9 percent; additional income increased as the total income increased. In the lower income group expenditures for food came first, for clothing second; but in the larger income group rent absorbed more than clothing. Rent averaged 12 percent of income, insurance 3.2 percent, furnishings and upkeep 4.1 percent, and education 1.5 to 4.4 percent. Thirteen of the

families had no recreation whatever. The lowest income group (2,758 to 3,320 reichsmarks) had no household help; the other groups had one or more servants, according to income.

GERMANY, STATISTISCHES REICHSAMT.

(888)

WEITERE ERGEBNISSE DER AMTLICHEN ERHEBUNGEN VON WIRTSCHAFTSRECHNUNGEN VOM JAHRE 1927-1928. *Wirtschaft u. Statistik* 9 (22): 902-907; 9 (24): 978-982, illus., 1929; 10 (2): 38-43; 10 (3): 78-81; 10 (5): 170-178, illus., 1930. [See also *The German Family Budget Enquiry of 1927-28. Internatl. Labour Rev.*, pp. 524-532, illus. 1930.]

Expenditures for food and food luxuries and the consumption of physical quantities are given for 896 workers' families, as covered in the 1927-28 survey of the Statistisches Reichsamt, *Die Lebenshaltung von 2,000 Arbeiter-, Angestellten-, und Beamtenhaushaltungen* (886). Expenditures, but not quantities, are given for the average of families in certain income ranges and per adult unit. The author concludes that the expenditures for food, drinks (both alcoholic and soft), and tobacco increased with increased income; that there was both an absolute and a proportionate increase in expenditures for vegetables and fruit; an absolute increase but proportionate decrease in expenditure for milk, bread, and baked goods; a general substitution of protein for fat and carbohydrate foods; and a general improvement in the quantity of food consumed. All physical-consumption figures are reduced to terms of an adult male.

Incomes and expenditures are given for the 546 households of salaried employees. Of these households, 478 were in large cities, 17 in medium-sized cities, and 1 in a small city. The average size of the families was 3.6 persons, the average income 4,712 reichsmarks. The averages of income, expenditure, and size of family are given for families in certain income ranges and for the whole. Expenditures per adult unit are reckoned for these averages. The value of the net income from self-raised products is given in reichsmarks. Insurance constituted 7.8 percent of expenses, taxes 4.4 percent. With a decrease of income, the proportion of insurance also decreased. Of total disbursements, current expenses were 96.7 percent, capital investment 1.9 percent, and payment on the principal of indebtedness 1.3 percent. Food expenditure per family increased with income, but the proportion which food formed of total expenditure decreased.

The influence of the number of children on the expenditures in the households of workmen is discussed. Of the 896 households of this class, many who had children received a part of their wages. The study is limited to 218 households with incomes ranging from 3,000 to 3,600 reichsmarks and from 1 to 6 children. None of the children were over 15 years of age. These 218 families all lived in large cities in various parts of Germany. Average expenditures are given per household by number of children. The author found that with increased size of family, the expenditure for food per household increased, while the expenditure for other necessities decreased. Reckoned per adult unit, all expenditures decreased with increase in size of family. The family consumed less of certain foods, such as eggs, meat, and fish. There was less recreation for the parents, and the home became progressively overcrowded. Formal education reached its highest level with 1 to 2 children and its lowest with 4 to 6.

Another part of the article deals with consumption of food and food luxuries in the 546 households of salaried employees. Expenditures and quantities of foodstuffs and luxuries (alcoholic and soft drinks and tobacco) are given for the average of all the families. The expenditures and quantities are reckoned for these averages per adult unit. The proportion of expenditures on food and luxuries (tobacco, drink) did not change greatly as income increased, but the absolute amount spent almost doubled, because of a change in either quantity or quality. The higher-income groups were much better nourished than the lower.

(889)

DIE WICHTIGSTEN ERGEBNISSE DER AMTLICHEN ERHEBUNGEN VON WIRTSCHAFTSRECHNUNGEN VOM JAHRE 1927/28. *Statist. Jahrb. Deut. Reich.* 1930, pp. 342-347, illus. Berlin. 1930.

Summaries are given here in tabular form of the data collected by the Statistisches Reichsamt in the survey of 1927-28, *Die Lebenshaltung von 2,000 Arbeiter-, Angestellten- und Beamtenhaushaltungen* (886). Income and expenditures are tabulated for the average household of workmen, of salaried employees, and of officials. Other tables give quantities of foodstuffs per household and per grown person.



KANTOROWICA, M.

(890)

DIE ERNÄHRUNG DER DEUTSCHEN LOHnarBEITER UND GEHALTSEMPFANGER  
NACH DEM KRIEG IM LICHT DER SOCIALEN HYGIENE. Ztschr. Schulgesund-  
heitspflege u. Soz. Hyg. 43 (15): 399-408; 43 (16): 430-443. 1930.

This is an analysis of the results of the study made by the German Statistisches Reichsamt in 1927-28 (886). The preliminary reports showed the validity of Engel's law; the laborers spent an average of half their income for food, the better situated occupational groups only about a third. Increased income led to the purchase of better quality, not greater amounts primarily. Although the poorer classes tried to spend rationally, they used too little milk in relation to its food value, too few vegetables, and substituted many artificial products for high-priced natural ones. Although an improvement in nourishment since the pre-war period appeared, the laborers were still ill-fed as compared with the officials.

CARROLL, M. R.

(891)

RECENT IMPROVEMENTS IN GERMAN SOCIAL STATISTICS. Jour. Amer. Statis.  
Assoc. 23: 386-397, illus. 1928.

This article, published in 1928, presents the results of some recent studies attempting to measure changes in the standards of living of various classes. No original material is contributed, but a number of more recent German studies are made available for the English reader.

SIEBEN, CLEMENS

(892)

UNTERSUCHUNGEN ÜBER DIE LEBENSHALTUNG DER ANGESTELLTEN. Kölner  
Sozialpolitische Vierteljahrsschr. 7 (4): 334-348. 1928.

This article, published in 1928, contains no primary material but comments upon two investigations made by the two largest unions of clerical workers in Germany into living conditions of clerical workers with incomes ranging from 3,000 to 4,000 marks. An analysis is made of original material not generally available.

DEUTSCHER BAUGEWERKSBUHD.

(893)

DIE LEBENSHALTUNG DER BAUARBEITER NACH WIRTSCHAFTSRECHNUNGEN  
AUS DEM JAHRE 1929. 167 pp., illus. Berlin. 1931.

Families of 896 German workers in 13 phases of the building trades, living in urban and rural districts throughout Germany, sent in daily reports of their incomes and expenditures for the year 1929. The size of the families varied from 1 to 11 persons; the incomes of the mason's families (509) averaged 2,044.80 reichsmarks per year, those of the assistants (284) averaged 1,581.20 reichsmarks, and those of the master masons and workers in allied trades (103) ranged up to about 2,079.28 reichsmarks. Expenditures in great detail are given for 101 categories of goods. Considerable analysis of these expenditures is made, with the general conclusion that consumption is influenced not only by the amount of income received, but also, and to a considerable extent, by local customs and traditions. In five representative cases, the quantity consumption of food and 14 other articles is also given. Furnished goods were valued at local prices. The consumption unit used was that worked out by the Statistisches Reichsamt in the study of 1927-28. Those who conducted the investigation desired the maintenance of the existing wage level.

EINHEITSVERBAND DER EISENBÄHNER DEUTSCHLANDS.

(894)

DIE LEBENSHALTUNG DES DEUTSCHEN REICHSBÄHNPERSONALS. 151 pp.,  
illus. Berlin. 1930. [Summarized in Gewerkschafts-Ztg. 41 (21): 330-  
332. 1931.]

The families of 120 railway workmen and salaried employees kept household accounts throughout the year 1929. The families were well distributed over the towns and country districts of Germany and the Saar region. The incomes of the workmen ranged from under 2,500 reichsmarks to over 4,300 reichsmarks; the average family contained four persons; and on an average, 41.9 reichsmarks of their expenditures was for food. The incomes of the railroad officials ranged from under 3,000 reichsmarks to over 7,500 reichsmarks; the average number of persons per family was 4.3; and 38.4 reichsmarks of their total expenditure, on an average, was for food. Consumption per adult equivalent is given for the different kinds of food. Increasing incomes were concurrent with a decreasing proportional expenditure for food; while the amount expended for animal foods showed, at the same time, a tendency to increase and that for vegetable foods showed a tendency

to decrease. The inquiry supplied no explicit confirmation of Schwabe's law for rent, mainly because of the great disparity in the quality of the employees' dwellings. A complete description of the social background of the participants in the survey is given. Analogies are made between the results of this and other German studies. The main conclusion is that even the best paid employees do not have sufficient surplus to avail themselves of the desirable cultural advantages. The summary article in the *Gewerkschafts-Zeitung* shows how the study of railroad employees served as a corrective for the official family expense account investigation made by the Statistisches Reichsamt in 1927-28. A lower wage level is included in the present work, and the geographical distribution is more representative. The official index of cost of living gave too great weight to the figures for food and lodging and understated the real rise in cost of living since the war.

LÜTGE, FRIEDRICH

(895)

DIE WOHNUNGS-AUSGABEN UND DAS SCHWABISCHE GESETZ IN DEN LETZTEN GROSSEN HAUSHALTUNGS-STATISTISCHEN ERHEBUNGEN. Jahrb. Nationalökon. 133: 265-282, illus. Jena. 1930.

This study contains no original data, but the author uses housing data from various sources, chiefly the survey made by the German Statistisches Reichsamt in 1927-28 (886). He considers expenditures for housing as (1) rent, (2) heat and light, and (3) upkeep and furnishings. He concludes that Schwabe's law is fully confirmed only among country and city workingmen, less so among salaried employees, and not at all among officials. It is even not confirmed among officials in income ranges in which it is fully confirmed among workingmen. He thinks another law is evident, the law of expenditure for housing, dependent upon social rank: The higher the social standing, the higher are the relative expenditures for housing.

MEERWARTH, RUDOLF, GÜNTHER, ADOLF, and ZIMMERMANN, WALDEMAR. (896)

DIE EINWIRKUNG DES KRIEGES AUF BEVÖLKERUNGSBEWEGUNG, EINKOMMEN UND LEBENSHALTUNG IN DEUTSCHLAND. 474 pp., illus. Stuttgart, Berlin [etc.]. 1932.

In this study published in 1932, Günther discusses the effects of the war upon the incomes and level of living of the middle classes of Germany. There are no original data in this part of the work; the author bases his conclusions on the results of German, Swiss, and Dutch surveys. He concludes that the change in the level of living is for the better in the upper and lower classes and for the worse in the middle class. He discusses in general the change of class. Of the declassed he says: "One can only say certainly that many more intellectuals, artists, and professional men and women are among the poor receiving help." Similarly he discusses the new middle class. Politics offered the greatest chance to rise. War damages enabled some to acquire property and so rise out of the lower class.

Zimmermann discusses the changes in income and living conditions among German workingmen. He gives tables of wages, 1914 to 1918, and quotes much household data from three German surveys. He discusses items of expenditure, food, housing, clothing, health, culture, education, recreation, and insurance, but gives no definite conclusions relative to each item except the high cost and scarcity of food, housing, and clothing during the war. He quotes the conclusions of Inante in *Lohnpolitik und Lohnentwicklung im Kriege*. He concludes in general that the level of living of all classes was lowered by the war. This was probably felt less by the working classes than by the middle and upper classes. It is certainly true that the level of living of the working and the more well-to-do classes has grown more similar as a result of the war. This is unfortunately almost entirely due to the fact that the upper classes were brought down to the level of the needy.

GERMANY, STATISTISCHES REICHSAMT.

(897)

DIE STEUERLICHE BELASTUNG DES HAUSHALTSBEDARFS DURCH VERBRAUCHS-ABGABEN UND ZÖLLE. Einzelschriften zur Statistik des Deutschen Reichs, no. 21, 328 pp., illus. Berlin. 1933.

#### OTHER INDEPENDENT FAMILIES

SCHRADER, T.

(898)

DIE RECHNUNGSBÜCHER DER HAMBURGISCHEN GESANDTEN IN AVIGNON VON 1333-1355. Hamburg. 1907.



ALBRECHT, J., ed. (899)  
CONRAD VON WEINSBERG DES REICHS-ERBKÄMMERERS EINNAHMEN- UND  
AUSGABEN-REGISTER VON 1437 UND 1438. 95 pp. Tübingen. 1850.

Conrad of Weinsberg kept this record of his income and expenditures during 2 years (1437-38) of his service as high chamberlain of the Holy Roman Empire. His items are listed in all current coinages: Imperial, Italian, and French. Every source and every kind of income and expenditure are noted. Whether or not it might be possible to reduce these to existing currencies and so determine the present value of his wealth, the comparative prices of the ordinary commodities of life are interesting. Horses cost from 5 to 60 gulden, honey 3 gulden. Pepper was 5 livres tournois; a barber received 10 gulden for his services.

TUCHER, ANTON (900)  
HAUSHALTBUCH (1507 BIS 1517). 312 pp. Tübingen. 1877.

The editor presents a practically complete copy, from the Royal Library in Dresden, of the household account book kept from 1507 to 1517 by Anton Tucher, a rich merchant and city councilor who lived almost alone in Nürnberg. His income is not definitely stated. His account books were divided into three parts: (1) Expenses for food; (2) expenses for clothing, gifts, house furnishings, etc.; and (3) wages of servants. The date of purchase, the quantity bought, and the price paid are in most cases given.

SITTE, ALFRED (901)  
KUNSTHISTORISCHE REGESTEN AUS DEN HAUSHALTUNGSBÜCHERN DER GÜ-  
TERGEMEINSCHAFT DER GEIZKOFER UND DES REICHS PFENNIGMEISTERS  
ZACHARIAS GEIZKOFER 1576-1610. 58 pp. Strassbourg. 1908.

The two sets of records given for families living in Augsburg are (1) the joint household account books of the Geizkofler family (1576-1605) who owned property amounting to 14,565 Rhenish florins, and (2) the household account books of the Reichspfennigmeister and Imperial councilor, Zacharias Geizkofler. These extracts include detailed lists of income and expenditure for some years, for others only a few items of expense, such as for jewelry, wedding presents, and other valuable articles. The significance of the study lies chiefly in the period which it covers and the economic class which it describes.

BRAND, GEORG (902)  
DIE WIRTSCHAFTSBÜCHER ZWEIER PFARRHAUSEN DES LEIPZIGER KREISES IM  
VORIGEN JAHRHUNDERT. 125 pp., illus. Leipzig. 1911.

The account books of the families of three German pastors living in parishes near Leipzig are here compared to show the cost of living. One of these was kept in the parish of Beucha from 1814 to 1817; a second in that of Brandis, 1846 to 1848; and a third at Beucha, 1870 to 1879. Of these, the first two, although they give a great many detailed items, do not in many cases include total expenditures. The third bookkeeper in his quite complete records estimated the value of his income from self-raised agricultural products, but the method used is not stated. The description furnished in these accounts of the living of the households shows the transition from a relatively simple household economy to a much more complex one.

KOLLMAN, PAUL (903)  
DIE VERTEUERUNG DES LEBENSUNTERHALTS UND STAATSDIENERBESOLDUNGEN.  
Oldenburg. 1876. [Original not seen. Partly summarized in Hampke,  
Carl, Das Ausgabebudget der Privatwirtschaften, p. 45. Jena. 1888.]

The expenditures of a high official's family for 1850 and 1875 are given here. Food cost 1,305.67 and 2,485.04 marks, respectively, in 1850 and 1875; rent cost 360 and 750 marks; clothing, 570 and 900 marks; the total expenditures were 3,596.79 and 6,348.38 marks. In each case the family consisted of parents, three children, and a maid.

EMMINGHAUS, A. (904)  
ZUM KAPITEL DER HAUSHALTSKOSTEN. Jahrb. Nationalökon. u. Statis. 28  
(5): 650-661, illus. 1904.

A summary of housekeeping accounts kept for more than 40 years, 1862-1903, by one of the author's friends is presented here. The author considered the case typical of the standard of living of a large number of the more cultured middle class. The data are presented for three periods, when the family lived (1) in a north German Hansa city, 1862 through 1865, (2) in a south German residential city, 1866 through 1872, and (3) in a medium-sized city of central Germany,

1873-1903. Average size of family cannot be determined, since the author gives only the number of children born in each period. There were 4 sons and 3 daughters who left the home at different times. Total income (salary, literary work, and interest on capital) varied from an average of 6,081 marks in the first period to 6,379 marks in the second period to 18,134 marks in the third period. The item "hauswirtschaft" included chiefly food expenditures; the percentage which that formed of the total fell with increasing income. The percentage of expenditure for housing did not decrease with rising income. Houses rented were reckoned at rental value in the place of residence. The expense of owned house included interest and mortgage payments, together with upkeep of the garden. The amount spent for mental development and recreation increased with rising income.

PFEIFFER, E.

(905)

DIE STAATSEINNAHMEN. 2 v., illus. Stuttgart. 1866. [Original not seen. Summary in Albrecht, Gerhard, *Haushaltungsstatistik*, pp. 53, 61. Berlin. 1912. Also in Hampke, Carl, *Das Ausgabebudget der Privatwirtschaften*, p. 42. Jena. 1888.]

This study included wage-earning as well as professional families, and is annotated as (742).

KARL.

(906)

EIN BEITRAG ZUR BEURTHEILUNG DES VERBRAUCHS UND DER INDIRECTEN ABGABEN BEI VERSCHIEDENEM EINKOMMEN. Volks. Zeitfragen 11 (84): 1-31, illus. 1889.

The purpose of this study was to compute the burden of duties and indirect taxes on persons with varying incomes. The author kept household accounts from 1876 through 1888. Friends interested by him kept their books for a varying number of years. The data are presented by yearly averages of income and expenditures of families in income groups ranging from 4,100 to 18,000 marks a year. Data for the highest income group, covering 6 to 8 years, were secured in a medium-sized city. Data for the smallest income group, covering 3 years, came from a large city. The consumption unit used counted adult members of a family over 20 years as 1.00; children, according to age, as 0.5, 0.6, or 0.7; servants as 0.6. The average size of families was 2.60 to 3.35 units. Average size of households ranged from 3.55 to 6.40 units. Other tables give amounts of duties and indirect taxes on expenditure for certain articles, and percentage of income that must be paid for duties and indirect taxes. For an income of 18,000 marks the percentage was 4.44; for 4,100 marks it was 5.59.

EHRENBERG, RICHARD

(907)

AUS BEAMTENHAUSHALTUNGEN. Arch. Exakte Wirtschafts-Forsch. 2: 316-346, illus. 1909.

The author believed that the most valuable household data are those of one family over a period of years. He gives the data from the household accounts of one higher government official. These accounts were most carefully kept from 1876 to 1906. From 1876 to 1885 the official lived in a small city of Schleswig-Holstein, from 1885 to 1889 in a suburb of Berlin, from 1889 to 1890 in a small city of west Prussia in which living was very inexpensive, from 1890 to 1896 in the chief city of a governmental district of Pomerania, and from 1896 on in a residential city of south Germany where living was very expensive. The size of the family varied from 3 to 6. The total income ranged from 4,515 to 10,093 marks per year. Because of the groupings, many items of expenditure cannot be determined. Household money includes many things; clothing, education, and support of children not at home are grouped.

MEYER-POLLACK, ERNA

(908)

DER HAUSHALT EINES HÖHEREN BEAMTEN IN DEN JAHREN 1880-1906. UNTERSUCHT AN HAND VON WIRTSCHAFTSRECHNUNGEN. Schr. Ver. Sozialpolitik 145 (4): 1-92, illus. München und Leipzig. 1915.

These accounts show living conditions of the family of a judge of a country court, who in 1888 was transferred to Berlin. During all the years covered, he kept accounts with the greatest exactness. Amounts spent for items of food could be given for only 9 months as the family took a vacation trip of 3 months each year. In 1880 the family consisted of husband, wife, and three sons, 3 years old and under. Another son was born in 1882 and a daughter in 1890. From 1886 the man's father and from 1892 the woman's sister lived with them. Their total income varied from 8,738 marks in 1881 to 15,053 marks in 1906. Expendi-



ture is reckoned per family and also per consumption unit (that of the Statistisches Reichsamt, a man being counted as 1.00, a woman as 0.8, and children in proportion down to 0.1).

HAMPKE, CARL (909)  
DAS AUSGABEBUDGET DER PRIVATWIRTSCHAFTEN. 148 pp., illus. Jena. 1888.

This study included wage-earning as well as professional families and is annotated as (767).

GERMANY, STATISTISCHES AMT. (910)  
ZWEI WIRTSCHAFTSRECHNUNGEN VON FAMILIEN HÖHERER BEAMTER. Reichs-Arbeitsblatt Sonderheft 3, 33 pp., illus. Berlin. 1911.

Household data of two German higher officials are here presented separately. For the family of A, expenditures are given for the years 1894 to 1908. In 1894 the family consisted of the parents and three very young children; its size varied somewhat in the ensuing years. From 1894 to 1899, A lived in a large city of Westphalia; in 1902 he moved his family to Berlin. His income over the whole period ranged from 6,541 to 9,297 marks per year. In addition to the regular tabulation of expenditures, balances and percentage relationships of certain items to total output are included for each year. A's salary paid about two-thirds of the expenses. The second account book is similar in form. It extends over the period 1899-1910. B's family increased during this period from 2 to 7 persons. The size of the family was also reckoned in adult equivalents (a woman being counted as 0.8 male unit, children up to 4 years, 0.1). B was an assistant in a state scientific institution. His average annual income during this period was 6,289 marks. These data are compared with those of the survey of less well-to-do families made in 1907.

DYHRENFURTH, GERTRUD (911)  
EIN SCHLESISCHES DORF UND RITTERGUT. 178 pp., illus. Leipzig. 1906.

The changes in the social and economic conditions in the seignorial village of Jacobsdorf, in the agricultural district of Neumarkt in Silesia, are here described in detail from the end of the thirteenth century. Five expense accounts kept during 1895-96 are given (for a farm hand, a bootmaker, a gardener, and two old women living on pensions), as well as various expenditure accounts of rural workers obtained by the Prussian Kingdom in 1848. Agricultural products raised or furnished by the manor house are valued at local prices. The purchases of the estate, for which total annual figures are given for most of the years between 1875 and 1905, indicate clearly the change to a commercial standard of living, i. e., to a greater consumption of purchased goods by workers. The exploitation of woman and child labor and the inadequacy of the housing conditions are discussed in detail.

K., KARL VON (912)  
WIRTSCHAFTSRECHNUNGEN. Ztschr. Gesam. Staatswiss. 62: 701-739, illus. 1906.

This detailed account gives the income and expenditures for 10 years (1895-1906) of the author, an insurance agent and part-time teacher of accounting, who lived in Leipzig with his wife and son, and for part of the time, his stepmother. The descriptive background is fairly complete.

GERLOFF, WILHELM (913)  
HAUSHALTUNGSRECHNUNGEN ZWEIER VOLKSSCHULLEHRER. Ann. Deut. Reich. 41 (3): 180-207, illus. 1908.

The teacher in Stetlin had a salary of 1,700 marks when he married in 1899. One child was born January 1, 1901, and another in 1902. From April 1, 1902, his salary was 2,000 marks; from April 1, 1903, 2,240 marks; from 1904, 2,440 marks, and from April 1, 1906, 2,840 marks. This salary included an allowance for rent, which was 450 marks up to 1902, 550 marks afterward. The data are presented year by year from 1901 to 1906. The teacher in Krefeld had no children. He had taught 18 years, and his income for 1904 was 2,605 marks; for 1905 and 1906, 2,870 marks. Household data are given separately for the years 1904, 1905, 1906.

GERLOFF, WILHELM.

(914)

WIRTSCHAFTSFÜHRUNG UND HAUSHALTUNGSaufWAND DEUTSCHER VOLKS-SCHULLEHRER. Arch. Sozialwiss. u. Sozialpolitik 30: 381-424, illus. 1910.

For the purpose of this investigation 17 household account books were kept for 1 year. All but six were excluded, however, because they did not always give quantities. These six books were kept most carefully for the year 1907 and were supplemented by questionnaires and by conversations with the heads of the families. The households were in cities and country districts in Prussia, except for one in the Black Forest of Württemberg. The size of the family is given in persons and in quets. The average income was 2,978.60 marks. Consumption of foodstuffs is reckoned in marks per quet and in kilograms per person. The values of natural products raised by the families are given in marks at the market prices of the various places.

GÜNTHER, ADOLF

(915)

LEBENSHALTUNG DES MITTELSTANDES. STATISTISCHE UND THEORETISCHE UNTERSUCHUNGEN ZUR KONSUMPTIONSLEHRE. MIT EINEM BEITRAG VON HEINRICH NEUMANN. Schr. Ver. Sozialpolitik 146 (2): 1-177, illus. München und Leipzig. 1920.

The part of this book written by Heinrich Neumann, "Die Lebensführung einer Mittelstandsfamilie in Friedens- und Kriegsjahren" (pp. 165-177), presents household accounts of a bank official in the capital city of a province of northern Germany for the two periods 1912-14 and 1915-17. The family consisted in the first period of husband, wife, and servant. In January 1914 a boy, and in February 1917 a girl were born. The income is not stated. Total expenditures varied from 4,959 to 5,796 marks per year.

ALBRECHT, GERHARD

(916)

DIE STRUKTUR DES AUSGABENBUDGETS VERSCHIEDENER BEVÖLKERUNGSSCHICHTEN AUF GRUND NEUERER HAUSHALTUNGSSTATISTISCHER ERHEBUNGEN. Jahrb. Nationalökon. 102 (ser. 3, v. 47): 300-326, illus. Jena. 1914.

This study included wage-earning as well as professional families and is annotated as (872).

WELKER, GEORG

(917)

DIE MÜNCHENER ERHEBUNG ÜBER DEN LEBENSMITTELVERBRAUCH IM FEBRUAR 1915. 201 pp., illus. München. 1916.

This study included farm and wage-earning as well as professional families and is annotated as (722) and also listed as (875).

GERMANY, STATISTISCHES REICHSAMT, ABTEILUNG FÜR ARBEITERSTATISTIK. (918)

DIE ERHEBUNGEN DES KRIEGSAUSSCHUSSES FÜR KONSUMENTENINTERESSEN ÜBER DIE LEBENSHALTUNG IM KRIEGE. DIE ERHEBUNG VOM APRIL, 1916. Reichs-Arbeitsblatt 15 (2): 145-156, illus. 1917. [Summarized in U. S. Dept. Labor, Bur. Labor Statis. Monthly Labor Rev. 6 (3): 13-28, illus. 1918.]

This study included wage-earning families as well as professional families and is annotated as (876).

(919)

DIE ERHEBUNGEN DES KRIEGSAUSSCHUSSES FÜR KONSUMENTENINTERESSEN ÜBER DIE LEBENSHALTUNG IM KRIEGE. DIE ERHEBUNG VOM JULI, 1916. Reichs-Arbeitsblatt 15 (3): 238-245, illus. 1917. [Summarized in U. S. Dept. Labor, Bur. Labor Statis. Monthly Labor Rev. 6 (3): 13-28, illus. 1918.]

This study included wage-earning as well as professional families and is annotated as (877).

(920)

DIE ERHEBUNGEN DES KRIEGSAUSSCHUSSES FÜR KONSUMENTENINTERESSEN. BEITRÄGE ZUR KENNNTNIS DER LEBENSHALTUNG IM DRITEN KRIEGSJAHRE. Reichs-Arbeitsblatt, Sonderheft 17, 48 pp. Berlin. 1917.

This study included wage-earning as well as professional families and is annotated as (878).



GERMANY, STATISTISCHES REICHSAMT, ABTEILUNG FÜR ARBEITERSTATISTIK. (921)  
DIE ERHEBUNGEN DES KRIEGAUSSCHUSSES FÜR KONSUMENTENINTERESSEN.  
BEITRÄGE ZUR KENNNTNIS DER LEBENSHALTUNG IM VIERTEN KRIEGSJAHRE.  
Reichs-Arbeitsblatt Sonderheft 21, 76 pp., illus. Berlin. 1919.

This study included wage-earning as well as professional families and is annotated as (879).

GERMANY, STATISTISCHES REICHSAMT. (922)  
DIE LEBENSHALTUNG VON 2,000 ARBEITER-, ANGESTELLTEN-, UND BEAMTEN-  
HAUSHALTUNGEN. ERHEBUNGEN VON WIRTSCHAFTSRECHNUNGEN IM  
DEUTSCHEN REICH VOM JAHRE 1927-28. Einzelschriften zur Statistik des  
Deutschen Reichs, v. 22, nos. 1-2, illus. Berlin. 1932.

This study included wage-earning as well as professional families and is annotated as (886).

(923)  
WEITERE ERGEBNISSE DER AMTLICHEN ERHEBUNGEN VON WIRTSCHAFTS-  
RECHNUNGEN VOM JAHRE 1927-28. Wirtschaft u. Statistik 10 (7): 266-271;  
10 (8): 31-318, illus. 1930.

These articles continue the summary of the survey by the Statistisches Reichsamt in 1927-28, Die Lebenshaltung von 2,000 Arbeiter-, Angestellten-, und Beamtenhaushaltungen (886). They deal with the consumption of food and food luxuries in the 498 households of officials.

Expenditures on food and luxury goods averaged 1,776 reichsmarks, or 33.2 percent of total expenditures, rising according to income. The increase was due to change in both quantity and quality. Consumption of meat, milk, cheese, eggs, etc., increased in the higher income groups. Few meals were taken outside the home. Alcoholic drinks ranked first among luxury expenditures, averaging 91 reichsmarks, while tobacco absorbed from 44 to 78 reichsmarks.

KANTOROWICA, M. (924)  
DIE ERNÄHRUNG DER DEUTSCHEN LOHNARBEITER UND GEHALTSEMPFÄNGER  
NACH DEM KRIEG IM LICHT DER SOCIALEN HYGIENE. Ztschr. Schul-  
gesundheitspflege u. Soz. Hyg. 43 (15): 399-408; (16): 430-443. 1930.

This study included wage-earning as well as professional families and is annotated as (890).

## GREAT BRITAIN AND IRELAND

### FARM FAMILIES

ROGERS, JAMES E. T. (925)  
A HISTORY OF AGRICULTURE AND PRICES IN ENGLAND. 7 v. Oxford. 1866-1902.

This combines the agricultural and economic history of England with a record of prices for all important products from the earliest consecutive annals to the close of the eighteenth century (1259-1793). Most of the data are published for the first time. The values in the most important tables are reduced to grains of silver. Dates of changes in the values of currency are indicated. The methods used in preparing the tables of averages and other numerical statements are given in each case. Four periods are covered: 1259-1400 (v. 1-2); 1401-1582 (v. 3-4); 1583-1702 (v. 5-6); and 1703-1793 (v. 7, pts. 1-2). Brief historical summaries are given of agriculture, the distribution of wealth, trade and markets, taxes and contributions, currency, weights and measures, as well as prices. Prices of the following commodities are given: Grain, hay, straw, wool, hides, livestock, farm produce, implements and tools employed in agriculture, building materials, metals, labor, fish, ale, beer, textile fabrics, clothing, paper, parchment, ink, books, sundries, foreign wines and spices, and cost of carriage. Analyses are made of the profits of agriculture, the purchasing power of wages, and the hours of work. Volumes 2, 3, 6, and 7 (pt. 1) are almost entirely composed of tables of prices and wages. Volume 7 (pt. 2) contains notes from the Cholmeley and Howard papers; gifts made by All Souls; income of All Souls from 1764-65 to 1793-94; contrast of prices 1710-11; estimated produce of wool; an account of investments and losses in the Bubbles; a statement of wages appointed by the justices in the west riding of Yorkshire; an account of the prices of labor, about 1707, from Mortimer's Art of Husbandry; an account of the prices of labor, about 1727, from Edward Laurence's Duty of a Steward; a statement of wages determined by the justices in the counties of Kent and

Gloucester; tables illustrating the rates of wages paid in various parts of England, extracted from Arthur Young's tours; prices of stock—South Sea Co., Bank of England, East India Co., and Consolidated Three Per Cents; and an account of the profits arising from the farm at Holkham, and the disbursements for management. This last is a detailed account "of the profits arising from the farm at Holkham, in the hands of the Right Hon. the Lord Lovell, and disbursements for managing the same from Michaelmas, 1731, to March 26, 1737." It included the total sales of wheat, rye, barley, malt, bullocks, sheep, hogs, hay, and straw, the receipts from carriage, limekiln, and brickkiln. The disbursements covered laborers' weekly bills, extra work by laborers both on the land and on the stock, the cost of seeds and stock, expenses of malt-house and limekiln, tradesmen's bills, rent, tithes, taxes, and servants' wages. The total income for 1733-34 showed £1,693 11s. 9d; the expenditures were £1,046 1s. 8d.

YOUNG, ARTHUR

(926)

THE FARMER'S LETTERS TO THE PEOPLE OF ENGLAND. 2 v., illus. London. 1771.

Young was chiefly interested in agriculture in its theoretical and practical aspects, but he also discusses population problems, commerce, prices, and the diet of low-income families. A special section of the book is devoted to the family in England, the average size of which Young estimates at five persons. He includes two expenditure accounts for a laborer's family, one hypothetical and the other based on figures from four families. The data apply to 1767.

(927)

A SIX MONTHS TOUR THROUGH THE NORTH OF ENGLAND. 4 v., illus. London. 1770.

Young was here interested in the improved methods of husbandry in the counties of northern England. Nobility, gentlemen, and farmers were interviewed in securing the data. The statistical material applies to the year 1770, and deals primarily with agricultural expenses and the profit to be expected, including tables of cost of labor, implements, and provisions; number of acres, animals, and servants; general average of earnings of farm laborers and industrial laborers, together with the aggregate price of provisions.

DAVIES, DAVID

(928)

THE CASE OF LABOURERS IN HUSBANDRY. 200 pp., illus. London. 1795.

This description of the condition of the poor in Great Britain in the eighteenth century and the causes of their growing distress is amplified by the inclusion of 137 expenditure accounts (1787-94) from families in various parishes of the counties of Berk, Cornwall, Dorset, Durham, Gloucester, Hampshire, Lancashire, Northampton, Somerset, Surry, Westmoreland, and York, in England; Denbigh and Merioneth in Wales; and Aberdeen, East Lathian, and Sutherland in Scotland. The size of the family ranged from 3 to 9 persons, one having 12; the annual income ranged from £5 2s. to £42 18s.; and expenses ranged from £7 to £56 1s. In all but 23 of the cases there was an excess of expenses over earnings varying from a few pence to £14 9s.; the highest surplus was £7 4s. 2d. This material was secured by direct inquiry in most parishes; the three lowest incomes and expenditures were taken from families in Scotland. No statistical tables were drawn up. Wheaten bread was the chief item in the diet. Tables showing the relative proportion between the price of labor and that of necessities from the middle of the fourteenth century through the eighteenth show that the laborer's lot was becoming increasingly worse. Several remedies were proposed to better these conditions such as reduction of prices, fixing of wages, increased employment for men and boys in the winter and for girls and women in the home, and the use of the poor rate for making up deficiencies in the family's expense account.

HAMMOND, J. L., and HAMMOND, B.

(929)

THE VILLAGE LABOURER 1760-1832. A STUDY IN THE GOVERNMENT OF ENGLAND BEFORE THE REFORM BILL. 418 pp. London. 1912.

This description of the life of the village poor during the Industrial Revolution discusses the methods and procedure of parliamentary enclosures and the laborers' rising of 1830. The enclosures deprived the village laborer of his rights to fuel, pasturage for his cow, and gleaning by his wife and children. Simultaneous with the loss of these rights was a general rise of prices. Cost of provisions increased at more than twice the rate of the increase in wages. One of the remedies suggested in 1795 for the deplorable conditions of the poor was diet reform, especially



the introduction of coarse bread, soup, and cheap cereals, and the elimination of tea, sugar, and wheaten bread. The poor in refusing this were thought ungrateful. Statistics are taken from Eden and Davies as to the income and expenditures of villagers' families analyzed in the light of the general economic situation.

YOUNG, ARTHUR

(930)

GENERAL VIEW OF THE AGRICULTURE OF THE COUNTY OF SUSSEX. 96 pp., illus. London. 1793.

Young gives here a detailed discussion of the agricultural methods in Sussex County, describing the typography, crops, sheep husbandry, etc. Six expense accounts for families of laborers in the parish of Glynd are given for a week and for the year 1793. The families consisted of 3 persons (2), 6 persons (2), 7 persons (1), and 8 persons (1). Expenditures for food ranged from £9 7s. 6d. per annum for the 3-person family to £34 4d. for the 8-person family, the total expenses being £18 1s. 6d. and £42 14s. 7d., respectively. Total earnings ranged from £13 for the 3-person to £32 8s. for the 6- and 7-person families. There is an excess of expenditure over income in every case ranging from 6s. 2d. to £14 2s. 2d.

DEVEY, J., and AVALLE, E.

(931)

MANOEUVRE-AGRICULTEUR DU COMTÉ DE NOTTINGHAM (ANGLETERRE). JOURNALIER DANS LE SYSTÈME DES ENGAGEMENTS VOLONTAIRES PERMANENTS D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN MAI 1856. Les Ouvriers des Deux Mondes (1) 1: 373-402. Paris. 1857.

This study deals with an agricultural laborer in a permanent position, who cared for livestock on a holding 2 miles south of Newark in 1856. The family consisted of the laborer (36), his wife (42), and 4 daughters (16, 9, 6, and 2). Health was excellent; medical attention, secured through a sick society, cost 2 francs per month. The worker belonged to the upper class of paid laborers. Recreations were chiefly noncommercialized. Family well-being lay chiefly in their regular saving habits and good employer-employee relations, as there were no communal institutions to help them. The family was permitted to use about 2 hectares for house and garden land. They paid 200 francs a year for pasture rights for their cow and pig. Property consisted of 2,500 francs in money, 525 francs in agricultural equipment, and 1,401 francs in furniture and clothing. Income was 2,520 francs, of which 1,777 francs was in money. Property accounted for 95 francs; subventions, 289 francs; labor, 1,672 francs; and industries, 365 francs. Food cost 1,384 francs; household, 279 francs; clothing, 466 francs; and moral, recreative, and health needs, 85 francs. Savings were 306 francs. Notes give details concerning the state of agriculture and the condition of rural workers in Nottingham; the system of loans against wages by English employers; and the 4-year system of crop rotation.

AVALLE, E.

(932)

NOURISSEUR DE VACHES DE LA BANLIEUE DE LONDRES (MIDDLESEX—ANGLETERRE). OUVRIER CHEF DE MÉTIER DANS LE SYSTÈME DU TRAVAIL SANS ENGAGEMENTS D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN AVRIL 1857. Les Ouvriers des Deux Mondes (1) 1: 263-298. Paris. 1857.

The case described in this study, made in 1857, was typical of the small dairy farmer supplying London at that time. The dairyman had 7 milk cows and 2 horses for his milk delivery. The family consisted of the head (28), his wife (26), and 3 daughters (3, 5, and 6 months). The man was liberal in politics. The parents had an elementary schooling and were temperate and honest. Health was good in spite of the unsanitary conditions of this part of London. The man had started as a laborer but had risen to his present position through his own energy. His wife sold milk to purchasers at the house. The chief positive trait of the family was the husband's industry. He carried no fire insurance. Property consisted of a home and dairy barns, animals, and equipment valued at 5,772 francs, and 2,383 francs in clothing and furniture. Income was 3,705 francs of which 3,084 francs was in money. Property accounted for 329 francs, subventions 50 francs, labor 1,575 francs, and industries 1,751 francs. Food cost 1,586 francs; household, 372 francs; clothing, 796 francs; moral, recreative, and health needs, 75 francs; and all else, 164 francs; savings were 712 francs. Notes are given concerning the dairy industry around London; the taxation of the poor; the observance of Sunday as a rest day; the labor vote in the elections of 1857; and the practice of renting rooms in the suburbs of London.

ESCARD, FRANÇOIS

(933)

FERMIER NORMAND DE JERSEY. OUVRIER TENANCIER DANS LE SYSTÈME DES ENGAGEMENTS VOLONTAIRES PERMANENTS, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN 1882, 1895, ET 1896. Les Ouvriers des Deux Mondes (3) 1: 1-60. Paris. 1904.

The family described in this study was held together from one generation to the next by its traditions and its association with agriculture. Data on family living were secured in 1882, 1895, and 1896. The worker rented 11 hectares, which he planned to buy later. The household consisted of the head (36), his wife (34), son (14), daughter (7), the wife's mother (60), and 4 male and 1 female servants. Family relations and morals were exemplary; health was fair. The principal work of the farm was raising and selling cows, next came the growing of potatoes and other crops. Recreations were noncommercialized. Their well-being rested on good agricultural conditions, family harmony, and high morals. Property consisted of animals, tools, and money valued at 22,698 francs, and furniture and clothing at 4,096 francs. Income was 16,616 francs, of which 14,741 francs was in money. Property contributed 1,126 francs income, subventions 1,065 francs, labor 1,913 francs, and industries 12,512 francs. Food cost 4,816 francs; household, 797 francs; clothing, 1,136 francs; moral, recreative, and health needs, 347 francs; and all else, 1,971 francs; savings amounted to 7,549 francs. Notes are given on the political, municipal, religious, and military organizations; old Norman customs, the language and instruction, and the roads in Jersey; the inheritance regime in the Channel Isles; excess of females; religious taxes and rent; credit institutions; statistics of production and sale of potatoes; ships in the Isle of Jersey in November 1895; and the moral principles of French Masons.

MANN, P. H.

(934)

LIFE IN AN AGRICULTURAL VILLAGE IN ENGLAND. Sociol. Papers, v. 1, pp. 163-193. London. 1905.

The information for this study of conditions of agricultural laborers in England was obtained in the autumn of 1903. It deals with 127 families in a village of Bedfordshire, almost all of whom were employed directly or indirectly in agricultural pursuits. On the basis of Rowntree's classification, 50 of the families were found to be in primary or secondary poverty. A minimum standard on the basis of local prices required a weekly income of 18s. 4d. for a family of 2 adults and 3 children. The tables giving average earnings, rent, etc., were made up according to the causes for poverty. The average size of the families in poverty ranged from 1.9 to 8.2, the earnings from 6s. to 21s. 4d., and the rent from 1s. 6d. to 1s. 10d. For those wage earners not in poverty, the average earnings were 23s. 7½d., and the family had 3.71 members; rent was the same.

HEATH, F. G.

(935)

BRITISH RURAL LIFE AND LABOUR. 318 pp. London. 1911.

Rural living conditions and labor in England, Scotland, Wales, and Ireland are described in this book, which also includes a great deal of material concerning payment in kind, such as food, fuel, and cottages, and cider during harvest time. Gardens also were occasionally supplied. Farm laborers are classified according to their duties. The author describes the overcrowded living conditions among the farm laborers. Only expenditures for food are listed. The period to which the data apply is not stated, but it seems safe to assume that it closely preceded 1911, the date when the study was published.

HARBEN, HENRY D.

(936)

THE RURAL PROBLEM. 169 pp., illus. London. 1913.

This study of the land question in 1912 concludes with 17 recommendations designed to remedy the existing bad conditions. A table is given of the average wages of agricultural laborers in England according to occupation, and the appendix gives the wages for each county of England and Wales. It was found that the cottages were too few in number, and that they were overcrowded and insanitary. Tables for the minimum cost of food, rent, clothing, and household sundries are given for Ridgmount, together with minimum weekly expenses for a single adult, 2 adults, and 2 adults with children ranging in number from 1 to 8. A weekly minimum was also given for York for a family of 2 adults and from 2 to 5 children.



GREAT BRITAIN BOARD OF TRADE, LAND ENQUIRY COMMITTEE.  
THE LAND. 2 v., illus. London. 1913.

(937)

An investigation of earnings, standards of living, and conditions of labor among rural laborers in England and Wales was undertaken by the Land Enquiry Committee in 1912. They used the Rowntree and Booth methods of investigation; two schedules were prepared: A, dealing with wages, hours of labor, housing, and allotments; B, with conditions of tenure, game, acquisition of land, etc. There were 2,759 returns on the A schedule by men of all classes, 866 on B. Tables of wages by counties and for several years past were given. The authors expressed the belief, based on records of expenditure collected by Miss Davies, Mann, and Rowntree and Kendall, that with the exception of a few of the highest paid counties, the average weekly earnings would fall below the level necessary to maintain physical health and efficiency. Besides malnutrition leading to a chronic state of apathy and indifference, low wages were held responsible for the frightful housing conditions and the exodus of young men to towns. When all sources of income were considered, over 60 percent of ordinary agricultural laborers received less than 18s. weekly. In volume 2 is reported the inquiry conducted in 1912-13 to discover the effect on industry and conditions of urban life of the existing systems of ownership, tenancy, and taxation. Schedules were secured in 101 towns of England and Wales. This study contains a description of the deficiency in quality and quantity of dwellings and attempts to indicate how the evils might best be remedied. Contrary to popular belief, the majority of insanitary and overcrowded dwellings were occupied by regular workers whose wages were too low to enable them to pay for a sanitary dwelling.

ROWNTREE, B. S., and KENDALL, M.

(938)

HOW THE LABOURER LIVES: A STUDY OF THE RURAL LABOUR PROBLEM. 324 pp., illus. London. 1913.

Expense accounts of 42 families, collected by the authors in 1912-13 from representative districts in the counties of York, Essex, Oxford, Leicester, and Berks, form the basis of this investigation of living and nutrition of the British village laborer. A general survey and a discussion of wages shows that 600,000 of the 1,200,000 employed in agriculture were agricultural laborers and shepherds and that the average weekly earnings (including allotments) were for England 18s. 4d. and for Wales, 18s. The remainder of the book is devoted to an analysis of the accounts. The absolute minimum for maintaining physical efficiency was placed at 20s. 6d.; the average earnings in every county but five were below this. Few averages were obtained because of the small number of accounts. The families studied contained 2 to 3 adults and 2 to 9 children; their weekly cash earnings ranged from 9s. to 28s. 3d. An analysis of the adequacy of the food consumed showed that it never exceeded the protein minimum and in only one case attained it; there was an average shortage of protein of 24 percent. The deficiency of energy value was 10 percent. Only one-fifth of the nutriment was obtained from animal sources. On the average the 42 families investigated were receiving not much more than three-fourths of the nourishment necessary for the maintenance of physical health. In the south, bread was the chief item in the diet; flour was often made into pastry in other sections. Meat figured in all the dietaries but scantily; it was "a flavouring rather than a substantial course", or "for the man only." The under consumption of milk was serious; butter did not figure in 20 of the 42 accounts, drippings or margarine being used instead. The women and children especially suffered from underfeeding. No adequate allowance was made for clothing, which in most cases was received from charity.

GREAT BRITAIN AGRICULTURAL WAGES BOARD.

(939)

REPORT OF THE COMMITTEE APPOINTED BY THE AGRICULTURAL WAGES BOARD  
TO ENQUIRE INTO THE FINANCIAL RESULTS OF THE OCCUPATION OF AGRICULTURAL LAND AND THE COST OF LIVING OF RURAL WORKERS. 73 pp., illus. London. 1919.

The committee, in addition to collecting considerable new material, made use of pertinent data available from other sources including prices of farm products, rents, wages, retail prices, and receipts and expenditures on farms. The impossibility of making accurate generalizations from the available data was pointed out. A table is given of average expenditures of 269 farm workers' families for June 1918, for various types of food, and for fuel and light, insurance, fares, and soap.

GREAT BRITAIN BOARD OF AGRICULTURE AND FISHERIES. (940)  
 WAGES AND CONDITIONS OF EMPLOYMENT IN AGRICULTURE. 2 v., illus. London. 1919.

One section of this report (v. 1, general report) deals with the muscular fitness and nutrition of farm workers. The expense records and dietaries collected were not felt to be representative as they were secured at a time when the shortage on bread, cheese, bacon, milk, etc., was keenly felt. An inquiry into dietaries of farm workers in 1902 showed that the prevailing diet was adequate in energy and proteins. Medical examinations of rural children showed their standard of nutrition to be higher than that of children in residential and industrial areas. In a consideration of earnings, it must be remembered that cash wages are practically always supplemented by allowances and allotments of some kind: rent-free cottage, potatoes, potato ground, manure, milk, coal, wood, and sometimes straw, meal, vegetables, cider, malt, etc. Volume 2 (report of investigators) contains expense records from 50 counties of England and Wales in 1918. The families contained from 1 to 10 children and from 2 to 7 adults; the range of cash wages was from 12s. to 83s. 6d., and of expenditures from 10s. 3d. to £4 1s. Food expenditures ranged from 7s. 6d. to 55s. 11 ¾d. The dietaries showed a lack of variation. The typical diet was bread, margarine, and tea for breakfast; vegetables and bacon for dinner, with meat only once or twice a week; bread, margarine, and tea for tea. In practically every case the farmer considered himself worse off than before the war, for prices had increased more than wages; the price of boots was a cause for complaint everywhere. Most investigators included comparisons of 1918 with pre-war prices.

PATON, D. NOËL, and FINDLAY, LEONARD (941)  
 POVERTY, NUTRITION AND GROWTH. STUDIES OF CHILD LIFE IN CITIES AND RURAL DISTRICTS OF SCOTLAND. [Gt. Brit.] Med. Research Council Spec. Rept. Ser. 101. 329 pp. London. 1926.

In this study the slum child was compared with the children of agricultural laborers and rural miners in an attempt to determine what influence such factors as poverty, bad housing, and the lack of fresh air and maternal care have on growth and nutrition. The slum children studied came from 788 Glasgow families, 606 Edinburgh families, and 864 Dundee families. Of these families, 93 percent lived in 1- or 2-room houses; 65 percent of the fathers were unskilled laborers, 35 percent were skilled. The agricultural and mining groups studied lived in the counties of Perth, Stirling, Forfar, Fife, East Lothian, Berwick, Dumfries, and Ayr. All of the families, city and rural, were below the poverty line. During the period studied, 1919-23, the cost-of-living increase (over 1914) from October 1919 to November 1920 was 115 to 176 percent, then there was a gradual decline until, at the end of the inquiry in 1923, it stood at 69 percent. The three age groups studied were (1) infants (10,619 in cities); (2) preschool (5,884 in agricultural and mining areas, 4,855 in cities); and (3) school age (1,578 in cities). Most intensive work was done on the second group, on which information was obtained by house-to-house visiting. Studies of income and diet showed that the amount spent on food and the energy value purchased per penny were of much more importance with relation to the calorie value of the diet than was income per man. From dietary studies of a limited number of typical families, it was found that the calorie intake tended to be constant. Dietaries for 11 Glasgow families (unemployed or on short time) for 1921 and 12 families from the same city for 1922 showed the effect of the trade depression in the decreased amounts spent for food, the expenditures per man per week ranging from 2s. 11d. to 8s. 6d. in 1922 as compared with 4s. 1d. to 13s. 7 ¾d. in 1921. Dietaries of nine families of regularly employed laboring men in Glasgow in 1924 showed the most marked difference to be the increased use of milk. Of 17 Glasgow artisan (well-to-do) families, it was found that 10.38s. per man per week was the average spent for food, and that the most striking features of the diet were the larger supply of energy, protein, and fats, and, along with the greater amount spent on food, the decreased amount of energy per penny purchased. Other dietaries were given for Dundee families, agricultural laborers, and coal miners. The source of protein and fats was definitely related to income, the proportion of vegetable protein and fat being higher for the low incomes. The families of over 3,000 children of agricultural laborers were studied, as well as 140 families of rural coal miners in Scotland. The average income per person per week was 9.95s. for the former group and 8s. for the latter. The agricultural children had much better housing conditions and general health than those in the preceding studies; their meals were regular and better prepared. The



studies showed for the agricultural group an intake of 3,220 calories and 0.87 pint of milk per man per day; for the mining group 2,917 calories and 0.34 pint of milk; and for the town group 2,564 calories and 0.39 pint of milk. The general conclusions were that neither diet nor amount of milk was directly responsible for the small size of town children, but that the most significant factor was maternal efficiency, which was in turn related to health, overcrowding, and size of family. The appendix contains four typical expense records for Dundee families whose incomes ranged from £1 5s. to £2 17s. 6d. Complete statistical data and correlations are given throughout.

ASHBY, A. W.

(942)

FARM WORKERS' BUDGETS. Jour. Min. Agr. [Gt. Brit.] 32: 812-821, 902-911, 996-999. London. 1924-25.

Forty expenditure records collected by the National Union of Agricultural Workers for February and March 1924 show the average prices of various food items, and also the total expenditures. The cost-of-living committee shows that prices for 1924 had increased over those of 1914 by from 4 percent for bacon up to 211 percent for sugar. Most commodities except sugar and flour had decreased since 1918. The cost of foodstuffs for a family of 2 adults and 4 children in 1902 was 13s. 7½d. per week; in 1923 the cost of the same quantities was 28s. 1d. The average total expenditures of the 40 families studied was 28s. ¾d., of which 18s. 11¼d. went for food, 4s. 5d. for fuel and lighting, and 2s. 8d. for rent. There were 6 persons per family, or 3.8 consumption units; the sum spent for food per consumption unit was 5s. When these 40 were divided into large and small families, it was found that 4s. 6½d. per unit was spent for food in the larger families and 5s. 11d. in the smaller, showing that large families tended to reduce their unit expenditures on foodstuffs. Another set of 43 accounts for the last week in March or first week in April 1924 was secured; 20 counties were represented. The larger family had 5.14 consumption units, the average income was 39s. 6¾d., and the expenditure for food 25s. 3¼d.; the smaller family had 2.98 consumption units, the income was 36s. 10d., and the expenditure for food 20s. 5d. Clothing costs annually were averaged as £5 18s. 8¾d. for a man; £5 1s. 11d. for a woman; and £2 11s. 1½d. for a child. The totals of the 83 records were averaged together for the various items of expenditure. Consideration was given those cases in which allowances of milk, potatoes, fuel, etc., free rent, and allotment produce added to the family income.

FAMILIES OF WAGE EARNERS, LOW-SALARIED WORKERS, AND SMALL PROPRIETORS

STEFFEN, GUSTAF F.

(943)

STUDIÖR ÖFVER LÖNSYSTEMETS HISTORIA I ENGLAND. Lorénska Stiftelsen, nos. 11, 16. Stockholm. 1895.

The history of English wages is here divided into six periods of relatively high or low level of living: (1) Before 1350 when there was increasing social subjection of the people during the rise of the wage system, the last stages of feudalism; (2) 1350-1540, the break-up of feudalism and the flourishing of the guild system, the rise of the purchasing power of wages; (3) 1540-1660, the great rise in prices and the origin of English poverty, the sinking of the level of living, the Elizabethan poor law; (4) 1660-1760, the improvements in the condition of the wage earners during the preparatory stages of the modern factory system; at this time the level of living among urban laborers improved but remained stationary among rural laborers; (5) 1760-1830, a time of deterioration of the level of living because of the sudden and unregulated development of industrialism; (6) 1830-90, an improvement in the level of living in the more advanced stages of modern industrialism. Throughout there is a discussion of the factors leading to a rising or falling level, as well as a discussion of the indications of the level of living—wages, habits of consumption, etc.

ROGERS, JAS. E. T.

(944)

SIX CENTURIES OF WORK AND WAGES. 591 pp. London. 1884.

Records and annual expense accounts studied for this survey show that wheat and oats were the chief grains of the thirteenth century, that barley was grown chiefly for beer, and that the leguminous plants—beans, peas, and vetches—were generally given to horses and pigs. Most of the meat was salted; dairy products were cheap. Pork, poultry, mutton, and salted fish were used, and the diet often led to such diseases as scurvy and leprosy. On the whole, there was

relatively little change in the peasant's mode of life from 1259 until the beginning of the nineteenth century. A distribution of income of the agricultural laborer in the thirteenth century might be as follows: £1 3s. 6d. annually for bread, using 4 quarters of wheat; 7s. 7d. for 2 quarters of second-quality malt for the home manufacture of beer; 16s. 8d. for 800 pounds of meat at  $\frac{1}{4}$ d. per pound. In all, the cost of maintenance would be £2 7s. 9d.; the remaining expenses would be for clothing—2s. for rude boots, 1s. 6d. for leather gaskins, the homespun russet cloth and linen shirting being made at home. Supplied with his own produce, the laborer might save 20s. a year. Through the fifteenth century, the condition of English labor was one of comparative plenty and hope, reaching its peak about 1495. Then it sank within a century to so low a level as to make workmen practically helpless. After reaching its lowest point at just about the time of the great war between King and Parliament, it gradually improved until in the first half of the eighteenth century, though still far below the level of the fifteenth century, it achieved comparative plenty. Then it began to sink again, and the workmen experienced direst misery, especially during the 40 years, 1782-1821. The nineteenth century showed a slow and partial improvement.

DUNNING, RICHARD

(945)

BREAD FOR THE POOR. London. 1698. [Original not seen. Partly summarized in Waterman [Gilboy], Elizabeth, Wages and Standards of Living of English Labour, 1700-90. 279 pp., illus. Thesis, Radcliffe College. 1928.]

A day laborer in husbandry, whose wife was supporting herself and 1 child, must maintain himself and the other 2 children in clothes, food, drink, pay the rent, buy tools, fuel, etc., out of 2s. 6d. or 2s. 8d. weekly (which Dunning estimated to be the full wage of the man in 1698). These expenditures are estimated at 2s. 5d. per week, which left no surplus for emergencies. Save for the woman's labor, there would have been a deficit.

PETTY, SIR WILLIAM

(946)

A POLITICAL SURVEY OF IRELAND. Ed. 2. London. 1719.

The object of the author was to ascertain Ireland's capacity for trade. He estimated the total population and the cost and nature of consumption. Housing facilities for the majority of families were very inadequate, being small, damp, and infested with vermin. Clothing on the whole was superior to that of similar classes in other countries, the Irish having the advantage of native-grown wool. Milk was used in various forms during the summer months; in winter beer or water was used. Bread, cakes, potatoes, and sea food were the principal foods. Animal flesh was not used commonly due to the inconvenience of storing. Turf was the common fuel. The people were divided into 16,000 families possessing more than one chimney per house, and 180,000 others. Data on the average income and expense for each group is estimated; although no date is specified, it is probable that this data referred to the period just preceding 1719, when the study was published. The expenditures are divided into food, clothing, housing, fuel, taxes, and savings, if any. A family of six of the class having one-chimney dwellings spent on the average 52s. per head per annum, whereas the average person of the more prosperous class spent £10 per annum. The cost of keeping the dependent class is estimated. Comparisons are made with English and French conditions.

BRADLEY, R.

(947)

A PHILOSOPHICAL ENQUIRY INTO THE LATE SEVERE WINTER. 56 pp. 1729. [Goldsmith Library, London.]

VANDERLINT, JACOB

(948)

MONEY ANSWERS ALL THINGS: AN ESSAY TO MAKE MONEY SUFFICIENTLY PLENTIFUL AMONG ALL RANKS OF PEOPLE, ETC. 160 pp. London. 1734. [Reprinted 1914, Baltimore.]

The author of this early economic essay believed that "reducing the present rates of labor" was necessary to increase trade and was therefore to the advantage of persons of all ranks. In connection with his proposed remedies, the author estimated the needs, in 1730, of a laboring man, his wife, and four children in a detailed budget and made a similar budget for a man of "middling station." The latter family was of the same size but included a servant. It was probably the family of the pawnbroker who wrote *An Apology for the Business of Pawnbroking* (London, 1744).



ANONYMOUS.

(949)

AN APOLOGY FOR THE BUSINESS OF PAWN-BROKING, BY A PAWNBROKER. 160 pp. London. 1744. [Included in McCulloch, J. R., *A Select Collection of Scarce and Valuable Economical Tracts*. London. 1859.]

This pamphlet includes an estimate of weekly and annual expense for food, sundries, clothes, etc., for a family of "middling station" consisting of man, wife, 4 children, and 1 maidservant. Although the period to which these estimates apply is not stated, it was probably immediately preceding 1744, the date when the tract was published. The largest weekly food item was 10s. 2½d. for fish and meat; then 4s. 1d. for tea and sugar, 3 s. ¾d. for bread, and the same for butter. The allowance for clothing was £16 each for the man and wife yearly, £28 for the four children; rent and taxes might be less than £50.

MASSIE, JOSEPH

(950)

CONSIDERATIONS RELATING TO THE POOR. London. 1758. [Original not seen. Partly summarized in Waterman [Gilboy], *Elizabeth, Wages and Standards of Living of English Labour 1700-1790*. 279 pp., illus. Thesis, Radcliffe College. 1928.]

Massie estimated that the annual income of a family, consisting of a man, wife, and two children with all at work, approached £30. He then presented a detailed analysis of household expenses totaling £29 10s. It is assumed that his estimate and expenditure analysis apply to the period about 1758, the date when his work was published.

ANONYMOUS.

(951)

SOME OBSERVATIONS UPON SETTING THE ASSIZE OF BREAD, RECOMMENDED TO THE PERUSAL OF ALL MAGISTRATES. 38 pp. 1766. [Goldsmith Library, London.]

(952)

SOME OBSERVATIONS ON THE CAUSES OF THE DEARNESS OF PROVISIONS IN GENERAL AND CORN IN PARTICULAR \* \* \* BY A COUNTRY GENTLEMAN. 56 pp. 1767. [Goldsmith Library, London.]

(953)

ANSWER TO A PAMPHLET \* \* \* ON THE CAUSES AND CONSEQUENCES OF THE PRESENT HIGH PRICE OF PROVISIONS. 36 pp. 1768. [Goldsmith Library, London.]

(954)

THE ECONOMIST \* \* \* ESTIMATES, FROM FOURSORE POUNDS A YEAR TO UPWARDS OF 800 POUNDS, HOW A FAMILY MAY LIVE \* \* \* BY A GENTLEMAN OF EXPERIENCE. 21 pp. 1774. [Goldsmith Library, London.]

(955)

ACCOUNT BOOKS OF PERSONAL EXPENDITURE, 1784-89, 1796-99, 1802-5, 1809-11, 1817-18, 1821-30, 1874-77. 90 pp. [Ms. in London School of Economics Library.]

DODD, F. L.

(956)

STATISTICS ILLUSTRATING THE STANDARD OF COMFORT, 1790-1900. 11 sheets. [Pamphlet collection, London School of Economics Library.]

EDEN, SIR FREDERIC MORTON

(957)

THE STATE OF THE POOR; OR A HISTORY OF THE LABOURING CLASSES IN ENGLAND. 3 v., illus. London. 1797.

The first of these volumes deals with a history of the poor, national establishments for the maintenance of the poor, and a description of the diet, dress, fuel, and habitation of the laboring classes of Great Britain in the last decade of the eighteenth century. In the south of England, the poorest laborers had an unvarying meal of dry bread and cheese from week to week, but in the north, and in Scotland and Wales, a greater variety was secured by the use of oatmeal, barley flour, and especially potatoes. Housing conditions were generally poor. Clothing was of the coarsest quality and often inadequate for health and comfort. The other two volumes deal with minute details of the condition of the poor in several parishes. Diets for the workhouses are given, the chief items being bread, cheese, beer, milk pottage, and broth, with meat about four times a week. Expense records for approximately 40 families in as many different parishes are given. Often the earnings did not cover the expenditures, and parish relief was required. Occupational groups included miners, weavers, masons, a dockyard laborer, a dyer, a carter, and agricultural laborers. The appendix contains ex-

tracts from the household account books of the Earl of Surrey and Sir Edward Coke, the former showing the kinds of food enjoyed by the gentry in 1523, the latter showing prices and kinds of food used in 1596. The appendix includes 66 expense records for 1795-96 for 53 families of agricultural laborers, collected in January and February 1796, in the following counties: Bedford, Cumberland, Huntingdon, Hertford, Leicester, Lincoln, Norfolk, Northampton, Oxford, Suffolk, Somerset, and York. Each family consisted of 2 adults, and 1 to 6 children under 16 years of age. The annual earnings ranged from £17 19s. to £51 6s., and the annual expenses from £18 13s. 3d. to £88 18s. 3d. In all but 12 of the cases, expenses exceeded earnings; often this deficiency was made up in part by harvest earnings, otherwise by parish or private charity. No averages were derived.

ANONYMOUS. (958)

REPORTS FROM THE COMMITTEE APPOINTED TO CONSIDER THE PRESENT HIGH PRICES OF PROVISIONS. British Parliament Papers 1800, repts. 1-6; 1801, repts. 1-7. [London School of Economics Library.]

COLGUHOUN, PATRICK (959)

GENERAL REPORT OF \* \* \* A FUND FOR THE RELIEF OF THE INDUSTRIOUS POOR, RESIDENT IN \* \* \* LONDON AND WESTMINSTER. 22 pp. 1800. Jevons Col., v. 44. [London School of Economics Library.]

DUTHY, D. (960)

OBSERVATIONS ON THE PRESENT HIGH PRICE OF PROVISIONS, IN A LETTER TO THE LORD LIEUTENANT AND INHABITANTS OF HAMPSHIRE. 50 pp. 1800. [Reform Club, London.]

HAMMOND, J. L., and HAMMOND, B. (961)

THE TOWN LABOURER, 1760-1832, THE NEW CIVILIZATION. 346 pp. London. 1920.

This study of the Industrial Revolution in England deals especially with the fortunes of the masses of people engaged in producing wealth, and their conflict with the governing class. The most striking fact was the rapid growth in population, leading to a flooding of the industrial towns by the working-class group. Included are discussions on hours of work, low wages, child labor, discipline and fines in the factories, descriptions of the overcrowded dwellings and barbarous recreational activities, and the subsequent movement for reform which resulted from these bad conditions. There is one table giving the expenditures in 1825 of a miner with a wife and three children. Prices of various necessities in 1818 were compared with prices of similar articles in 1788; in 1818 the prices were more than double.

FINCH, J. (962)

STATISTICS OF VAUXHALL WARD, LIVERPOOL, SHEWING THE ACTUAL CONDITIONS OF MORE THAN 5,000 FAMILIES. 55 pp. Liverpool. 1842. [Reform Club, London.]

LE PLAY, F. (963)

MENUSIER DE LA VILLE DE SHEFFIELD (YORKSHIRE). JOURNALIER DANS LE SYSTÈME DES ENGAGEMENTS VOLONTAIRES PERMANENTS, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN 1842 ET EN 1851. In *Les Ouvriers Européens*, ed. 2, v. 3, pp. 364-399. Paris. 1877.

In this study, made in 1842 and 1851, and also dealing with the stem family, the household consisted of the worker (35), his wife (30), daughter (8), and a boarder (3). The worker's health was good, but the wife was frail. The worker belonged to a mutual-aid society. A skilled worker, he made furniture for the home they intended to build and also did the family marketing. Recreations were confined to Christmas celebrations, attendance at two fairs, and occasional walks. Their well-being rested on the spirit of saving, his skill and steadfastness, and the permanence of his work and of the file and saw industry. Property consisted of materials for building a house, money, and tools valued at 1,535 francs, and furniture and clothing at 1,136 francs. Income was 1,862 francs, of which 1,784 francs was in money. Property accounted for 49 francs; subventions, 5 francs; labor, 1,483 francs; and industries, 325 francs. Food cost 910 francs; household, 285 francs; clothing, 313 francs; moral, recreative, and health needs, 109 francs; and all else, 29 francs; savings were 216 francs. Notes are given on the small-scale industry in the English social structure, and the efforts to provide home ownership as an indispensable means of moral and material well-being for the workers.



WARREN, ELIZA

(964)

HOW I MANAGED MY HOUSE ON TWO HUNDRED POUNDS A YEAR. Amer. ed. 5, 95 pp. Boston. 1866.

This autobiography describes the education of an experienced English wife in the mid-nineteenth century in the managing of her household affairs. Minute details are given as to the daily schedule and the pet household economies which enabled her to live within her budget. The family consisted of 2 adults, 2 children, and a servant. Expenses in 1846 included rent and taxes, £25; household, £70; wages for servant, £10; insurance, £25; clothes for man, £20; clothes for wife, £15; clothes for children, £5; laundry, £10; and sickness or emergencies, £20.

SMITH, T.

(965)

FOURNIER DES USINES À FER À LA HOUILLE DU DERBYSHIRE. JOURNALIER DANS LE SYSTÈME DES ENGAGEMENTS VOLONTAIRES PERMANENTS, D'APRÈS LES RENSEIGNEMENTS COMMUNIQUÉS EN 1850. In Le Play, F., Les Ouvriers Européens, ed. 2, v. 3, pp. 400-436. Paris. 1877.

In this study, made in 1850 and affording another illustration of the stem family, the worker was a skilled day laborer, faithful and honest. The family consisted of the head (36), his wife (35), 2 sons (11 and 4), and 2 daughters (9 and 7). Health was good. The worker belonged to a mutual-aid society. The wife raised pigs, and the man cultivated a garden. Recreations were confined to drinking at home, smoking, and Christmas celebrations. Their well-being was protected by good morals and excellent and permanent relations with the employer. Property consisted of animals, tools, and rights in mutual-insurance societies to the value of 107 francs, and furniture and clothing valued at 850 francs. Income was 2,009 francs, of which 1,914 francs was in money. Property accounted for 4 francs; subventions, 23 francs; labor, 1,824 francs; and industries, 157 francs. Food cost 1,461 francs; household, 230 francs; clothing, 208 francs; moral, recreative, and health needs, 81 francs; and all else, 29 francs, there being no savings. Notes are given on the history, the regime of inheritance, and the characteristics of the Anglo-Saxon famille-souche, and on the economic reforms in England since 1830 and their significance.

WOOD, GEORGE H.

(966)

REAL WAGES AND THE STANDARD OF COMFORT SINCE 1830. Jour. Roy. Statis. Soc. 72 (1):91-103. 1909.

The purpose of this study was to estimate the variations in living conditions during the last half of the nineteenth century. In addition to collecting new material, the author used figures from Bowley, Fox, Board of Trade reports, and the like. He found an advance, from 1850 on, of 80 percent in material living conditions and an increased consumption of 60 percent, due chiefly to the increased importance of highly paid skilled labor, the rise in wages for the same grade of labor, and the reduction in the cost of living.

LE PLAY, F.

(967)

COUTELIER DE LA FABRIQUE URBAINE COLLECTIVE DE LONDRES (MIDDLESEX). TÂCHERON DANS LE SYSTÈME DES ENGAGEMENTS MOMENTANÉS, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN 1851. In Les Ouvriers Européens, ed. 2, v. 3, pp. 273-317. Paris. 1877.

This study, made in 1851, is one of a number made by Le Play illustrating the strong social structure built about the stem family. The worker here described lived near a merchant who furnished him piecework at home. The household consisted of the head (34), wife (33), 2 sons (10 and 6 months), 2 daughters (9 and 5), and the head's mother (82). Family health was poor. The worker repaired and ground knives for his neighbors and did most of the family marketing. Recreations consisted of Christmas celebrations, picnics, the theater, and walking. Well-being rested on the comparative steadiness of the work, economy, and the parish poor relief board. Property consisted of money, tools, and rights in a mutual-aid society to the value of 191 francs, and furniture and clothing, 1,059 francs. Income was 2,498 francs, of which 2,335 francs was in money. Property accounted for 6 francs, labor 1,831 francs, and industries 661 francs. Food cost 1,284 francs; household, 660 francs; clothing, 418 francs; moral, recreative, and health needs, 106 francs; and all else, 29 francs, there being no savings. Notes are given on the transformation in the social structure of England by the

Saxon conquest; the increasing preponderance of urban population; the continual increase of pauperism; religious education; and the spirit of novelty, changing the material culture of England in which tradition had an important place.

LE PLAY, F.

(968)

COUTELIER DE LA FABRIQUE URBAINE COLLECTIVE DE SHEFFIELD (YORKSHIRE). TÂCHERON DANS LE SYSTÈME DES ENGAGEMENTS MOMENTANÉS, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN 1851. In *Les Ouvriers Européens*, ed 2, v. 3, pp. 318-363. Paris. 1877.

This study, made in 1851, and another of those illustrative of the stem family, describes a household consisting of the head (38), his wife (38), and 3 daughters (10, 7, and 5), 3 other children having died. The eldest daughter was a dress-maker. They were of good morals. Health was poor, all but the worker being frail. He belonged to a mutual-aid society. He cultivated a garden and did the family marketing, while the woman cared for the home, fed the pigs and poultry, and made a drink to sell in the summer. The children attended school. Recreations included the raising of pigeons and canaries and attending Christmas celebrations and fairs at Sheffield. Well-being was far from assured, there being no provision for emergencies except the help of the mutual-aid society in case of illness of the worker. Property consisted of animals and tools valued at 132 francs, and furniture and clothing at 534 francs. Income was 1,591 francs, of which 1,429 francs were in money. Property accounted for 7 francs; subventions, 44 francs; labor, 1,117 francs; and industries, 423 francs. Food cost 803 francs; household, 268 francs; clothing, 287 francs; moral, recreative, and health needs, 149 francs; and all else, 31 francs; savings of 52 francs were used to pay a debt. Notes are given on the transformation of work in England; the social disorganization during the preceding century by the working of the coal mines; new ideologies concerning employer-employee relations; the societies of mutual insurance; and the unions established for workers of the Sheffield factories.

DÜCKERSCHOFF, ERNST

(969)

HOW THE ENGLISH WORKMAN LIVES. By a German coal-miner. 97 pp. London. 1899.

This is an autobiographical study of a miner's life in Newcastle from 1850 to the close of the nineteenth century. Comparisons are frequently made between English and German conditions. The English miner worked better and longer than the German because he had more meat than potatoes; he demanded more of life and hence found it more difficult to save than the German; German cooking was less expensive because the Germans were better informed about it. The miner rose at 8 a. m., breakfasted on bacon or brawn with a couple of eggs, bread, and tea; he took a couple of slices of bread and meat or cheese with him to the pit. On finishing the shift at 4 p. m., he had meat and pudding, or soup and eggs or meat, and for supper, bread and cheese or meat, with tea, the kind of meat always changing. Provisions were usually procured in large quantities and were delivered on pay day. Rents were paid weekly in advance. Most families did their own baking.

MACKENZIE.

(970)

THE STANDARD OF LIVING IN THE UNITED KINGDOM: 1860-1914. 1921.

[Original not seen. Summary in Hill, A. B., *A Physiological and Economic Study of the Diets of Workers in Rural Areas as Compared with Those of Workers Resident in Urban Districts*. Jour. Hyg. 24: 189-240. London. 1925.]

The author, in making this survey of living standards from 1860 to 1914, arrived at the conclusion that one-fourth of the population was insufficiently nourished in the 1860's (on the basis of 3,000 calories per man per day). Among this quarter would fall the agricultural population. During the next 20 years, the general level of living increased so that all the deciles were above the minimum standard (3,000 calories), and even the lowest decile and lower quartile were not much below the higher standard (3,500 calories). Miss Mackenzie placed the best paid agricultural laborer at the lowest decile and estimated that in 1880, with 17s. income a week, he was able to feed his family better than the unskilled town laborer on 21s. 4d. In the most recent years covered by her study, before 1914, the lowest decile family was between the two standards, and at this date such a family was represented by an unskilled town laborer, while the agricultural population was nearer the 3,000-calorie standard.



LEVI, LEONE

(971)

WAGES AND EARNINGS OF THE WORKING CLASSES. 140 pp., illus. London. 1867.

The main part of this book is devoted to tables giving the estimated annual earnings of workers in every sort of occupation and profession. Presumably such estimates apply to the period about 1867, when the work was published. Farm laborers received the lowest wages, and their number of children exceeded the average for the Kingdom. A workman's chief expenditures were for food, which absorbed about two-thirds of his income; rent, with fire and lighting; clothing; and education, health, and recreation. Bread and meat were the chief items in food expenditure; in many families the biggest item was spirituous and malt liquors. A great proportion of the working classes paid less than £7 a year for housing, the accommodations being very small and poor. Prices of food and household supplies are given for 1740-1865.

ROWE, RICHARD

(972)

HOW OUR WORKING PEOPLE LIVE. 242 pp. London. 1882.

This book describes the environment and struggle for existence of various types of workers throughout England, Ireland, Scotland, and Wales about 1882. A furnaceman in a Staffordshire pottery made £2 a week; laborers' wages in Buckinghamshire were 10s. or 11s. a week, and the laborers lived chiefly on turnip tops. An ironworker in Wales, paid by the ton, earned 20s. a week if he was a good worker; iron rollers and puddlers got 25s. a week. The land of a Connaught cottier in Ireland fetched 30s. an acre; the cottier and his family lived on potatoes. In Scotland a Banffshire fisherman might make £15 to £18 for 2 months' fishing.

[MASSACHUSETTS] BUREAU OF STATISTICS OF LABOR.

(973)

FIFTEENTH ANNUAL REPORT. [Mass.] Bur. Statist. Labor Ann. Rept. 15 (pt. 4): 462-469. 1884. ([Mass.] Pub. Doc. 15.)

For comparative purposes, 16 Great Britain and 19 Massachusetts workers' reports for the year 1883 were secured by the Massachusetts Bureau of Statistics of Labor. Total current living expenditures for the Great Britain families of about six persons averaged \$508. Total family earnings averaged \$517, leaving a surplus of \$9. Expenditures for rent averaged \$69, for food (groceries, meat, fish, and milk) \$261, and for clothing \$75. Families in Great Britain earned and spent less money than the Massachusetts families, but they expended a greater proportion of their total income for living purposes. The smaller actual expenses were due in part to lower prices and in part to a lower level of living. Verification was made of the percentages of total expenditures for the various items as shown by the reports for both Massachusetts and Great Britain workers with the conclusions drawn from Engel's analysis for a similar income group. "The remarkable harmony in the items of expenditure shown by a percentage of total expenditure must establish the soundness of the economic law propounded by Dr. Engel" (p. 467).

UNITED STATES BUREAU OF LABOR

(974)

EARNINGS AND EXPENSES OF WAGE RECEIVERS IN EUROPE. U. S. Commr. Labor. Ann. Rept. 1 (app. B): 431-444, illus. 1886.

The condition of the English laborer in 1885 appeared in this study to be far from prosperous, due largely to his intemperance. From 20 to 36 percent of his income went for beverages. Of the expense records given, 12 are from mill workers at Halifax, 3 from laborers at Leeds, 4 from laborers at Liverpool, 2 from Manchester, 1 from London, and 1 from Birmingham. Of these records, 12 show a surplus and 4 just balance. The incomes ranged from \$250 to \$728 a year. About 70 to 80 percent of the income went for food. Engel's law is confirmed, but not Schwabe's.

BOOTH, CHARLES

(975)

LIFE AND LABOUR OF THE PEOPLE IN LONDON. 17 v., illus. London. 1889.

The purpose is to show the numerical relation which poverty, misery, and depravity bear to regular earnings and comparative comfort and to describe the condition under which each of the eight classes described lived. The data apply to the period from 1886 to 1888; the complete analysis was focused on three main topics—poverty, industry, and religion. The main causes of poverty were found to be low pay and irregular employment. Rowntree's law is borne out by the data. It was believed by the author that it would be necessary to raise the general level of existence, to do away with the lowest classes, and to increase the proportion of those who knew how to use the means they had. Detailed

data on expenditures for a 5-week period were obtained from 30 families of the poorer groups and are given separately for each family. The families are reduced to male adult-consumption units, a woman being counted as 0.75, and children in proportion to their ages. The make-up of each family is described, including the number and ages of children. Prices of main food articles and the number of purchases made during the period are recorded. Averages are computed for each of the economic groups represented.

GREAT BRITAIN BOARD OF TRADE.

(976)

RETURNS OF EXPENDITURES BY WORKINGMEN. Cd. 5861. 46 pp. London. 1889.

The Board of Trade in 1887 undertook an investigation of the incomes and expenditures of workingmen in Great Britain. Expenditure records were obtained from 34 families of miners, joiners, engineers, shoemakers, lithographic printers, clerks, and laborers from the following districts and towns: Northumberland, Glamorgan, London, Leith, Dumfries, Govan, Edinburgh, Leeds, Liverpool, Birmingham, Hartlepool, Greenock, Stafford, Keetering, Manchester, Sheerness, Sheffield, Hebden Bridge, Huddersfield, Kent, and Durham. Annual incomes of 19 ranged from £23 to £80, of 13 from £80 to £110, 1 was £125, and 1 was £150. In only 16 cases was there a surplus of income over expenditure. The average family had 5.3 persons and occupied 3.53 rooms. Data showed but imperfect agreement with Engel's law. One very unusual record was that of a London cabinetmaker for the 37-year period of 1850-87. It starts with the days of his bachelorhood, continues through the establishment of a household and family, and reaches its peak of prosperity when the older children began to augment the family income by their earnings. A table of average weekly food requirements for a family of six is given.

GUÉRIN, URBAIN

(977)

TANNEUR DE NOTTINGHAM (ANGLETERRE). OUVRIER-JOURNALIER DANS LE SYSTÈME DES ENGAGEMENTS MOMENTANÉS D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN 1838. Les Ouvriers des Deux Mondes (2) 3: 369-324. Paris. 1892.

The "souche" family of this study, which was made in 1888, lived in Nottingham (a city of lace, hosiery, and glove industries) to which a group of French workers migrated from Calais because of higher salaries. The family consisted of the head (55), his wife (54), 4 daughters (29, 25, 13, and 11), and 2 sons (22 and 19); 2 other children had died, and the 2 oldest sons were not at home. School was compulsory, only 5 days' absence being allowed during the year. Health was excellent, doctor's visits cost 4 francs, and midwives 13 francs. Recreations were mainly noncommercialized. English workers did not generally aspire to higher positions. They liked good salaries but only to insure comfort. There was great respect for paternal authority and stable families. Their well-being rested on the serious qualities of the head of the family and on good family relationships. The worker was affiliated with the Society of Tanners. Property consisted of 200 francs in money, 69 francs in working equipment, and 5,889 francs in furniture and clothing. Income was 7,037 francs, of which 6,814 francs was in money. Property contributed 4 francs, labor 6,990 francs, and industries 44 francs. Food cost 4,838 francs, household 604 francs, clothing 1,095 francs, moral, recreative, and health needs 311 francs, and all else 1 franc, 189 francs being saved. Notes are given on the religious spirit in the homes of English workers; the extension of electoral rights; building societies, and the methods of holding land at Nottingham; and the role of trade unions.

UNITED STATES DEPARTMENT OF LABOR.

(978)

COST OF PRODUCTION: IRON, STEEL, COAL, ETC. U. S. Dept. Labor, Commr. Labor Ann. Rept. (1890) 6: 605-1376. 1891.

In addition to data covering 2,490 families living in the United States (226), information is given on the incomes and expenditures in 1888-89 of 526 families living in Great Britain. The heads of these families were employed in the pig-iron, bar-iron, steel, bituminous-coal, and coke industries. Employees were selected for study who were working in industrial establishments from which cost of production and pay-roll accounts had been obtained previously. The facts gathered covered the period 1888-89 and are presented for each family. Averages per family and per individual are also given. The employees, with two exceptions, were either English, Irish, Scotch, or Welsh.

Sixty-five families in the pig-iron industry, comprising an average of 4.9 persons, reported incomes averaging \$457 and expenditures, including insurance,



averaging \$435. Expenditures for food averaged \$222, for rent \$39, for fuel and lighting \$26, and for husbands' and wives' clothing \$47. Expenditures for children's clothing for 56 families averaged \$36. Forty families reported expenditures for furniture and utensils averaging \$87, and 21 families reported life insurance averaging \$12. One hundred and fourteen families in the bar-iron industry reported average-sized families of 4.8 persons, average incomes of \$526, and average expenditures of \$481. Expenditures for food averaged \$226, for rent \$53, and for lighting \$7. For these families reporting such expenditures, fuel averaged \$27, furniture and utensils \$8, life insurance \$10, and clothing for husbands \$29, for wives \$24, and for children \$43. One hundred and sixty-six families in the steel group comprising 5.3 persons per family, had incomes averaging \$589 and expenditures averaging \$531. Food purchases averaged \$275 and rent \$48. Fuel and lighting of these families averaged \$25, and purchases of husbands' clothing \$25. Expenditures of reporting families for life insurance averaged \$4, for furniture and utensils \$9, and for wives' and children's clothing \$24 and \$48, respectively. Total income of 166 families in the bituminous-coal group averaged \$495 and total expenditures for a family of 5.4 persons averaged \$457. Expenditures for food averaged \$246 and for rent \$48. Families reporting such items paid an average of \$18 for husbands' clothing, \$15 for wives' clothing, \$33 for children's clothing, \$15 for fuel, \$5 for lighting, \$5 for furniture and utensils, and \$11 for life insurance. Fifteen families in the coke group had an average of 4.1 persons per family; total income averaged \$379; total expenditures averaged \$359, food \$200, rent \$35, fuel and lighting \$23, and clothing for husbands \$16. Thirteen families reported purchases of clothing for wives and children averaging \$38. Expenditures for furniture and utensils of 10 families averaged \$2, and for life insurance of 14 families \$11.

Separate analyses are given for 284 normal families, that is, families which included no lodgers and had five or fewer children, none of whom were over 14 years of age.

One hundred and ninety-three normal families in the pig-iron, bar-iron, and steel groups had average incomes of \$444 and average expenditures of \$419. Expenses for food averaged \$207, for clothing \$68, for rent \$47, and for fuel and lighting \$28. The average income for 91 normal families in the bituminous-coal and coke industry was \$377, and the average expenditure \$359. Expenditures for food averaged \$189, for clothing \$49, for rent \$44, and for fuel and lighting \$21.

The figures for Great Britain are contrasted with similar data for families living on the European Continent and in the United States. Information is also given showing the quantities and costs per "100 units of consumption" for 18 separate food items—the unit of measure being the adult-male equivalent calculated by the United States Bureau of Labor Statistics. These are presented in a table showing relative decreasing costs with increasing size of family.

Other information regarding life in the localities from which expenditures were obtained as well as remarks on the living conditions of the families studied are included.

UNITED STATES DEPARTMENT OF LABOR.

(979)

COST OF PRODUCTION: THE TEXTILES AND GLASS. U. S. Dept. Labor,  
Commr. Labor Ann. Rept. (1891) 7 (v. 2, pt. 3): 2048. 1892.

This report includes, along with similar data for wage earners of other foreign countries and the United States (228, 518, 656, 777, 1311), income and expenditure figures collected during the period 1888 to February 1891 from 498 families living in Great Britain. The fathers of 341 of these families were employed in the cotton industry, 131 in the woolen industry, and 26 in the glass industry. Revised material from the sixth annual report of the Commissioner concerning 284 "normal" families living in Great Britain also is given. Forty-six of the fathers of these families were employed in the pig-iron industry, 68 in the bar-iron, 79 in the steel, 83 in the bituminous-coal, and 8 in the coke industry. Individual records for each family in the first-mentioned industry cover the following points: Family description (age, sex, size, occupational status); sources of income; home ownership; expenditure for food (quantities of 11 and costs of 22 staple articles of diet); expenditure for rent (number of rooms), fuel and lighting (kind), clothing (husband and wife separate, children grouped), furniture and utensils, taxes, insurance (property and life), organizations, religion, charity, books and news papers, amusements and vacations, intoxicating liquor, tobacco, sickness and death, and unclassified expenses; contrasted income and expenditure, showing surplus or deficit; and descriptive remarks concerning conditions and furnishings of homes. The entries for any one family can be traced through the various tables of expenditures of commodities.

The average size of the 472 families of the textile group was 5, their average annual income \$545, and their average expenditures for all purposes including insurance, \$496. The average size of the 26 families in the glass industry was 4, average annual income \$502, and average annual expenditure for all purposes \$460.

Separate computations are recorded for 150 normal families in the cotton and woolen industries combined, for 21 normal families in the glass industry, for 193 normal families in the group comprising the pig-iron, bar-iron and steel industries, and for 91 normal families in the bituminous-coal and coke industries. Families considered normal were those which included no boarders or dependents, rented their homes, and recorded expenditures for rent, fuel, lighting, clothing, and food, and included a husband, wife, and not more than 5 children, none of whom were over 15 years of age. Quantities and costs of food consumed for these families are given for nine food articles in terms of "100 units of consumption" and in tabular form showing decreasing per capita cost with increasing size of family. Percentages of expenditure for each classification for the normal families in all industries combined are also presented.

Of the total average annual expenditure for all the 455 normal families together, 49 percent was expended for food, 15 percent for clothing, and 12 percent for rent. The total yearly income of the 150 normal textile families averaged \$423. Total yearly expenditures for all purposes, including insurance, averaged \$401, for food \$183, for clothing \$53, and for rent \$50. The total yearly income of the 21 normal glass families averaged \$423. Total yearly expenditures for all purposes averaged \$397, for food \$196, for clothing \$52, and for rent \$49. The average annual income of the 193 normal families in the group comprising the pig-iron, bar-iron, and steel industries averaged \$444. Total annual expenditures for all purposes averaged \$419, for food \$207, for clothing \$68, and for rent \$47. The 91 normal bituminous-coal and coke families had a total yearly income averaging \$377 and a total expenditure averaging \$359, of which \$189 was for food, \$49 for clothing, and \$44 for rent.

NASSE, R.

(1880)

ÜBER DIE HAUSHALTUNG DER BERGARBEITER IM SAARBRÜCKENSCHEN UND IN GROSSBRITANNIEN. Jahrb. Nationalökon. 57: 398-416, illus. Jena. 1891.

The study presents original data on 10 families of miners in Saarbrück taken from household accounts for 1889. For comparison, the writer uses the data for 1887 of 5 families of miners in Northumberland and 1 in South Wales collected by the English Board of Trade (Returns of Expenditure by Working Men, London, 1889). Tables giving, in marks, expenditures per adult unit and income from labor compare conditions in the two countries. Only the original data of the 10 Saarbrück families are considered here. The author gives only income from work in the mines. Three families had working sons who contributed to the family income. Consumption is reckoned per adult unit (a man being counted as 1, a woman as two-thirds, a child over 6 as one-half, a child under 6 as one-third. Average size of family was 4.5 adult units. Incomes ranged from 1,024.45 to 2,992.31 marks.

OGLE, M.

(1891)

ON CERTAIN ECONOMIC CONDITIONS OF LIFE OF WORKMEN IN LONDON. Bull. Inst. Internatl. Statis. 6: 180-187. 1891.

Data for the period around 1890 were obtained by the questionnaire method from 21,443 workmen in four selected districts in London where the working population was predominant. All but 10.7 percent of these were married, and the average family included 2 adults and 3 children. The average income per week was 26.19s., the average rent 4s. to 6s. More than half the families had three or more rooms at their disposal, with an average of 1.65 persons per room. The proportional amount spent for rent varied inversely with the income.

SCHULTZE-GÄVERNITZ, GERHART VON

(1892)

THE COTTON TRADE IN ENGLAND AND ON THE CONTINENT. 214 pp. London. 1895.

In connection with the study of the cotton trade, the author felt it was important to know the standard of living of cotton operatives. Accordingly, in the summer of 1891 he made a personal investigation in Lancashire and includes five of the expense accounts in his book. The first was for the family of a mule skinner, composed of 2 adults and 7 children. The total income of 5 wage earners was £206, and family expenses were £185. The second account was that of a spinner's family, including 2 adults and 2 children, whose yearly income was £131 8s.; the total expenditure was £107. A weaver's family, consisting of 2



adults and 7 children, spent £172 of his annual income of £227. Another weaver's family of 2 adults and 3 children had an income of £101 7s. and expenditures of £94 15s. The family of a fustian cutter, 2 adults and 6 children, had an income of £244 4s.; their annual expenditure was £174 16s. 2d. All the food accounts are given in detail; wheaten bread and meat were in all instances the chief item. These accounts indicate that as income increased, the amount and proportion spent on clothes also increased. Two other records are given, one of a Northumberland miner with wife and 8 children, whose total income was £234, and one of a machine fitter in London with wife and 6 children, and an income of £150. The total expenditure in the former case was £194 14s. 7d., in the latter case, £139 11s. The author gives figures (not original) to show that certain itemized food requirements—bread, meat, potatoes, milk, sugar, coffee, tea, etc.—fell in price from the 1830's to 1887.

## ECONOMIC CLUB.

(983)

FAMILY BUDGETS: BEING THE INCOME AND EXPENSES OF 28 BRITISH HOUSEHOLDS. 76 pp., illus. London. 1896.

The purpose of this compilation was to study family life in Great Britain through the details of expenditures in 1891-94 of 28 families, scattered from Sussex to Scotland. Both rural and urban districts were included.

## BIDOIRE, PIERRE, translator.

(984)

MONOGRAPHIE D'UNE FAMILLE D'OUVRIERS ÉCOSSAIS, ÉCRITÉ PAR LE CHEF DE FAMILLE. *Réforme Sociale* (4) 32: 503-509. Paris. 1896.

This monograph, written to show the degree of comfort which could be attained by a worker's family, is a study of an artisan's family in 1892. The household was composed of six persons; they lived in a small city in Scotland, had an income of about 43s. a week, and owned their house. Menus for 1 week are given. The writer urges economy and abstinence from liquor upon workers.

## HIGGS, HENRY

(985)

WORKMEN'S BUDGETS. *Jour. Roy. Statis. Soc.* 56: 255-294, illus. London. 1893.

Expense records presented here are extracted from other studies: Eden's, Ducpétiaux's, Le Play's, Wright's, etc. One record for a slipper maker in London is original. It covers 15 weeks in 1892 and 1893 and includes income and expenditures of the family of eight. Food averaged 14s. ¼d. a week, beverages 1s. 11¼d., fuel 1s. 11d., rent 10s. ½d., clothing 1s. 4d. The total weekly expenditure was £1 13s. 11¼d. The total income was £2 11s. The family was German-Jew and lived in a four-room house in the East End. The working day was 13 to 14 hours long. The father was the sole contributor to the income.

## BOSANQUET, MRS. BERNARD

(986)

THE STANDARD OF LIFE AND OTHER STUDIES. 219 pp. London. 1898.

This collection of essays is a theoretical discussion of various social problems. The first chapter deals with level of living. It states that the relationship of level of living to performance of work is far-reaching insofar as community interests are concerned; that insufficient diet undermines the individual not only physically but also morally. It compares F. M. Eden's records of the expenditures of agricultural laborers collected in 1795 with similar data collected 100 years later. In the earlier period, the great bulk of the income was spent for food, especially bread; rent was the next important item; and a relatively small sum remained for other expenses. The records of expenditure of the later period (taken from the work of F. S. Nitti) indicated a decided decrease in the relative expenditure for food, a slight increase for rent, and a marked increase in the proportion for other items. No original household data are included.

## ROWNTREE, B. S.

(987)

POVERTY, A STUDY OF TOWN LIFE. 452 pp., illus. London. 1902.

This study of the wage-earning classes of York covers the period from 1899 to 1902. By direct inquiry, information was obtained concerning the housing, occupations, and earnings of 11,560 families, comprising a population of 46,754, or two-thirds of the entire population. All families below the poverty line were classified as primary or secondary—the primary group having not enough income for subsistence, the secondary group having enough income for bare subsistence if part of it were not diverted into other channels, whether useful or unnecessary. Wage earners were divided into four classes. Class A consisted of those whose income was under 18s. per week; the average income of the 656 families, averaging 3 to a family, was 11s. 7d., the average amount expended for rent, 2s. 9½d.

The 983 families in class B had incomes ranging from 18s. to 21s., the average being 19s. 9d. The average size of the family was 4.56; 18.4 percent of the income or 3s. 7½d. went for rent. Although class B was not in such extreme poverty as class A, it was always in danger of sinking there, and extras had to be purchased out of food money. In class C were 3,822 families, average size 4.11, their average earnings being 26s. 7d. Rent took 4s. 4d. or 15.6 percent of income. Class D comprised the largest group, and was the most important class socially and industrially. The income of the 6,099 families in this group was over 30s., the average being 41s. 9½d., of which 5s. 4d. or 12.8 percent went for rent. A budget was worked out that included just the minimum necessary expenses: Food to furnish 3,500 calories and 125 g of protein per man per day would cost 3s. per adult per week, 2s. 3d. per child; rent would vary from 1s. 7d. for 1 room to 5s. 9d. for 5 rooms; other sundries, fuel, clothing, etc., totaled 4s. 11d. for a family of 5. Budgets were then itemized for single adults and for families of various sizes. Some family expense accounts are presented: Eighteen for families whose total weekly earnings were under 26s., 4 for families earning over 26s., and, for comparison, 6 of the servant-keeping class. In the first group, the amount spent for food weekly was 10s. 4½d. or 51 percent of income, which allowed 89 g of protein (deficiency of 36) and 2,685 calories (deficiency of 814). The second class spent 10.2d. per man per day on food as against 5.93d. of the first class, and secured a slight excess of calories. This class spent 56 percent of its income on food. The servant-keeping class spent 15.99d. per man per day for food, had an adequate diet, but obtained for each shilling not much more than half the nourishment secured for the same amount by the laboring class. From this study the author worked out the "law" of cycles of poverty; that is, poverty and underfeeding occur in early childhood, in early middle life when several children have to be cared for, and in old age; relative prosperity occurs when a man works and lives at home, and later when children start to earn.

PATON, D. NOËL

(1988)

A STUDY OF THE LABOURING CLASSES IN EDINBURGH. 104 pp., illus. Edinburgh. 1901.

In 1901 a study was undertaken to determine whether the food supply of the slum dwellers in Edinburgh was sufficient and if there was a sufficient income to meet other necessary expenses. A minimum adequate diet, using Atwater's table, was first determined. Fifteen families were studied for a week each, representing the well-to-do, where there was generally more than one wage earner (4 cases); those suffering from poverty but having a regular weekly income of about 22s. (5 studies); and those without regular employment and earning less than 20s. a week. The families included from 2 to 11 persons, or 1.5 to 6.1 consumption units; the expenditure on food per unit per day ranged from 4.1d. to 9.5d.; the nutritive content of the diet varied from 1,828 to 3,646 calories and 65.16 to 153.27 g of protein per unit per day. Bread was the basis of all diets, providing nearly one-third of the total energy; potatoes ranked second in usage, but seventh as provider of nutriment; milk ranked third—it was 5 times as expensive as bread as a source of energy and 3 times as expensive as a source of protein; sugar was the cheapest energy producer and as a source of energy was second only to bread in the average diet; beef ranked fifth as an energy-providing food, and was the most important protein source next to bread. The accounts showed that 62 percent of the income was spent on food and 13 percent on rent. The dietaries are compared with those of American football teams, and English and Scottish prisons and lunatic asylums.

ANONYMOUS.

(1989)

DIE KOSTEN DER LEBENSHALTUNG DER ARBEITENDEN KLASSEN IN GROSSBRITANNIEN UND IN EINIGEN ANDEREN LÄNDERN. Soziale Rundschau 5 (9): 569–580, illus. Wien. 1904.

Since 1877 the index number of retail prices in Great Britain had fallen 30 percent. This article compares the cost of living in 1902 of British agricultural and industrial workers with workers in other countries. The average weekly income for an English agricultural worker's family of 2 adults and 4 children was 18s. 6d.; average cost of food was 13s. 6½d., bread and meat amounting to 56 percent of the budget. The weekly budget of a worker's family averaging 33s. 10½d. income was: food 15s. 8d. (48.8 percent), rent 3s. 9½d. (11.8 percent), clothing 4s. 8½d. (14.6 percent), heating and lighting 2s. ¼d. (6.4 percent). With rising wages, bread and meat expenditure increased slightly. Expenditure for clothing rose proportionally with income, averaging 15 percent of the budget.



BOSANQUET, H.

THE "POVERTY LINE." 15 pp. 1903(?). [Pamphlet collection, London School of Economics Library.] (990)

GREAT BRITAIN BOARD OF TRADE.

BRITISH AND FOREIGN TRADE AND INDUSTRY. I. CONSUMPTION AND COST OF FOOD IN WORKMEN'S FAMILIES IN URBAN DISTRICTS IN THE UNITED KINGDOM. II. CHANGES IN THE COST OF LIVING OF THE WORKING CLASSES IN LARGE TOWNS. Cd. 2337, ser. 2, pp. 1-75. London. 1904. (991)

I. Forms were sent out in 1904 to discover the consumption and cost of food in urban workmen's families throughout the United Kingdom. The returns included 1,808 for 1 week of the summer of 1904, and 136 returns from London for 1903. The districts represented were the north of England (about 439 returns), Midlands (262), London and suburbs (347), rest of England and Wales (318), Scotland (455), and Ireland (123), with approximately one-half of the returns coming from Scotland and northern England. The returns are divided into five income groups, half of them being from families with less than 35s. weekly, and half from those having more. The higher income was due chiefly to the larger number of adults in those families. The various districts are compared with regard to expenditure for and consumption of food; the income groups are compared in the same way. The average income for all groups was 36s. 10d. for a family having 3.6 children at home; the total expenditure for food was 22s. 6d. (a range from 14s. 4½d. to 29s. 8d., according to income groups) or 61 percent of the income; meat, bacon, and fish accounted for 17 percent of food expenditure, bread and flour 10 percent, butter 6 percent, fresh milk and tea each 3 percent. The proportion spent on food diminished as the income increased; the consumption of fresh milk rose rapidly with the income. The proportion of income spent on food per person in London was 12.2 percent; in the north of England, 10.1 percent.

II. A rough estimate of the cost of living for working-class families from 1880 to 1900 shows a decrease of 20 percent (when 1900 is used as the standard year). The decline in cost of food was twice as great as that in the total cost of living; clothing declined slightly; fuel and light increased; and rents rose considerably. The cost of articles of clothing of similar quality declined on the average about 5 percent, while the fall in price per article of the kind most largely purchased by the working classes was about 15 percent, due to a change of quality, a larger variety of articles of less durability being demanded.

DUNDEE SOCIAL UNION.

REPORT ON HOUSING AND INDUSTRIAL CONDITIONS IN DUNDEE. 150 pp., illus. Dundee. 1905. (992)

This inquiry into social conditions in Dundee, undertaken by experienced investigators in 1904, includes reports on housing conditions, family income and expenditure, employment and wages, infant mortality, and medical inspection of school children. The outstanding industrial feature of Dundee (population 161,173 in 1901) was that 54.6 percent of the females above 15 years of age were wage earners. The study proves what one would expect—that mothers cannot work 6 days in the week and yet nourish and rear a healthy family. An official report showed that 88.4 percent of the population lived in houses of three rooms or under. Of the 3,039 cases in which income was ascertained, 769 families had one male wage earner, 520 of whom earned between 15s. and 25s. weekly; 684 had one female wage earner, 655 of whom earned from under 10s. to 15s. weekly. Expense records for 22 families were obtained; the expenditure for food per consumption unit per week varied from 2s. 10½d. to 8s. 9d. Bread was the largest item of expenditure, meat a very small one; fish was plentiful and much used; butter and fresh milk were used more than margarine and condensed milk. Tea, bread, and butter was the usual breakfast, with porridge or milk if there were young children. If the mother was at home, "broth" made of one-half pound boiling beef, 1d. worth of leeks, carrots, and turnips, and ½d. worth of barley, was the chief item for dinner. Potatoes, pea or lentil soups, and sometimes rice or suet puddings were also served. The medical inspection of children showed underweight to be most serious in those districts where the mothers worked while the children were very young.

WINSLOW, EMMA A.

(1993)

CHANGES IN FOOD CONSUMPTION AMONG WORKING-CLASS FAMILIES. *Economica* 2: 256-272, illus. London. 1922.

The material for this study was drawn from several British cost-of-living reports made between 1904 and 1920. The author came to several conclusions as to the effect of changes in price and wages, etc., upon food consumption, for instance, that there was no evidence of any change in food consumption associated with a higher wage level.

MASSACHUSETTS BUREAU OF STATISTICS.

(1994)

FORTY-FIRST ANNUAL REPORT ON THE STATISTICS OF LABOR, 1910. Mass. Bur. Statis. Ann. Report. on Statis. Labor 41: 193-214, 219-227. 1911. (Mass. Pub. Doc. 15.)

The material given in this report concerning expenditures of families in England and Wales was used for comparison with expenditures of wage earners in 28 selected cities in the United States and was collected by the agents of the British Board of Trade in 1905. The data summarize in terms of American currency information originally published in Great Britain under the title *Cost of Living in American Towns*, Report of an Enquiry by the Board of Trade into Working Class Rents, Housing, and Retail Prices, together with the Rates of Wages in Certain Occupations in the Principal Industrial Towns of the United States of America, with an Introductory Memorandum and a Comparison of Conditions in the United States and the United Kingdom. Expense comparisons were attempted especially between the countries for "(1) the percentage of income spent on all food, exclusive of alcohol; (2) the percentage of income spent on similar items of food in both countries; and (3) the quantities consumed and amount spent in similar items (p. 220)."

In the United Kingdom about 70 percent of all the budgets collected were from families with incomes of less than \$9.73 per week. The income group of the United Kingdom and for comparison with the United States group which contained the largest number of cases for quantities of, or amounts spent on certain articles of food, was that of families whose total incomes ranged from \$8.52 to \$9.73 per week and averaged \$8.89. This group had on the average over three children living at home and expended about \$5 for food, exclusive of wines, beer, and spirits.

Additional material given concerning the United Kingdom covers food prices, rents and housing conditions, and costs and quantities of food articles purchased by the average British family compared with the purchases of wage earners in the United States.

OLDFIELD, JOSIAH

(1995)

HOW TO LIVE CHEAPLY. 96 pp. 1906. [London School of Economics Library.]

LATOCHE, C. D., and STAFFORD, T. J.

(1996)

NOTE ON THE SOCIAL CONDITION OF CERTAIN WORKING-CLASS FAMILIES IN DUBLIN. 45 pp. Dublin. 1907. [Pamphlet collection, London School of Economics Library.]

LIVERPOOL JOINT RESEARCH COMMITTEE.

(1997)

HOW THE CASUAL LABOURER LIVES. 114 pp., illus. Liverpool. 1909. [See also Great Britain, Domestic Expenditure of Casual Labourers in Liverpool. 113 pp., illus. 1908.]

The living conditions of 40 dock-laborers' families in Liverpool in 1908-9 formed the subject of this investigation. Of the number that kept expense records, 29 were dock laborers, 4 were casual laborers, 2 were ship firemen, and 5 were laborers in regular work (plate layers, carters, etc.) The records of 10 were kept for 1 week, of 20 for 2 to 11 weeks, and of 10 for 16 to 62 weeks, making a total of 429 weeks. The average was 4.1 consumption units per family. The average income was 21s. 10½d. per week, expenditure 22s. 5½d. Of the 27 records kept for 4 weeks and over, the income ranged from under 15s. to over £2. Wives added little to family income. All but six households had some of their members insured for burial. Money clubs were used by some for boots, furniture, or payment of a debt. The money lender and pawnbroker were of immense importance, and a terrific drain. The most marked feature of the diet was the fluctuation between plenty and scarcity. For the longer studies, 3 weeks were



given—the best, worst, and median weeks. In every case the food expenditure was below Rowntree's minimum during the worst weeks, in 14 cases it was below during the median weeks, and in 5 cases it was below in all 3 weeks. The general average of food expenditure per man per week was 3s.  $\frac{1}{2}$ d.; very little milk was bought; margarine of the cheapest quality was used, butter only rarely; tea was an item in every meal. In most of the accounts, the week formed a sort of cycle, the fare being comparatively generous on Sunday and decreasing through the week. The average rent was 4s. 9 $\frac{1}{2}$ d., with 1.67 persons per room.

STUDNICKA, HENRY

(1998)

INDUSTRIAL CONDITIONS IN EUROPE. PART I, ENGLAND AND FRANCE. U. S. Dept. Commerce and Labor, Bur. of Manfrs. Spec. Agents Ser. no. 38, 56 pp. Washington. 1910.

Wages, cost of living, housing conditions, and number of unemployed among the working classes in the principal industries in the London, Sheffield, Nottingham, Manchester, and Birmingham districts in 1909 and 1910 are covered in this study. Food prices obtained from the retail stores were compared in all districts; it was found that costs in every district but Nottingham were lower in practically every respect than those in London. The only district in which bread seemed to be baked at home to any considerable extent was Sheffield. Data from 75 families in London showed food expenditures for a family of 2 adults and 2 small children at \$3.68 per week. For the Manchester district, 2 average food accounts were given; the one for a laboring family of 2 adults and 1 or 2 small children, based on 5 cases, showed the income to be \$4.86, and expenses \$3.18; in the case of 6 mechanics, the average income was \$9.75 and food expenditure \$5.87. In the Birmingham district the cost of living varied from approximately \$3 weekly in laboring districts to \$6 for mechanics.

REEVES, MAGDALEN S.

(1999)

FAMILY LIFE ON A POUND A WEEK. Fabian Tracts no. 162, 23 pp., illus. 1912.

This study, carried on for 3 years, from 1909 to 1912, in the Lambeth district of London, concerns several families having a weekly income range from 18s. to 24s. The main purpose was to discover the effect of proper nourishment on mother and child before and after birth. Several accounts and menus are included and there is some discussion of the various items of expenditure. More detailed information concerning this same material is given by the author in another publication (1004).

MARTIN, A.

(1000)

THE MARRIED WORKING WOMAN. 47 pp. 1911. [Pamphlet collection, London School of Economics Library.]

LINDSAY, D. E.

(1001)

REPORT UPON A STUDY OF THE DIET OF THE LABOURING CLASSES IN THE CITY OF GLASGOW CARRIED OUT DURING 1911-12, UNDER THE AUSPICES OF THE CORPORATION OF THE CITY. 100 pp. Glasgow. 1913.

This report could not be obtained, but it was analyzed on the basis of summaries in 1 study by Tully, and 1 by A. B. Hill. It was the first of several studies to be made of Glasgow laboring families. It presented data for 1911-12 for 60 families, of whom 43 were dealt with statistically. The 27 families with a weekly income above 20s. had an energy value of 3,356 calories per man per day (Atwater's basis; Hill deducts 14 percent to reduce it to the Lusk standard). The protein content was 115.1 g, fat 87 g, and carbohydrate 503 g. For the families having a weekly income under 20s., 2,765 calories was the average energy value, 98.4 g protein content, 70.4 g fat content, and 416.3 g carbohydrate content. Of those having an income above 25s., 61.9 percent was expended on food; of those having under 25s., 67.3 percent; and those whose income was irregular spent 75.5 percent on food.

BOWLEY, A. L., and BURNETT-HURST, A.

(1002)

LIVELIHOOD AND POVERTY: A STUDY ON THE ECONOMIC CONDITIONS OF WORKING-CLASS HOUSEHOLDS IN NORTHAMPTON, WARRINGTON, STANLEY, AND READING. 222 pp. London. 1915.

This study deals chiefly with the conditions of 2,150 households in 1912-13 in the four towns considered. Approximately 1 house in 20 was visited in each of the towns. One-half of the working-class houses in Stanley were found to be overcrowded. One-half the households were below the poverty line at Warrington and Reading, nearly one-half at York, and one-third at Northampton, the chief

reason being insufficient wages. Poverty was determined by comparing wages with the costs in standard budgets as estimated by Rowntree and the authors; it was found that wages were so low as not to permit the support of a family of more than two children at a decent level of living. A distinction was made between primary and secondary poverty. The main incidence of poverty was among families with three or more children below school age with no subsidiary earners.

[GREAT BRITAIN], CHARITY ORGANISATION SOCIETY. (1003)

FOOD PRICES IN LONDON: AN ENQUIRY INTO PRESENT CONDITIONS AS AFFECTING THE POORER CLASSES OF WORKERS. 35 pp., illus. London. 1913.

The chief subject of inquiry here is food prices, and particularly increases in food prices; but there is some attention to expenditures for housing, insurance, etc., for typical families. Prices and expenditures probably refer to the period immediately preceding 1913, the date when the study was published.

REEVES, MAGDALEN S. (1004)

ROUND ABOUT A POUND A WEEK. 231 pp. London. 1914.

Thirty-four families of the Lambeth district in London were studied by the women's group of the Fabian Society about 1913, in order to determine the effect of insufficient nourishment on mother and baby. The families were not of the very poorest class and included only those in which the husband was sober and steady, and earning a regular weekly wage of from 18s. to 30s. The houses, though outwardly decent, were often damp, infested with bugs, and had insufficient fireplaces. Although one-third of the income went for rent, overcrowding was a serious problem, families of 6 or 8 living in 1 or 2 rooms. It is pointed out that the poor actually paid more rent per cubic space than the rich; similarly they paid more for fuel because of the necessity of buying in such small quantities. The most popular plan of buying clothing, and often other articles as well, was to pay a certain stipulated sum weekly to a clothing club. When any surplus above absolute necessities existed, it was used, not for the child's food and clothing, but for burial insurance, as a protection against the social degradation of a pauper's burial. Individual accounts are given for 5 families of 2 adults and 4 to 6 children for several different weeks. These show that the cost of items other than food amounted to from 9s. 4d. to 14s. 3d., leaving but 5s. to 10s. for food. By far the chief article of diet was bread, then came potatoes, meat, and fish. When the income was decreased, bread was the last item to vary, meat the first. The menus showed very little variety. It was estimated that the minimum amount spent weekly for the man was 3s. 6d., though generally it was about 4s. 6d. or 5s. Seven family expense records for cases in which the men became unemployed were given to show how readjustments were made. No statistical tables were derived.

GREAT BRITAIN, WORKING CLASSES COST-OF-LIVING COMMITTEE. (1005)

REPORT ON THE INCREASE SINCE JUNE 1914 IN THE COST OF LIVING TO THE WORKING CLASSES. Cd. 8980, 28 pp., illus. London. 1928.

In order to make a comparison of the cost of living of the working classes of Great Britain in 1918 with that in 1914, expenditure records for these years were secured and reduced to comparable figures; that is, the "standard" family was set at 4.57 units. The 1914 expenditures were based on records obtained by the board of trade in 1904, and slight adjustments made according to the index prepared by the Ministry of Labor. For the week of May 31 to June 6, 1918, records of 1,306 families were secured and classified as "skilled", "semiskilled", "unskilled", "clerks", and "on service." The geographical classifications were: Scotland, north of England, Midlands, London, rest of England, and Wales. Food was the largest item in the working-class expenditure. A comparison of the two groups (1914 and 1918) shows that the weekly expenditure for food had increased from 24s. 11d. in 1914 to 47s. 3d. in 1918 for a standard family. Meat, bacon, and bread were the largest items in all classes, and milk was third in clerks' families. The comparison also shows a change in quantities consumed; there was a decrease of 2,900 calories per family per week (about 3 percent), the largest being in sugar and butter, while there was an increase in potatoes and milk. This decrease was most apparent among the skilled and semiskilled; there was a slight increase among the unskilled. Clothing prices showed a 93-percent increase for an average family (this information obtained from retail clothing establishments). There was practically no increase in rent except that due to increased rates. Expenditures for coal and gas were doubled, and also for household sundries. Insurance



and fares remained about the same. The average percentage increase of all expenditures over those of 1914 was 74 percent to June 1918, and 80 percent to September 1918.

OGBURN, W. F.

(1006)

INCREASE IN THE COST OF LIVING IN GREAT BRITAIN. U. S. Dept. Labor. Bur. Labor Statis. Monthly Labor Rev. 8 (5): 169-177. 1919.

Ogburn here summarized the report of the Working Class Cost of Living Committee, published by the board of trade in 1918 (Cd. 8980), which presented a working-class cost-of-living budget for 1914 and another for 1918. The change during the war years was manifested in (1) the change in price level and (2) the change in the quality of goods consumed. In 1918 less butter, sugar, eggs, and cheese were consumed and more margarine, cereals, and potatoes; there was also a distinct change in the quality of clothing. There was a fall of about 3 percent in the energy value of the food consumed by the average working-class family. Comparison of the average 1914 expense record with that for 1918 showed that food expenditure had increased from \$6.06 to \$11.50; clothing from \$1.34 to \$2.62; rent and fares were practically the same; the total expenditure had jumped from \$10.79 to \$18.35.

FERGUSON, MARGARET

(1007)

THE FAMILY BUDGETS AND DIETARIES OF FORTY LABOURING CLASS FAMILIES IN GLASGOW IN WARTIME. Roy. Soc. Edinb. Proc. 37: 117-136, illus. 1918.

The families considered in this study, all with small children, were examined in 1915-16, and the data concerning income, expenditures, and diets were compared with data obtained by Miss Lindsay in 1911-12. The families were reduced to adult-male units according to the Atwater scale. The average income (32s.  $\frac{1}{2}$ d.) for 1915-16 had increased 42 percent over that for 1911-12. The total cost of living had increased about 37 percent. The cost of energy in food had increased about 50 percent. More protein from vegetable sources and less from meat was utilized during war time. In 1916 lentils, oatmeal, and flour were the cheapest sources of energy. Expenditure for housing remained constant. Habits of living had not changed since 1911-12. In 26 families one or more of the children were suffering from rickets; family poverty was due to indolence or drink rather than to unemployment. Ten of the families in which the father was the only wage earner were investigated after the food-control authorities issued an appeal for voluntary rationing in 1917. During that time the incomes had increased. Food expenditures increased, rents remained practically the same, and the proportion left for other items decreased. The diets of the later periods were less adequate in energy.

VESSELITSKY, V. DE

(1008)

EXPENDITURE AND WASTE: A STUDY IN WARTIME. Ratan Tata Foundation. 64 pp., illus. London. 1917.

The purpose of this study is "the consideration of the economic effects of the war upon some workers in the east end district" of London. The investigation was carried on in the slums in the vicinity of the docks. Expense accounts kept by mothers from November 1915 to February 1916 were analyzed, chiefly with respect to the changes in expenditure with increase in income. Costs of provisions and necessities increased more rapidly than the income, thus necessitating either drastic cuts in expenses or wage earning on the part of the women and children. Except for a few weekly food records, priced at the 1917 level and compared with the 1915 level, no material is presented in statistical form.

FERGUSON, MARGARET

(1009)

THE DIETS OF LABOURING-CLASS FAMILIES DURING THE COURSE OF THE WAR. Jour. Hyg. [London.] 18: 409-416. 1920.

Four weekly investigations were made over a period of 4 years of five Glasgow laboring families to discover how their food was affected by war conditions. The first investigation was in 1915-16, the second in February 1917 when prices were high but foodstuffs plentiful, the third in November 1917 after voluntary rationing was urged by the Ministry of Food, and the last in December 1918, during the period of compulsory rationing of meat, sugar, and fats. The 5 families studied included 3 men, 5 women, 12 children over 10 years, and 14 under 10 years. Atwater's standard is used as a basis for estimating the adequacy of the diet. Rationing had little effect upon the protein content or energy value of the

dietary, the chief determinative factors being income and dietary habits. The income ranged for the four studies from 22s. to 36s., 23s. 5d. to 55s. 6d., 34s. to 61s., and 34s. to 68s.; the average energy values were 2,897, 2,661, 2,808 and 2,680; the protein content was 93.1, 87.4, 87.5, and 89.6 g; and the fat content was 84.2, 69.4, 87.5, and 89.6 g. The author concludes that food values showed great constancy, the shortage of certain commodities being compensated for by a greater use of others, and that the children of these families were markedly below the average in height and weight, their interruption of growth being due probably to an insufficiency of food.

ANONYMOUS.

(1010)

EFFECT OF THE RISE IN PRICES ON THE CONSUMPTION OF FOOD BY THE WORKING CLASSES. 4 pp. 1916. [Pamphlet collection, London School of Economics Library.]

FERGUSON, MARGARET

(1011)

A FURTHER STUDY OF THE DIETS OF LABOURING CLASS FAMILIES IN GLASGOW IN WARTIME. Roy. Soc. Edinb. Proc. 38: 40-47, illus. 1919.

In November 1917, 9 months after the voluntary rationing plan had been launched, the diets of eight previously investigated families were studied again. Each family was reduced to adult-male units according to the Atwater scale, and comparisons were made with the earlier studies. Between February and November 1917 there was no change in the amount of bread, meat, and sugar consumed. In 1917 about 86 percent of the energy was obtained from rationed foods, whereas in 1915-16 the proportion was 75 percent. The data indicated on the whole that increased incomes resulted in increased proportional expenditures for food. In cases where the father was in military service, the diet was more adequate than when he was at home.

MASTERMAN, J. HOWARD B.

(1012)

CLERICAL INCOMES. AN ENQUIRY INTO THE COST OF LIVING AMONG THE PAROCHIAL CLERGY. 306 pp. London. 1920.

In 1918 income and expenditure data were obtained from 11 clergymen in urban and rural districts of England. Some of the families had only two adults, some included numerous children. No averages were made up for the group. The general conclusions were that the clergy were underpaid and that their families were unable to maintain a standard of living fitting to their profession.

PATON, D. NOËL, and FINDLAY, LEONARD

(1013)

POVERTY, NUTRITION AND GROWTH. STUDIES OF CHILD LIFE IN CITIES AND RURAL DISTRICTS OF SCOTLAND. [Gt. Brit.] Med. Research Council, Spec. Rept. Ser. 101, 329 pp. London. 1926.

This study included farm as well as wage-earning families and is annotated as (941).

GREAT BRITAIN, LABOUR COMMITTEE ON THE COST OF LIVING.

(1014)

COST OF LIVING. Labour Gaz., p. 392. August 1921. [Summarized in U. S. Dept. Labor, Bur. Labor Statis. Monthly Labor Rev. 13 (4): 86-88, illus. 1921.]

This is the final report of the labor committee on the cost of living, about the year 1920, of 629 working families. The average size of family was 5.2 persons. It was estimated that the cost of living increased 189 percent from 1914 to 1921.

TULLY, A. M. T.

(1015)

A STUDY OF THE NUTRITION AND ECONOMIC CONDITIONS OF WORKING CLASS FAMILIES IN GLASGOW IN APRIL 1921. Lancet [London] 201 (2): 57-59. 1921.

Of the dietaries of 11 working-class families studied in Glasgow in April 1921, only 2 yielded energy value of 3,000 calories per adult male (Lusk's table) per day, and this was obtained by spending more than the whole income on food; by over-expending or with charitable help, 6 yielded about 2,500 calories; and 3 had only 1,600 to 1,800 calories per adult-male unit per day. For the 5 families having an income of over 8s. per man per week, the average daily calorie value was 2,466, protein 72.9 g, fat 77.6 g, and carbohydrates 352.5 g. Their average total income was £2 8s. 1½d., or 12s. 10d. per man per week, of which 9s. 1½d, or 6s. 1½d. per man was expended on food; the energy value obtained was 219.8 calories per penny. Their average daily calorie yield was 2,505, protein 64.1 g, fat 73.3 g, and carbohydrate 380.4 g. The average rent was a little over 6s.



IRELAND, MINISTRY OF ECONOMIC AFFAIRS.

(1016)

## REPORT ON THE COST OF LIVING IN IRELAND. Dublin. 1922.

In the part of this report dealing with family expenditures, it is stated that special forms were dispatched to 5,000 school teachers, of which 308 were completed and returned, giving the expenditures of a wide variety of wage-earning households in 112 towns. Although the period of the study is not stated, it was probably not long before 1922, the date when the report was published. There was considerable statistical analysis of the data. A table shows the percentages of expenditure for food, clothing, rent, fuel and light, and sundries of those families studied which had not more than 2 persons over 14 years of age and 1 or more children under 14 years, classified according to income in 5 groups: Under £3 per week, £3, £4, £5, £6, and upwards. The percentage of expenditure for food decreased steadily with increasing income, that for clothing increased slightly, and for clothing and sundries noticeably.

TULLY, A. M. T.

(1017)

## A STUDY OF THE DIETS AND ECONOMIC CONDITIONS OF LABOURING-CLASS FAMILIES IN GLASGOW IN JUNE 1922. Glasgow Med. Jour. 16: 353-368. 1922.

This study in June of 1922, of the effects of prolonged periods of unemployment on 12 laboring-class families in Glasgow, is a continuation of the 1921 study, which showed that the 11 families studied were unable to procure an adequate supply of food for necessary energy. Eight of the fathers studied were unemployed for a long time, 2 were dockers with varying income, 2 were on short time. Income figures are necessarily very general, as they are based on unemployment insurance, dole, relief, etc. There was a continual contracting of debts, and rent was in arrears in most of the families. The families having a weekly income per adult-male unit of over 8s., averaging 8s. 9½d., expended 6s. 1d. for food, and obtained 2,605 calories per adult-male unit per day, 78.4 g protein, 87.7 g fat, 358 g carbohydrate. Those whose income was under 8s. per adult-male unit per week, averaging 4s. 11¼d., spent 8s. 11¼d. on food, which ranged from 60 percent to 134 percent of the income. They obtained 2,185 calories, 62.6 g protein, 61.3 g fat, and 330.7 g carbohydrate. A comparison of this with the 1921 study shows that a higher energy value per penny was obtained in 1922, because of more careful marketing and a decrease in the price of some foods; and that, of three families restudied, the energy value was lower than in the preceding year. A worse condition of overcrowding existed, and the children showed pronounced malnutrition; the infants, however, were in good condition. The author concludes that a distressing condition of underfeeding and undernutrition did exist; and that existence on 2,200 calories, 63 g of protein, and 61 g of fat daily was possible only if basal metabolism was reduced, which occurs in semistarvation.

[Great Britain], MEDICAL RESEARCH COUNCIL, COMMITTEE UPON QUANTITATIVE PROBLEMS IN HUMAN NUTRITION.

(1018)

## REPORT ON THE NUTRITION OF MINERS AND THEIR FAMILIES. [Gt. Brit.] Med. Research Council, Spec. Rept. Ser. 87, 59 pp., illus. London. 1924.

This report was an estimate of the state of nutrition of families of miners during the 1922-23 period of industrial depression. The study dealt with 140 families from 5 typical colliery districts, with an average of 4.8 children per family. The mean daily income per man was about 13s., the mean expenditure on food per man 6.7s. The several tables included means for the different counties of food values, cost, calories, percentages, and correlations, also details of diets for the 41 Derbyshire families and the 43 Durham families. Conclusions showed that in one district food consumption was sufficient to maintain health, and children in these families were normal. Diets in the four other districts fell below normal. In the worst district children fell below the average in weight. Variations of diet from district to district existed apart from differences of income. Absence of correlation between weight and caloric intake indicated that factors other than diet influenced nutrition.

HILL, A. B.

(1019)

## A PHYSIOLOGICAL AND ECONOMIC STUDY OF THE DIETS OF WORKERS IN RURAL AREAS AS COMPARED WITH THOSE OF WORKERS RESIDENT IN URBAN DISTRICTS. Jour. Hyg. [London] 24: 189-240. 1925.

A comparison of the efficacy of urban and rural diets, as indicated by anthropometric measurements, was the chief object of this study. Specimen diets from rural districts for the period of 1 week between February and November 1923 were collected by the author in Essex from a sample of the agricultural

laboring class. Only 17 percent of these diets exceeded the 3,300 calorie minimum for an agricultural laborer, the average being 2,872 ( $\pm 31.8$ ) calories per man per day. Of the 74.3 grams of protein intake, 27.4 percent was animal protein. The menus showed little variety; all the families used some meat, although the bulk was reserved for the father; all used milk, but the quantity was small; nearly all bought sugar, cheese, butter or margarine, or some form of fat; three-quarters used jam or treacle, rice, and oatmeal; less than one-third bought fish. As the income increased, the calorie value of the diet increased. Nearly 50 percent paid between 2s. and 4s. rent; only 17 percent paid over 5s.; housing accommodations were bad—the houses were overcrowded, damp, drafty, etc. Boots were the chief item in clothing expenditures, most of the other clothes being gifts or purchased in "jumble sales." Other rural studies, as well as urban studies, were used as a comparison. The urban comparisons showed that in pre-war times the rural diets were superior to those of the lower-paid urban workers but inferior to those of the highest-paid class; that war time was a period of rapid changes in prices and wages, the rural worker being less well off than the urban worker, although his diet was not greatly inferior; that in the post-war period the calorie value and carbohydrate content was very much higher in the Essex studies, while the fat content was low even in comparison with unsatisfactory diets, and protein was low. The consumption of meat indicated in urban studies was twice that of the rural; more milk and less bread and flour were consumed. In the earlier studies the rural families secured over 100 more calories per penny than did the urban families. A comparison with studies of miners' families gives similar results. In proportion to his income, the agricultural worker secured a diet of higher calorie value than that of the town worker by (1) a smaller purchase of animal protein and greater consumption of carbohydrate, and (2) by spending a greater proportion of his income for food. The anthropometric measurements showed a distinct difference between the city and country children, but there are too many other factors—sunlight, air, racial factors, etc.—involved to isolate the effect of the diets. The author concludes that in spite of low diet, there was little evidence of malnutrition among Essex rural children.

TULLY, A. M. T.

(1020)

A STUDY OF THE DIETS AND ECONOMIC CONDITIONS OF ARTISAN FAMILIES IN GLASGOW IN MAY 1923. *Glasgow Med. Jour.* 19: 1-13. 1924.

Previous Glasgow studies showed pre-war, war-time, and trade-depression (1921 and 1922) conditions. This is a study of 17 artisan families in May 1923 to compare their condition with that of the families of unskilled laborers who had been shown to suffer from the effects of short time and unemployment. These families were accustomed to a steady income adequate for the necessities of life; until now they had had savings; they lived in good working-class areas. In only six cases did the energy value of their diets fall below the standard for moderate work (3,000 calories), the average yield being 3,070 calories. They obtained 87.9 g protein and 96.8 g fat per man per day, and spent 10.38s. per man per week for food. A comparison of these results with those obtained from the laboring-class studies shows a fairly proportionate increase in all three elements; the food was more varied and more cooking was done; however, the artisan class purchased far less energy per penny than did the laborers, due in part to more expensive breads and the use of fresh beef instead of corned mutton, sausages, etc. This group showed no overcrowding. The author concludes that the trade depression of the country had not markedly affected the nutrition of these artisan families as it had that of the laboring classes.

BOWLEY, A. L., and HOGG, M. H.

(1021)

HAS POVERTY DIMINISHED? 236 pp. London. 1925.

The purpose of this book, a sequel to *Livelihood and Poverty*, published in 1915, was to ascertain the living conditions of the working classes of Reading, Northampton, Warrington, Bolton, and Stanley, and to determine the post-war conditions, particularly the effect of the declining birth rate, the loss of life due to the war, and the rise in prices, wages of unskilled labor, and unemployment. It was found that there had been little change in housing conditions since 1914. The causes of poverty were broken families and insufficient wages. In comparing the 1913 and 1924 data, it was found that in the aggregate of the towns the improvement due to increased wages was about twice the improvement due to diminished needs. Overcrowding was often brought about by the taking in of lodgers. In order to determine a standard budget, the budget of Rowntree was revised. There was little change in the earning strength of the average family, but the number of children under 14 years was smaller per family.



JONES, D. CARADOG

(1022)

THE COST OF LIVING OF A SAMPLE OF MIDDLE-CLASS FAMILIES. Jour. Roy. Statist. Soc. 91: 463-518. 1928.

Expenditure records were obtained from 235 families in England for the 4 weeks in February 1926. The families all represented the same profession (not specified); 50 were from London, 62 from towns with a population exceeding 50,000 (A towns), and 123 from towns with a population of less than 50,000 (B towns). The total expenditures were itemized, as were the amounts spent for food. The total amounts were given in terms of quintiles separately for London, the A towns, and the B towns, and then tables of percentages were derived. For practically all items except rent and traveling expenses, expenditures in the B towns equaled the maximum expenditure. This general rule was formulated: "Whereas on necessities there is regression in expenditure as the income rises, on things which are not indispensable there tends to be progression." There was sufficient data on food expenditure in 186 of the records to justify analysis; of these 39 were from London, 53 from A towns, and 95 from B towns. The Lusk standard of the adult male was used. When expenditures were combined, it was found that on the average 42.5 percent of the total expenditure went for housekeeping and service, 19 percent for rent, rates, fuel, and light, and 11 percent for clothing. The next largest item, 9.5 percent, was accounted for by holidays, clubs, and recreation. The food distribution was compared with working-class expenditures (1914), and it was found that a larger percentage of the middle-class expenditures went for meat, dairy products, and fruit and vegetables, a smaller percentage for bread, sugar, tea, and oatmeal. The author's findings are substantiated by comparisons with expenditures of Government employees (1920), estimates made by the Ministry of Labour (1914), report of the Sumner committee (1914-18), and the cost-of-living index of the Labour Gazette. It was shown that the higher expenditures in the small towns were due not to higher incomes but to higher costs for the majority of items.

LAYMAN, GEOFFREY

(1023)

HOW THE ENGLISH MIDDLE CLASS LIVES. Harpers 158: 616-624. April 1929.

This is an intimate description of the life of an English middle-class family since the World War, in view of the rise both in income tax and the cost of living. The father, employed in the higher division of the civil service, had an annual income of £1,400. The family consisted of 2 adults, 3 children, and 3 servants. Annual expenses included £80 for rent and £120 for income tax; per month the wife used £45 to £50 for food, household sundries, clothes, servants' wages, etc.; the husband used about £15 for fares, luncheon, tobacco, clothes, recreation, and hobbies; £35 to £40 remained for school bills, life insurance, gas, electricity, telephone, coal, wine, doctor, etc. The consumption data probably refer to a period just prior to 1929, the date when the article was published.

CATHCART, E. P.

(1024)

A STUDY IN NUTRITION: AN ENQUIRY INTO THE DIET OF 154 FAMILIES OF ST. ANDREWS. [Gt. Brit.] Med. Research Council, Spec. Rept. Ser. 151. London. 1931. [University of California Library.]

BAKKE, E. WIGHT

(1025)

THE UNEMPLOYED MAN: A SOCIAL STUDY. 308 pp., illus. London. 1933.

The author tries to give a complete picture of the whole life of the British unemployed, his object being to find out what had been the effect of unemployment insurance on the willingness and the ability of workers to support themselves. The sources of the material were interviews with unemployed workers and other members of the community, a few diaries, personal observation, and statistics from employment exchanges, churches, schools, etc. The main study was made for the year 1931-32, in Greenwich (153 skilled and 185 unskilled workers), and checked by shorter visits to other London boroughs, and districts of South Wales, Lancashire, and Yorkshire. Half the families of unskilled laborers had gross family incomes of from 40s. to 59s.; skilled workmen of from 60s. to 99s. About 73 percent of unskilled laborers' families and 26 percent of the skilled had less than 30s. a week for an average family of 4.57 persons after minimum needs for rent, food, clothing, and fuel were met. Rents paid by skilled workers ranged from about 13s. a week; by unskilled from about 10s. The appendixes summarize the British scheme of unemployment insurance and transitional payments. A number of tables summarize the data for Greenwich. The influence of unem-

ployment upon malnutrition and clothing of school children is given in a statistical statement based upon data from the New Survey of London Life and Labour.

## OTHER INDEPENDENT FAMILIES

MADDEN, SIR FREDERICK, ed.

(1026)

MANNERS AND HOUSEHOLD EXPENSES OF ENGLAND IN THE THIRTEENTH AND FIFTEENTH CENTURIES. 621 pp., illus. London. 1841.

The household roll of Eleanor, Countess of Leicester, 1265, showed the price of a bushel of wheat or rye to be about 5s. and of a bushel of oats about 2s.; 22 gallons of wine cost 9s. 2d.; and eggs were 3½d. to 4½d. per hundred. According to the editor of the manuscript, 1s. would purchase as much in the thirteenth century as 15 would in the nineteenth. The accounts and memoranda of Sir John Howard, first duke of Norfolk from 1462 to 1471, contained both income and expenditure. Sir John's annual fee of £40 as one of the King's carvers is an index of salary paid to the nobility. The account showed expenses for travel, 12d. for a bed for one of his men at Ipswich, and 20d. for ferrying the master's horse at Lynne. Three pence was paid for sugar and pepper; 4s. 4d. for a white mantle, and 20d. for a hat. A shave cost Sir John 2d. Wages were reckoned in single items: "To little Jean for wages, 8d.;" "to John Gylder for wages, 3s. 4d.;" Receipts were for rent, for the sale of hides and tallow. In many cases only the sums and names of the payers of these sums were given.

WEBB, JOHN, ed.

(1027)

A ROLL OF THE HOUSEHOLD EXPENSES OF RICHARD DE SWINFELD, BISHOP OF HEREFORD, DURING PART OF THE YEARS 1289 AND 1290. 2 v. London. 1855.

A record of the expenses of an ecclesiastic of high rank in the See of Hereford in 1289-90 was kept by his house steward. The original was kept in Latin on a roll with regular expenses on one side and incidental disbursements on the other. Totals were drawn up for each day, week, and month. Abstracts and notes by the editor interpret the record in terms of the mode of living of those times. The daily records included bread, wine, and beer; the quantity and sorts of fish (if a fast day) or of flesh and fowl; milk, eggs, condiments, produce of the garden, concluding with food for the hounds and provender for the stable. Bread was made of both ground and unground wheat; yeast was sometimes used. Bran went to the horses. There were two kinds of wine, red imported and white home-made. Fish varied considerably, including salmon, sturgeon, herring, eels, cod, and haddock. Meat included beef, mutton, veal, pork, and venison. There was not a wide range of poultry, but something always appeared on the table on flesh days (capons, larks, geese, domestic fowl, occasionally mallards). Eggs were very important, and spices were lavishly employed. There was a very limited range of vegetables and fruit. Other expenditures itemized included travel, messengers, repairs, gifts, entertainment of guests, etc.

BURT, J., ed.

(1028)

ACCOUNT OF THE EXPENSES OF JOHN OF BRABANT AND THOMAS AND HENRY OF LANCASTER, A. D. 1292-93. Printed for the Camden Society. Camden Miscellany, v. 2, pp. 1-18. 1853.

The Duke of Brabant (a powerful baron of Germany) was the son-in-law of Edward I of England. This union considerably strengthened the King's continental possessions. A large sum was settled for the bride's portion. The accounts are of the period November 1292 to May 1293, during which time the Duke resided in England. The record was kept by a Flemish attendant. The record shows a great lavishness in expenditures for dress, sports, entertainment, etc. Thomas and Henry of Lancaster were nephews of Edward I. From April 13, 1293, they were with John of Brabant, and from that date a portion of the account relates entirely to outlays for them, but almost wholly for small articles of apparel.

PERCY, THOMAS, ed.

(1029)

THE REGULATIONS AND ESTABLISHMENT OF THE HOUSEHOLD OF HENRY ALGERNON PERCY, THE FIFTH EARL OF NORTHUMBERLAND. 464 pp. London. 1757.

This is a copy of the original household book of the Earl of Northumberland's castles of Wresill and Lekinfield in Yorkshire, which was begun in 1512, and which bore the title "the book of all the directions and order for keypyng of my lordes hous yerely." It dealt with the management of and expenditures for every department of the household, from nursery to stables. Prices of provisions and



commodities are given, wages and stipends fixed, arbitrary gifts and rewards reduced to regular invariable rule. Such details are included as menus for breakfast during Lent for each gradation of the household, posts and hours of service of all servants, contributions at masses, and drinks for the porter lodge and for the stable. A thousand pounds was the annual assignment for the housekeeping. The number of persons in the household was 166. The sum divided equally amongst them amounted annually to £6 5½d. per person, and weekly to 2s. 3¼d. per person which, according to the purchasing power of money at the time, was a liberal allowance and cannot be considered an index of the living of the common people.

RAINE, JAMES

(1030)

THE DURHAM HOUSEHOLD BOOK OR THE ACCOUNTS OF THE BURSAR OF THE MONASTERY OF DURHAM FROM PENTECOST 1530 TO PENTECOST 1534. Publications of the Surtees Society, v. 18, 378 pp. London and Edinburgh. 1844.

This transcript of the private account book of the bursar of Durham Priory, from 1530 to 1534, sets forth the whole consumption of the great monastery for 4 years. Food and clothing, wages, prices, and quantities, necessities, and luxuries were all included. One hogshhead of red wine cost 30s.; the total expenditure for wine in 1530 was £53. A horse cost 14s., a lamb 14d., and a pig 2s. Sugar was 7½d. a pound and dates 4d. a pound. A half barrel of prunes cost 6s. 3d., a barrel of honey from 27s. to 30s., and licorice 4d. a pound. A fireman received 10s. a year; the clerk of the infirmary 6s. 8d. a year. The entries are in Latin; yearly totals are given in only a few cases.

MADDEN, SIR FREDERICK

(1031)

PRIVY PURSE EXPENSES OF THE PRINCESS MARY, DAUGHTER OF KING HENRY THE EIGHTH, AFTERWARDS QUEEN MARY OF ENGLAND. 285 pp., illus. London. 1831.

This text is taken from the original manuscript of these accounts in the royal collection in the British Museum and covers 4 years and 7 months in various periods from 1536 to 1544. The accounts were kept by Mary Fynche, the keeper of the privy purse, and are verified throughout by the signature of the Princess Mary. The total receipts for the entire period were £1,784 11s. and the expenditures £2,118 5s. 9¼d. The receipts were from the King through his treasurer, with the exception of two gifts from the Queens (Jane Seymour and Catherine Parr). The expenditures include money paid for clothing ("a fruntlett for hir grace"), for food ("chekyns, fyshe, a quirnce pye"), for education ("techyng hir on the vyrgnalles and on the lute"), for transportation ("for their bote hier from London to Hampton Court"), and for many gifts to the poor, to her household, to Elizabeth, to charity, and to the church ("to a pore woman", "to the prysen houses of London", etc.)

STRANGFORD, VISCOUNT, ed.

(1032)

HOUSEHOLD EXPENSES OF THE PRINCESS ELIZABETH DURING HER RESIDENCE AT HATFIELD, OCTOBER 1, 1551 TO SEPTEMBER 30, 1552. Printed for the Camden Society. Camden Miscellany, v. 2, 98 pp. 1853.

These accounts were kept for a period of 12 months in 1551-52, by the princess' chamberlain and present in detail her personal and household expenses. There were no traces in this record of excessive expenditure for books or dress, for the lavishness of which she later became famous. There were frequent entries for household necessities which she supplied to her brother, the King.

HALLEN, A. W. C., ed.

(1033)

THE ACCOUNT BOOK OF SIR JOHN FOULIS OF RAVELSTON 1671-1707. Scot. Hist. Soc. 16: 1-470. Edinburgh. 1894.

Light is thrown on the social history of Scotland and the manner of living in a nobleman's household in the last part of the seventeenth and early eighteenth centuries (1671-1707). Items in the expense account include salary for chaplain, wages of several servants, amounts expended for recreation, health, improvement of the estate, travel, gifts, festivals, clothes, and food. The family was large, as Sir John married four times and there were his own children, stepchildren, servants, and later grandchildren.

PENNEY, NORMAN

(1034)

THE HOUSEHOLD ACCOUNT BOOK OF SARAH FELL OF SWARTHMOOR HALL. 597 pp. [London.] 1920.

A fairly complete account of the conditions of life in one of the larger houses in Furness in the latter part of the seventeenth century (1673-78), is furnished. Individual households were becoming less self-sufficient, engaging in many commercial transactions with neighbors and in the village. The agricultural occupations and expense of running the household are the chief items. Although food, drink, clothing, etc., are prominent in the account, they are not totaled as separate items. The family consisted of mother, stepfather, and three daughters, one of whom was Sarah Fell. The family purchased and sold goods at a number of trade centers.

AUTHOR NOT ASCERTAINED.

(1035)

MANUSCRIPT HOUSEHOLD BOOK OF QUEEN CAROLINE (CONSORT OF GEORGE II). 22 pp. [Original not seen. Summarized from the 1934 catalog of Henry Sotheman, Ltd., Booksellers, 43 Picadilly, London. W. I.]

This is a detailed expense account of the queen from September 1727 to August 1730, as returned by her treasurer, Sir William Strickland, audited and attested. It begins with the entry "cash in hand, nothing, this being the first account of this accountant", and ends with the total of £69,508 8s. 4d. Expenditures include money paid out for the establishment of Her Majesty's household for salaries, wages, etc., her wardrobe and nursery, bounty warrants, and for Richmond Lodge, the Queen's favorite residence.

TEMPLE, P., and TEMPLE, W.

(1036)

A COPY OF THE ACCOUNT BOOK OF P. AND W. T. OF BISHOPSTROW, WARMINSTER, WILTONSHIRE, BETWEEN THE YEARS 1748-1781. [Ms. in London School of Economics Library.]

BEST, R. D.

(1037)

PRICES AND WAGES \* \* \* A SUMMARY OF MR. BERCY AND MR. ALBERT WALLIS' BOOK OF THAT NAME. 16 pp. 1923. [Pamphlet collection, London School of Economics Library.]

## GREECE

PRATSIKA, N. P.

(1038)

ENQUÊTES SUR LES BUDGETS FAMILIAUX ET NOTES SUR LES NOMBRES-INDICES DES PRIX ET DU COÛT DE LA VIE À ATHÈNES DE 1923 À 1928. 51 pp. Athens. 1928. [Original not seen. Summarized in Statistics, Family Budget Enquiries in Greece. Internatl. Labour Rev. 19: 872-4, illus. 1929.]

This was the first attempt made in Greece to base a price index on actual data of family expenditures. Seventeen reports, secured in 1923, were divided into three income groups: 2,000 to 2,500 drachmai, 2,501 to 3,000 drachmai, and over 3,000 drachmai for 1913-14 and 1923-24. The expenditures for food in 1913-14 averaged 54 percent of the income, in 1923-24 they were 57 percent; clothing 11 percent in 1913-14, 17 percent in 1923-24; rent 16 percent in 1913-14, 6 percent in 1923-26. The average income increased from 3,049 drachmai in 1913-14 to 3,112 drachmai in 1923-24. A more extensive study was carried on in 1926-27, based on a study of 55 accounts of which 38 showed an income of 1,500 to 3,500 drachmai, 14 of 3,501 to 5,000 drachmai, 1 of 5,001 to 6,500, and 2 of over 8,000 drachmai. The average income was 14.5 times that of the 17 families in 1913-14, while the increase in the cost of living was 19.5 times. The average consumption of each of the main articles of food is included, and the nutritive value of the food is calculated. As compared with a theoretical standard of nutrition the families were undernourished. Units of consumption were approximated on the basis of the expenditures in the records. The summary in the International Labour Review explains the methods of conducting the inquiry, describes the families studied, and presents the main statistical results and general conclusions.



## HUNGARY

LE PLAY, F.

(1039)

IOBAJY OU PAYSANS (À CORVÉES) DES PLAINES DE LA THEISS (HONGRIE CENTRALE). PROPRIÉTAIRES-OUVRIERS DANS UN SYSTÈME D'ENGAGEMENTS FORCÉS CONVERTI DEPUIS 1818 EN UN SYSTÈME DE TRAVAIL SANS ENGAGEMENTS, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS EN 1846. *In Les Ouvriers Européens*, ed. 2, v. 2, pp. 272-303. Paris. 1877.

The social organization here described formed a transition between the feudal system of eastern Europe and the free-labor system of western Europe. The domain of the feudal lord was cultivated partly by corvée, partly by hereditary private tenure (redevance), and partly by community tenure. In 1846 at the time of the study this family possessed 10.36 hectares and paid 26 days of man labor. The household consisted of the head (34), his wife (32), two sons (13 and 8), a daughter (11), and the head's father (60). Two other children had died. All had good moral habits. The children received some schooling. Health was excellent; traditional folk remedies supplied medical aid. Recreations were mostly noncommercialized. Since the family saved nothing, the well-being rested on the fact that the property could not be mortgaged or sold. Property consisted of 2,665 francs in land, 975 francs in animals, 231 francs in working equipment, and 611 francs in furniture and clothing. Income was 1,179 francs, of which 292 francs was in money. Property accounted for 203 francs; subventions, 111 francs; labor, 455 francs; and industries, 410 francs. Food cost 715 francs; household, 131 francs; clothing, 154 francs; moral, recreative, and health needs, 71 francs; and all other expenses, 107 francs. Notes deal with the population; corvée; the parceling of property; terms for securing land; and the changes in social constitution of Hungary, 1846 to 1855.

SAGLIO, A., and LE PLAY, F.

(1040)

FONDEURS SLOVAQUES DES USINES À ARGENT DE SCHEMNITS (HONGRIE). OUVRIERS PROPRIÉTAIRES ET TÂCHERONS DANS LE SYSTÈME DES ENGAGEMENTS VOLONTAIRES PERMANENTS, AVEC UN PRÉCIS DE LA MONOGRAPHIE AYANT POUR OBJET LE CHARBONNIER DE LA CARINTHIE, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN 1846. *In Les Ouvriers Européens*, ed. 2, v. 4, pp. 1-67. Paris. 1877.

This study deals with a stable industrial family of western Europe, members of the mining guild, living amidst social disorganization. The German mining corporation restricted the size of family. When the study was made in 1846, the household consisted of the father (50), his second wife (38), a stepson (25), and son (4). A stepdaughter was married. Many of their native Slavic customs had been replaced by German ones. The state furnished scanty education. The climate was healthful but not the work, the father being a founder and the son a charger at the silver blast furnaces. Medical aid was financed by the workers and the feudal mining administration. The men of the household cared for a garden. Well-being rested on communal rights, the ancient German mining guilds, and the family house and gardens. Property consisted of dwelling, 1,040 francs; animals, 102 francs; tools, 25 francs; insurance rights, 1,350 francs; and furniture and clothing 500 francs. Income was 976 francs, of which 735 francs was in money. Property accounted for 59 francs; subventions, 116 francs; labor, 697 francs; and industries, 104 francs. Food cost 555 francs; household, 82 francs; clothing, 193 francs; moral, recreative, and health needs, 98 francs; and insurance, 46 francs, there being no other savings. Notes discuss the well-being assured by the low fixed cereal price; stability under the feudal regime in the mines of Schemnitz and under the regime of private property in the forests, mines, and steel mills in Carinthia; the history and social constitution of the Slovaks and the neighboring Slavic races; and a summary of a monograph on an unmarried charcoal burner of Carinthia.

KELETI, CARL

(1041)

DIE ERNÄHRUNGS-STATISTIK DER BEVÖLKERUNG UNGARNS AUF PHYSIOLOGISCHEN GRUNDLAGE BEARBEITET. Budapest. 1887. [Listed in Kayser's Bücher-Lexikon.]

DÄLNOKI-KOVÁTS, EUGEN

(1042)

FAMILY BUDGET INQUIRY. 1917. [Original not seen. Summarized in International Labour Office, *Methods of Conducting Family Budget Enquiries*, pp. 65-66. Geneva. 1926.]

An unofficial inquiry was conducted in Hungary in 1917. Forms were distributed to 300 families, who were asked to enter information for the pre-war period. On account of the difficulties of giving such information, only 32 reason-

ably satisfactory forms were returned. Of these, 19 were for families of lower grade officials, and 13 for those of industrial workers. The results served as a basis for the weights used in the calculation of the cost-of-living index numbers compiled by the present author.

GROSS, IRMA H. (1043)  
A SURVEY OF FOOD HABITS IN A HUNGARIAN MINING TOWN. *Jour. Home Econ.* 17: 315-321. 1925.

This survey of dietary conditions among 53 families in the Hungarian mining town of Tatabanya was undertaken in the summer of 1923. Tatabanya was relatively new; the company owned and controlled everything, such as housing, fuel, medical service, schools, amusements, and a store. A certain amount of milk, soap, and fuel was provided free. The chief foods and some of their percentages are listed. The analysis of the nutritive value of the special rations provided by the company showed that the workers obtained 61.1 g of protein and 1,806 calories (half the theoretical requirement), and nonworkers received 51.5 g of protein and 1,165 calories. The principal foods used to supplement the ration were vegetables other than potatoes and beans and some milk.

BUDAPEST STATISTICAL OFFICE. (1044)  
FAMILY BUDGET INQUIRY. Budapest. 1926. [Original not seen. Summarized in International Labour Office, *Methods of Conducting Family Budget Enquiries*, p. 66. Geneva. 1926.]

Early in 1926 the statistical office of Budapest undertook an inquiry covering 142 families of different grades, chiefly workers, but including also families of officials.

ILLYEFALVI, LUDWIG I. (1045)  
DIE SOZIALEN UND WIRTSCHAFTSLICHEN VERHÄLTNISSE DER ARBEITER IN BUDAPEST. 1143 pp., illus. Budapest. 1930. [Text in Hungarian and German.]

Tables on every conceivable phase of the Budapest worker's life are presented. There is, however, no explanatory text. Parts I—IX give household accounts in the year 1929 of 50 families of window washers, barbers, shoemakers, factory workers, etc. Their incomes ranged from 1,502.60 to 5,376 pengo. The size of the family ranged from 3 to 9 persons. The Langworthy consumption unit was used. Expenditures and the amount of consumption for each family are given in great detail.

#### ICELAND

AUTHOR NOT ASCERTAINED. (1046)  
COST OF LIVING, RETAIL PRICES, AND BUILDING COSTS IN REYKJAVIK, ICELAND. Hagstafu, Hagtidindi, Reykjavik, December 1924 and January 1925. [Original study not seen. Summary in the U. S. Dept. Labor, *Bur. Labor Statis. Monthly Labor Rev.* 20 (5): 75-76. 1925.]

The expenditure record of a family of five persons for July 1914, for January and October 1924, and for January 1925 is used for the calculation of price-index numbers. Before the war the family spent 1,800 krone. After the war, in October 1924, the values of the same items totaled 5,772 krone.

#### ITALY

DAVIS, W. S. (1047)  
THE INFLUENCE OF WEALTH IN IMPERIAL ROME. 335 pp. New York. 1910.

Although this is a general survey of imperial Rome, it furnishes valuable data on living conditions among various classes of citizens, giving prices for items of food, clothing, household expenses, and incomes of lawyers (300,000,000 sesterces, maximum), of teachers (15,000 sesterces), of state professors (100,000 sesterces), and the incomes from estates. Cicero's son was allowed 100,000 sesterces a year when a student at Athens. Public banquets cost from 200 to 1,000 sesterces. In 120 B. C. the ground floor of a house rented for 3,000 sesterces a year and the first floor for 2,000 sesterces. Fish brought as much as 1,000 sesterces a pound. Data are given on living conditions, sanitation, and types of houses. The average daily wage for unskilled labor was 4 sesterces. Small farmers were economically independent but had little ready money. (The sesterce is estimated at 4 cents. In a note the author says that this is an approximate estimate and that values fluctuated, e. g., the denarius of Augustus weighed



60 g, that of Nero 52 g. Julius Caesar is alleged to have brought from Gaul nearly \$70,000,000 and consequently so increased the supply of bullion that the value of gold sank from 4,000 to 3,000 sesterces to the pound.)

PERUZZI, U.

(1048)

MÉTAYER DE LA BANLIEUE DE FLORENCE (GRAND-DUCHÉ DE TOSCANE). OUVRIER-TENANCIER DANS LE SYSTÈME DES ENGAGEMENTS VOLONTAIRES PERMANENTS D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN 1857. Les Ouvriers des Deux Mondes (1) 1: 221-262. 1857.

The worker described in this study was a tenant and agricultural worker, living near Florence, who cultivated about 7½ hectares planted in olives, grapes, and cereals. In 1857, the time of the study, the family consisted of the husband (56), wife (50), six sons (30, 28, 26, 20, 15, and 14), a daughter-in-law (28), and a daughter (24). Health was good. Their well-being was based on habits of industry, the interest of the friendly landlord in their welfare, and the strength of family ties. Property consisted of 1,630 francs in money, animals, and agricultural equipment and 3,266 francs in furniture and clothing. Income was 1,966 francs, of which 788 francs was in money. The property accounted for 98 francs income; subventions, 126 francs; labor, 1,648 francs; and industries, 94 francs. Food cost 1,164 francs; household, 224 francs; clothing, 280 francs; moral, recreative, and health needs, 90 francs; and all else 29 francs, 177 francs being saved. Notes explain the agricultural system and its social organization in Tuscany, public education of the peasants, conditions of rent and tenancy, family organization, and sanitary conditions in the territory.

BLANCHARD, F.

(1049)

FONDEUR DE PLOMB DES ALPES APUANES (TOSCANE-ITALIE). JOURNALIER-PROPRIÉTAIRE DANS LE SYSTÈME DES ENGAGEMENTS MOMENTANÉS D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN JUILLET 1860. Les Ouvriers des Deux Mondes (1) 3: 413-448. 1861.

The family described in this study, which was made in 1860, lived in Nespolo at the foot of the Apennines, on the plateau sides of which were found a succession of different climates and types of agriculture. The family consisted of the worker (33), his wife (32), son (10), and daughter (2½), four other children having died. The son attended a religious school. Health was excellent, and free medical services were provided by a local public institution. The worker was honest and respected. Recreation included visiting friends and drinking cheap punch. Their well-being was based upon industry, economy, and the combination of agriculture and industry. Property was valued at 1,428 francs, animals at 28 francs, working equipment at 65 francs, and furniture and clothing at 505 francs. Income was 965 francs, of which 679 francs was in money. Property contributed 66 francs income; subventions, 78 francs; labor, 639 francs; and industries, 182 francs. Food cost 450 francs; household, 150 francs; clothing, 119 francs; moral, recreative, and health needs, 44 francs; and all else 6 francs, 190 francs being saved. Notes are given on the mineral deposits of the Apennines and the resultant industries, methods of treating the ores, the character of the working population on the Tuscan side of the Apennines, free medical service, and property inheritance in Tuscany.

(1050)

MINEUR DE LA MAREMME DE TOSCANE (TOSCANE-ITALIE). JOURNALIER DANS LE SYSTÈME DES ENGAGEMENTS MOMENTANÉS D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN JUIN 1860. Les Ouvriers des Deux Mondes (1) 4: 331-362. 1862.

This study, made in 1860, deals with a family whose head supervised a number of silver miners. The family consisted of the husband (40), his wife (27), and daughter (4). They were of irreproachable moral habits and customs. Neither parent was literate, but the miner was fortunate in having a subcorporate under him who could make out the daily reports. Health conditions were good except that malaria was prevalent. Recreations comprised smoking, drinking, and plays by traveling theatrical groups. There seemed to be little hope of improving their condition, since they saved nothing and owned no property. It was impossible to buy agricultural land or homes in this district, and in any case these two had no knowledge of agricultural work. Property consisted of 19 francs in working equipment and 780 francs in furniture and clothing. Income was 1,015 francs, of which 938 francs was in money. Property contributed 18 francs; subventions, 45 francs; labor, 913 francs; and industries, 39 francs. Food cost 649 francs; household, 136 francs; clothing, 141 francs; moral, recreative, and health needs,

73 francs; and all else, 17 francs. There were no savings. Notes are given concerning the mineral wealth of the Maremma; the ownership of mines in Tuscany; the influence of the theater on the Italian working population; and the organization of a Tuscan commune. These mines were worked earlier by the Etruscans and Romans.

BODIO, LUIGI

(1051)

SUI CONTRATTI AGRARI E SULLE CONDIZIONI MATERIALI DI VITA DEI CONTADINI IN DIVERSE REGIONI D'ITALIA. [CONCERNING AGRICULTURAL CONTRACTS AND LIVING CONDITIONS IN VARIOUS REGIONS OF ITALY.] Ann. Statist. Ital. (2) 8: 125-206, illus. 1879.

The data in this article come from a survey ordered by the Chamber of Deputies in 1875. Each district was assigned to a definite official, whose reports are published in full. The farmers were classified according to the contracts made with their employers: Mezzadria, the owner and tenant dividing the products of the soil equally; *terzaria*, the owner furnishing animals and implements and receiving two-thirds of the produce; *affittanza*, the tenant renting for a stipulated sum, usually on 3- to 9-year contracts; and *boaria*, the laborer being hired to work, the contract running for 1 year only. Laborers were divided into 6 groups: Men 24 to 55 years old, men 18 to 24, boys 14 to 18, old men 65 to 70, women, and children under 14, and old men over 70. Expense accounts are given for three families of northern Italy. The first included 10 members, 8 of whom were gainfully employed. The total income was 1,520 lire a year. The total expenditure was 1,298 lire, of which rent constituted 60, food 998, and clothing 240 lire. The next family consisted of 3 hired laborers, whose income (1,429 lire) and expenditure balanced; the third was a family of 9, whose income of 1,385 lire equaled the expenditure. In other districts the average daily wage and expenditure were given. Land rented for from 200 to 280 lire a hectare. Wages were high in May, June, July, and August, and low for the rest of the year. They varied but little in the different regions, but living conditions grew steadily worse south of Rome. The highest number of emigrants listed (22,540) was in Belluno. While the range of salary was small in the three accounts given, the data tended to confirm Engel's law.

ASSIRELLE, J. P.

(1052)

PAYSAN MÉTAYER (CONTADINO MEZZAJUOLO) DE LA COMMUNE DE ROCCASAN-CASCIANO (ROMAGNE-TOSCANE-ITALIE). OUVRIER TENANCIER DANS LE SYSTÈME DES ENGAGEMENTS VOLONTAIRES PERMANENTS D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN 1879-80 AVEC NOTES DE 1895. Les Ouvriers des Deux Mondes (2) 5: 189-233. 1899.

This study made in 1879-80 and in 1895, exemplifies excellent tenant-owner relationships, the worker furnishing tools and labor, and the owner land, animals and money. The profits were divided equally. The worker, who honored custom and tradition, was a respected member of the community. The household consisted of the head (32), his wife (28), son (5), daughter (3), and the head's sister (27). An adopted son lived with them in 1879 but was dead by 1880. Health was good. In the winter, the man repaired furniture and shoes. The main work was in the fields. Recreations comprised chiefly village celebrations. Well-being was protected by good relations with the owner. Property consisted of animals, tools, and money valued at 343 francs, and furniture and clothing at 573 francs. Income was 1,355 francs, of which 489 francs was in money. Property contributed 9 francs; subventions, 190 francs; labor, 700 francs; and industries, 456 francs. Food cost 740 francs; household, 252 francs; clothing, 276 francs; moral, recreative, and health needs, 39 francs; and all else, 25 francs. Savings were 24 francs. Notes are given on the soil of Romagna Tuscany; the agricultural population, its rental contract and moral condition; and the history of the family from 1868 to 1881.

BODIO, L.

(1053)

PRIME LINEE DI UNA STATISTICA DELLE CONDIZIONI DI VITA DEGLI OPERAI. [APPROACH TO A STATISTICAL SURVEY OF THE CONDITIONS OF LIVING FOR WORKMEN.] Atti R. Accad. Naz. Lincei (3) 6: 317-323, illus. 1882.

This survey was intended to cover all living conditions of all classes of Italian laborers, but not all the data desired could be secured. The employers refused to give accurate statements as to wages, as this would reveal inadequate pay. The report, therefore, is confined to the study of food. In Belluno, where the laborers were miners or employed in nail factories, the food was very poor, consisting of unsalted polenta and cheese. The cost of this for a man was from 0.60



to 0.80 lire a day, for a woman 0.45 to 0.60 lire, and for a child 0.30 to 0.40 lire. In the Veneto polenta was also the staple diet; in Lombardy conditions were better, and for the same expenditure the laborers had bread, rice, meat once a week, and wine, with a small amount of fruit. The consumption of polenta decreased as one moved south. In Sicily it was not used. Two food-expense accounts, kept in the year 1881, are given: One of an employee in a paper factory in Pescia, who earned 1.40 lire a day, while his wife earned 0.65 lire a day, making the income 10.25 lire for the week. They spent 8.15 lire a week for food. The second record was that of a miner in Inquetosu (Piedmont) who earned 4.50 lire a day or 22.50 lire a week. He spent 17.50 lire for food for himself alone. In each case nearly two-thirds of the expenditure was for breadstuffs.

ITALY, DIREZIONE GENERALE DELLA STATISTICA.

(1054)

RESULTATI DELL'INCHIESTA CONDIZIONI IGIENICHE E SANITARIE NEI COMUNI DEL REGNO. RELAZIONE GENERALE. ALIMENTAZIONE. Ch. XII, pp. CXIV-CXLIV, 106-131. Roma. 1886.

This study forms part of a general survey of hygienic and sanitary conditions in the kingdom. Data were secured from 8,258 communes, and comparisons were made with the same classes of people under similar living conditions in foreign countries. The statistical tables in the appendix include some material other than that mentioned in the text. Of the 8,258 communes, 5,380 depended largely on flour foods, 1,178 only partly, and 1,700 used practically none. Of the total communes, 3,284 depended largely on fresh meat, 1,178 only partly; 2,886 had meat inspectors. In 3,647 communes milk was a major item; in 3,081 it was a minor item; in 1,530 it was seldom used. In 3,761 communes, salted meat was a major item, in 4,497 it was a minor item, and in 1,530 it was seldom used. In 3,254 communes, wine was a major item, in 4,641 it was a minor item, and in 363 it was never used. The average daily ration of a male adult farm laborer in north Italy included fresh meat, "paste" (all-flour foods, bread, macaroni, etc.), cheese, milk, salted meat, vegetables, fish, and wine. In the south there was more meat, paste, and wine, and less or none of the other items. The farm diet was compared with that of soldiers and prisoners. Annual consumption of food is tabulated by provinces. Expense accounts are given for April 1885 of 29 rural families from the various provinces. The families ranged from 1 to 14 members; the incomes from 299 to 2,741 lire. The expenditures (in some records only food is included) ranged from 291 to 2,788 lire. The data given confirm Engel's law, but those for clothing and rent do not confirm the Wright version of Engel's law.

UNITED STATES BUREAU OF LABOR.

(1055)

EARNINGS AND EXPENSES OF WAGE RECEIVERS IN EUROPE. U. S. Commr. Labor Ann. Rept. 1 (app. B.): 411-423, illus. 1886.

The data given in these records are not extensive enough in range of industry or of locations covered to serve as a basis for generalizations. Labor conditions in Italy were distinguished by poverty and hardship. The habitation was generally a single room. Used coffee grounds, oil, clothing, and furniture were sold in the open market to this class. Twenty expense accounts are given here for 1885: 4 from Naples, 1 from Siena, 1 from Raciglione, 1 from Acquapendente, 1 from Monte Rosa, 2 from Florence, 6 from the Roman Campagna, 2 from Venice, and 1 from Piedmont. The working day averaged 10 to 12 hours; the daily wages ranged from \$0.25 to \$1. In Naples all 4 records showed a slight surplus; they represented skilled laborers. The Siena and Piedmont records were from weavers; the former showed a surplus, the latter a deficit. The records of the Florentine shoemakers showed a surplus; of the shepherds and stonecutters, a small surplus, and the same was true of the glassworkers of Venice. The annual income was between \$25 and \$700. Engel's law was confirmed.

SANTANGELO-SPOTO, HIPPOLYTE

(1056)

MINEUR DES SOUFRIÈRES DE LERCARA (PROVINCE DE PALERME-SICILE). OUVRIER-PROPRIÉTAIRE DANS LE SYSTÈME DES ENGAGEMENTS VOLONTAIRES PERMANENTS D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN 1886. Les Ouvriers des Deux Mondes (2): 281-336. 1890.

The locality with which this study is concerned changed in a short time from a poor agricultural community to an industrial center, without improving the conditions of the laboring class. The family described consisted at the time of the study in 1886, of the head (62), his wife (51), son (25), daughter (20), and the wife's mother (75). An older son was married and lived nearby. Traditional customs, morals, and paternal authority were respected. The father was a gang boss of good repute. The second son was a priest and a greatly respected teacher.

Health and medical facilities were good. Recreations were mainly noncommercialized. Family well-being rested on thrift, love of work, and the spirit of cooperation. The father belonged to a mutual-aid society. Property consisted of dwelling valued at 6,000 francs, land at 8,000 francs, animals at 96 francs, tools at 238 francs, floating capital at 500 francs, former savings at 600 francs, daughter's savings at 400 francs, and furniture and clothing at 2,969 francs. Income was 3,492 francs, of which 3,059 francs was in money. Property accounted for 294 francs; subventions, 151 francs; labor, 2,926 francs; and industries, 122 francs. Food cost 1,749 francs; household, 455 francs; clothing, 332 francs; moral, recreative, and health needs, 266 francs; and all else, 391 francs. Savings for the year were 299 francs. Notes are given on the sulphur industry, the beds in Lercara-Friddi, its development and vicissitudes, its future, the division of work and salaries, the economic situation of the miners, the work of women and children, and the hygienic conditions.

GUÉRIN, URBAIN

(1057)

VIGNERON PRÉCARISTE ET MÉTAYER DE VALMONTONE (PROVINCE DE ROME).  
TENANCIER CHEF DE MÉTIER DANS LE SYSTÈME DES ENGAGEMENTS MOMENTANÉS, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN 1887.  
Les Ouvriers des Deux Mondes (2) 2: 385-432. 1890.

The family cultivated rented land near Rome on such short leases that it could not make any land improvements. At the time of the study, in 1887, the household consisted of the head (33), his wife (30), and four daughters (10, 9, 5, and 4). The parents could not read or write but worked hard and had good morals and strong family traditions. Relations between worker and proprietor were good, as was health. The peasants cultivated their own vineyards and gardens. One of the vineyards was rented for 8 years and cultivated on equal shares, the proprietor paying the taxes and the worker bearing the cultivation expenses. For a second vineyard, the worker returned one-fourth of the proceeds, but the contract was terminable at the owner's will. Recreations included family feasts, concerts, drinking, and visiting. Family well-being rested on hard work, orderliness, and good health. They could borrow from an ancient self-supporting municipal institution which made loans of foodstuffs to be repaid in same, or from an agricultural bank which loaned money. Property consisted of animals valued at 86 francs, tools at 190 francs, and furniture and clothing at 1,265 francs. Income was 1,238 francs, of which 531 francs was in money. Property was credited with 14 francs income; subventions, 128 francs; labor, 587 francs; and industries 509 francs. Food cost 940 francs; household, 119 francs; clothing, 114 francs; moral, recreative, and health needs, 52 francs; all else, 12 francs. There were no savings. Notes are given on an estate at Zagarolo; phases of Italian agrarian legislation; history of Valmontone; tax increase since 1870; the laws of succession under the pontifical government and under the Italian regime; Italian traits of character; and rural conditions in Italy.

SANTANGELO-SPOTO, HIPPOLYTE

(1058)

PAYSAN AGRICULTEUR DE TORREMAGGIORE (PROVINCE DE FOGGIA—ITALIE).  
OUVRIER-TENANCIER DANS LE SYSTÈME DES ENGAGEMENTS MOMENTANÉS  
D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN 1887 ET EN 1889. Les Ouvriers des Deux Mondes (2) 3: 213-268. 1892.

The family described in this study which was made in 1887 and in 1889, lived in an agricultural district in which the products in 1885 were valued at half a million francs. They had a 9-year lease which provided for rotation of crops on 3 to 4 hectares of land. The family consisted of the head (48), his wife (46), two sons (27 and 21), wife of the older son (19), daughter (16), and grandson (1½). According to an ancient custom, only the older son lived with his family after marriage. They were a sober, orderly, hard-working family. Health was excellent. There were seven doctors and a midwife available, who were paid in produce. Recreations included religious and family festivals, drinking, and the purchase of lottery tickets. Family well-being rested on constant work, family unity, good health, and honesty. They received no public assistance; they belonged to a burial society. Property consisted of 215 francs in domestic animals, 206 francs in working equipment, and 1,160 francs in furniture and clothing. Income was 1,387 francs, of which 779 francs was in money. Property contributed 22 francs; subventions, 338 francs; labor, 640 francs; and industries, 387 francs. Food cost 617 francs; household, 229 francs; clothing, 346 francs; moral, recreative, and health needs, 59 francs; and all else, 45 francs. Savings were 92 francs. Notes are given on the history of Torremaggiore;



pasture rights; agriculture; the organization of property; rural industries; economic, moral, and intellectual conditions of the agricultural population; their physical, hygienic, and social state; the organization of work and salaries; and emigration.

PASOLINI, MARIA

(1059)

MONOGRAFIE DI ALCUNI OPERAI BRACCIANTI NEL COMUNE DI RAVENNA.

[STUDIES OF SOME FARM LABORERS IN THE COMMUNE OF RAVENNA.] Gior. Econ., pp. 311-339, 411-425. 1892.

This study of the level of living among the peasants of Ravenna is based on data for the year 1890, secured by the proprietor of the estate on which they lived. Aside from three case histories there is much that is pertinent to the study of agricultural laborers, taken as a class of society. The first case is that of Luigi Poletti, son of a small farmer, forced to serve as apprentice without pay, beginning when he was 7. Each step of his career is discussed, from that time until he became head of a family. He was a good workman, sober, with three children (1 adopted.) His income averaged 587 lire a year; his expenses 571 lire. An inventory is given of all of his possessions. His income as an apprentice was first food and keep; then to this was added 8 lire a year in money; the next step was to 40 lire a year. When he was 19 he lost his position through illness. Then he became a farm hand, with a wage of 90 lire a year in addition to maintenance and clothing. Luigi and his wife were both illiterate. Their children went to the common schools.

The second case was Angiolo Tassinari, a temperate, thrifty man and a good worker, but of low intelligence. He had four children. In 1890, when he was 53, his income as a laborer was 479 lire and his expenses 536 lire. For him there is less of early data and no inventory of his possessions.

The third case is Andrea Cirri. He was given to gambling, was not a good worker, and was not especially honest. His income was 315 lire, but his wife and one of his children also worked, so that the total income was 588 lire, while the total expenditure was 616 lire. The data given for expenditures do not confirm Engel's or Schwabe's laws.

SANTANGELO-SPOTO, HIPPOLYTE

(1060)

TISSEUR DE SAN LEUCIO (PROVINCE DE CASERTE-ITALIE). OUVRIER-TÂCHERON-PROPRIÉTAIRE DANS LE SYSTÈME DES ENGAGEMENTS VOLONTAIRES PERMANENTS, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN AVRIL 1892. Les Ouvriers des Deux Mondes (2) 4: 325-396. 1895.

The worker of this study was a property owner because his wife was sole heir of three houses. He belonged to the stable family type, believed that expenditure should be proportional to income, and was much respected. When the data were gathered, in 1892, the household consisted of the head (55), his wife (45), six daughters (19, 18, 14, 12, 9, and 6), a son (4), and the wife's father (70). Except in the case of the father-in-law, morals were excellent. The parents were illiterate. Health was good; the community paid a doctor and midwife. The man, two eldest daughters, and father-in-law all worked in the silk factory. The man also cultivated a garden. Recreations included walks, feast-day celebrations, and, on the part of the father-in-law, excessive smoking and drinking. Their only assurances of well-being lay in their habits of work and economy. Property consisted of dwellings, land, money, animals, and tools valued at 6,917 francs, and furniture and clothing at 3,383 francs. Income was 2,751 francs, of which 2,046 francs was in money. Property contributed 344 francs; subventions, 181 francs; labor, 1,941 francs; and industries, 286 francs. Food cost 1,565 francs; household, 210 francs; clothing, 699 francs; moral, recreative, and health needs, 236 francs; and all else, 29 francs. Savings were 13 francs. Notes are given on San Leucio; the laws of Ferdinand I of Bourbon for San Leucio; the silk industry here and elsewhere in Italy; the industrial organization of San Leucio and the spinning mill of Offeritelli and Pascal; and the economic and social conditions of the workers.

ALBERTONI, PIERO, and NOVI, Ivo

(1061)

ÜBER DIE NÄHRUNGS- UND STOFFWECHSELBILANZ DES ITALIENISCHEN BAUERS. Pflüger's Arch. Physiol. 1894: 213-246, illus. 1894.

The study deals with a field laborer, his wife, and 14-year-old son, for 1 year in 1892-93. There were 292 working days for the father and 100 each for mother and son. The father's income was 267.4 lire; the mother and the son each earned 120 lire, the total for the three being 507.4 lire. They lived near Ferrara, owned no land, and had a two-room house for which they paid 60 lire a year. Clothing

cost 21.4 lire a year, and food 405 lire. Food costs were 44 percent higher in summer than in winter, owing largely to increased consumption. The staple articles of diet were polenta, soup, fish, pork, and chestnuts.

MANTOVANI, FELICE

(1062)

BILANCI DI TRENTA FAMIGLIE DI CONTADINI IN PROVINCIA DI TREVISO. [THIRTY FAMILY EXPENSE ACCOUNTS IN THE PROVINCE OF TREVISO.] Riforma Sociale 8: 45-56, 134-156, 421-441, illus. 1898.

Twenty-six families of agricultural laborers in the district of Oderzo, north of Venice, were studied for a period of 3 years, 1893-95, with reference to earnings, expenditure, and general welfare. This was a very rich district but sparsely settled, many of the natives having emigrated to North America. The families ranged in size from 3 to 33 members. They raised grain, cattle, vegetables, grapes, and dairy products. Crops were rotated to a certain extent. Farming was done on shares, and houses and tools were provided. The main article of diet was polenta. Food costs ranged from 62.9 to 80.2 percent of the income; clothing from 5.98 to 12.8 percent. Some of these workers also plied other trades such as tailoring, shoemaking, etc., to add to their incomes. About half the family accounts showed an annual deficit.

LOMBROSA, GINA

(1063)

SULLE CONDIZIONI SOCIALI ECONOMICHE DEGLI OPERAI DI UN SOBBORGIO DI TORINO. [CONCERNING THE SOCIAL-ECONOMIC CONDITIONS OF THE WORKMEN IN A SUBURB OF TURIN.] Riforma Sociale 6: 310-330, illus. 1896.

A house-to-house canvass of the workmen in Crocetta, a suburb of Turin, furnished the data presented here, for 1894. Crocetta was not one of the poorer districts. The laborers were employed by the railway and in smaller factories. One hundred families were chosen for detailed study. The hours of labor ranged from 5 to 15; the number of children from 2 to 6; the earnings from 15 centesimi to 4.50 lire a day; the number of rooms from 1 to 4. All those studied were literate. The average yearly expenditure for food was 300 to 400 lire; for shoes and clothing 80 lire; for rent 150 lire. So far as there was a variation of incomes it tended to prove Engel's law.

PASOLINI, MARIA

(1064)

PRÉCIS D'UNE MONOGRAPHIE D'UN OUVRIER AGRICULTEUR DE LA CAMPAGNE DE RAVENNE (ROMAGNE-ITALIE). JOURNALIER DANS LE SYSTÈME DES ENGAGEMENTS MOMENTANÉS. Les Ouvriers des Deux Mondes (2) 5: 234-252. 1899.

This study concerns a worker representing a class of relatively intelligent day laborers who had been forced out of the renting class by the agricultural and economic crisis. Although the period to which the data apply is not stated, it was probably just antecedent to 1899, the date when the study was published. The family consisted of the father, mother, son (14), and daughter (11). There was also an adopted daughter (14) who was treated as one of the family. Health conditions were good. The parents could neither read nor write. The younger girl enjoyed reading and often wrote letters for friends. The worker still hoped to become a renter. He was an exceptionally fine worker, and was employed chiefly by one patron. He belonged to a mutual-aid society. The woman did some outside washing. The son made baskets and blinds in an industry organized by a neighboring property owner for the benefit of the children of workers. Gleaning and gathering of wood and herbs added much to the family income. There was no organized recreation. Income was 589 francs, subventions contributing 144 francs, labor 400 francs, and industries 45 francs. Food cost 402 francs; household, 99 francs; clothing, 48 francs; and all else, 6 francs. Savings were 34 francs. Notes are given on some types of workers' societies, and on the cooperative society of production in Ravenna. Many of the details ordinarily given in a Le Play monograph are lacking.

CHESSA, F.

(1065)

LE CONDIZIONI ECONOMICHE E SOCIALI DEI CONTADINI DELL'AGRO DI SASSARI. [ECONOMIC AND SOCIAL CONDITIONS OF THE PEASANTS OF L'AGRO DI SASSARI.] Riforma Sociale 16: 36-63, 266-298, illus. 1906.

Professor Chessa undertook this study in order to compare the condition of the peasants in one district of northern Sardinia with those in Italy proper. L'Agro di Sassari (the district around the city of Sassari) was less thickly settled than the rest of Italy; in 1901 there were 3,964 contadini in Agro, 20 percent of the population of this district. They included three classes—the small proprietors who



cultivated their own lands; the zappadori, who were hired by day, month, or year; and those who farmed on shares. The last named also worked by the day for the first group. The zappadori earned from 1.25 to 2 lire a day. Their families lived in the city; housing conditions were bad, all sleeping in the same bed, eating from the same plate, and washing in the same bucket. The working day was 6½ to 7 hours in winter and 10 to 12 hours in summer. Food was insufficient in quantity and poor in quality. Expense records are given for two families of day laborers. For the first, a family of 5, the income was 428 lire a year and the expenditures 524 lire, of which 327 was for food, 94 for lodging, 67 for clothing. The second family, consisting of 8 members, had an income of 613 lire and expenditures totaling 596 lire, of which 487 went for food and 65 for clothing. The second family lived on the estate in a house provided by the owner.

MASE-DARI, E.

(1066)

LA CRISI DEL LAVORO AGRICOLO NEL MANTORANO. [THE LABOR CRISIS IN THE MANTUA DISTRICT.] V. 9, pp. 466-478, illus. Torino. 1901.

This study, made in 1901, concerns the day laborers on the farms about Mantua. Their labor was almost always contracted for, and almost continuous the year round. The working day was from 9 to 10 hours long; the work was not heavy, and the general conditions were good. Men earned about 1.75 lire a day in summer and women 1.10 lire; in winter the wages dropped to 1 lire a day; in harvest time they rose to 3.50 lire a day for the men. Heads of family earned about 480 lire a year; their wives and children usually supplemented this. In addition to these wages, they received 8 sacks of corn, 4 of wheat, 7 vats of wine, oil and kerosene, firewood, houses with small gardens, and the right of hunting and fishing. Their only expenditures were for clothing, incidentals, and what might be called luxuries.

MILANO, UFFICIO DEL LAVORO DELLA SOCIETÀ UMANITARIA.

(1067)

LA DISOCCUPAZIONE NEL BASSO EMILIANO. [UNEMPLOYMENT IN LOWER EMILIA.] 1927 pp., illus. Milano. 1904.

This inquiry covered the Provinces of Ferrara, Bologna, and Ravenna, for each of which expenditure records of laborers are given. The inquiry was carried out by the Società Umanitaria under governmental auspices. Although primarily a study of unemployment, it also took into consideration the condition of some farm laborers, who spent from 12 to 14 hours per day in the field. Four expense accounts are presented for the year 1902. In the Province of Bologna an expenditure account is given for a family of 7. The total income was 484 lire a year, the total expense 545.50 lire. Another record is given for a family of 3 whose income was 582.80 lire, and whose expenses were 588 lire. In the Province of Ravenna, a record is given for a family of 5 with an income of 346.46 lire and expenses of 443 lire, and one for a family of 7 with an income of 2,608.50 lire, and expenses of 1,908.75 lire. The latter was a share-tenant family, the others were laborers. Even when some food was provided, the latter group did not earn enough to cover expenses. The data confirm Engel's law, but not the Wright versions of that law.

LOJODICE, DOMENICO ANDREA

(1068)

PAYSAN CULTIVATEUR DE RUVO DI PUGLIA (PROVINCE DE BARI-ITALIE). FERMIER ET PETIT PROPRIÉTAIRE DANS LE SYSTÈME DU TRAVAIL SANS ENGAGEMENTS D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN 1903. Les Ouvriers des Deux Mondes (3) 3: 1-76. 1908.

This study, made in 1903, deals with a district in which agriculture was the chief industry. The population was on the increase. The household consisted of the head (49), his wife (43), 3 sons by a first wife (23, 16, and 11), 1 son of the wife by a first husband (13), and 1 daughter of the present marriage (3). The worker was respected for his honesty and judgment. They worked hard for material gain and were on the alert for improved methods. All were in excellent health except the wife. The sons worked with the father at home and by the day for neighbors. Commercial recreations were the exception, feast days and occasional smoking being the chief diversions. Well-being was based on work, economy, and good family conditions and relations with the landlord. Property consisted of land valued at 1,445 francs, money 100 francs, animals valued at 85 francs, tools at 150 francs, and furniture and clothing at 1,104 francs. Income was 2,356 francs, of which 1,851 francs was in money. Property was credited with 84 francs income; subventions, 83 francs; labor, 1,408 francs; and industries, 781 francs. Food cost 974 francs; household, 184 francs; clothing, 317 francs; moral, recreative, and health needs, 54 francs; and all else 32 francs.

Savings were 796 francs. Notes are given on cultivation, leases, tools, the work and its remuneration, the economic and social situation of the peasant, communal land, public charity, matrimonial customs and dowries, and cooperation among the vinegrowers.

SCHIAVI, ALESSANDRO

(1069)

L'INDUSTRIA DEI MOBILI IN BRIANZA E LE CONDIZIONI DEI LAVORATORI. [THE FURNITURE INDUSTRY IN THE BRIANZA AND THE CONDITION OF THE LABORERS.] Pub. Uff. Lavoro della Soc. Umanitaria. 32 pp., illus. Milano. 1904.

The region between Milan and the Lake of Como, known as the Brianza, was devoted almost entirely to furniture making; of the 15,048 employed in this industry, only 1,268 were engaged in factories. The rest of the work, that of higher quality, was done at home. The working day was from 12 to 14 hours. The chief laborers averaged 2 lire a day; apprentices 1.25 to 1.30 lire; "inlayers" 3 to 3.50 lire. There were younger boys also employed who were not apprentices, and who earned from 25 to 30 lire a year. Much of the polishing of the furniture was done by women, whose wages are not given. Expense accounts of three types of laborers are given for the year 1903. The first is for one who worked in his own home with a single apprentice. In 300 days he earned 2,369.25 lire. For the family of five the expenses were for food, 1,428.30 lire; for rent, 598.15 lire; for clothing, 214.05 lire; for recreation, education, medicine, 48.45 lire; and for insurance 80.30 lire. This account just balanced. The second type worked in a factory. His total income was 1,533 lire. For the family of six the expenses were for food, 1,013.70 lire; for rent, 346.95 lire; for clothing, 337.30 lire; for miscellaneous, 54.28 lire, leaving a deficit of 220 lire owed to the proprietor and to the Monte di Pietà. The third type was a family of eight who lived on a small farm and also made furniture. The income from the farm was 891.50 lire and from the furniture 1,445 lire. Living costs were 1,845.50 lire, leaving a balance of 75.80 lire. In all cases living expenses included only the absolute necessities. Within the small range of incomes, Engel's law is verified.

LORENZONI, GIOVANNI

(1070)

I LAVORATORI DELLE RISAIIE. [LABORERS IN THE RICE FIELDS.] 2 v., illus. Milano. 1904.

This survey is concerned with rice growing in northwest Lombardy, particularly the Provinces of Novara, Vercelli, and Mortara. Although the period to which the data refer is not stated, it probably was just previous to 1904, the date when the work was published. There were two groups of laborers, local and immigrant. The latter were either employed directly by the proprietor or were furnished in groups by a contractor, who might arrange for direct payment of the laborer by the employer, or might accept a lump sum from the proprietor (money or crop) and pay the laborer himself. The work during the short summer season of 35 days was done both by immigrants and by local labor; that of the autumnal season, when the rice was planted, was done almost entirely by local labor. Of the 76,145 laborers studied, 39,921 were local and 36,224 imported. Of the former group, 17.93 percent were men, 76.04 percent women, and 6.03 percent children. Of the latter group, 21.61 percent were men, 71.45 percent women, and 6.94 percent children. Local laborers were paid in money or in kind; no estimate of their expenses was given. Immigrant labor was paid an average of 1.86 lire a day. Food valued at 0.34 lire a day and shelter were furnished. When transportation was over 6 lire it was paid by the employer and a slight reduction (not proportional to the cost) was made in the wage. As the season was short no estimate was given for clothes, etc. Mosquitoes, malaria, and occupational diseases were prevalent. No accounts of expenditures are given, but the pay included practically all living costs.

ALBERTONI, P., and ROSSI, F.

(1071)

BILAN NUTRITIF DU PAYSAN DES ABRUZZES ET SES CONDITIONS PHYSIOLOGIQUES, PSYCHOLOGIQUES ET ÉCONOMIQUES. Arch. Ital. Biol. 1908: 241-268, illus. Roma. 1908.

Three peasant families of varying economic status were chosen as types on which to base this study. The first family consisted of 8 members, of which 5 were included—father, mother, 2 sons, and a daughter. The second family consisted of 9 members of which 5 were chosen—father, 2 sons, and their wives. The third consisted of 7 members of which 3 were included—father, mother, and oldest son. The turn of the season, March, was chosen in order to measure



the vitality of the groups after the winter's inactivity. The first group remained inert; the second group had begun to work in the vineyard and had provided an extra meal and more vegetables; and the third group had made the same alterations in food but had not begun work. The first family was of low mentality, exempt from military service and in debt to the employer. The father suffered from malaria. The second family had achieved a balance between income and expenditure. The third family owned their farms. The first family had 9.6 hectares of land and lived in 2 rooms; the second had 10 hectares of land and lived in 4 rooms; and the third family had 4.8 hectares of land and a separate house. The estimates given are based on 16 days' observation in the year 1906. The first family ate from 1,248.15 to 2,277.44 calories a day per person and assimilated from 27.61 to 40.38 calories per kilogram. The second family ate from 2,370.85 to 2,588.19 calories a day per person and assimilated 37.24 to 59.91 calories per kilogram; and the third family ate from 1,907.48 to 3,259.55 calories a day per person and assimilated 39.74 to 76.18. The food was deficient in albumens and fats, and overheavy in carbohydrates. The first family spent 5.25 lire for food in 7 days; the second 8.04 lire in 7 days; and the third 2.88 lire in 4 days. The data secured in the survey confirm Engel's law.

ORANO, DOMENICO

(1072)

COME VIVE EL POPOLO A ROMA. 917 pp., illus. Pescara. 1912.

The author surveyed living conditions in the Testaccio quarter (the modern section) of Rome. The population was of the lowest class of laborers. The survey was made between March and December 1908, but the data covered 1906-10. In this area of 600,030 square meters, 9,262 persons were housed. The buildings had all been erected since 1883 by cooperative associations, banks, and the Beni Stabili (a real estate corporation that owned half the houses in Rome). Of the 1,348 apartments, 38 percent were single rooms, 29.5 percent had 2 rooms, and 24.5 percent 3 rooms. Two apartments had 9 rooms, 3 had 7, and 8 had 6. Rents ranged from 5 to 80 lire a month. The density of population meant poor sanitation and low morality. Food utensils, clothing, and beds were used in common. All families were undernourished. Infant mortality was very high (51.8 percent). Tubercular patients were not segregated. Free medical centers were provided, but as there was only one doctor for this quarter, the people resorted to shrines and superstitions. Meat was of poor quality and rarely eaten. Few families ate in any one day the normal amount of food. Food was chosen for its stimulating but not nutritive content. The men were metal workers, coachmen, dyers, bakers, painters, brick masons, etc.; the women were employed in factories, or as dressmakers, laundresses, etc. The average income ranged from 2.25 to 4 lire a day. Of the families studied, 917 were wholly or partly dependent on charity. Over two-thirds of the wage income was spent for food, which left less than 2 lire a day for rent, light, and clothing. Daily and monthly expense records for 35 families are given; their daily incomes ranged from 3 to 9 lire and daily food expenses from 1.90 to 6.90 lire. Data furnished include length, width, and condition of streets; ownership of houses; size of apartments; occupants per room; density of population; income and expenditure; industries; marriages by age; emigration; savings; people receiving assistance; and kinds of food. The small range of material prohibits application of any economic law.

MILANO, UFFICIO DEL LAVORO DELLA SOCIETÀ UMANITARIA.

(1073)

LE CONDIZIONI GENERALI DELLA CLASSE OPERAIA IN MILANO. 253 pp., illus. Milano. 1907.

Questionnaires returned from 340,354 laborers in Milan furnished the data on which this report is based. Although the period to which the data apply is not given, it probably was not long before 1907, the date of publication of the study. Rents, salaries, and general employment conditions are given, but no details of expenditure. The average workingman's family consisted of 3.87 members. In 70.57 percent of the cases studied, 1 or 2 members contributed to the income. Among the married laborers, 6.94 percent had no families; 2.48 percent of the workers lived alone; three-fourths of them were men, and one-half were natives of Milan. Less than 365 lire a year was earned by 2.21 percent; 0.32 percent earned more than 3,650 lire. The majority of the incomes ranged from 721 to 1,825 lire. The wage to 90.4 percent was paid in cash; to 6.1 percent in money and lodging; to 3.33 percent in money and food; and to 0.17 percent in money, food, and lodging. Rent cost 78.42 percent of the workers less than 50 lire, 76.92 percent over 300 lire. For 70.14 percent the average was one room per person. Cottage industries employed 6.48 percent of the workers.

ZINGALI, GAETANO

(1074.)

ALIMENTAZIONE—CONSUMI—BILANCI DI FAMIGLIA—TRATTATO ELEMENTARE DI STATISTICA. [NUTRITION—CONSUMPTION—FAMILY ACCOUNTS—ELEMENTARY STATISTICAL TREATMENT.] *Statis. Econ.*, v. 4-5, 26 pp. Milano) 1933.

This article discusses the food problem of Italy covering a period from 1909 to 1931. It establishes a definite relation between the amount of food required and the work performed by a person of given stature, sex, age, and weight. Evaluation of foods on the basis of their caloric content is discussed. Determination of the alimentary needs of any large group is calculated, taking as a unit of consumption a male adult weighing 70 kilograms, living in a temperate climate, and working 8 hours daily. The ration for this unit is placed at 3,000 calories daily. Considerable attention is paid to national production in the various states of Europe and its relation to national consumption on the basis of the consumption unit used. A typical Milanese workman's family, composed of 2 adults (1 male and 1 female) and 3 children (1 female of 15 years and 2 males of from 5 to 10 years) was taken as an example. By using the coefficient of reduction of Lusk, it is established that this family corresponded to four units of food consumption. The daily demand for the family would be 12,000 calories. The data for this family show weekly expenditures as follows: 62.1 percent for food, 12 percent for clothing, 11.4 percent for lodging, 4.5 percent for heating and lighting, 10 percent for various other items of expense. The percentage of expense for food is slightly higher on a lower level of living. During difficult times, the typical family proportioned its food expenditure among cheaper foods. As an index to the variation in consumption a comparison was made between the years 1914 and 1924 for the same family living under the same conditions. It was found that in 1924 the family could afford only 79 percent of the amount it had spent for food in 1914.

GINI, CORRADO

(1075)

PREZZI E CONSUMI. *Gior. Econ.*, pp. 99-114, 235-249. Jan.-Feb. 1910.

The author's investigation of the relationship between various items of consumption expenditure led him to the conclusion that as food expenditures increase or decrease in arithmetic ratio, other expenditures move in geometric ratio in the opposite direction. He also maintained that, in general, as prices increase or decrease in geometric ratio, consumption changes, in the opposite direction, in arithmetic ratio. It is assumed that this investigation covered a period closely preceding 1910, the date when Gini published his results.

ALBERTI, MARIO

(1076)

IL MOVIMENTO DEI PREZZI E DEI SALARI NELL' ANNO 1911 A TRIESTE. 115 pp. Trieste. 1915.

PUGLIESE, ANGELO

(1077)

IL BILANCIO ALIMENTARE DI 51 FAMIGLIE OPERAIE MILANESI. [THE FOOD CONSUMPTION OF 51 MILANESE WORKERS' FAMILIES.] Museo Sociale della Società Umanitaria. Milano. 1914. [Original not seen. Summarized from International Labour Office, Methods of Conducting Family Budget Enquiries, p. 69. Geneva. 1926.]

This inquiry was conducted in July 1913, and its results used in the calculation of the Milan cost-of-living index numbers. Daily records were kept for periods of 15 to 20 days by 51 working-class families in different occupations in Milan. A review of the investigation is given by F. Lepelletier (*Réforme Sociale*, pp. 224-226. 1914). Results indicated that the diet of the average laborer lacked fat and carbohydrates and did not supply adequate energy. Women in particular were underweight. About 50 percent of the income went for food; the families were small, 37 out of 51 having only 2 children.

MARCONCINI, FEDERIGO

(1078)

L'INDUSTRIA DOMESTICA SALARIATA. 848 pp., illus. Torino. 1914.

Home industries in all countries of western Europe, but particularly in Italy, form the subject of this study, which applies to the first decade of the twentieth century. Conditions of labor, moral and sanitary, hours, salaries, and kinds of industry are discussed. In some cases the food costs are given, and one household account is given for a laborer of Turin, whose income was 529.40 lire and whose expenses were 707.90 lire, of which 120 lire was for rent, 419.75 lire for food, and 50 lire for clothing.



RICCI, UMBERTO

(1079)

IL FALLIMENTO DELLA POLITICA ANNONARIA. [THE FAILURE OF THE FOOD POLICY.] 471 pp., illus. Florence. 1921.

The first part of this survey was directed to determining the increase in cost of living between 1914 and 1920. Data were derived from family expense records kept throughout the year. For a typical Milanese family consisting of father and mother, 1 son (between 10 and 15 years of age), and 2 sons under 10, the cost of daily consumption (that of 3.5 adult male units), not including wine, was quadrupled. Most of this increase was in food costs. In Florence the food costs of a similar family were tripled. The weekly account of a family of laborers in Milan showed an increase of food costs from 25.58 lire in 1914 to 101.15 lire in 1919; of clothing, from 4.94 lire in 1914 to 18.50 lire in 1919; of housing, from 4.70 lire in 1914 to 5.09 lire in 1919; of light and heat, from 1.86 lire in 1914 to 4.09 lire in 1919. A family of small farmers living near Milan, consisting of parents, two sons, and a servant, spent three and one-half times as much for food in 1920 as in 1917. In Rome, food costs increased from 107.7 percent of 1914 costs in 1917 to 315.2 percent of 1914 costs in 1920. A family of workingmen in Rome spent 33.25 lire a week for food in 1914 and 83.65 lire a week in 1919; for clothing, the costs increased from 5.43 lire to 19 lire in the same period; for housing it remained the same, 7 lire; for light and heat, it rose from 3.85 lire a week to 7.20 lire a week. Similar increases occurred in other Italian cities and for other social classes. Data are given for an employee in Florence, who spent 5,122 lire in 1914 and 9,627 lire in 1918 for food, clothing, housing, light, heat, and taxes. In Milan the daily salary of a mason in 1914 was 4.80 lire; in 1919 it was 12.80 lire. During these years the consumption of bread among rural inhabitants increased and of pasta decreased. An appendix is given on G. del Vecchio's logarithmic formula of the relation between income and increase of expenditures.

PUGLIESE, ANGELO

(1080)

L'ALIMENTAZIONE DELLA FAMIGLIA OPERAIA MILANESE DURANTE LA GUERRA. [NUTRITION OF THE MILANESE WORKING FAMILY DURING THE WAR.] Museo Sociale della Società Umanitaria. 1918. [Original not seen. Cited in International Labour Office, Methods of Conducting Family Budget Enquiries, p. 69. Geneva. 1926.]

These inquiries, conducted among Milanese workers in 1916 and 1917, are supplementary to Pugliese's earlier study published in 1914.

MILANO, UFFICIO DEL LAVORO E DELLA STATISTICA.

(1081)

LE VARIAZIONI DEI SALARI IN RAPPORTO AL RINCARO DELLA VITA. [VARIATIONS IN SALARY IN RELATION TO THE COST OF LIVING.] 143 pp., illus. Milano. 1920.

A survey was undertaken by the Italian Government to determine whether salaries had increased in proportion to living costs between 1914 and 1920. Forty-three cities published semimonthly reports on commodity prices, including flour, meat, bacon, and oil. From these reports average prices for all of Italy were estimated and index numbers determined. It was found that the average salary in 1914 was 3.53 lire a day and in 1919 was 91.80 lire a week. The average daily ration was fixed at 2,400 calories for one engaged in light labor and at 3,500 calories for heavy labor. The amount of food required in grams of substances is also given, and the prices. An average family of 5 (3 children and 2 adults) had to pay 113.71 lire a week for an adequate amount of food, 29.25 lire for clothing, and 5.09 lire for rent, out of a total weekly expenditure of 101.77 lire.

UNITED STATES DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS. (1082)

COST OF LIVING IN TURIN, ITALY. U. S. Dept. Labor, Bur. Labor Statist. Monthly Labor Rev. 12 (2): 68, illus. 1921.

Data secured from the American consul at Turin is used for this estimate of living costs. The minimum weekly expense for each adult in September 1920 was 164.76 lire, of which 96.60 lire went for food, 28.20 lire for clothing, 4.75 lire for lodging, and 15.30 lire for heat and light. In October the total cost was 170.58 lire, 97.36 lire going for food, 29.97 lire for clothing, and 15.59 lire for heat and light. Lodging remained the same. This amount provided only for the bare necessities of life.

MILANO, UFFICIO DEL LAVORO E DELLA STATISTICA. (1083)  
 COME SI CALCOLANO LE INDENNITÀ CARO-VIVERI. [COMPUTATION OF THE  
 COST OF LIVING.] 63 pp., illus. Milano. 1921.

An effort to determine the actual increase in living costs since the war was undertaken at the instigation of the statistical convention held in Milan, July 1920. The data, which apply to 1920 and 1921, consist of a laborer's records of expenditures, secured from the municipal records of Venice, Milan, Florence, Genoa, Rome, and Trieste. These accounts give the weekly expenditures of a laborer's family consisting of father, mother, a son over 10, and 2 children under 10. Five categories of expenditures are considered. Food costs averaged 105.02 lire a week. This included a very small proportion of meat, fruit, and vegetables in summer, and in winter mostly polenta and cheese. The food was purchased in cooperative markets. Rent averaged 5.09 lire a week, clothing 29.25 lire, heat and light 11.37 lire, and miscellaneous expenses 22.35 lire, totaling 173.08 lire. The percentage of increase in the cost of living is computed, as well as the index numbers of consumption.

## LATVIA

LATVIA STATISTICAL OFFICE. (1084)  
 COMMUNICATION TO THE INTERNATIONAL LABOUR OFFICE. 1926. [Original  
 not seen. Summarized in International Labour Office, Methods of Con-  
 ducting Family Budget Enquiries, p. 70. Geneva. 1926.]

The statistical office undertook an inquiry, beginning April 1926, into the records of expenditure of workers' and officials' families in different towns of Latvia. Records of income and expenditure were to be kept for a year, in books furnished by the statistical office, under the supervision of government agents.

## NETHERLANDS

CORONEL, S., and ALLAN, F. (1085)  
 PÊCHEUR-CÔTIER MAÎTRE DE BARQUES DE L'ÎLE DE MARKEN (HOLLANDE  
 SEPTENTRIONALE-PAYS-BAS). OUVRIER CHEF DE MÉTIER DANS LE SYSTÈME  
 DU TRAVAIL SANS ENGAGEMENTS D'APRÈS LES RENSEIGNEMENTS RECUEILLIS  
 SUR LES LIEUX EN 1862. Les Ouvriers des Deux Mondes (1) 4: 405-460.  
 1862. [Reprinted in Le Play, F., Les Ouvriers Européens, ed. 2, v. 3, pp.  
 204-272. Paris. 1877.]

This study of workers made in northern Europe in 1862 furnishes another illustration of the famille-souche. The household consisted of the head (50), his wife (48), 3 sons (23, 21, and 15), and 2 daughters (20 and 21), 2 other children having died. The couple were very devoted and looked on a large family as a blessing. Paternal authority was respected. They were proud, independent, charitable, ambitious, and economical. Health was good. The father and eldest son fished together, the two younger sons worked partly for other fishermen and partly for their father. Recreations included family feasts, walking, smoking, attendance at fairs, and the purchase of lottery tickets. Family well-being was based on their savings and their moral and religious habits. There was no mutual-aid society in Marken. Property consisted of dwelling, land, three fishing boats and equipment, tools, and money valued at 18,703 francs, and furniture and clothing at 7,754 francs. Income was 5,366 francs, of which 4,745 francs was in money. Property contributed 701 francs; labor 2,745 francs; and industries, 1,889 francs. Food cost 1,903 francs; household, 406 francs; clothing, 1,223 francs; moral, recreative, and health needs, 176 francs; and all else, 38 francs. Savings were 1,620 francs. Notes are given on the social structure of the Netherlands; fishing in the Zuyder Zee; details about Marken—its animals, vegetation, and agriculture, history of its people, their intellectual and moral development, recreations and feasts, sanitation, statistical facts on the population, and administration; and the seventeenth century prosperity of the Netherlands and current signs of disturbance (last item to be found only in the Les Ouvriers Européens).



CORONEL, S., and ALLAN, F.

(1086)

PRÉCIS D'UNE MONOGRAPHIE D'UN TISSERAND D'HILVERSUM (HOLLANDE SEPTENTRIONALE-PAYS-BAS.) OUVRIER-TÂCHERON DANS LE SYSTÈME DES ENGAGEMENTS MOMENTANÉS, 1865. Les Ouvriers des Deux Mondes (2) 3: 143-172. 1892.

The family described in this study made in 1865, consisted of the head (44), his wife (42), two sons (22 and 12), and a daughter (19). Four other children had died. The family had excellent morals. Workshop conditions were very unhealthful and continually irritated the worker's lungs. The wife and children were quite well. All had been vaccinated. They belonged to two aid societies—one connected with the factory for sickness, and another with burials. This family owned no property but was greatly respected for its honesty, economy, and moral standards. Recreations were noncommercialized. Future well-being rested chiefly on the two aid societies. Property consisted of working equipment valued at 53 francs, and furniture and clothing at 1,299 francs. Income was 1,372 francs, to which property contributed 34 francs, labor 1,263 francs, and industries 76 francs. Food cost 460 francs; household, 194 francs; clothing, 351 francs; moral, recreative, and health needs, 34 francs; and all else, 334 francs, there being no savings. Notes are given on the carpet factory at Hilversum and its influence on health; the moral and material situation of the manufacturing population there; charitable institutions and the aid societies for sickness and burial; Hilversum and the condition of the weavers in 1891; and household budgets of workers in 1891. The value of the study lies in the 25 years of observation of the same kind of workmen. The budgets given in 1891 are short but contain important details for a cigarmaker, a blacksmith, and a worker in a cloth mill in a large city of the same province. Many details ordinarily given in a Le Play budget are not included.

MOQUETTE, JULIEN J. R.

(1087)

ONDERZOEKINGEN OVER VOLKSVOEDING IN DE GEMEENTE UTRECHT. [INVESTIGATION OF FOOD CONDITIONS IN UTRECHT.] 182 pp., illus. Utrecht. 1907.

This is primarily a study of food values and nutrition obtained from the normal amount of food consumed. Some data regarding costs in 1905 are included. A minimum of 2,749 calories was considered essential for an adult working 9 to 11 hours a day. From a study of 10 laborers, the author concludes that the average workman secured only 2,538.4 calories a day. The earnings of these 10 men averaged about 8 francs a week; 62 percent of their income went for food, 16 percent for clothing, 12 percent for housing, 5 percent for heat and light, and 2 percent for school and church. Of the middle-class incomes, 55 percent went for food, 18 percent for clothing, 12 percent for housing, 5 percent for heat and light, and 3.5 percent for school and church. Of the wealthy group, 50 percent of the income went for food, 18 percent for clothing, 12 percent for rent, 5 percent for heat and light, and 5.5 percent for school and church.

CLAEYS, RENÉ

(1088)

L'INDICE DU CÔÛT DE LA VIE DU BUREAU DE STATISTIQUE DE LA VILLE D'AMSTERDAM. Rev. Econ. Polit. 35 (2): 165-182, illus. 1921.

The household accounts of 30 working families of Amsterdam in 1920 are compared with those of 23 similar families studied in 1911. Households that had been established before the war were relisted; they averaged 5 persons. The male-adult unit of consumption was used, each adult female being counted as 0.9; children below 1 year, 0.15; between 1 and 2, 0.2; between 2 and 3, 0.3; 0.5 being added for each year until the age of 15, after which the adult unit was used. Family expenses were compared with retail prices to avoid errors. Two comparisons were made to show the rise in prices from 1911 to 1920 (1) of commodities bought in 1920, and (2) of commodities bought in 1911. Weekly expenditures per unit of consumption (in Dutch cents) in 1920 were, bread, 151; flour, 15½; milk, 68; cheese, 16; eggs, 7; meat, 82; fish, 19; fats, 110½; sugar, 29; spices, 34½; vegetables, 30½; fruit, 13; potatoes, 45; total food expenditure, 621. Clothing was 92½; shoes, 52½; rent, 84; fuel, 25½; lighting and gas, 46½; washing, 25½; insurance, 33; dues, 41; tobacco and alcoholic beverages, 27½; miscellaneous, 148; total weekly expenditure per adult unit was 11.97 florins. The 1911 expenses per adult unit in terms of the 1920 Dutch cent were, bread, 149½; flour, 29; milk, 78; cheese, 22½; eggs, 12; meat, 78; fish, 11½; fats, 91½; sugar, 21½; spices, 58½; vegetables, 21½; fruits, 9½; potatoes, 41; total food expenditure was 624. Clothing was 163½; shoes, 67½; rent, 109; fuel, 27½; gas and electricity, 64½;

washing, 29½; insurance, 28; dues, 38; tobacco and drink, 28; miscellaneous, 109; total expenditure per adult unit per week was 12.88½ florins. Prices rose 122.7 percent between 1911 and 1920; the index number rose to 222.7.

GERMANY, REICHSARBEITSMINISTERIUM. (1089)

BUDGET OF WORKMEN'S FAMILIES IN AMSTERDAM BEFORE, DURING, AND AFTER THE WAR. Reichs-Arbeitsblatt 1 (21): 856. Berlin. 1921. [Original not seen. Summary in U. S. Dept. Labor, Bur. Labor Statis. Monthly Labor Rev. 13 (5): 89-92, illus. 1921.]

This contains summaries of previously published studies of family expenditures conducted in Amsterdam in 1912, 1919, and 1920.

NETHERLANDS, DEPARTMENT VAN ARBEID. (1090)

ARBEIDERSBUDGETS GEDURENDE DE CRISIS. [WORKMEN'S BUDGETS DURING THE WAR.] The Hague. 1917. [Original not seen. Summary in U. S. Dept. Labor, Bur. Labor Statis. Monthly Labor Rev. 13 (5): 89-90. 1921.]

Household accounts were kept during a period of 4 weeks in February and March 1917 by 39 intelligent workers in reasonably comfortable circumstances in Amsterdam to compare with the results of the 1911 inquiry. The names of the families were obtained from socialist trade unions. As in 1911 emphasis was put on expenditures rather than on incomes. Economy failed to prevent the appearance of a deficit in many cases.

AMSTERDAM, BUREAU VAN STATISTICK. (1091)

UITGAVEN VAN ARBEIDERS EN ANDERE GEZINNER VOOR TYDENS EN NA DEN OORLOG VAN FEBRUARI 1917 TOT SEPT. 1920. [EXPENDITURES OF WORKMEN.] Amsterdam. 1920. [Summary in U. S. Dept. Labor, Bur. Labor Statis. Monthly Labor Rev. 13 (5): 89-90. 1921.]

Household accounts were collected in 1918 from 28 Amsterdam families, the same ones who participated in the 1917 investigation. Accounts were kept for a period of 4 consecutive weeks during each quarter. Deficits appeared in many cases.

(1092)

SUPPLEMENT TO THE BULLETIN MENSUEL DU BUREAU DE STATISTIQUE DE LA VILLA D'AMSTERDAM. November 1925. [Original not seen. Summary in International Labour Office, Methods of Conducting Family Budget Enquiries, pp. 71-73. Geneva. 1926.]

An inquiry was conducted in Amsterdam from the 1st of September 1918 covering a period of a year. The names were proposed by trade unions and 99 families agreed to take part; 82 families (351 persons) completed the inquiry. The data were published together with information collected in March 1919 in respect to 32 working-class families. A special unit of consumption, called the Amsterdam scale, was used.

NETHERLANDS, BUREAU VAN STATISTIEK DER GEMEENTE AMSTERDAM. (1093)

DE UITGAVEN VAN 114 AMBTENAARS EN ARDEIDERGEZINNEN. [THE EXPENSES OF 114 FAMILIES OF OFFICIALS AND WORKMEN.] Statis. Meded. 73, 108 pp., illus. Amsterdam. 1924.

Data were obtained from annual records of expenditures kept by 82 families of upper class officials, most of them Federal employees, and from household accounts kept for 4 consecutive weeks by 32 families of industrial workers. The two groups are considered separately. The first group is divided into 6 classes, according to amount of annual expenditure; the second group, into 3 classes, according to amount of weekly expenditure. Visitors were sent to each family to give instructions regarding the keeping of accounts. The unit upon which the tabulations are based is that of the male adult. It is noted that the smaller the income, the smaller the proportional expenditure for sugar, meat, and vegetables, and the greater that for carbohydrates.

AMSTERDAM BUREAU OF STATISTICS. (1094)

FAMILY BUDGET INQUIRIES. Amsterdam. 1918-22. [Original not seen. Summary in International Labour Office, Methods of Conducting Family Budget Enquiries, p. 72. Geneva. 1926.]

Expenditure accounts were collected in August-September 1918, from then quarterly until September 1920, and again in March 1922. These reports were published in each case within 3 weeks after the inquiry. The number of families covered varied from 25 to 34.



NETHERLANDS, STATISTISCH BUREAU DER GEMEENTE 'S-GRAVENHAGE. (1095)  
UITKOMSTEN VAN EEN ONDERZOEK NAAR DE KOSTEN VAN HET LEVENSONDER-  
HOUD VAN 28 GEZINNEN TE 'S-GRAVENHAGE IN 1921 EN 1922. [RESULTS OF AN  
INQUIRY ON THE COST OF LIVING FOR 28 FAMILIES IN THE HAGUE IN 1921-22.]  
55 pp., illus. 's-Gravenhage. 1924.

Supervised expense accounts kept by 24 families of laborers and 4 families of lower-class officials in The Hague, from November 27, 1920 to November 25, 1921, form the basis of this study undertaken to determine the minimum cost of living in the Netherlands. The income of the two groups was approximately the same, ranging from 1,500 to 3,500 florins a year. The families averaged three children. The results obtained showed that the industrial classes spent more for bread, cereals, oils, sugar, coffee, and potatoes, while the officials spent more for cakes, meat, eggs, cheese, butter, chocolate, fruit, and beverages. The industrial workers also spent more for books, shoes, light, and heat, while the officials spent more for clothing, rent, taxes, and service. The two classes spent the same amount for recreation.

NETHERLANDS, BUREAU VAN STATISTIEK DER GEMEENTE AMSTERDAM. (1096)  
HUISHOUDREKENINGEN VAN 212 GEZINNEN. [HOUSEHOLD ACCOUNTS OF 212  
FAMILIES.] Statis. Meded. 80, 53 pp., illus. Amsterdam. 1927.

Data obtained from expense records kept by families in Amsterdam whose annual income ranged from 1,000 florins or less to 19,000 florins or more are used in this study of living costs for 1 year for different social classes. The 212 families considered included high officials, federal employees, municipal employees, employees of private enterprises, tradesmen, and teachers. The families are divided into six groups according to income. Individual families are listed according to size, profession, units of consumption, and age of the heads of the families. Detailed tabulations are given showing income and expenditure according to the subdivisions of the budgets. Of the deficits, which are shown in 97 accounts, 14 were the result of unusual circumstances; 114 accounts show surpluses. The Schwabe-Bauer law as to lodging and Wright's version of Engel's law as to clothing are confirmed by these investigations.

THE HAGUE STATISTISCH BUREAU. (1097)  
ONDERZOEK NAAR DE KOSTEN VAN HET LEVENSONDERHOUD TE 'S-GRAVENHAGE  
IN 1927. Statis. Bur. Gemeente 's-Gravenhage. 's-Gravenhage. 1928.

NETHERLANDS, BUREAU VAN STATISTIEK. (1098)  
HUISHOUDREKENINGEN VAN GEZINNEN IN HET LANDELIJK GEDEELTE DER  
GEMEENTE (1930). [HOUSEHOLD ACCOUNTS IN THE RURAL DISTRICTS OF  
THE COMMUNE.] Statis. Meded., v. 96, 39 pp., illus. Amsterdam.

This report forms an appendix to one made in 1923-24, including the rural districts annexed to Amsterdam in 1920. Expense records of 19 rural and agricultural laborers for 1930 were examined, the same methods being used as in the earlier survey. Seven of these accounts balanced; 12 showed deficits.

#### NORWAY

SAINT-LÉGER, A. DE, and LE PLAY, F. (1099)  
FONDEUR DES USINES À COBALT DU BUSKERUD (NORVÈGE MÉRIDIONALE).  
JOURNALIER DANS LE SYSTÈME DES ENGAGEMENTS MOMENTANÉS D'APRÈS  
LES DOCUMENTS RECUEILLIS SUR LES LIEUX EN 1845. *In* Les Ouvriers  
Européens, ed. 2, v. 3, pp. 54-98. Paris. 1877.

The family described here was one of a group of families in northern Europe characterized by firmly fixed customs regarding the responsibility of the employers to workers, to the family, and to religion. The stem family predominated. This man worked in the foundry but also participated in gardening for home consumption and in subsistence farming during unemployment. At the time of the study, 1845, the household consisted of the head (38), his wife (35), 2 sons (12 and 3), and 2 daughters (10 and 7). Health was excellent; medical service was financed by the foundry. The wife cultivated the garden, looked after the animals, and was a paid harvester. Recreations included hunting, fishing, drinking, picking wild berries, and militia celebrations. Family well-being depended on subsistence farming and patronage from the employer. A fixed code of behavior and paternal authority gave the people a solidarity that helped to bridge crises. Property consisted of animals and tools valued at 157 francs, and furniture and clothing at 565 francs. Income was 1,095 francs, of which 680 francs was in money. Property accounted for 9 francs; subventions, 102 francs; labor,

840 francs; and industries, 145 francs. Food cost 794 francs; household, 108 francs; clothing, 159 francs; moral, recreative, and health needs, 27 francs; and all else, 8 francs. There were no savings. Notes are given on the social make-up of Norway; the agricultural workers and manufacturing plants of Buskerud and the eastern coast of Norway; the temperance societies in southern Norway; the social structure of Denmark; the forests of the Scandinavian mountains, compared with those of the Ural Mountains; and the importance of the salmon among the natural products contributing to the subsistence of the people of the north.

ESCARD, F.

(1100)

PRÉCIS D'UNE MONOGRAPHIE D'UN PÊCHEUR CÔTIER DU FINMARK (LAPONIE-NORVÈGE). OUVRIER CHEF DE MÉTIER DANS LE SYSTÈME DU TRAVAIL SANS ENGAGEMENTS, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS EN 1884 PENDANT L'EXPÉDITION SCIENTIFIQUE DU PRINCE ROLAND BONAPARTE. Les Ouvriers des Deux Mondes (2) 3: 125-142. 1892.

The population of Finmark engaged chiefly in farming and fishing. There was a government general store where people exchanged their produce for necessities. The family of this study (made in the year 1884) consisted of the head (32), his wife (30), his mother (60), his sister (26), 2 daughters (6 and 4), and 2 sons (1, and 2 months). The family was related to another Lapp family of the community which consisted of a widow and two daughters. The adults could read both Finnish and Lapp. The children attended school from the ages of 8 to 15. Illegitimate children were rare. Family life was simple and primitive, healthful, and intelligent. The animals shared the home. The property consisted of a house valued at 70 francs, 2 fishing boats at 278 francs, and 2 cows at 250 francs. Income was 921 francs. Property contributed 17 francs; subventions, 35 francs; labor, 229 francs; and industries, 639 francs. Food cost 966 francs; household, 3 francs; clothing, 28 francs; moral, recreative, and health needs, 31 francs; and all else, 21 francs. There was a deficit of 128 francs. Notes by Prince Roland Bonaparte are given on Lapland and its inhabitants. Many details usually given in a Le Play study are omitted.

NORWAY, STATISTISKE CENTRALBYRAA.

(1101)

SKATTERNES FORDELING EFTER INDTAEGT OG FORSREGELSESBYRDE. [DISTRIBUTION OF TAXES IN NORWAY WITH REGARD TO REVENUES AND EXPENSES OF CONTRIBUTING FAMILIES.] Norges. Off. Statis. 104, 81 pp. Kristiania. 1909.

All of Norway was included in this survey, and data were secured from as many different classes as possible. Detailed expense records for 1906-7 are given for 2 farmers; 12 families of the laboring class, whose incomes varied from 46 kroner to 100 kroner a month; and 18 petty officials, whose incomes varied from 300 kroner to 6,000 kroner a year. The *quet* is the unit of consumption. The survey was made primarily to determine the basis of levying taxes, and the data presented emphasize taxable property.

STORSTEEN, EINAR

(1102)

ET GAARDBUKERBUDGET. [FARMER'S BUDGET.] 82 pp., illus. Kristiania. 1915.

The purpose of this survey was to compare the level of living of a farmer with that of a lower class townsman. The *quet* is the unit of consumption used. Six families dwelling in cities in 1911-12 are compared with six rural families. The food of the latter group cost less and had a higher nutritive value; education and recreation costs were the same; housing costs were less for the farmer; clothing and other expenses were proportionately higher.

NORWAY, STATISTISKE CENTRALBYRAA.

(1103)

HUSHOLDNINGSRÆGNSKAPER FOR HANDELSFUNKTIONÆRER. [HOUSEHOLD ACCOUNTS OF COMMERCIAL EMPLOYEES.] Norges Off. Statis. 6 (44): 44, illus. Kristiania. 1915.

This study is based on expenditure accounts in the year 1912 of 19 low-salaried white-collar employees residing in various parts of Norway. Each account is analyzed separately: 12 of the families had an income of less than 3,000 kroner per annum; 6 had an income of 3,000 kroner or more; while the remaining account is that of an unmarried man without dependents. The unit of consumption is that of a male adult. Those with incomes under 3,000 kroner spent about one-third of their incomes for food; those whose incomes were 3,000 kroner or



more spent about one-quarter. Data are also given for expenditures of a lower class official from 1898 to 1914.

CHRISTIANIA, MUNICIPAL BUREAU OF STATISTICS.

(1104)

HUSHOLDNINGSREGNAKAPER FORT AU ENDEL MINDRE BEMIDLEDE FAMILIER I KRISTIANIA, BERGEN, TRONDHJEM, DRAMMEN, KRISTIANSSAND, OG HAMAR I AARET 1912-13. [HOUSEHOLD ACCOUNTS OF LESS WELL-TO-DO FAMILIES IN KRISTIANIA, BERGEN, TRONDHJEM, DRAMMEN, KRISTIANSSAND, AND HAMAR.] Kristiania. 1915.

Expenditure accounts were kept in 1912-13 by 171 families of the working class in 6 cities of Norway. They were divided into income groups of 1,200 to 1,750 kroner, 1,750 to 2,500 kroner, and 2,500 to 4,000 kroner. The average size of the family in adult equivalents was 5.23. The data confirms Engel's law for food.

NORWAY, STATISTISKE CENTRALBYRAA.

(1105)

JORDBRUK OG FÆDRIFT 1911-15. [STATISTICS OF AGRICULTURE.] Norges Off. Statist. 6 (104): 91-119, illus. Kristiania. 1917.

Expense accounts for 16 rural families in various parts of Norway are given; they were supposedly kept from April 1, 1913, to March 31, 1914, but some of them are incomplete. These families were divided into two groups—those from the east and those from the west. The former paid 45 percent of their income for food, and the latter, 22 percent; both paid 10 percent of their income for clothing; the former paid 14 percent for rent, the latter, 12 percent. Other expenses show little variation.

(1106)

DYRTIDENS VIRKNINGER PAA LEVEVILKAARENE. [EFFECTS OF THE HIGH COST OF LIVING ON THE STANDARD OF LIVING.] Norges Off. Statist. 6 (105): 30, illus. Kristiania. 1917.

This survey was conducted by means of supervised records kept in various sections of Norway. Of the 1,900 received, only 651 were used. These represented farmers, minor officials, merchants, and municipal officials, with annual incomes ranging from 1,750 kroner or less to 7,000 kroner or more. The accounts were kept for August 1916, and the results were compared with records for 1912-13 in order to ascertain the effect of the increase of living costs on standards. Averages are given in kroner per unit of consumption.

(1107)

DYRTIDENS VIRKNINGER PAA LEVEVILKAARENE. [EFFECTS OF THE HIGH COST OF LIVING ON THE STANDARD OF LIVING.] Norges Off. Statist. 6 (no. 124, pt. 2): 75 Kristiania. 1918.

This survey was conducted by means of supervised records kept by 534 families of varying economic status from all parts of Norway. The records covered the months of August 1916 and February 1917. Income ranged from less than 1,750 to 7,000 kroner or more per annum. Tabulations are based on income, size of family, locality, and units of consumption. Emphasis is placed on the relative increase in costs between 1912-13 and 1916-17.

(1108)

HUSHOLDNINGSREGNSKAPER, SEPT. 1918-SEPT. 1919. [FAMILY EXPENSE RECORDS SEPT. 1918-SEPT. 1919.] Norges Off. Statist. 7 (13): 117 illus. Kristiania. 1921.

The statistics given here were compiled from supervised accounts kept from September 1918 to September 1919 by 82 lower and middle-class families of Oslo (Kristiania) and Bergen. Of these families 48 were laborers, 20 were of the lower class officeholders, and 14 were of the upper class officeholders. The incomes ranged from 5,000 kroner or less per annum to 10,000 kroner or more. The laborers spent from 50 to 60 percent of their income for food, 17 to 23 percent for clothing, 3 to 7 percent for housing; the lower class officials spent 47 to 54 percent for food, 12 to 21 percent for clothing, and 4 to 7 percent for housing; the upper class officials spent from 33 to 48 percent for food, 13 to 20 percent for clothing, and 8 to 10 percent for housing.

(1109)

HUSHOLDNINGSREGNSKAP, 1927-28. [FAMILY EXPENSE ACCOUNTS, 1927-28.] Norges Off. Statist. 8 (103): 1-174, illus. Oslo. 1929.

Statistics on the cost of living for workingmen, and for federal employees with approximately the same range of income were compiled from supervised household accounts of 135 laborers and 31 government employees, kept for the period of 1 year (1927-28). These accounts were from residents of Oslo, Bergen,

Trondhjem, Stavanger, and Drammen. The average number of children per family was 2.7. Incomes of laborers ranged from 3,819 to 5,553 kroner per annum; expenditures from 3,743 to 6,075 kroner per annum. The incomes of the employees ranged from 4,666 to 5,717 kroner per annum, and their expenditures from 4,142 to 6,179 kroner per annum. Laborers spent from 370 to 655 kroner per annum on food; employees from 346 to 693 kroner per annum.

## POLAND

WOYCICKI, ALEXANDRE (1110)  
L'OUVRIER POLONAIS. *Réforme Sociale* 79: 433-443; 80: 506-515, illus. 1909.

This article was published in *La Classe Ouvrière dans la Grande Industrie du Royaume de Pologne* in 1909. Of the 11,000,000 inhabitants of Poland, 283,683 were laborers, about half of whom were engaged in textile industries. These laborers had from 3 to 5 children; the average wealth was 500 rubles, in comparison with 1,000 rubles for the Italian and 3,150 rubles for the Englishman. The Pole knew how to work but not how to save. The percentage of illiteracy was 53.6. The housing conditions of the Polish laborer left much to be desired; 38,972 of the 89,817 domiciles were basement or attic rooms. In Prague the average was 4.5 persons to a room. Houses for laborers were neither comfortable nor sanitary. The Polish laborer ate 7 kilos of meat a year, the British laborer 78; the Pole consumed 21 liters of milk a year, the Englishman, 250 liters, etc. For 2 laboring families, each consisting of 2 adults and 3 children, expenditure accounts in the year 1906 are given. Out of an income of 5 rubles, 30 kopecks, for the first family, the weekly expenditure for rent, food, heat, and light was 5 rubles, 29 kopecks, leaving 1 kopeck for clothes, etc. The income of the second family was 7 rubles a week; rent, food, light, heat, and domestic service cost 6 rubles 53 kopecks, leaving 47 kopecks for clothing. In both cases the food was insufficient.

WARSAW, MUNICIPAL STATISTICAL OFFICE. (1111)  
FAMILY BUDGET INQUIRY. 1922. [Original not seen. Summary in International Labour Office, *Methods of Conducting Family Budget Enquiries*, pp. 73-74. Geneva. 1926.]

Six officials and six workmen kept records of their expenditures from November 1 to 28, 1922. The German scale was used for reducing families of different size to units.

POLAND, GŁOWNY UNZAD STATYSTYCZNY. (1112)  
BUDŻETY RODZIN ROBOTNICZYCH 1927. [BUDGETS OF LABORING CLASSES, 1927.]  
*Statystyka Polski* 40 (1): 49, illus. Warszawa. 1930.

This study is based on expense records of 40 laborers from Warsaw, 32 from Lodz, 76 from Basin de Dabrowa, and 44 from Upper Silesia, kept during 1927. The families are put in four groups according to income: Less than 600 zł per annum; 600 to 899 zł per annum; 900 to 1,199 zł per annum; 1,200 zł or more per annum. Tables give the annual average income in zlotye in each region, the average size of the family, and the average number of consumption units for each family. Each section is considered separately.

OTREBSKI, EDWARD (1113)  
BUDŻETY DOMOWE RODZIN ROBOTNICZYCH W LATACH 1927-28. [BUDGETS OF LABORERS IN 1927 AND 1928.] *Odbitka z Kwartalnika Statystyka Pracy*. 18 pp., illus. Warszawa. 1931.

The expense records of 69 families, presumably Polish of the lowest class, are here given, for 1927 and 1928. These families averaged 3, 4, or 5 members; the incomes ranged from 599 to 1,200 zł or more per annum. The survey shows a gradual amelioration of living conditions, with reference both to total amount of expenditures and units of consumption, and for clothing and housing as well as for food. There was a decrease in the amount spent for foods of little nutritive value; more albumens and fewer carbohydrates were used, and a smaller percentage of the total income went for food in 1928 than in 1927 or the preceding years.

POLAND, CENTRAL OFFICE OF STATISTICS OF THE POLISH REPUBLIC. (1114)  
BUDGETS DES FAMILLES OUVRIÈRES; RÉSULTATS DE L'ENQUÊTE EFFETUÉE À VARSOVIE, À LODZ, DANS LE BASIN DE DABROWA ET EN HAUTE-SILÉSIE, 1927, 1928, 1929. V. 40 (1-2). Warszawa. 1930.



POLAND, GLOWNEGO URZEDU STATYSTYCZNEGO. (1115)  
 WIADOMOSCI STATYSTYCZNE. [STATISTICAL INFORMATION.] pp. 443-444,  
 illus. Warszawa. August 5, 1932.

From the expense records of 369 laboring-class families of Poland the average income and expenditures for 1927, 1928, and 1929 were determined. The average size of the family was 4.9 in 1927, 4.8 in 1928, and 5 in 1929. The average number of adult-male consumption units per family was 3.7 in 1927 and 1928, and 3.9 in 1929. The average annual income per family was 3,014 zł in 1927, 3,087 zł in 1928, and 3,524 zł in 1929; the expenditures were 2,995 zł in 1927, 3,083 zł in 1928, and 3,490 in 1929.

POLAND, CENTRAL OFFICE OF STATISTICS. (1116)  
 BUDGETS DES FAMILLES OUVRIÈRES 1928-29. T. 40, Fasc. 2, p. 51. Warszawa.  
 1933.

SKRZYWAN, WACŁAW (1117)  
 PROBA SZACUNKU DYNAMIKI KONSUMCJI ROBOTNICZEJ W POLSCE. [A TENTATIVE  
 ESTIMATE OF THE DYNAMICS OF WORKING CLASS CONSUMPTION IN  
 POLAND.] *Konjunktura Gospodarcza* 3 (12): 320-327. 1930.

This study, published in 1930, presents an analysis of the percentage of various items in a workman's expenditures, which reveals that those percentages vary with the total amount of his wages, and makes possible the construction of a regression line. An index of the total pay roll for the country is also constructed on the basis of the production and real wage indexes, and the workman's average income is estimated. The percentage of expenditure is then estimated from the regression line and an index for each class of consumption is constructed. These indexes show a striking resemblance to analogous empirical series. The author's conclusion is that the sensitivity of various branches of industry to cyclical variation is largely due to the elasticity of demand for their products.

OTREBSKI, EDWARD (1118)  
 WYNIKI BADANIA BUDŻETÓW DOMOWYCH PRACOWNIKÓW UMYSTOWYCH PRZE-  
 PRAWIONEGO W MAJU 1932 R. [THE RESULTS OF THE STUDY OF BUDGETS  
 OF MENTAL WORKERS MADE IN MAY 1932]. *Statystyka Pracy* 11 (4):  
 345-366, illus. 1932.

Expense accounts for May 1932 are given here for the families of 71 workers in Warsaw, of whom 19 had less than 149 zł, 33 had 150 to 249 zł, and 19 had more than 249 zł. The average size of family was 3.89. Since May is not a typical month for many groups of expenditures, such as furnishings and clothes, the average expenditure on these items for the preceding 16 months is also given. This study is both detailed and complete. Comparisons are drawn with manual laborers, who were studied earlier by the same author. (*Budżety Domowe Rodzin Robotniczych w Latach 1927: 1928. Warszawa. 1931.*) The mental workers spent only 28.2 percent of their total income for food, as compared with 54.9 percent for the poorer manual laborers. The proportion of expenditure for food in the budgets of the mental workers diminished in proportion as the income of the family rose. The proportion of expenditure for cultural needs in the accounts of the mental workers was only 1.8 times as great as in the accounts of the hand workers; while the proportion of other expenditures, except that for clothing, is much more than 1.8 times as great; higher intellectual standards would thus not seem to account for the difference between the two sets of accounts. The nutritive and calorific values of the dietaries of the mental workers were found to be entirely satisfactory. An increase in the consumption of albumens and fats was shown to coincide with increase in income. The value of foods furnished is given but the method is not defined.

#### PORTUGAL

PORTUGAL, MINISTÉRIO DO TRABALHO E PREVIDÊNCIA SOCIAL. (1119)  
 INQUÉRITO ÀS CONDIÇÕES DA VIDA ECONÓMICA DO OPERÁRIO PORTUGUÊS.  
 Bol. Previdência Social 1 (2): 101-143. 1917. [Summarized in U. S.  
 Dept. Labor, Bur. Labor Statis. *Monthly Labor Rev.* 5: 137-138. 1917.]

Expense questionnaires were returned from 538 heads of workmen's families in Portugal in 1916, chiefly from Lisbon, Coimbra, and Oporto. The families having less than four members each were divided into 11 income groups, the average weekly income for the lowest being \$1.81, and the average expenditure \$2.62; for the highest, income \$13.50, expenditure \$11.28. The families having

four or more members were divided into 12 income groups, the average income and expenditure for the lowest being \$1.78 and \$3.40, and for the highest \$16.75 and \$13.17, respectively. In the families having less than four members, the expenditure exceeded the income in the 3 lowest income groups; in the families having four or more members, expenditure exceeded income in the 4 lowest groups. The average income for all families was \$7.44, the average expenditure \$6.73, and the average size of family 4.3 persons. Expenditures for various items are given for each group, but no percentages are computed. In every case food absorbed more than half the total expenditure. Food prices for the chief items are given for Lisbon, Coimbra, and Oporto for 1914, 1916, and 1917.

## RUMANIA

RADU, V. L. (1120)

IL CONTADINO RUMENO E LA PROPRIETÀ DELLA TERRA IN RUMANIA. [THE RUMANIAN PEASANT AND LAND OWNERSHIP IN RUMANIA.] Riforma Sociale 3: 557-575. Torino. 1896.

This study of the condition of the Rumanian peasant preceded the redistribution of state lands. The houses consisted usually of straw-thatched cabins with a single room; the families included 4 to 5 children. Clothing was worn day and night until it fell to pieces. Food was poor in quality and insufficient in quantity, consisting usually of polenta and vegetables. The working day was from 14 to 16 hours, the average income 0.64 centesimi (about 10 cents). There was much unemployment. Only in rare cases did the income reach 270 lei a year. Of the 0.64 centesimi, 0.34 was spent for food and 0.05 for tools. The data given refer to the year 1895.

CHICOS, STEFAN

(1121)

MONOGRAFIA STĂREI MESIRICLOR IN PITESTI. Pitesti. 1909.

RUSSIA <sup>70</sup>

ROZNATOVSKI, ANDREI (1122)

PROGRESS OF THE NEW AGRICULTURE, BASED ON THE RULES OF THE SECRET ADVISOR JOHANNES CHRISTIAN SHUBART VON KLEEFELD. University Press of Ridiger and Clodia. Moscow. 1795.

This study, published in 1795, discusses the breaking up of large villages into smaller ones or isolated farms, and the establishment of separate peasant households or farms as compared with the mir or commune. An estimate of income, expenditures, and savings is given for a peasant household in the Tula district if the farm were reorganized for rotation with grass crops. These data were obviously based on expenditures of existing households. Estimates are presented on the quantity and value of wheat, rye, oats, seed, buckwheat from 5 acres of land, and of fiber and seed from 300 pounds of flax, and on the cash income from sheep, butter, poultry and eggs, pigs, and cattle. Expenditures allow for the hire of a farm hand, horseshoeing, house maintenance, and taxes. The study does not include data on meat, poultry, butter, eggs, or garden vegetables for family use.

AUTHOR NOT ASCERTAINED.

(1123)

HOMESTEADS, OR A NEW METHOD OF SETTLING PEASANTS AND OBTAINING REVENUES FROM THEM FOR LANDOWNERS. St. Petersburg. 1801.

Included in this study, published in 1801, is a description of peasant farms in the Zvenigorodski district with a detailed account of income and expenditures in cash and in kind for one household.

LE PLAY, F., and DANILOFF, M.

(1124)

FORGERON ET CHARBONNIER DES USINES À FER DE L'OURAL (RUSSIE SEPTENTRIONALE). TÂCHERONS ET OUVRIERS-PROPRIÉTAIRES DANS LE SYSTÈME DES ENGAGEMENTS FORCÉ, D'APRÈS LES DOCUMENTS RECUEILLIS SUR LES LIEUX EN 1844. In *Les Ouvriers Européens*, ed. 2, v. 2, pp. 99-141. Paris. 1877.

This is a study of serfdom applied to the industrial process; the workers were required to labor exclusively for the lord proprietor who in turn must furnish them with means of existence. The workers were divided into those who worked by hand and those who used horses. This family belonged to both. In 1844, the period of the study, it consisted of the blacksmith (40), his second wife (27), a son, a coal hauler (19), three other sons (11, 9, and 1), and a daughter (7).

<sup>70</sup> With the exception of the analyses of the Le Play monographs for Russia, the analyses presented in this section are based on the sources cited on p. 25.



Good behavior was insured by the strength of family bonds and by a close surveillance on the part of the lord. Two sons had an elementary education. Health was good; medical service was furnished by the lord. Work was suspended in the summer, and the families went to the mountains to gather winter forage for the beasts. Other recreations were connected with family and religious customs. Property consisted of a house valued at 1,210 francs, animals and tools 408 francs, and furniture and clothing 760 francs. Income was 1,166 francs, of which 736 francs was in money. Property accounted for 83 francs; subventions, 107 francs; labor, 652 francs; and industries, 224 francs. Food cost 486 francs; household, 156 francs; clothing, 262 francs; moral, recreative, and health needs, 65 francs; and all else, 162 francs. Savings were 36 francs. Notes are given on the two principal types of industrial organization in Russia (free labor and serf factories) and the feudal dues in the mineral industry.

LE PLAY F., and RIABOFF, R.

(1125)

CHARPENTIER ET MARCHAND DE GRAINS DES LAVERIES D'OR DE L'OURAL (SIBÉRIE OCCIDENTALE). JOURNALIER ET OUVRIER CHEF DE MÉTIER DANS LE SYSTÈME DES ENGAGEMENTS FORCÉS, D'APRÈS LES DOCUMENTS RECUEILLIS SUR LES LIEUX EN 1844. *In* Les Ouvriers Européens, ed. 2, v. 2, pp. 142-178. Paris. 1877.

This carpenter (a highly ranked occupation in Russia) worked 220 days yearly for his feudal lord and also had an important trade in flour and grain. He owned a home and several hectares of land. When the study was made in 1844 the family consisted of the husband (39), his wife (40), 2 daughters (16 and 1), and 2 sons (11 and 9). Moral and religious habits were strong. Health was excellent; medical care was furnished by the lord. Recreations were based on family and religious customs. Family well-being was protected by feudal obligations, family strength, moral character of the head, and family property. The latter consisted of 1,474 francs in real property and working equipment and 440 francs in furniture and clothing. Income was 816 francs, of which 451 francs was in money. Property accounted for 76 francs; subventions, 117 francs; labor, 306 francs; and industries, 317 francs. Food cost 385 francs; household, 104 francs; clothing, 180 francs; moral, recreative, and health needs, 30 francs; and all else, 60 francs, 57 francs being saved. Separate notes are given concerning the natural resources of the northern Ural Mountains; the social level which the intelligent laborer could attain; land holdings and inheritance; transportation in the mines of Russia; and the making of fermented drinks.

JURAVSKI, D. P.

ON SOURCES AND USES OF STATISTICAL ACCOUNTS. 1846.

(1126)

This study, published in 1846, in comparing the material resources of different classes of the population, presents data on expenditures showing the percentage spent for necessities, one for a family with a landed estate and another for a middle-class family.

SAINT-LÉGER, A. DE, and LE PLAY, F.

(1127)

PAYSANS, PORTEFAIX ET BATELIERS ÉMIGRANTS (À L'ABROK) DU BASSIN DE L'OKA (RUSSIE CENTRALE). PROPRIÉTAIRES-OUVRIERS DANS UN SYSTÈME D'ENGAGEMENTS FORCÉS, TOUCHANT DÉJÀ DE PRÈS AU TRAVAIL SANS ENGAGEMENTS. LES MEMBRES ÉMIGRANTS TRAVAILLANT TEMPORAIREMENT EN QUALITÉ DE JOURNALIERS OU DE TÂCHERONS DANS LE SYSTÈME DES ENGAGEMENTS MOMENTANÉS, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN JUIN 1853. *In* Les Ouvriers Européens, ed. 2, v. 2, pp. 179-231. Paris. 1877.

This patriarchal family paid feudal dues of 69 francs cash for 16 hectares of land, which supplied the basic needs. Two migrant members of the family, who made free contracts as boatmen, porters, and tradesmen, provided the remainder of the income. In 1853 when the study was made, the family consisted of the chief (58), his wife (58), son (28), daughter-in-law (20), granddaughter (6 months), son (22), his wife (22), granddaughter (1), son (19), pregnant daughter (19), and three sons (17, 14, and 9). The family was strong; the people were intemperate, and debts were repaid slowly. Illegitimate children were well treated. Health was good. Recreations were connected with family and religious life. Well-being rested on family organization, the village community, and the feudal lord. Property consisted of 3,070 francs in land, money, and

equipment, and 943 francs in furniture and clothing. Income was 1,795 francs, of which 702 francs was in money. Property accounted for 152 francs; subventions, 54 francs; labor, 1,072 francs; and industries, 517 francs. Food cost 738 francs; household, 155 francs; clothing, 506 francs; moral, recreative, and health needs, 113 francs; and all else, 283 francs, there being no savings. Notes are given on peasant migration; the Artels in Russia; the influence of the feudal lord on family solidarity; the hand grinding of grain; the cost of construction of peasant houses; the administration of a feudal estate; the influence of army service on village labor needs; the custom of hoarding bullion among the peasants; new family units breaking off from the patriarchal family; and the tendencies toward reform of the feudal system.

SAINT-LÉGER, A. DE, and LE PLAY, F.

(1128)

BACHKIRS, PASTEURS DEMI-NOMADES DU VERSANT ASIATIQUE DE L'OURAL (RUSSIE ORIENTALE). OUVRIERS CHEFS DE METIER ET PROPRIÉTAIRES DANS LE RÉGIME MIXTE DES NOMADES ET DES PEUPLES SÉDENTAIRES, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN SEPTEMBRE 1853. *In Les Ouvriers Européens*, ed. 2, v. 2, pp. 1-46. Paris. 1877.

The family dealt with in this study made in 1853, traveled about with their flocks in the grass season. Social status was measured by the number of wives and milk animals. This family, which had two milk mares, consisted of the head (59), his second wife (30), a son (11), three daughters (9, 6, and 1), and the head's brother and sister-in-law. The tempo of life was slow, the mores strong, and health conditions good. Their well-being was based on strong customs concerning the inalienability of property, patriarchal family organization, and customs of community responsibility. Property consisted of dwelling and land valued at 565 francs; animals, 336 francs; working equipment, 145 francs; and furniture and clothing, 426 francs. Income was 643 francs, of which property contributed 58 francs; subventions, 41 francs; labor, 395 francs; and industries, 149 francs. Food cost 444 francs; household, 53 francs; clothing, 93 francs; moral, recreative, and health needs, 35 francs; and all else, 16 francs, there being no savings. Notes are given on the physical environment of the people; their relations with other Mohammedans; the tents constructed during nomad life; religious practices; marriage customs; the authority of the chief of the family; government taxes; and methods of making fermented liquors.

— and LE PLAY, F.

(1129)

PAYSANS ET CHARRONS (À CORVÉES) DES STEPPES DE TERRE NOIRE D'ORENBOURG (RUSSIE MÉRIDIONALE). PROPRIÉTAIRES-OUVRIERS ET OUVRIERS CHEFS DE MÉTIER DANS LE SYSTÈME DES ENGAGEMENTS FORCÉS, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN SEPTEMBRE 1853, AVEC LE CONCOURS DE M. ET DE MME. N. TIMACHEFF. *In Les Ouvriers Européens*, ed. 2, v. 2, pp. 47-98. Paris. 1877.

A part of the land was cultivated for themselves by this family, who also worked 125 days a year for the lord. In 1853, the time of the study, the household consisted of the father (61), three sons (30, 25, and 22), their wives (30, 26, and 24), son and daughter of the eldest (3 and 1), and an unmarried daughter (15). Education was scanty, and recreations were noncommercialized. Health was excellent; the lord furnished free medicine. The family all did agricultural labor. Well-being was based on the extent of land available, family cooperation, the right of seigniorial property, and subventions and help from the lord. Property consisted of dwelling and land valued at 1,345 francs; money, 97 francs; animals, 523 francs; working equipment, 289 francs; and furniture and clothing, 714 francs. Income was 2,492 francs, of which 218 francs was in money. Property accounted for 117 francs, subventions, 91 francs; labor, 1,522 francs; and industries, 761 francs. Food cost 764 francs; household, 173 francs; clothing, 330 francs; moral, recreative, and health needs, 49 francs; and all else, 1,175 francs. There were no savings. Notes are given on the distinction between the "abrok" and the "corvés"; the "tiaglo"; grain cultivated and its use; the forests; the agricultural system, its economic organization and net proceeds; the feast and fast days; religious, marriage, and recreative practices and their costs; and the money and personal property owned individually.



WILBOIS, A.

(1130)

BORDIERS ÉMANCIPÉS EN COMMUNAUTÉ RURALE DE LA GRANDE RUSSIE. OUVRIERS-PROPRIÉTAIRES, CONTINUANT À VIVRE EN COMMUNAUTÉ RURALE JUSQU'EN 1910, ÉPOQUE DU REMBOURSEMENT TOTAL DE LA TERRE QUI LEUR A ÉTÉ CONCÉDÉE EN 1861 ET QU'ILS POSSÉDERONT ALORS EN TOUTE PROPRIÉTÉ, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN 1876 ET EN 1884. Les Ouvriers des Deux Mondes (2) 1: 56-112. 1887.

This study, made in 1876 and in 1884, illustrates the working out of the emancipation act. Land was purchased by the State at 267 francs per share when the serfs were freed in 1861, for which each male paid 16 francs yearly to reimburse the lords. Under the communal regime the land was divided according to the number of mouths. This particular family belonged to the old patriarchal type and consisted of the respected head (60), his wife (50), eldest son (25), his wife (24), their son (3), the second son (21), his wife (19), and the head's daughter (14). Health was good. The three men worked for their old lord. The women also worked for the lord and other property owners. The family all helped to cultivate the garden and care for the animals. Recreations were mainly noncommercialized. Well-being had been assured by the feudal system, and now rested on community organization. Property consisted of dwelling valued at 390 francs; stables, 130 francs; land rights, 2,054 francs; animals, 534 francs; tools, 192 francs; money, 46 francs; and furniture and clothing, 930 francs. Income was 1,427 francs, of which 527 francs was in money. Property contributed 182 francs; subventions, 56 francs; labor, 917 francs; and industries, 273 francs. Food cost 533 francs; household, 148 francs; clothing, 496 francs; moral, recreative, and health needs, 69 francs, and all else, 144 francs. Savings were 38 francs. Notes are given on the emancipation act; the means of paying back property owners for their land; and the material and moral results of emancipation in Russia.

RUSSOV, A. A.

(1131)

TRANSACTIONS OF THE STATISTICAL DIVISION OF THE CHERNIGOV ZEMSTVO. pp. 123-148. 1877.

COMMISSION FOR THE INVESTIGATIONS OF HOME INDUSTRY IN RUSSIA.

(1132)

TRANSACTIONS. v. 2-10. 1879.

This early American study, published in 1879, describes the studies of family living made in this early period and presents original data on the expenditures of three families, a poor, a middle-class urban family, and a well-to-do peasant family.

HOURWICH, I. A.

(1133)

THE ECONOMICS OF THE RUSSIAN VILLAGE. Columbia Univ. Studies Hist., Econ., and Pub. Law, v. 2, no. 1, 182 pp., illus. New York. 1892.

The appendixes of this historical survey of Russian village life include some expense records of typical peasant households. Figures are given for one family of medium standing for 1879, when crops were good. The family, which consisted of seven persons, owned a house, 40 acres of land, and livestock, had a total income (both in money and in kind) of 591 rubles, and spent in all 528 rubles, of which 212 rubles went for food. The method of estimating income and expenditure in kind is not stated. The second family was economically well off, had 10 members, and received an income of 1,301.25 rubles, of which 392.05 rubles went for food. The third family was poorly situated economically; it consisted of eight persons and had an income of 241.80 rubles, of which 111.92 rubles were spent for food.

SEMIONOV, P. P.

(1134)

SYMPOSIUM OF MATERIALS FOR THE STUDY OF THE RURAL AGRICULTURAL COMMUNE. v. 1, p. 139. 1880.

In the course of an investigation of 20 communes of the Muraevenska volost, Dankovski uyezd, Razan guberniya, sponsored in 1877-78 by Semionov, six households belonging to various classes of a single village were studied. These were representative of different groups according to their wealth. His work may be judged on the basis of one of his accounts as follows:

A self-sufficing household, consisting in 1861 of six census persons, was broken up in 1869 by the uncle and his nephew. The nephew left with two census persons and a third of the property. Then, in the remaining household, in 1872 the oldest son was forced out by his father, taking with him one person's share of land, but no additional property. In 1876 a second son was separated on the same conditions. In both cases domestic disagreements of the wives were the causes of the separation. The household described is that of the first son, who left in 1872. It was composed in 1880 of 2 children under 12 years and 2 adults.

The inventory as given in rubles included land, stone cottage, farm buildings, cattle (1 cow, 3 sheep with lambs), poultry, furniture, and clothes.

The income (divided into that from owner's land and that from rented land) was from rye, millet, oats, hemp, cattle, poultry raising, labor and management of the head of the family as a hired workman and supervisor, his keep, and the earnings of his wife.

The expenditures included taxes and levies, rent for land, cost of cultivation, hire of shepherd, keep of householder, flour for the family, other food items, footgear, and clothing.

The stone cottage, which cost 200 rubles, was built partly from savings and partly from borrowings (70 rubles) from the landlord in 1878.

The study is very brief, its figures are rounded off, and items of expenditures are not subdivided according to any groupings of wants. In the account of production income and expenditures, attention is given only to final totals expressed in units of value. Although it brings in household income and expenses, it omits many important items, such as allowances for fodder and seed.

Soudakov. (1135)

DE L'ALIMENTATION DES OUVRIERS. Zdorovié. 1881.

Poliak. (1136)

RÉSULTATS DE L'ANALYSE CHIMIQUE DES REPAS À 0.10 C. DES RESTAURANTS À BON MARCHÉ DE VARSOVIE. Vestnik Obshchestvennoi Hygieni. 1882.

Pokrovski, V. I. (1137)

HISTORICO-STATISTICAL DESCRIPTION OF TVER GUBERNIYA 1: 51-55, 111. 1883.

This description of an average Tver peasant household published in 1883, gives in great detail an inventory of the family possessions, their expenditures, and the income from their farm. Nonfarm income is not given and receipts and expenditures do not balance.

Skibnevski. (1138)

NUTRITION NORMS OF PEASANTS OF THE MOJHAISKI UYEZD. Trans. 7th Meeting of Zemstvo Physicians. Moscow. 1884.

Galine. (1139)

QUANTITÉ ET QUALITÉ DE LA NOURRITURE DES PAYSANS (DE QUELQUES VILLAGES) DU DISTRICT D'AKKERMAN. Trav. Soc. Russe de Surveillance de la Santé Publique. 1885.

Kovalkovski. (1140)

MEDICAL INSPECTION DURING THE CONSTRUCTION OF THE RAILWAY FROM JHLOBIN TO PINSK. Soc. Protect. Natl. Health Trans. 1885.

Bogdanoff. (1141)

ESSAI D'ANALYSE QUALITATIVE ET QUANTITATIVE DE LA NOURRITURE DES PAYSANS DU DISTRICT DE KIRSANOV. Medizinskoe Obozrenie. 1887.

Peretz, A. (1142)

PRÉCIS D'UNE MONOGRAPHIE DE L'ARMURIER DES MANUFACTURES IMPÉRIALES DE TOULA (GRANDERUSSIE). OUVRIER-PROPRIÉTAIRE ET CHEF DE MÉTIER DANS LE SYSTÈME DU TRAVAIL SANS ENGAGEMENTS. Les Ouvriers des Deux Mondes (2)1: 112-132. 1887.

This monograph, published in 1887, deals with the armorers of Toula (formerly employed in the imperial factory under state jurisdiction) after the serf emancipation in 1861. This worker (a patron) employed 5 or 6 men in a shop where he sold his products at retail. The family consisted of the head (50), his wife (47), 2 daughters (30 and 26), and a son (23), 9 children having died. They had some education. There was a free state school. Morals and health were good. The son helped his father. The two daughters occasionally sewed by the day. Recreations were mostly noncommercialized. Their well-being depended on the work of the father and son. Property consisted of dwelling and 33 acres of land valued at 2,600 francs; money, 780 francs; animals, 34 francs; tools, 385 francs; and furniture and clothing, 1,566 francs. Income was 1,414 francs. Property was credited with an income of 182 francs; work, 932 francs; and industries, 300 francs. Food cost 584 francs; household, 281 francs; clothing, 157 francs; moral, recreative, and health needs, 38 francs; and all else, 4 francs. Savings were 350 francs, of which 270 francs were placed to the credit of the son to enable him to become established.



- KATAEV, I., and FILEMONOV, E. (1143)  
MATERIALS ON THE DESCRIPTION OF OCCUPATIONS IN VIATKA GUBERNIYA.  
1: 82-86. (1889); 5:113-114 (1893). Viatka.
- CHELCHOWSKI. (1144)  
GENS DE MÉTAIRIE DU GOUVERNEMENT DE PLOTZK. Zdrowie. 1890.
- MALCHINE. (1145)  
TOPOGRAPHIE MÉDICALE DU DISTRICT DE RIASAN. Zemsky Vrach. 1890.
- SHESHUNOFF. (1146)  
MATERIALS ON THE INVESTIGATION OF LAND UTILIZATION AND ECONOMIC LIFE  
OF THE RURAL POPULATION OF THE IRKUTSK AND YENISEISK GUBERNIYAS.  
2: 177-236 (1890); 4:342 (1893).
- Sheshunoff in Yeniseisk guberniya (1890-93) made statistical analysis his primary aim. Uniform data from households were studied by large-scale methods. Questionnaires were sent to correspondents of the statistical office. Of 85 blanks sent out, 35 were returned filled in; and of these, 20 were analyzed in tabular form, giving a fairly full presentation of the details of the economic life of the families described. In the first division of the tables are placed data on peasant property—cattle, buildings, agricultural implements, vehicles and harness, furniture, dishes, etc. In the second division 198 items of expenditure are listed, somewhat similar to an American farm-management study. Housing expenditures as well as those for farming purposes were included. Each of the 261 items was listed in money and in kind. There was some confusion in the expenditure division, but the study concedes nothing in fullness and detail to classic European investigations.
- FEDOROV. (1147)  
LIFE ON THE SOUTHERN COAST OF THE WHITE SEA. Soc. Russian Physicians, Trans. 1892.
- LÉBÉDEV. (1148)  
INFLUENCE DES RAFFINERIES SUR LA SANTÉ DES OUVRIERS DE CES USINES.  
Vestnik Obshchestvennoi Hygieni, Soudebnoi i Practicheskoi Meditsini.  
1892.
- SAVELIEV. (1149)  
NUTRITION NORMS OF PEASANTS OF ZEMLIANSKI UYEZD, VORONEZH GUBERNIYA. Herald Social Hyg. 1892.
- CHTCHERBAKOV. (1150)  
COMPOSITION DES REPAS DU RESTAURANT MUNICIPAL POUR LES VAGABONDS  
DE ST. PÉTERSBOURG. Jour. Soc. Russe de Surveillance de la Santé  
Publique. 1893.
- IGHNATIÉV. (1151)  
RESULTATS DU FONCTIONNEMENT DU RESTAURANT MUNICIPAL POUR LES  
VAGABONDS DE ST. PÉTERSBOURG, ORGANISÉ AUPRÈS DE L'ABATTOIR.  
Jour Soc. Russe de Surveillance de la Santé Publique. 1893.
- MARÈS. (1152)  
L'ALIMENTATION DES MASSES POPULAIRES EN RUSSIE. Rousskaia Mysl.  
1893.
- SAVTCHENKO. (1153)  
VALEUR NUTRITIVE DES REPAS DES RESTAURANTS À BON MARCHÉ, À VARSOVIE.  
Vrach. 1893.
- TICHKOV. (1154)  
COMPOSITION DE LA RATION DE MATELOTS SUR TERRE. Médzinskió Pribav-  
lénie k Morskomoú Sbornikou. 1893.
- ALIMENTATION DES OUVRIERS DU PORT DE CRONSTADT. Compt. Rend. de la  
Soc. des Méd. de la Marine de Cronstadt. 1894. (1155)
- ZALESKY. (1156)  
CONTRIBUTION À LA RÉGLEMENT DE LA RATION ALIMENTAIRE DES OUVRIERS  
DES MINES. Tomsk. 1894.
- IVANOV. (1157)  
ALIMENTATION DES OUVRIERS AUX TRAVAUX DE CONSTRUCTION. St. Péters-  
bourg. 1895.

RÈOUTOVSKY. (1158)  
LA VIE DES OUVRIERS DES MINES D'OR À TOMSK. Trav. Soc. Nat. et Méd.  
de Tomsk. 1895.

FAVRE. (1159)  
SANITARY CONDITIONS OF PEASANTS OF BOROBICHEVSKI UYEZD, NOVGOROD  
GUBERNIYA. Soc. Protection of Natl. Health. 1896.

PELTYNÉ. (1160)  
ALIMENTATION DE LA POPULATION PAYSANNE POLONAISE. Vestnik Obshchest-  
vennoi Hygieni, vols. 11 and 12. 1896.

OUSPENSKY. (1161)  
ANALYSE DES REPAS DE QUELQUES RESTAURANTS D'ÉTUDIANTS À KIÉV.  
Jour. Soc. Russe de Surveillance de la Santé Publique. 1897.

VORONEZH STATISTICAL BUREAU. (1162)  
TABULAR SYMPOSIUM ON 12 UYEZDI OF VORONEZH GUBERNIYA. Voronezh.  
1897.

The Voronezh Statistical Bureau, which began its investigations in 1884, differed from others in the introduction of monetary values for all incomes and expenditures, whether in goods or services. This practice was not fully developed at once, but developed gradually out of two needs: (1) That for a complete account of the most important characteristics of the household and farmstead as a nucleus for the study, and (2) the statistical need for a single unit of measurement which could be subdivided. Eventually all items were reduced to money values.

The first time this new method was used in the Zadonski uyezd it gave such satisfactory results that mass accounts of peasant households within definite limits became the basis of all later studies of the Voronezh Statistical Bureau. Further developments led to the adoption of a form covering the following items under money income: (1) Value of different kinds of labor on the farm computed in money for each person; (2) piecework done for others; (3) day labor done for others for money payment; (4) alms or gifts collected (men, women, in kind and in money); (5) amount of money obtained by sale of horses, oxen, cows, sheep, pigs, rye, wheat, flour, oats, millet, buckwheat, barley, sunflower seed, other grains, from renting land, fodder, wood (forest and building), poultry, garden vegetables, etc., eggs, butter, down, feathers, wax, cloth, bristles, wool, and hemp, etc.; (6) income from unusual sources (pensions, salary for public service, rewards, shares, and renting rooms); (7) income from labor in trade and industrial undertakings (releasing land, renting a mill, keeping a livery stable, money lending, contracting, etc.); and (8) income from shares in commercial and industrial establishments.

Separate figures were secured on money spent during a year on purchase of (1) grain, meat, pork, millet, fish, and other food, horses, oxen, cows, sheep, pigs, fodder, wood, and lumber for buildings, clothing and footgear, wheels, carts, plows, scythes, and other harness, salt, kerosene, tar, utensils, etc.; (2) money spent on weddings (ceremonies, vodka, and other expenses); (3) funeral expenses; (4) other religious ceremonies; (5) military service; (6) payment of old debts; (7) interest on debts; (8) vodka; (9) tea; and (10) cultivation of land and harvesting of grain.

In addition to the items listed, the study also contained questions on credit and the value of the remainder of the seed grains. It contained not only expenditure items but also the usual questions of the farmstead census, from which the payments in kind could be determined by computation. The census takers questioned 176,821 household heads.

KALUGA STATISTICAL BUREAU. (1163)  
STATISTICAL DESCRIPTION OF KALUGA GUBERNIYA. v. 1, issue 2. Kozelski  
Uyezd. Kaluga. 1898.

In this study, published in 1893, this bureau, under the direction of A. Peshekhonov, instead of making a complete census as the Voronezh bureau had done, used the sampling method. The attempt was to study every tenth household, but the result was 1,313 out of 15,821 households, or 8 percent. Mechanical selection was used. The program was considerably less detailed than that of the Voronezh bureau, as it took into account only the more important divisions of property and of income and expenditures. A large part of the money income and expenditure was calculated from norms without direct notation for the individual family. The chief significance of this study is that it considered factors completely ignored



by previous studies, but which received more general consideration very much later. The new items thus introduced were the following: (1) An attempt to take account of the labor done by the family for the household; (2) the relating of the expenditures for living to farm-settlement problems, i. e., evaluating types of land colonization; and (3) an attempt to use accounting methods so as to make possible the computation of household income apart from the farm as a business, and the determination of the relationship of production to consumption expenditures.

OSSADCHI, G. I. (1164)

LAND AND ITS CULTIVATORS ON THE SOUTHWEST BORDER (ZVENIGOROD UYEZD, KIEV GUBERNIYA). Kiev. 1899.

STATISTICAL BUREAU OF THE ZEMSTVO OF KAZAN GUBERNIYA. (1165)

BRIEF PRELIMINARY REPORT ON THE PEASANT BUDGET. Issues 1, 2, and 3. 1899.

ZALESKI, V. F. (1166)

PEASANT BUDGETS. Issues 1 and 2. Kazan. 1899.

ALAVDINE. (1167)

ALIMENTATION ET MORBIDITÉ DES OUVRIERS DES ATELIERS D'IMPRESSION SUR INDIENNES À IVANOVVO-VOZNESSENSK, GOUVERNEMENT DE VLADIMIR. Vestnik Obshchestvennoi Hygieni, Soudebnoi i Prakticheskoi Meditsini. 1900.

SHCHERBINA, F. (1168)

PEASANT BUDGETS. Pub. of Independent Econ. Soc. 1900.

In this work, published in 1900, Shcherbina, following his basic idea of breaking up general phenomena into particulars, developed a new, very detailed schedule for the study of the single peasant household, covering goods used in kind as well as money income and expenditure. He paid particular attention to household inventory, including household furniture. His schedule took several hours to fill out and gave a complete picture of the household. The Voronezh statisticians, with the aid of school teachers and others, in Voronezh, Ostrogozh, and Zemlansk uyezds succeeded in getting 300 questionnaires filled out, of which 230 were worked up and published by Shcherbina to show expenditures for family living. These were distributed as follows: Composition of family, 29 items; expenses for absences of members of family from home, 12; hired laborers, 4; distribution of shares of land by strip, 4; rental, 10; composition value and cost of buildings, 28; enumeration and value of working equipment, 19; enumeration and value of furniture, utensils, ikons, pictures, objects of comfort, material for clothing and footgear of men and women, bedding, 222; data on home production consumed for farm or household purposes (in units in kind and units in value, with division into expenditures in money and in kind), 77; the same as above for purchased items, 92; data on gross income in units of kind and units of value with division of receipts into kind and money, 84; account of stores in existence at beginning of the year, 3; account of things taken on credit, loans, and arrears, 2; and balance of income, expenditure, and credit relations, 28.

Shcherbina's treatment of data shows the influence of the extent of landholding and of the size of household on the living expenditures of families and on their household inventories. Furthermore, it establishes physiological norms of consumption and compares the data of different Russian studies to one another and to that secured in foreign investigations. The quet was used as a unit of comparison. This study played the same role in Russian statistics that the studies by Duclap, Le Play, and Engel did for western Europe.

KUZNETSOV, V. (1169)

FOOD CONSUMPTION NORMS OF THE PEASANT POPULATION OF OLONETSK GUBERNIYA. Address to the 10th Meeting of Russian Naturalists and Physicians. 1901.

ANNENSKI, N. F. (1170)

ACCOUNT BOOK OF MOSCOW GUBERNIYA. Russian Wealth no. 7. 1902.

DESSIA TOV. (1171)

DIET OF SEAMEN. Repts. Med. Inspectors. Kazan. 1902.

PADOLKA, A. (1172)

FIVE BUDGETS OF PEASANT HOUSEHOLDS OF DEMIANOVKI POLTAVA GUBERNIYA, KHOROLSKI UYEZD. Poltava. 1903.

- MAKEDONOV, A. (1173)  
ECONOMIC CONDITION AND OCCUPATIONS OF VILLAGES (STANITSI) IN THE  
KUBAN OBLAST. St. Petersburg. 1904.
- CHIEF DEPARTMENT OF LAND CULTIVATION AND ORGANIZATION. (1174)  
BUDGETS OF KIRGHIZ OF THE AKMOLINSK, SEMIPALATINSK, AND TURKESTAN  
OBLASTS. From the Collection of Data on Kirghiz Land Utilization, v.  
13. St. Petersburg. 1906.
- MAKEDONOV, A. (1175)  
ECONOMIC CONDITION AND OCCUPATIONS OF THE INHABITANTS OF THE VILLAGES  
(STANITSI) OF THE ASTRAKHAN COSSACK ARMY. St. Petersburg. 1906.
- YUFEROV, V. I. (1176)  
MATERIALS ON THE INVESTIGATION OF MIGRATING HOUSEHOLDS IN THE STEPPE  
COUNTRY OF TOBOLSK, TOMSK, AND IRKUTSK GUBERNIYAS. Issue 26. St.  
Petersburg. 1906.
- AUTHOR NOT ASCERTAINED. (1177)  
MATERIALS FOR THE VALUATION OF LANDS IN VOLOGDA GUBERNIYA. v. 2.,  
Vologodski Uyezd; v. 3, Totemski Uyezd; v. 4, Velski Uyezd. 1907-9.

In this study of 1907-9 the Vologda statistical bureau was interested in an economic inventory of the households studied, in working out methods for determining normal output per worker, the return from different crops, and in the amount and composition of crop loans customarily registered by village censuses. The investigators had the happy thought of determining these amounts by means of monographic descriptions of a considerable number of typical households. Utilizing the data of a farmstead census, they attempted to select the households having expenditures typical of all the economic groups. All averages and relative figures for sample and for the area were to coincide, so that an expansion of the sample would give the whole region. They developed a new schedule, using those of the Voronezh and Kaluga studies as a basis, and then, despite the apparent all-inclusiveness of preceding programs, they succeeded in introducing the following new elements: (1) An exact account of the consuming composition of the family and of its food requirements in time, and (2) an exact and exhaustive account of working time. In addition, they added a number of important details concerning the income and the expenditure for production. All these elements are found in the works by Shcherbina and Peshekhonov but in a formative stage only. The additions were in the nature of exactness of specification and of accounting.

However, the greatest achievement of the Vologda investigation lay not in the field of collection of data but in the analysis of those data. In addition to the grouping according to land owned or sowed, cross tabulations were made according to the amount of cattle owned and according to occupation. Thus the way was cleared for dealing with expenditure records from the point of view of production. Moreover, the first serious attempt was here made to use information on family-living expenditures for studying social problems and to apply seriously the principle of cross tabulation. Finally, the tabular arrangement of the data combined the individual arrangement of each record according to largest divisions of incomes, expenditures, and inventory with very detailed presentation through cross tabulation on a number of variables. The Vologda study was carried out with completeness both as to methods and as to results secured.

- PROKOPOVICH, SERGEI (1178)  
BUDGETS OF PETERSBURG WORKERS. 1909. [Also in German, Haushaltsbudgets Petersburger Arbeiter, Arch. Sozialwiss. u. Sozialpolitik 30: 66-100, illus. Tübingen. 1910.]

The tabulations given in this study are based on results from 570 household accounts for February and March 1908, obtained from three groups of laborers: Russians as a whole, residents of the Province of St. Petersburg, and residents of the city of St. Petersburg. The families are further grouped according to total expenditures, which ranged from less than 200 to more than 1,200 rubles a year. The incomes were not known accurately, but it was judged that the expenditures were on the whole 20 percent more than the incomes. Rents averaged 15 percent of the total expenditure, clothing ranged from 10 to 15 percent, and food from 45 to 58 percent of the expenditures. Averages in rubles are likewise tabulated. Tabulations were also made according to the size of the family, which ranged from single individuals to 11 or more members. The relative proportion of expenditures for necessities offered confirmation for Engel's law but not for



Schwabe's. Incomes for laborers in St. Petersburg averaged about 50 percent more than they did in other parts of Russia. The number of accounts examined (570) was small in comparison with the whole number of Russian workers (3,000,000). However, the study represented a beginning of this type of investigation in Russia.

KRESTOVNIKOV, A. N. (1179)  
DIET OF PEASANTS OF KOSTROMA GUBERNIYA FROM BUDGETARY INVESTIGATION  
IN 1908-9. Kostroma. 1912.

DAVIDOVICH. (1180)  
ECONOMIC SIGNIFICANCE OF WOMAN IN A WORKING FAMILY. Knowledge of  
Russia (Poznanie Rossii). No. 3. 1909.

GORBUNOV. (1181)  
WORKERS' EARNINGS. Technol. Herald. 1909.

KISLIAKOV. (1182)  
ON THE QUESTION OF THE ECONOMIC IMPORTANCE OF FLAX CULTURE. Oblast  
Conference on Flax in Pskov. 1909.

S., E. (1183)  
A COMFORTABLE LITTLE CORNER (OTRADNI UGOLCK). Agr. Herald, no. 48, p.  
9. 1909.

BABER-BUKHANOVSKI, L. M. (1184)  
BAYSUTSKI AUXILIARY ROUTE. Moscow. 1912. (Consumption norms.)

DAVIDOVICH. (1185)  
BUDGETS OF PETERSBURG TEXTILE WORKERS. St. Petersburg. 1912.

PERVUSHIN, S. A. (1186)  
ON THE QUESTION OF ESTABLISHING BUDGETARY INQUIRIES. Moscow. 1912.

TSCHAJANOW, A. (1187)  
AN EXPERIMENT IN QUESTIONNAIRE INQUIRY INTO MONETARY ELEMENTS OF  
PEASANT ECONOMY IN MOSCOW GUBERNIYA. Moscow. 1912.

(1188)  
FLAX AND OTHER CROPS IN THE PLAN OF ORGANIZATION OF PEASANT HOUSE-  
HOLDS OF NONBLACK-SOIL RUSSIA. v. 1, issue 1, Volokolamsk Uyezd,  
Moscow, 1912; issue 2, Smolensk Guberniya, Moscow. 1913.

This investigation, the results of which were published in 1913, was planned as a complete study of family expenditures; but after it was begun, the inventory of personal property and many items of expenditure in kind for personal needs were omitted. It is inferior to the Voronezh data in the account of consumption but superior in certain parts of the production account. The original contribution was the emphasis on the distribution of working time of the family and the distribution of its monetary income and expenditure in time.

Tschajanow took data on 25 households from the material gathered for the above study and analyzed them in detail.

By summarizing the figures of the separate accounts and deducting debits from credits, the income from agriculture for the year was found. By adding wages received for other occupations the author was able to compare the total with the expenditures for personal wants, as well as to calculate the average return for 1 working day in terms of produce grown. This connection of investigations of expenditures with accounting analysis of production was thereafter a basic factor in Russian economic studies of agriculture.

CHELINTSEV, A. N. (1189)  
DIVISIONAL AGRONOMY AND ACCOUNTING ANALYSIS OF PEASANT AGRICUL-  
TURAL ECONOMY. Samara. 1914.

KAJHANOV, N., ed. (1190)  
COLLECTION OF ACCOUNTS ON THE QUESTION OF ACCOUNTING STATISTICS.  
St. Petersburg. 1914.

KUZMINIKH-LANIN, I. M. (1191)  
ARTEL FEEDING OF FACTORY WORKERS IN MOSCOW GUBERNIYA. Moscow.  
1914.

(1192)  
ARTEL FEEDING OF ONE SILK-WINDING FACTORY IN MOSCOW. Moscow.  
1914.

- OBER-TALLER, M. O. (1193)  
ACCOUNTING FOR SMALL (PEASANT) HOUSEHOLDS. Poltava. 1914.
- CHELINTSEV, A. N. (1194)  
TABLES OF A BUDGETARY INVESTIGATION OF PEASANT ECONOMY IN TAMBOV GUBERNIYA IN THE SUMMER OF 1915. Tambov. 1915.
- KhARKOV, RURAL STATISTICAL BUREAU. (1195)  
PEASANT BUDGETS OF STAROBELSK UYEZD. Kharkov. 1915.
- This inquiry was conducted by a special staff of statisticians during the course of 3 months, August to October 1910. Selection of the households was made on the basis of a census from which typical households scattered throughout the Starobelsk uyezd were selected, according to economic districts. In 3 months 101 accounts were obtained. The outstanding feature of this study is the attention paid to property. Tables giving an account of all the details and phenomena relating to property furnish an accurate picture of the smallest changes in value during the course of a year. The investigation noted for each article its original cost, the number of years of service, value at the end of the year, and the cost of repairs. In even greater detail is registered the changes in value of cattle and poultry, for which the investigation noted the value at the beginning of the year, the value of what died, or was sold, slaughtered, or bought, the increase in value during the year, the value of the added number of animals, and the value at the end of the year. Even current expenditures for field cultivation and cattle raising were taken into account as movements of values either stored or kept in monetary form in household cash.
- STOPANI, A. I. (1196)  
THE WORKER IN THE OIL INDUSTRY AND HIS BUDGET. Baku. 1916.
- AUTHOR NOT ASCERTAINED. (1197)  
WORKERS' BUDGETS IN THE INVESTIGATION OF 1918. Data for the Valuation of Immovable Property in Cities and Factory Villages of Kostroma Guberniya, v. 1, issue 3. Kostroma. 1918.
- DUBINSKA, I. (1198)  
BUDGETS OF PETROGRAD WORKERS. Data from Statistical Work of the Northern Oblast, issue 1. Petrograd. 1918.
- KOSTROV, N. (1199)  
SKETCHES OF PEASANT HOUSEHOLDS IN CHERNIGOV GUBERNIYA. Material from Budgetary Records, issue 1. Chernigov. 1918.
- CHELINTSEV, A. N. (1200)  
EXPERIMENT IN STUDYING THE ORGANIZATION OF AGRICULTURE FOR THE PURPOSE OF ESTABLISHING SOCIAL AND COOPERATIVE-AGRONOMIC AID ON THE MODEL OF TAMBOV GUBERNIYA. Kharkov. 1919.
- (1201)  
THEORETICAL BASIS OF THE ORGANIZATION OF THE PEASANT HOUSEHOLD. Kharkov. 1919.

- LITOSHENKO, L. N. (1202)  
FIRST BUDGETARY STUDY OF THE CENTRAL STATISTICAL BUREAU IN 1919, FIVE GUBERNIYAS. Statis. Yearbook 1918-20: 71-91. Moscow. 1921.

This study of the central statistical bureau in 1919 was published in the following sections: (1) Characteristics of the household, (2) balance of the products of field cultivation, gardening, and forestry, (3) balance of cattle and poultry, (4) balance of the products of cattle raising, (5) balance of working time, (6) monetary balance, (7) victualing of the population, and (8) maintenance of cattle.

The first section showed a balance in kind of products of field cultivation, meadows, gardens, cattle raising, and the average of cattle per peasant household in each of 10 regions (17 items). The second presented the monetary exchanges for the average household for the same regions (17 items). The third characterized the monetary income and expenditure of the average household in groups by type of land utilization for 59 records of Moscow guberniya (21 items). The fourth indicated the average balance per household in kind of grains used for food, grouped according to type of land utilization, for 120 households of Tver guberniya. The fifth attempted to show the complete yearly turnover in money and in kind of an average peasant household of Livenski uyezd, Orel guberniya. A separate balance was derived for a group of 16 households consuming all products of field cultivation and for a group of 14 households which sold them. This form



of treatment broke up household expenditures and presented only a series of balances. In the succeeding works of this bureau this one-sidedness was somewhat corrected. A part of this study furnishes an example of the utilization of data on family expenditures for the presentation of national economic problems.

- DUBINSKA, I. (1203)  
WORKERS' BUDGETS IN KHARKOV. Statistical Data on Labor in the Ukraine, issue 1. Kharkov. 1920.
- CHELINTSEV, A. N., ed. (1204)  
SYMPOSIUM OF STATISTICAL DATA ON QUESTIONS OF ORGANIZATION OF PEASANT ECONOMY IN THE UKRAINE AND ADJACENT GUBERNIYAS. Odessa. 1921.
- MIROTVORTSEV, K. (1205)  
ON THE QUESTION OF THE BUDGET OF THE RURAL POPULATION OF IRKUTSK GUBERNIYA. Data of Irkutsk Guberniya Statistical Bureau, issue 3. Irkutsk. 1921.
- CHEREP OVETS GUBERNIYA STATISTICAL BUREAU. (1206)  
PEASANT ECONOMY. Statistical Data, issue 2. Cherepovets. 1922.
- STUDENSKI, G. (1207)  
FROM THE LIFE OF A PEASANT HOUSEHOLD OF THE GRAIN-PRODUCING REGION AFTER THE WAR. Agriculture and Forest Economy. May 1922.
- CRIMEA STATISTICAL BUREAU. (1208)  
DATA ON PEASANT BUDGETS IN THE CRIMEA 1922-23. Simferopol. 1924.
- KHARKOV GUBERNIYA STATISTICAL BUREAU. (1209)  
BUDGETS OF PEASANTS OF KHARKOV GUBERNIYA IN 1922-23. Issues 2 and 3, Kuindjski Okrug. Kharkov. 1924.
- LITOSHENKO, L. N. (1210)  
THE PEASANT BUDGET IN 1922-23. Cent. Statis. Bur. Moscow. 1923.
- MISHKIN, A. S. (1211)  
PEASANT BUDGETS OF THE FAR EASTERN OBLAST IN 1922-23. Far Eastern Kraistatis. Div. Khabarovsk. 1925.
- YURACHSKI, A. M. (1212)  
PEASANT BUDGETS OF THE KIEV GUBERNIYA IN 1922-23. Guberniya Statis. Div. Kiev. 1924.
- U. S. S. R., CENTRAL STATISTICAL BUREAU. (1213)  
PEASANT BUDGETS OF 1922-23 AND 1923-24. Trans. Moscow. 1927.
- 
- (1214)  
PEASANT BUDGETS OF 1922-23 AND 1923-24, CENTRAL BLACK-SOIL REGION. Trans. Moscow. 1927.
- 
- (1215)  
PEASANT BUDGETS OF 1922-23 AND 1923-24, NORTHERN REGION, URAL REGION. Trans. Moscow. 1926.
- 
- (1216)  
STATISTICESKOJE OBOZRÉNYÉ 1927 (5), AND 1928 (5). Narodnoje Khoziasistvo S. S. S. R. 1924: 546; Trud v. S. S. S. R. 1926: 172. Moscow. [Original not seen. Summary in Turine, S. P., Workers' Family Budget Enquiries in Soviet Russia. Internatl. Labour Rev. 20: 568-576. 1929. Also in U. S. Dept. Labor, Bur. Labor Statis. Monthly Labor Rev. 8 (6): 212. 1927.]
- The Soviet Government, assisted by local governments, has made extensive annual studies of the level of living. Those from 1922 to 1927 are most easily comparable. They cover workers in textile and metal industries and coal mining in Moscow, Leningrad, the Ural district, and the Doubas. The returns were not large enough to be truly representative. The average family spent nearly half its income on food.
- ALTA GUBERNIYA STATISTICAL BUREAU. (1217)  
SOME CHARACTERISTICS OF THE BUDGET OF PEASANT HOUSEHOLDS IN THE STEPPE REGION. Bull. 12. 1923.
- IAKIAMANSKI, V. A. (1218)  
MARKET TURNOVER IN PEASANT HOUSEHOLDS OF THE UKRAINE ON THE BASIS OF THE BUDGETARY INQUIRY OF 1923. Central Statis. Off. Kharkov. 1924.

- KOKULINA, A. A. (1219)  
BUDGETS OF PEASANT HOUSEHOLDS OF IRKUTSK GUBERNIYA FROM THE INVESTIGATION OF 1923. Irkutsk Gubstatist. Bur. Irkutsk. 1924.
- MARIISKA AUTONOMOUS OBLAST, STATISTICAL BUREAU. (1220)  
ITEMS IN THE SPRING 5 PERCENT INVESTIGATION OF PEASANT HOUSEHOLDS IN 1923. Krasnokokshaishk. 1923.
- PENZA GUBERNIYA, STATISTICAL DIVISION. (1221)  
BUDGETARY INQUIRIES INTO SEPARATE PEASANT HOUSEHOLDS IN PENZA GUBERNIYA. Pt. 3, series 3. Penza. 1923.
- AUTHOR NOT ASCERTAINED. (1222)  
BUDGETS OF PEASANTS OF KHARKOV GUBERNIYA IN 1923-24. Cent. Statist. Bur. Kharkov. 1925.
- (1223)  
BUDGETS OF PEASANTS OF THE SIBERIAN BORDER IN 1923-24. Sibkraibureau. Novosibirsk. 1925.
- (1224)  
MARKET TURNOVER OF PEASANT HOUSEHOLDS AROUND KHARKOV IN 1923-24. Kharkov Gubstatbureau. Kharkov. 1925.
- GILBERT, I. F. (1225)  
BUDGET OF THE PEASANT HOUSEHOLD IN 1923-24. Economics and Statistics of Carelia. Nos. 1 to 3. Organ. Planning Comm. and Statist. Div. A. K. S. S. R. (Autonomous Carelian S. S. R.). Petrozavodsk. 1926.
- GREENBLATT, N., and ANUFRIEVA, T. (1226)  
PEASANT BUDGETS OF LENINGRAD GUBERNIYA FOR 1923-24. Gubstatist. Div. Leningrad. 1925.
- IVANOV-VOZNESENSK GUBERNIYA, STATISTICAL BUREAU. (1227)  
PEASANT BUDGETS IN THE IVANOV-VOZNESENSK GUBERNIYA IN 1923. (A. Mokletsov.) INVESTIGATION OF THE DIET OF PEASANT POPULATION IN THE IVANOV-VOZNESENSK GUBERNIYA DURING THE MONTHS OF JULY AND OCTOBER 1924. (A. Mokletsov.) Bull., issue 9. 1924.
- KAMIN, V. (1228)  
BUDGETS OF PEASANT HOUSEHOLDS IN NOVGOROD GUBERNIYA FOR 1923-24. Novgorod Okr. Statist. Div. N.-Novgorod. 1927.
- NIJHEGOROD GUBERNIYA. (1229)  
COMMODITY TURNOVER OF PEASANT HOUSEHOLDS IN NIJHEGOROD GUBERNIYA FROM APRIL 1, 1923 TO APRIL 1, 1924. Statist. Bull. 12. December 1924.
- (1230)  
FODDER BALANCE OF ONE PEASANT HOUSEHOLD IN NIJHEGOROD GUBERNIYA FROM DATA OF PEASANT BUDGETS FOR 1923-24. Statist. Bull. 5. May 1925.
- (1231)  
PROFITABLENESS OF PEASANT ECONOMY IN 1923-24. CALCULATION PER HOUSEHOLD FROM BUDGETARY INVESTIGATION GENERAL BALANCE OF PEASANT ECONOMY IN NIJHEGOROD GUBERNIYA IN 1923-24. Statist. Bull. 1. January 1927.
- (1232)  
STATISTICAL YEARBOOK. 1926. (Peasant Budgets of the Guberniya, from April 1, 1923, to April 1, 1924.)
- RUDENSKI, V. K. (1233)  
PEASANT BUDGETS OF KIEV GUBERNIYA IN 1923-24. Kiev Gubstatbureau Kiev. 1925.
- SOSNITSKI, V. I., ed. (1234)  
BUDGET OF A PEASANT HOUSEHOLD IN KALUGA GUBERNIYA IN 1923-24. Statist. Handbook. Kaluga. 1925.
- ULIANOV GUBERNIYA, STATISTICAL BUREAU. (1235)  
PEASANT BUDGETS IN THE ULIANOV GUBERNIYA FOR 1923-24. Senilei. 1926.
- VINOGRADOV, A. V. (1236)  
PEASANT BUDGETS OF KOSTROMA GUBERNIYA FOR 1923-24. Gubstatbureau. Kostroma. 1926.



- CENTRAL STATISTICAL OFFICE OF BSSR. (1237)  
MARKET CAPACITY OF BSSR AND CAPACITY OF THE VILLAGE MARKET. (A. Kaleda.) BRIEF CHARACTERIZATION OF THE BUDGET OF PEASANT HOUSEHOLDS IN 1923-24 AND MARKET AND MONETARY TURNOVER IN PEASANT HOUSEHOLDS IN BSSR IN 1924-25. (Popeleshko.) Bull., issue 3. May-June 1925.
- DERBENEV, A. G. (1238)  
THE PEASANT HOUSEHOLD IN N.-DVINA GUBERNIYA IN 1923-25 ON THE BASIS OF ITS BUDGET. Gubstatbureau. Veliki Ustiug. 1925.
- U. S. S. R., CENTRAL STATISTICAL BUREAU. (1239)  
BULLETIN NO. 15, 1926. (L. N. Litoshenko, Basic Elements of the Peasant Budget for 1923-24; Monetary Balance of Peasant Economy in 1924-25.)
- CENTRAL ASIAN NATIONAL UNIVERSITY. (1240)  
TYPES OF HOUSEHOLDS IN TURKESTAN. Seminary in the Econ. and Organization of Rural Econ. Trans. Tashkent. 1924.
- DAGHESTAN STATISTICAL BUREAU. (1241)  
SPRING INVESTIGATION OF THE DIET OF RURAL POPULATION OF THE D. S. S. R., MAKHACHKALA. Bull. 13, issue 10. June 1924.
- VOLOGDA GUBERNIYA DIVISION OF PEASANT BUDGETS. (1242)  
STATISTICAL SYMPOSIUM FOR 1917-24. ("Basic Elements and Profitableness of Peasant Economy from Data of Budgetary Investigations in 1924"; and "Market Turnover of Peasant Households from Data of Budgetary Investigations of 1924").
- VOROBIEV, N. I., and MAKAROV, N. P. (1243)  
PEASANT BUDGETS IN KOSTROMA GUBERNIYA. Gubstatbureau. Kostroma. 1924.
- AUTHOR NOT ASCERTAINED. (1244)  
PEASANT BUDGETS OF LENINGRAD GUBERNIYA FOR 1924-25. Organ. Div. Leningrad Gubizpolkom (Gub. Exec. Com.). Leningrad. 1927.
- BASHKIRSK REPUBLIC CENTRAL STATISTICAL BUREAU. (1245)  
BUDGETS OF PEASANT HOUSEHOLDS OF BASHKIRSK REPUBLIC FOR 1924-25. Ufa. 1926.
- FILIPPOV, A. F., and IVANTSOV, M. I. (1246)  
MARKET TURNOVER OF PEASANT ECONOMY IN BRIANSK GUBERNIYA. Briansk Gubzen-Div. Trans. Orel. 1926. (From data of investigations of family living in 1924-25.)
- MURMANSK GUBERNIYA STATISTICAL DIVISION. (1247)  
BUDGETS OF FISHING HOUSEHOLDS FOR 1924-25. Collect. Statis. Materials of Murmansk Guberniya, Issue 1. Murmansk. 1926.
- NIJHEGOROD GUBERNIYA. (1248)  
PEASANT BUDGETS FROM APRIL 1924 TO APRIL 1925. Statis. Bull. No. 7. July [1925?].
- NORTH CAUCASUS KRAISTATISTICAL DIVISION. (1249)  
PEASANT BUDGETS OF THE NORTH-CAUCASIAN BORDER FOR 1924-25. Rostov on the Don. 1927.
- NORTH OSSETIN OBLAST STATISTICAL BUREAU. (1250)  
PEASANT BUDGETS OF OSSETINS IN NORTHERN OSSETINIA IN 1924-25. Vladikavkaz. 1925.
- VIATKA GUBERNIYA STATISTICAL BUREAU. (1251)  
DIET OF THE POPULATION IN 1924-25. Viatka. 1925.
- PEASANT BUDGETS OF VIATKA GUBERNIYA FOR 1924-25. Viatka. 1927. (1252)
- EKATERINOSLAV GUBERNIYA STATISTICAL BUREAU. (1253)  
BUDGETS AND DIET OF THE POPULATION, GUBERNIYA EKATERIN. Statis. Handbook of Ekaterinoslav Guberniya, p. 489. Ekaterinoslav. 1925.
- FERGANSKA DOLINA DIVISION OF WATERWAYS. (1254)  
AGRICULTURAL ECONOMY AND IRRIGATION IN CENTRAL ASIA: RESULTS OF A BUDGETARY INVESTIGATION. Tashkent. 1925.

- MILOVZOROV, A. F. (1255)  
MARKET TURNOVER IN PEASANT HOUSEHOLDS IN SARATOV GUBERNIYA.  
Saratov. 1925.
- NIJHEGOROD GUBERNIYA STATISTICAL BUREAU. (1256)  
BALANCE OF WORKING TIME, IN A PEASANT HOUSEHOLD, OF THE PEASANT  
FAMILY AND HORSES. Statis. Bull. 2. February 1925.
- OSSETIN RESEARCH INSTITUTE ON REGIONAL STUDY. (1257)  
FOUR PEASANT BUDGETS OF THE VILLAGE OF CHRISTIANOV. Data on Economic  
Characteristics of the Ossetin Village. Vladikavkaz. 1925.
- PODOLIYE GUBERNIYA STATISTICAL BUREAU. (1258)  
BUDGETARY INVESTIGATION OF PEASANT HOUSEHOLDS OF PODOLIYE. Bull.  
3 (30). Vinnitsa. June 1925.
- REZNIKOV, I. (1259)  
DIET OF RURAL POPULATION IN AZERBAIJAN. Baku. 1925.
- STEPANOV, I. P. (1260)  
25 BUDGETS OF PEASANT HOUSEHOLDS IN MOSCOW GUBERNIYA. Agr. Div.  
Moscow Soviet of Workers' and Peasants' Deputies. Moscow. 1925.
- URAL OBLAST STATISTICAL BUREAU. (1261)  
DATA ON BUDGETS OF PEASANTS, SAMOYED, AND OSTIATKI HOUSEHOLDS.  
Sverdlovsk. 1925.
- UZBEKISTAN CENTRAL STATISTICAL OFFICE. (1262)  
DEKKHAN BUDGETS, BEK.-BUDANSKI UYEZD, KASHKA DARINSKA OBLAST AND  
OYERMINSKI UYEZD, ZERAVSHANKA OBLAST. Bull. 10. Samarkand.  
October 1925.
- DEKKHAN BUDGETS OF THE CARACUL REGION, ZERAVSHANKA OBLAST. Bull. (1263)  
7. Central Statis. Bur., U. S. S. R. Samarkand. 1925.
- VORONOV, I. K., ed. (1264)  
POPULATION AND ECONOMY OF VORONEZH GUBERNIYA. Statistical Symposium,  
Gubizpolkom. Voronezh. 1925.
- YELTSOV, A. A. (1265)  
GOODS IN PEASANT HOUSEHOLDS OF ARCHANGEL GUBERNIYA, AN EXPERIMENT  
IN QUESTIONNAIRE INVESTIGATION OF COMMODITY ELEMENTS OF PEASANT  
HOUSEHOLDS IN ARCHANGEL GUBERNIYA. Archangel Gubplan and Arch-  
angel Gubstatbureau. Archangel. 1925.
- AUTHOR NOT ASCERTAINED. (1266)  
103 SETTLERS' BUDGETS FROM DATA OF BUDGETARY ARCHIVE RECORDS IN  
COLONIAL HOSPODARIATES FOR 1925-26. Zemplan of N. D. Z. (Natl.  
Min. Agr.) Kharkov. 1927.
- NORTH CAUCASUS KRAISTATISTICAL BUREAU. (1267)  
WORKING UP PEASANT BUDGETS FOR 1925-26. Rostov on the Don. 1926.
- ORLOV GUBERNIYA STATISTICAL DIVISION. (1268)  
MARKET TURNOVER IN PEASANT HOUSEHOLDS OF ORLOV GUBERNIYA FOR  
1925-26. Statis. Data, issue 4. Orel. 1927.
- PEASANT BUDGETS OF THE OREL GUBERNIYA FOR 1925-26. Organization and (1269)  
Profitableness of Peasant Economy, issue 6. Orel. 1927.
- RESEARCH INSTITUTE OF AGRICULTURAL ECONOMICS. (1270)  
BUDGETARY DATA ON 30 PEASANT HOUSEHOLDS OF THE GRAIN-GROWING,  
FLAX-GROWING, AND DAIRYING TYPES, 1925-26. Moscow. 1927. (From  
data of local field expeditions.)
- IVANOV-VOZNESENSK GUBERNIYA STATISTICAL BUREAU. (1271)  
PEASANT BUDGETS OF THE IVANOV-VOZNESENSK GUBERNIYA. Bull., issue 2.  
Ivanov-Voznesensk. 1926.
- OSSETINIAN RESEARCH INSTITUTE OF REGIONAL STUDY. (1272)  
EIGHT PEASANT BUDGETS OF THE MOUNTAIN ZONE (OSSENTINIA). Data on  
the Economic Characteristics of the Ossetinian Village, issues 4 and 5.  
Vladikavkaz. 1926.



- OSSETINIAN RESEARCH INSTITUTE OF REGIONAL STUDY. (1273)  
FOUR PEASANT BUDGETS OF THE VILLAGE ARDON. Data on the Economic Characteristics of the Ossetinian Village, issue 3. Vladikavkaz. 1926.
- POPOV, V. (1274)  
ECONOMIC SIGNIFICANCE OF THE MOST IMPORTANT BRANCHES OF RURAL ECONOMY IN THE BUDGETS OF PEASANTS OF THE T. S. S. R. KAZAN. 1926. (Reprint from Labor and Economy, nos. 11-12.)
- U., C. (1275)  
MONETARY TURNOVER OF PEASANT HOUSEHOLDS IN LENINGRAD GUBERNIYA. Economy of the Northeastern Border, nos. 8-9. 1926.
- UZBEKISTAN CENTRAL STATISTICAL BUREAU. (1276)  
DEKKHAN BUDGETS OF SAMARKAND OBLAST. Bull. 12. Samarkand. 1926.
- VORONOV, I. K. (1277)  
VORONEZH BUDGETARY INVESTIGATIONS AND THEIR COMPARATIVE REWORKING. Voronezh. 1926.
- YAROSHCHUK, E. A. (1278)  
THE BOND BETWEEN THE PEASANT HOUSEHOLD OF B. S. S. R. AND THE MARKET. White Russian Agricultural Bank. Minsk. 1926.
- ANISIMOV, J. A., VERMENICHEV, I., and NAUMOV, K. (1279)  
PRODUCTION CHARACTERISTICS OF PEASANT HOUSEHOLDS OF DIFFERENT SOCIAL GROUPS, 60 PEASANT HOUSEHOLDS OF THE FLAX REGION, VOLOKOLAMSK UYEZD, MOSCOW GUBERNIYA. Research Inst. Agr. Econ. Trans. Issue 24. Moscow-Leningrad. 1927.
- FAR EASTERN KRAISTATISTICAL BUREAU. (1280)  
PEASANT BUDGETS OF THE FAR EASTERN BORDER. Khabarovsk-Vladivostok. 1927.
- KAZANSKI, F. (1281)  
PROFITABLENESS OF PEASANT ECONOMY IN THE URALS ACCORDING TO SOCIAL TYPES. Sverdlovsk. 1927. (Reprint from Ural Economy.)
- LITOSHENKO, L. N. (1282)  
CAPACITY OF THE PEASANT MARKET—DATA AND INVESTIGATION OF MARKET CAPACITY. Industrial Economic Soviet of the Supreme Economic Council. Promizdat. Moscow. 1927.
- MAGNITSKY, N. K. (1283)  
THE PEASANT HOUSEHOLD IN THE VICINITY OF MOSCOW. Moscow. 1927. (With a foreword by the Gub. Agronomist Stepanov.)
- RASTSETAEV, M. I. (1284)  
BUDGETS OF FISHERS' HOUSEHOLDS IN MURMANSK GUBERNIYA. Petrozavodsk. 1927. (Reprint from Colonization Comm. of N.-E. Oblast Econ. Statis. Div. Trans., The Fishing Industry on the Murman.)
- SHUBAEV, K. V. (1285)  
FROM DISAPPEARANCE TO REBIRTH, REPETITION OF THE STUDY OF FORMER "DYING" SETTLEMENTS (VILLAGE NOVO-JHIVOTINNOE AND VILLAGE MOKHOVATKA), VORONEZH GUBERNIYA AND UYEZD. Edited by I. A. Theodorovich and A. V. Chayanov. The New Village. Moscow. 1927.
- STUDENSKI, G. A. (1286)  
AN EXPERIMENT IN INVESTIGATING THE ORGANIZATION OF THE PEASANT HOUSEHOLD. Research Inst. Agr. Econ. Issue 20. Central-Black Soil Oblast. Knigosoyuz. Moscow. 1927.
- PROBLEMS OF THE ORGANIZATION OF PEASANT RURAL ECONOMY. Gosplan of the R. S. F. S. R. and Research Inst. Agr. Econ. Samara. 1927. (1287)
- VIATKA OBLAST, AGRICULTURAL EXPERIMENT STATION. (1288)  
PEASANT BUDGETS. Trans., issue 2. Viatka. 1927.
- VILDO, U. I., UJHANSKI, I. T., and TZILKO, F. A. (1289)  
PEASANT AND LARGE-SCALE INDUSTRY IN CONNECTION WITH THE PROBLEM OF BEET SOWING. Peasant Budgets of Tula Guberniya. Issue 2. Management of the Sugar Trust. Moscow. 1927.

## SPAIN

RATIER, P. A., and SUAZEZ, S.

(1290)

MÉTAYER DE LA VIEILLE-CASTILLE. OUVRIER TENANCIER À ÉMIGRATION PERIODIQUE DANS LE SYSTÈME DES ENGAGEMENTS MOMENTANÉS, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX DE 1840 À 1847. *In* Le Play, F., *Les Ouvriers Européens*, ed. 2, v. 4, pp. 247-290. Paris. 1877.

This study covering the years 1840 to 1847, depicts a stable family of industrialized western Europe living amid social disorganization. The family consisted of the worker (33), his wife (30), two daughters (9 and 4), and a son (8). Health was excellent. The worker belonged to the more prosperous class in Revilla and was saving toward property of his own. Their thriftiness and desire to advance put them in the minority in this locality. They both worked in their own field and sometimes for neighboring farmers. The children attended school. They could all read and write. Recreation included smoking, visiting, and community festivals. Family well-being rested on their share in communal rights and their foresight and love of work. Property consisted of money 95 francs, animals valued at 583 francs, working equipment at 192 francs, and furniture and clothing at 544 francs. Income was 1,945 francs, of which 456 francs was in money. Property contributed 45 francs income; subventions, 143 francs; labor, 389 francs; and industries, 469 francs. Food cost 481 francs; household, 111 francs; clothing, 129 francs; moral, recreative, and health needs, 52 francs; and all else 18 francs. Savings were 252 francs. Notes are given on the elements of social stability in Spain, in 1855; the distinctive characteristics of the Spanish working people; the sentiments of equality which united the extreme classes; periodical emigration; the general characteristics of property holding and the abundance of food and natural products; and the relative value of communal property versus individual patronage considered as means of protection for the workers.

SAINT-LÉGER, A. DE, and DELBET, E.

(1291)

PÊCHEUR CÔTIER MAÎTRE DE BARQUE DE SAINT SÉBASTIAN (GUIPUSCOA-ESPAGNE). OUVRIER CHEF DE MÉTIER DANS LE SYSTÈME DU TRAVAIL SANS ENGAGEMENTS D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN JUIN 1856. *Les Ouvriers des Deux Mondes* (1) 1: 403-444. 1857.

This study, made in 1856, shows a stable industrial family of western Europe living amid social disorganization. They spent their winters fishing and their summers as longshoremen. The household consisted of the husband (45), his wife (30), a daughter (8), and four sons (13, 10, 6, and 2). Two other children had died. The parents had had no formal schooling, but the children were being educated. Health was good. This family was normal, intelligent, laborious, thrifty, and respected. The wife often helped to unload and prepare the fish for market. Recreations consisted chiefly in family and village religious celebrations. Their well-being was protected by a half interest in the fishing bark and mutual insurance voted by members of the fishing industry. Property consisted of 1,033 francs (the bark and equipment), and 1,208 francs in furniture and clothing. Income was 2,568 francs, of which 2,168 francs was in money. Property accounted for 69 francs; subventions, 40 francs; labor, 849 francs; and moral, recreative, and health needs, 124 francs. Savings were 363 francs. Notes are given concerning the associations and organizations of the fishers at St. Sebastian, the distribution of work between women and men, and the old and modern industrial organizations in the Basque Provinces. This case is also published in *Les Ouvriers Européens*.

## SWEDEN

SAINT-LÉGER, A. DE, and LE PLAY, F.

(1292)

FORGERON DES USINES À FER DE DANNEMORA (SUÈDE SEPTENTRIONALE). TÂCHERON DANS LE SYSTÈME DES ENGAGEMENTS VOLONTAIRES PERMANENTS, D'APRÈS LES DOCUMENTS RECUEILLIS SUR LES LIEUX EN 1845. *In* *Les Ouvriers Européens*, ed. 2, v. 3, pp. 1-53. Paris. 1877.

This study of workers in northern Europe shows a combination of the old and the new in their social structure. The stem-family organization marks them as midway between the feudal and the purely individualized industrial system. The family here described consisted in 1845, the period of the study, of the head (37), his wife (35), 2 sons (14 and 13), and 2 daughters (10 and 6). The man was a skilled pieceworker in a semiagricultural and industrial community. Health was good; medical treatment and drugs were free. The parents cared for a garden and did agricultural labor for neighbors in addition to their regular work. Recreations



included smoking, drinking, hunting, family reunions, and neighborly visits. The children attended school up to the age of 12. Family well-being rested on the patron's interest in their welfare. The relationship between patron and worker (even though he was a pieceworker) continued from generation to generation. A part of their income was free rent of house and garden, and a part was represented by permission to buy grain for food at a lower-than-market price. Property consisted of animals and tools valued at 332 francs, and furniture and clothing at 510 francs. Income was 1,264 francs, of which 683 francs was in money. Property accounted for 20 francs; subventions, 152 francs; labor, 769 francs; and industries, 324 francs. Food cost 917 francs, household, 100 francs; clothing, 179 francs; moral, recreative, and health needs, 35 francs; and all else, 33 francs. There were no savings. Notes are given on the social structure of Sweden; work in 1845 in the four classes of Swedish industries; the reform of 1846; Swedish organizations encouraging domestic industry; the condition of Swedish workers; forestry problems and their relationship to the mining industry; and the communities of peasants working the small forges of Wermland.

STOCKHOLM, STATISTIKA KONTORET.

(1293)

STATISTIK UNDERSOEKNING ANGÅENDE LEVNADSKOSTNADERNA I STOCKHOLM ÅREN 1907-8. [STATISTICAL INVESTIGATION OF HOUSEHOLD BUDGETS IN STOCKHOLM IN 1907-8.] 143 pp., illus. Stockholm 1910. [Résumé in Swedish and French.]

This is the first official inquiry on family expenditures in Sweden. Household accounts were kept for a year (1907-8) by 150 families in Stockholm. Incomes ranged from 1,200 to 5,000 kronor. The size of the family in adult equivalents (United States standard) ranged from 3.50 to 6. The proportion of the total expenditure which went for food decreased with increasing income. In the Statistik Årsbok for Stockholms Stads (Stockholm, 1915) is given one detailed table summarizing the 150 records of expenditure collected in 1907-8. The families are arranged in 7 income groups, and expenditures for several kinds of food and for 17 other categories are shown.

SWEDEN, K. SOCIALSTYRELSEN. SVERIGES OFFICIELLA STATISTIK.

(1294)

SOCIALSTATISTIK.

LEVNADSKOSTNADERNA I SVERIGE 1913-14. [COST OF LIVING IN SWEDEN 1913-14.] 670 pp., illus. Stockholm. 1917-1921.

Household accounts for 12 months in 1913-14 were obtained from 1,355 families, about two-thirds of them working-class families, the remainder belonging to the class of lower grade officials, whose incomes were about the same as those of the working-class families covered. The families were distributed throughout the läns of Sweden. The average size of family was 4.44 persons (2.59 consumption units according to the U. S. Department of Labor standard). Incomes ranged from under 1,500 to about 4,000 kronor. Gifts, income from nature, and payment in kind were assigned local values and added to the income. The conclusion was drawn that the proportion of food to total expenditure declined with increase in income. An increase in the size of the family, while the income remained constant, had the same effect on expenditures as a decrease in income while the size of the family remained constant. The second part of the study is arranged by geographical districts. Some modified conclusions are drawn for the individual districts, showing variations in the level of living throughout the country. Categories of expenditure are itemized in detail. The household accounts are presented individually in tabular form in part 3. These raw data constitute the entire volume, no interpretation or generalizations being given.

SWEDEN, STATISTIKA CENTRALBYRÅN.

(1295)

INKOMSTER OCH UTGIFTER FÖR ARBETBARE OCH MEDELKLASSHUSHÅLL ÅREN 1913-14, 1920 OCH 1922-23. [INCOMES AND EXPENDITURES FOR WORKERS' AND MIDDLE CLASS FAMILIES IN 1913-14, 1920, AND 1922-23.] Statis. Årsbok Sverige. 231 pp., illus. Stockholm. 1928.

A summary is presented here in tabular form of the sources of income and the categories of expenditure investigated by the Swedish K. Socialstyrelsen in 1913-14, 1920, and 1923.

SWEDEN, K. SOCIALSTYRELSEN. SVERIGES OFFICIELLA STATISTIK.  
SOCIALSTATISTIK. (1296)

LIVSMEDELSFÖRBRUKNINGEN INOM MINDRE BEMEDLADE HUSHÅLL ÅREN 1914 OCH 1916. [CHANGES IN COST OF LIVING OF PEOPLE OF SMALL MEANS FROM 1914-1916.] 77 pp., illus. Stockholm. 1917. [Also in U. S. Dept. Labor, Bur. Labor Statis. Monthly Labor Rev. 6: 1157-1160, illus. 1918.]

The purpose of this investigation was to find what change had occurred in the level of living since the beginning of the World War. Records were made for May 1916 by 601 of the families who had kept household accounts in 1914 (1294). (Levnadskostnaderna i sverige 1913-14, by the Sveriges Officiella Statistik). These families were distributed among 27 Swedish cities, had an average of 4.78 persons per household, as compared with 4.59 in 1914, and an average weekly income per consumption unit of 10.84 kronor, as compared with 10.67 kronor in 1914. Goods furnished from the farm were assigned local values and included in the income. From May 1914 to May 1916 the tendency was to substitute cheaper for dearer articles of food, e. g., cereals and vegetables for animal foods, and to improve the dwelling with gas and electricity. The article in the Monthly Labor Review is a summary of the above study. It describes the method of conducting the original investigation, and its main results, including a table of average weekly consumption of various foods in 1914, 1916, and 1917.

SWEDEN, K. SOCIALSTYRELSEN. (1297)

LIVSMEDELSFÖRBRUKNINGENS OMLÄGGNING UNDER KRISTIDEN. [CHANGE IN THE CONSUMPTION OF HOUSEHOLD COMMODITIES DURING THE PERIOD OF THE CRISIS.] Sociala Meddel. 1917: 1176-1192, illus. Stockholm. 1917.

A total of 2,832 persons in 615 households kept household accounts for a month in June and July 1917. These records were kept in order to show the effect of the rise in prices caused by the war upon the standard of living, notably upon food consumption. The families studied were distributed among 19 cities, and had kept records in 1913-14 and in May 1916. Since 1916 the consumption of cereals and vegetables had decreased, because of scarcity and government rationing, while consumption of the more expensive animal foods increased.

SWEDEN, K. SOCIALSTYRELSEN, SVERIGES OFFICIELLA STATISTIK. (1298)

LIVSMEDELSFÖRBRUKNINGEN INOM MINDRE BEMEDLADE HUSHÅLL UNDER KRISÅREN 1914-1918. [CHANGES IN STANDARD OF LIVING AMONG PEOPLE WITH SMALL MEANS DURING THE YEARS OF CRISIS, 1914-1918.] 141 pp., illus. Stockholm. 1922.

In June and July 1918, 390 of the families which kept household accounts in 1913-14, 1916, and 1917, kept a record of their food expenditures for another period of 4 weeks. The incomes of these families had not increased since 1914, although the general level of prices had risen considerably. The adjustment to this decreased buying power had been qualitative from 1914 to 1916, i. e., the families had substituted vegetable foods for animal foods, thus lowering their expenditure without reducing the number of calories consumed. But the scarcity of vegetable foods from 1916 to 1918 forced the families to buy animal foods at almost prohibitive prices. The average number of calories consumed daily per capita went from 2,874 in 1914 to 2,612 in 1917. Throughout the period, the percentage of expenditure for food went up, while that for rent decreased.

SWEDEN, K. SOCIALSTYRELSEN. [1299]

LEVNADSKOSTNADERNA PÅ LUNDSBYGDEN I SVERIGE VID ÅR 1920. [COST OF LIVING AMONG RURAL WORKERS IN SWEDEN IN 1920.] Sveriges Off. Statis., Socialstatis. 200 pp., illus. Stockholm. 1923.

Data on the families of 372 rural Swedish workers and tenants for the year 1920 were compared with data collected in the investigation of urban workers conducted in 1913-14. The average number of persons per family was 5.04, or 3.73 consumer units according to the United States standard. The average income was 3,783 kronor, of which 61.1 percent was in cash and 38.9 percent in kind (estimated at local wholesale prices). The ordinary rural household spent about 60 percent of its income for food, as compared with 47 to 55 percent for the urban family; the country family 4 percent on rent, the city family, 6 percent; the expenditures for clothing were about 15 percent in both city and country; miscellaneous expenses were higher in the city than in the country. The income for the average rural family was lower than that for the average urban family. In the country there was an average consumption per day per consumer-unit of 3,546 calories, as compared with the city consumption of only 2,981 calories. The original contains a summary in French. A summary of a preliminary report



of this study (published in 1920) is given in United States Department of Labor, Bureau of Labor Statistics, Monthly Labor Rev. 14 (6): 66-69, illus., 1922. A brief but succinct summary of the whole study is supplied in International Labour Office, International Labour Rev. 9: 403-407, 1924.

SWEDEN, K. SOCIALSTYRELSEN, STOCKHOLMS STADS STATISTIK. (1300)  
SPECIALUNDERSÖKNIN GAR, NO. 13: STATISTIK UNDERSÖKNING ANGÅENDE  
LEVNADESKOSTNADERNA I STOCKHOLM, 1922-23. [SPECIAL INVESTIGATION  
NO. 13: STATISTICAL INVESTIGATION ON THE COST OF LIVING IN STOCKHOLM,  
1922-23.] Stockholm. 1927. [See also U. S. Dept. Labor, Bur. Labor  
Statis. Monthly Labor Rev. 25 (3): 214-217, illus. 1927.]

This is part of the inquiry made in various Swedish cities in 1923 by the Swedish Social Board: Levnadskostnaderna i Städer och Industriorter & Landsbygden Omkring år 1923. It contains complete household accounts for 167 Stockholm families of the middle and working classes. Among industrial workers food, beverages, tobacco, etc., absorbed 41.1 percent of the total expenditures; among subordinate employees, 38.5 percent; and among middle-class families, only 26.9 percent. There was little variation among the classes in expenditure for lodging. The résumé in the Monthly Labor Review gives tables showing the income, expenditure, and quantities of consumption of several classes of Stockholm families.

SWEDEN, K. SOCIALSTYRELSEN. (1301)  
LEVNADESKOSTNADERNA I STADER OCH INDUSTRIORTER Å LANDSBYGGEN  
OMKRING ÅR 1923. [COST OF LIVING IN THE INDUSTRIAL CITIES AND TOWNS  
IN 1923.] Sociala Meddel. 1926 (6): 435-465, illus. Stockholm. 1926.  
[See also Cederblad, Nils, The Swedish Family Budget Enquiry of 1923.  
Internatl. Labour Rev. 14: 489-508, illus. Geneva. 1926.]

This investigation was made mainly to determine whether the results of the 1913-14 inquiry (1294) were, as a result of changes in prices during the interval, inadequate for purposes of wage regulation, etc. Household accounts were kept for the year 1923 by 1,400 households in Swedish cities; 1,192 families belonged to the working classes, though none were of the lowest income group; the remainder of the families belonged to the middle class. Incomes ranged from about 2,000 to about 12,000 kronor a year; the average income of the middle-class families was 8,433 kronor a year, that of the working-class families 3,811 kronor. The average size of the family (in U. S. Department of Labor units) was 3.3. Income was compiled under 15 heads, and expenditures under 153 heads, including 72 for foodstuffs. Higher incomes were associated with a larger number of children in working-class families. The ratio of expenditure on foodstuffs in the middle classes to that of the working class was 126 to 100; the middle classes also spent proportionately less than the working class for fuel, subscription to trade unions, and newspapers. The nutritive value of the diet rose with increasing prosperity. An increase in cost of living since 1913-14 was everywhere noticeable. The article in the International Labour Review is a fairly complete English summary, dealing with methods of collection and compilation, and giving the chief results and a few of the most representative tables.

(1302)  
LEVNADESKOSTNADERNA I STADER OCH INDUSTRIORTER OMKRING ÅR 1923.  
[COST OF LIVING IN TOWNS AND INDUSTRIAL CENTERS ABOUT 1923.] 199  
pp., illus. Stockholm. 1929.

This study is based on records of expenditures kept by 1,400 families for the entire year of 1923, 747 families being those of industrial workers, 445 of minor functionaries mainly employed in communication, and 208 of the middle class just above the employees. The mean incomes of these three groups were 3,547, 4,424, and 7,635 kronor, respectively. Among the workers and functionaries, families without children were relatively rare (4 percent of the total); 21 percent had 1 child, 44 percent had 2 or 3 children, and 19 percent had 4 or more. In the middle class, childless families or those with only 1 child were very numerous, while those with more than 4 children were rare. The heads of the middle-class families generally had received superior school or university education. The selections were made at random from the three classes in different localities. The towns or cities supplied 76 percent of the industrial workers, 89 percent of the functionaries, and 80 percent of the middle-class families. The other households lived in industrialized rural sections. Wages, including those of wives and children, amounted to 94.6 percent of the total income of workers' and functionaries' families, and 95.7 percent of that for the middle class. The difference between

prevailing local rent and cost of upkeep was added to income of home owners. Income in kind, valued in money, was added after the expenses involved were deducted. Most of this income in kind came from gardens. There was also some free medical care and a few other benefits. The United States Department of Labor adult unit scale was used. The "normal household" was one of 3.3 adult units—the mean of all the families studied. The industrial worker consumed 3,390 calories per unit of consumption, the functionaries 3,420, and the middle class 3,760. Quality and variety of foods increased with income. Diet was also influenced by the resources and consumption habits of the regions studied. Expenditures in amounts and percentages for the three groups under the headings of food (including beverages), housing, fuel and light, clothing and shoes, fixed charges (taxes and dues), and intellectual needs are given. With increased incomes, expenditures for food, beverages, and tobacco increased at about equal rates, and articles consumed were of better quality and higher nutritive value. The data confirm Engel's law. Rents, being subject to legal regulation, give no confirmation to Schwabe's law. Rowntree is substantiated in that the ratio of income to unit of consumption falls. With increasing incomes, proportions for clothing, rent, fuel, and light remained about the same, while all other expenditures increased.

## SWITZERLAND

LE PLAY, F.

(1303)

HORLOGER DE LA FABRIQUE COLLECTIVE DE GENÈVE. JEUNE MÉNAGE D'OUVRIERS-TÂCHERONS DANS LE SYSTÈME DES ENGAGEMENTS MOMENTANÉS AVEC UN PRÉCIS DE LA MONOGRAPHIE AYANT POUR OBJET LE VIEUX MÉNAGE D'HORLOGERS-TÂCHERONS, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN AOÛT 1848. *In* Les Ouvriers Européens, ed. 2, v. 6, pp. 34-84. Paris. 1878.

This study, made in 1848, illustrates a family in a disorganized social structure, the complete antithesis of that which prevailed in eastern Europe. There was a continuous irritation between employers and employees over salaries, one of the first symptoms of social disorganization. The family consisted of the head (27), his wife (25), and son (2½). Health was good, but energy and animation were lacking. The doctor was paid 1 franc per visit. The worker hoped to become a small manufacturer. Recreations included lectures, walking, the theater, and family festivals. Family well-being was protected only by an energetic striving toward the bourgeois class, and by mutual insurance in case of unemployment or sickness. Property consisted of 657 francs in money, 40 francs in working equipment, and 2,317 francs in furniture and clothing. Income was 1,541 francs, of which 1,511 francs was in money. Property contributed 25 francs, labor 1,255 francs, and industries 261 francs. Food cost 499 francs; household, 399 francs; clothing, 341 francs; moral, recreative, and health needs, 211 francs; and all else, 11 francs. Savings were 80 francs. Notes are given on the ancient stability in Switzerland and the beginning of disorganization; the manufacturing system in Switzerland, particularly the watch factory in Geneva; comparison of the large and small workshops; the mass production of watches by machinery; intellectual status of workers in the East and the West; the yearly visits of the pastor to the Geneva workers; and a summary of a similar study of an older watchmaker's household in Geneva.

This man was a pieceworker in a system of momentary engagements. The household consisted of himself (50), his wife (53), and a son (13). Their lives were dominated by religious feeling and paternal love. The family savings were being used to give the son moral and intellectual training with a view to raising the family in the social hierarchy. This subordination of the family to the individual qualities of the child was described as an indication of instability. Family health was good. The physician was paid 1 franc per visit. The woman carried water and made clothing to add to the family income. The worker belonged to a mutual-aid society which would care for him in case of illness or unemployment. This assistance and the prospects for their son furnished the only assurance of future family well-being. Recreations included drinking, smoking, and walking. Furniture was valued at 595 francs, utensils 187 francs, and clothing 200 francs. Income was 1,115 francs, of which 45 francs came from subventions, 855 francs from the man's labor, 71 francs from his wife's, and 145 francs from industries. Food cost 550 francs; household, 255 francs; clothing, 185 francs; moral, recreative, and health needs, 122 francs; and all else, 3 francs. Nothing was saved.



HOFMANN, E.

(1304)

ZWEI HAUSHALTUNGSBUDGETS ÜBER EINEN ZWANZIGJÄHRIGEN ZEITRAUM.  
Arch. Soziale Gesetzgebung und Statis. 6: 47-113, illus. 1893.

One family was that of a clerk living in a rural community. The family varied in size, but for half the period it included 6 persons: The father, mother, 3 daughters, and 1 son. The income varied from 2,685 francs in 1866 to 3,503 francs in 1885. Savings are itemized as well as the cost of the various types of food. The other family was that of a teacher in the secondary schools living in the Canton of Thurgau. When he died in 1878 the wife's father became responsible for the family. There was a family of five through the whole period. The income varied from 1,830 francs in 1866 to 2,516 francs in 1877.

BÖHMERT, C. V.

(1305)

ARBEITERVERHÄLTNISSE UND FABRIKEINRICHTUNGEN DER SCHWEIZ. Zurich.  
1873. [Original not seen. Partly summarized in Hampke, Carl, Das  
Ausgabebudget der Privatwirtschaften, pp. 30-31, XVII. Jena. 1888.]

The expenditure account of a metal worker's family of five persons, in 1872, is given here. No income is mentioned. Food costs were 1,279.12 francs, rent 350 francs, clothing 250 francs, heat and light 118.75 francs, and the total expenditure 2,213.17 francs.

CHATELANAT, A.

(1306)

DIE LEBENSVERTHEURUNG UND DIE STAATSDIENERBESOLDUNGEN. EIN  
BEITRAG ZUR BESOLDUNGSERHÖHUNGSFRAGE. Ztschr. Schweizerische  
Statis. 9 (1): 1-21, illus. 1873.

This study is concerned chiefly with the percentage of rise in the cost of living between 1861 and 1872. Many tables present price data. One table shows the estimated minimum consumption of a family of five persons at the time of writing and compares these costs with the estimated sum necessary in 1840-50. The author also presents actual consumption data for the year 1872 for middle-class families of 4 and 5 persons, and compares these costs of consumption with those for the earlier years. He concludes that from 1861-72 there was a rise of 34 to 45 percent in the cost of living and a rise of 30 to 40 percent in prices.

DUTTWEILER, MAX

(1307)

EINE ZÜRCHER WIRTSCHAFTSRECHNUNG VON 1883-1910. Ztschr. Gesam.  
Staatswiss. 71: 84-127, illus. 1915.

The data for this study were taken from account books kept by husband and wife for 28 years (1883-1910), and balanced monthly. The husband recorded total income and expenditures, of which one item was household money. The wife recorded the items for which she spent household money. Both husband and wife were of native middle-class stock. The husband was a Government official whose salary increased regularly. They lived in the city of Zurich, except from April 1887 to October 1898, when they lived in a village in the Canton of Zurich. Save for slight variations over relatively short periods of time, the family consisted of four persons: Husband, wife, daughter (born 1886), and son (born 1884). The average income for the period was 4,432 francs, salary increasing from 2,400 to 5,800 francs. Expenditures were plainly budgeted according to salary. Earnings of the father for 28 years were 116,356 francs; expenditures were 115,197 francs. The family moved 2 or 3 times but did not improve their housing conditions (though their income almost doubled during the period) because the expenditure for the same type of house almost doubled.

SCHULER, FRIDOLIN

(1308)

DIE ERNÄHRUNGSWEISE DER ARBEITENDEN KLASSEN IN DER SCHWEIZ UND  
EINFLUSS AUF DIE AUSBREITUNG DES ALKOHOLISMUS. 39 pp., illus. Bern.  
1884.

An argument against the use of strong liquor by the working classes was the substance of this study. Reasons for the use of liquor by workers were stated as: (1) The prevailing notion that efficiency depends upon nervous irritation not furnished by usual food; and (2) the substituting of "schnapps" for the more expensive wines, caused by a reduction of wages unaccompanied by a decrease in living expenses. Figures for wages and for some articles of food, about the year 1884, were stated for both farmers and industrial workers in Bern, Travers, Genf, Oberhasli, Freiburg, Luzerne, and some other districts. The cost of a good daily fare, with drinks, was reckoned in a farming district as 1.25 francs for men and 1 franc for women. In Basel, three meals a day cost from 1.30 to 2 francs. Milk cost from 15 to 18 cents a liter, lean cheese from 100 to 120 cents

per kilogram. In Genf the meat consumption was 74 kilograms per head per year, the potato consumption 150 kilograms per year. In Switzerland, in 1874, 20,000,000 liters of brandy and liquor were consumed. A general knowledge of the poison content of spirituous liquor and its effect on the digestive organs was recommended as a means of stamping out alcoholism.

UNITED STATES BUREAU OF LABOR.

(1309)

REPORT ON EARNINGS AND EXPENDITURES OF WAGE RECEIVERS IN EUROPE.

U. S. Commr. Labor. Ann. Rept. 1 (app. B): 452-456, illus. 1886.

Eight expenditure accounts of skilled laborers in Switzerland in 1885 are given here—5 watchmakers and music-box mechanics from Geneva, 1 from Vevay, and 2 from Zurich. The incomes ranged from \$97 to \$718 a year. Only two accounts show a deficit. Rent and clothing show little variation; food costs amount to about 55 percent of the income and confirm Engel's law. Among the agricultural laborers, the income and expenditures were much lower, even including the value of food furnished. However, their standard of living compared favorably with that of the lower class factory worker.

ACKERMANN, ERNST

(1310)

EINNAHME UND AUSGABEBEWEGUNG EINER WESTSCHWEIZERISCHEN LEHRER-FAMILIE VON IHRER GRUNDUNG BIS ZUR GEGENWART, 1885-1915. Schr. Ver. Sozialpolitik 146 (1): 127-197, illus. München und Leipzig. 1917.

The household accounts of one higher middle-class family in the Swiss Canton of Thurgau are here studied. The father, a teacher, came from a family which dated back to the beginning of the eighteenth century. Among his ancestors were a farmer, a lieutenant, a manufacturer, a miller, and a landlord. He had passed the examination for primary teachers. The size of the family ranged from 6.5 to 16.5 quets. The average income was 5,338.20 francs, average expenditures 4,956 francs. The accurately kept accounts of this family covering so long a period (1885-1915) are unusually valuable. There are also tables of prices furnished by the office of the society for general consumption in Basel. Tables from other sources are used to show the influence of variation of income, prices, or size of family on the consumption of various articles of food. This family is compared with that of a textile worker in eastern Switzerland, studied by the same author. He concludes that increased income caused increased expenditure per unit of consumption; that increase of family caused decreased expenditure per unit of consumption; that consumption of bread rose with increased income; that Engel's law was confirmed; that expenditure for clothing rose for a time with increased income and then fell; that the expenditure for housing rose with increased income, but the percentage fell. He concludes that the income from yearly salary was not sufficient to maintain a family on a sound economic footing.

UNITED STATES DEPARTMENT OF LABOR.

(1311)

COST OF PRODUCTION: THE TEXTILES AND GLASS. U. S. Dept. Labor, Commr. Labor Ann. Rept. (1891) 7 (v. 2, pt. 3): 2048. 1892.

Along with similar data for wage earners of other foreign countries and the United States (228, 518, 656, 777, 799), income and expenditure figures are reported for the period 1888 to February 1891 from 52 families living in Switzerland. The fathers of these families were employed in the cotton industry. The average size of the 52 families was 5 persons. Their total annual income averaged \$359 and their total expenditure per year for all purposes, including insurance, averaged \$347. Individual records for each family cover the following points: Family description (age, sex, size, occupational status); sources of income; home ownership; expenditure for food (quantities of 11 and costs of 22 staple articles of diet); expenditure for rent (number of rooms), fuel and lighting (kind), clothing (husband and wife separate, children grouped), furniture and utensils, taxes, insurance (property and life), organizations, religion, charity, books and newspapers, amusements and vacations, intoxicating liquors, tobacco, sickness and death, and unclassified expenses; contrasted income and expenditure, showing surplus or deficit; and descriptive remarks concerning conditions and furnishings of homes. The entries for any one family can be traced through the various tables of expenditures for commodities.

Separate computations are given for 14 normal families. Normal families were those which included no boarders or dependents, rented their homes and recorded expenditures for rent, fuel, lighting, clothing, and food and included a husband, wife, and not more than five children all under 15 years of age. Quantities and costs of food consumed for each of the normal families are given for



nine articles of food in terms of 100 units of consumption and in tabular form showing decreasing per capita cost with increasing size of family.

The total annual income of the 14 normal families averaged \$271. Total expenditure for all items, including insurance, averaged \$285, for food \$150, for clothing \$41, and for rent \$26.

LANDOLT, CARL

(1312)

SAVETIER DE BÂLE (SUISSE). OUVRIER-CHEF DE MÉTIER DANS LE SYSTÈME DU TRAVAIL SANS ENGAGEMENTS D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX DU 1ER AVRIL 1889 AU 1ER AVRIL 1890. Les Ouvriers des Deux Mondes (2) 4: 225-272. 1895.

This is a study, made in 1889-90, of a household that consisted of the head (39), his wife (40), 3 daughters (9, 8, and 6), and 2 sons (4, and 3 months). Morals were excellent, but there was complete indifference to all religion. The mother was illiterate. The children attended public school. Health was good. The woman cleaned and washed by the day. The reading of a paper for the masses with a somewhat doubtful influence, rare drinks, and a political society to which he rarely paid dues, comprised the only recreations of the worker. The children would be fortunate if they could take care of themselves, and the parents would undoubtedly be dependent on charity in their old age. The worker had a small amount of sickness insurance. Property consisted of tools and money valued at 160 francs, and furniture and clothing at 206 francs. Income was 1,224 francs, of which 1,187 francs was in money. Property contributed 4 francs income; subventions, 71 francs; labor, 932 francs; and industries, 127 francs. Food cost 535 francs; household, 484 francs; clothing, 89 francs; moral, recreative, and health needs, 99 francs; and all else, 9 francs. They had to use 90 francs of their savings to make the budget balance. Notes are given on the division of expenses, and a comparative study of 10 workers' families of Basel.

(1313)

ZEHN BASELER ARBEITERHAUSHALTUNGEN. Ztschr. Schweizerische Statis. 27 (3): 281-372, illus. 1891.

This study presents data on household expenditures from 10 account books, 9 kept for a year, and 1 for 6 months, in 1889-90. Records were checked fortnightly or monthly by personal visits of the author. Each household is described and its data and complete inventory presented separately. Earnings and expenditures are given by month. These families all belonged to the working class, cobblers, tobacco workers, weavers, masons, and clerks being represented. The size of the families ranged from 2 to 10. The average income was 1,143 francs. Only 1 of the 10 men was able to support his family without assistance from wife or children. Only one had a savings deposit. A separate table presents the weight of different foods consumed by each family and reckons the amounts of protein, fat, and carbohydrate consumed. On the basis of C. Voit's estimates of the quantities of each of these necessary for nutrition, he concludes that in many cases the nourishment was inadequate and that in but few cases was there the proper relation between the three elements.

(1314)

METHODE UND TECHNIK DER HAUSHALTSTATISTIK. 104 pp., illus. Freiburg und Leipzig. 1894.

The author discusses here the best method of collecting and presenting household statistics. In the second part of the work, dealing with the household of one workman's family in the city of St. Gallen, the author describes in detail the Canton of St. Gallen. Income and expenditures are given for a family of five from January 1, 1890, to January 1, 1891. The man was a pattern drawer in an embroidery manufactory. The author describes the family as comparatively well situated. A detailed inventory of all their possessions on March 18, 1890, is given. The wages of the man for that year were 2,239 francs; income from other sources, such as capital and credit, brought the total income up to 2,402 francs. An appended table gives data, not collected by the author, of 12 other Swiss and 2 German families.

ACKERMANN, ERNST

(1315)

EINNAHME UND AUSGABEBEWEGUNG EINES OSTSCHWEIZERISCHEN TEXTILARBEITERHAUSHALTES IN 21 JAHREN. Schr. Ver. Sozialpolitik 146 (pt. 1): 1-60, illus. München und Leipzig. 1917.

Complete household accounts of a textile worker in the eastern part of Switzerland who left school at 14 are given for the years 1892-1912. Income, expenditures, and savings of his father, who was first a teacher and then clerk in a store,

are given for the years 1864-72. The average income of the textile worker was 3,425.67 francs a year. The size of the family, given in terms of quets, ranged from 7.8 to 8.9. From a study of the data the author deduces confirmation of C. D. Wright's version of Engel's law. There are many conclusions as to the increase in the cost of living during these years, especially as to the rise in the prices of food.

MENZI, A.

(1316)

ÜBER DIE PREISENTWICKLUNG UND DIE BELASTUNG DER HAUSHALTUNGS-RECHNUNGEN DURCH DIE PREISSTEIGERUNG IN BASEL. 1892-96, 1900-2, 1912. Schr. Ver. Sozialpolitik 146 (1): 61-84, illus. München und Leipzig. 1917.

The purpose of the study was (1) to determine the rise in prices for the year 1912 in comparison with the average for the years 1892-96, and (2) to determine how this increase in the cost of living is shown in the household accounts for the year 1912. One table shows the rise in price of 13 articles of food from 1892 to 1912. Another shows increased expenditures for these articles in 1912 compared with 1892-96. Account books of four families, whose size in quets ranged from 7.5 to 18.8, and whose total expenditures ranged from 2,111.42 marks to 2,957.08 marks, were chosen from the 85 books collected by the office of the Swiss secretary of labor for the year 1912. No description of the families is given. These four families were selected because of the range in size and in total expenditures. Data showed that higher prices had not affected the consumption of milk and bread. The consumption of meat decreased. As a control of the method, an appendix shows in one table the total income, total expenditures, and itemized food expenditures of one family for the years 1896, 1901, 1902, and 1912.

LANDOLT, CARL

(1317)

LOHNSTATISTIK UND HAUSHALTUNGSBUDGETS. Schweiz. Bl. für Wirtschafts- u. Sozialstatist. 3 (2): 729-745, 762-772. 1895.

These articles give a summary of data from the household accounts of 12 workmen's families in Switzerland. The period to which the data apply is not stated, but was probably just prior to 1895, the date when the articles were published. Tables give income, total expenditures, and expenditures for food. Chief emphasis is on nutrition. According to the Voit figures, most of the families were undernourished.

KRÖMMELBEIN, FRITZ

(1318)

MASSENVERBRAUCH UND PREISSTEIGERUNGEN AUF GRUND BASLERISCHER WIRTSCHAFTSRECHNUNGEN. 193 pp., illus. Stuttgart. 1910.

Four household accounts representing altogether 19 years of bookkeeping in the years 1896-1906 are presented here. The income ranged from 1,778.20 to 41,268 francs per year. Consumption is reckoned per quet for each family. The heads of the four families all belonged to the lower middle class. The purpose of the work was to determine accurately (1) incomes and expenditures, especially expenditures for certain items, (2) the rise in prices, especially of food-stuffs, and (3) the influence which the rise had on the people of small means. The percentage of total expenditure spent for food fell with increased income.

SAVORY, ÉMILE

(1319)

CHOCOLATIER DE LA FABRIQUE DES CHOCOLATS AU LAIT F. L. CAILLER, À BROCCANTON DE FRIBOURG, SUISSE). OUVRIER JOURNALIER DANS LE SYSTÈME DES ENGAGEMENTS VOLONTAIRES PERMANENTS D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN 1908, 1909 ET 1912. Les Ouvriers des Deux Mondes (3) 3: 293-347. 1913.

This study was made in 1908, 1909, and 1912 in Broc, where the population varied from 611 to 1,756 people, depending on the seasonal employment at the factory. French was the common language. The household described in this study consisted of the father (58), his wife (53), 2 sons (24 and 18), and 3 daughters (23, 18, and 10). Two other children were married, and one was dead. Education was elementary, except for one son who spent a year at the College of St. Maurice. Morals were good. Health conditions were poor; but medical service was free. Employer-employee relationships were good. Recreations were chiefly noncommercialized. Two mutual-aid societies and a cooperative society added to the well-being of the workers. Property consisted of money and tools valued at 180 francs, and furniture and clothing at 1,586 francs. Income was 3,689 francs, of which 3,407 francs was in money. Property contributed 53 francs, labor 3,591 francs, and industries 144 francs. Food cost 1,654 francs; the



household, 643 francs; clothing, 528 francs; moral, recreative, and health needs, 257 francs; and all else 81 francs, 526 francs being saved. Notes are given on the history of the Swiss chocolate industry, the various official and private institutions contributing to the well-being of the working population about Broc, factors determining the location of this factory, public (community) property, rise in cost of living, regulations concerning dancing in Fribourg, and the agricultural production of Fribourg.

LORENZ, JACOB

(1320)

DIE KOSTEN DER LEBENSHALTUNG IN DER SCHWEIZ IN DEN JAHREN 1905-16. UNTER BESONDERER BERÜCKSICHTIGUNG DES KRIEGSEINFLUSSES AUF DIE LEBENSKOSTEN. Schr. Ver. Sozialpolitik 146 (1): 219-303, illus. München und Leipzig. 1917.

This study is concerned with determining the rise in the cost of living. Household accounts of 785 families in 135 places throughout Switzerland for the year 1912 were studied. Both urban and rural districts and three classes, workmen, salaried employees, and government officials, were represented. The average of all these families is taken as a norm. Size of family averaged 10.9 quets; income 3,033 francs; expenditures 2,919 francs. Prices are taken from two Swiss surveys and also the monthly bulletin of prices of the Swiss bureau of statistics. The expenditures of this average family are used to get index figures for determining the rise in the cost of living. Only expenditures of this average family are given.

SWITZERLAND, ARBEITERSEKRETARIAT.

(1321)

DIE LEBENSHALTUNG SCHWEIZERISCHER ARBEITER UND ANGESTELLTER VOR DEM KRIEGE. Zürich. 1922. [Original not seen. Summary in International Labour Office, Methods of Conducting Family Budget Enquiries, p. 77. Geneva. 1926.]

This inquiry, conducted in 1912, is an important investigation of family expenditures undertaken in Switzerland.

MENZI, A.

(1322)

NACHTRAG: DER EINFLUSS DES KRIEGES 1914-16 AUF DIE PREISENTWICKLUNG UND DIE BELASTUNG DER HAUSHALTUNGSRECHNUNGEN IN BASEL. Schr. Ver. Sozialpolitik 146 (1): 85-97. München und Leipzig. 1917.

The purpose of this appendix is to show how the war influenced prices. Data from the office of statistics in Basel were utilized. One table shows prices of 13 articles of food in 1892-96, 1900-1902, 1912, 1915-16. Another shows what the expenditures of each of the four families for the 13 articles of food would have been according to the prices of 1916 compared with 1912. The average rise in the cost of the 13 articles of food for these four families was 75 percent from 1900 to 1916. The rise from 1912 to 1916, due to the war, was 35 to 40 percent, probably 50 percent in families with a large expenditure for food.

ZÜRICH, KANTONALES STATISTISCHES BUREAU.

(1323)

BEITRÄGE ZUR WIRTSCHAFTSSTATISTIK: HAUSHALTUNGSRECHNUNGEN AUS DER STADT WINTERTHUR UND DEN LANDGEMEINDEN DES KANTONS BETREFFEND DIE JAHRE 1912, 1919 UND 1920. Statis. Mitt. Betreffend den Kanton Zürich 141: 1-112, illus. 1922.

The bureau of Zurich joined the general Swiss survey of 1912, publishing separately the household accounts it collected. Of the 150 accounts collected in 1912 in Winterthur and rural communities, 20 were excluded because of abnormal conditions. There were 37 accounts for 1919 and 53 for 1920. The family size is given in quets; for 1919 and 1920, it is also given in persons and consumption units (a male of 20 being counted as 1, female of 20 as 0.8). The average family size was 11.1 quets. Average incomes were 2,764 francs for 1912, 5,660 francs for 1919, and 6,128 francs for 1920. A table shows the average incomes for the 3 years of workers in different industries. A table showing the average expenditures for the 3 years shows the cost of living had risen. In 1912 and 1920 more than half the households had a surplus; in 1919 three-fifths of them had a deficit. Engel's law is confirmed. For 1912 the average income and expenditures are given for families grouped according to occupation, locality, and range of income. Average quantities of food consumed are given per family and per quet for families grouped according to occupation. For 1919 and 1920 the average incomes and all items of expenditure are given for families grouped according to locality, occupation, range of income, and size of family (in persons, consumption units, and quets). Average quantities of foodstuffs consumed are given per family and per consumption unit for the same groupings, except that size of family

is given in consumption units only. For the averages of income for 3 years, all items of expenditure and quantities of foodstuffs consumed are worked out per household and per quet.

BASEL-STADT STATISTISCHES AMT DES KANTONS.

(1324)

HAUSHALTUNGSRECHNUNGEN VON BASLER FAMILIEN AUS DEN JAHREN 1912, 1919-23. Mitt. Statist. Amtes des Kantons Basel-Stadt, no. 45, 59 pp., illus. Basel. 1925.

This study presents household accounts taken from publications of Swiss surveys made by the Swiss labor bureau or bureau of statistics. There are 127 accounts from families of officials and salaried employees, and 159 from workmen's families. Size of family is given in persons, adult units, and quets, and incomes and expenditures are reckoned per family and per consumption unit. Expenditures for food are reckoned all three ways. Average size of the family increased from 1912 to 1923, as did income. Taking 1912 as 100, incomes of the workmen studied increased to 196.6; of the official and salaried employees, to 184.7. Average incomes of all the families studied in the survey ranged from 3,194.45 francs in 1912 to 6,165.94 francs in 1923. Indications are that the highest level of living was maintained in 1922, the level for 1923 being about the same. The lowest level was that of 1917, that of 1912 being nearly as low.

ACKERMANN, ERNST

(1325)

ANHANG ZU "EINNAHME UND AUSGABEBEWEGUNG EINES OSTSCHWEIZERISCHEN TEXTILARBEITERHAUSHALTES FÜR 1913-16." Schr. Ver. Sozialpolitik 146 (1): 199-218, illus. München und Leipzig. 1917.

During the years covered (1913-16), except for 4 months when the son was away, the family of this textile worker consisted of husband, wife, and one son. Size of family is given in quets. The yearly income from all sources ranged from 4,453 francs in 1913, 3,425 francs in 1914, to 5,080 francs. The income covered expenses except in 1914. The author agrees with the textile worker that his accounts cannot be taken as a true picture of the workers during these years, since he was never unemployed.

ZÜRICH, STATISTISCHES AMT.

(1326)

ZÜRCHER HAUSHALTSRECHNUNGEN AUS DEM JAHRE 1919, EIN BEITRAG ZUR KENNTNIS DER LEBENSHALTUNG. 56 pp., illus. Zürich. 1921.

Records of 85 families of various rank, including teachers, government employees, and industrial workers were given in this study. The incomes ranged from 3,000 to 10,000 francs and above. One item of measurement was the adult male consumption unit; persons under 19 years of age were considered as fractions of consumption units according to age and sex. The average income per family was 6,281.88 francs, or 2,625.95 francs per adult unit. The average expenditure was 6,147.24 francs per family, or 2,569.67 francs per adult unit. Of this expenditure 43.7 percent was for food, 13.9 percent for clothing, 12.1 percent for rent, 4.4 percent for house furnishings, 6 percent for heating and lighting, and 19 percent for other items. The data were tabulated so as to show the relation of income to expenditure by income groups, by occupational groups, per family, per capita, and per consumption unit.

SWITZERLAND, OFFICE FÉDÉRAL DU TRAVAIL (EIGENÖSSISCHES ARBEITSAMT).

(1327)

HAUPTERGEBNISSE DER ERHEBUNGEN VON HAUSHALTUNGSRECHNUNGEN AUS DEM JAHRE 1922 VERGlichen MIT SOLCHEM AUS DEM JAHREN 1919, 1920 UND 1921. Schweiz. Arbeitsmarkt 5 (6): 251-255, illus. 1924.

This article gives summaries of the data for 1920 and 1922. For the year 1920, 94 families of officials and salaried employees, and 128 families of workmen, were studied; for the year 1922, 174 families of officials and salaried employees, and 147 families of workmen, were studied. Probably both rural and urban districts are represented. In 1920 the average size of family was 3.74 persons or 2.39 consumption units for the official and salaried groups; in 1922, the average size was 3.79 persons or 2.41 consumption units. The average income per family for this group was 7,671 francs in 1920, and 7,233 francs in 1922. For the wage-earner group, the average size of family in 1920 was 4.52 persons or 2.74 consumption units, and the average income per family was 5,908 francs; in 1922, the average size of family was 4.41 persons or 2.67 consumption units, and the average income per family was 5,494 francs.



SWITZERLAND, OFFICE FÉDÉRAL DU TRAVAIL (EIGENÖSSISCHES ARBEITSAMT). (1328)

BUDGETS DE FAMILLES TENUS EN SUISSE DURANT L'ANNÉE 1921. COMPARÉS AVEC DES BUDGETS TENUS EN 1912, 1919, 1920. Inform. Statis. Sociale. Ed. 2. 34 pp., illus. Bern. 1923.

Tables give the complete data for 1921, both urban and rural communities being represented. Of the 323 families studied, 16 were those of high officials, 159 of other officials and salaried employees, 122 of skilled workers, and 26 of unskilled workers. Size of family is given in persons and consumption units (according to Schiff, male of 19 being counted as 1, female as 0.8, child up to 3 years as 0.1, etc.). The average size of the family was 4.24 persons or 2.6 consumption units. Average income was 6,823 francs per family or 2,620.2 francs per consumption unit. Expenditures are reckoned per family and per consumption unit. For purposes of comparison, data for 1912 are given on income, sources of income, average quantities of foodstuffs, and the percentage of total expenditure spent for various foodstuffs.

SWITZERLAND, STATISTISCHES AMT DES KANTONS WINTERTHUR. (1329)  
HAUSHALTUNGSRECHNUNGEN AUS DER STADT WINTERTHUR \* \* \* 1921-22. Statis. Mitt. Betreffend den Kanton Zürich 150: 85-86. 1925.

SWITZERLAND, SECRÉTARIAT DES PAYSANS SUISSES AU DÉPARTEMENT FÉDÉRAL DE L'ÉCONOMIE PUBLIQUE. (1330)

RECHERCHES RELATIVES À LA RENTABILITÉ DE L'AGRICULTURE PENDANT L'EXERCICE 1926-27. Pt. 1, pp. 97-122; pt. 2, pp. 361-454, illus. (Reprinted from the *Annuaire Agricole de la Suisse* 1928.) Bern. 1928.

Most of the data presented here cover the years 1901-26, showing the advance or decrease in income and expenditures. Apparently all Switzerland was covered by the study. The average expense of the agricultural laborer for 1926 was 587 francs; the number of days of labor per hectare for all undertakings was 77; the laborer's expenses per working day were 7.46 francs for the members of the family, and 5.47 for employer; the return to the former was 7.43 francs a day, and to the latter 5.47 francs. In nine groups of laborers the salaries paid ranged from 3.30 to 22.35 francs a week. Prices of staple foods are given, and the proportion due each laborer. The consumption is not given, save in the cases of actual expenditure records. For 1926, 386 of these records were studied. These showed average total expenditures of 1,760 francs, 538 francs for clothing, 17 francs for groceries (no other food costs given), 162 francs for furniture, and 111 francs for books, etc.

#### SYRIA

DELBET, E. (1331)

PAYSANS EN COMMUNAUTÉ ET EN POLYGAMIE DE BOUSRAH (ESKY CHAM') DANS LE PAYS DE HAOURÂN (SYRIE—EMPIRE OTTOMAN). OUVRIERS-PROPRIÉTAIRE DANS LE SYSTÈME DU TRAVAIL SANS ENGAGEMENTS D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN DÉCEMBRE 1857. Les Ouvriers des Deux Mondes (1) 2: 363-446. 1857. [Reprinted in Le Play, F., Les Ouvriers Européens, ed. 2, v. 2, pp. 304-397. Paris. 1879.]

In this agricultural community the property was not divided, each farmer cultivating an area proportionate to the number of his oxen. In 1857, when the study was made, this household consisted of the chief (41), who had three wives (39, 24, and 18). His first brother (35) had a wife (25) and a Nubian concubine slave (40). The second brother (27) had a wife (16). The third brother (20) had a wife (15) and supported his mother (50). The older son of the sheik (17) had a wife (14). There were also 8 children, 10 domestic servants, and 2 others attached to this community. In winter fevers and minor epidemics of cholera and syphilis were common. Folk medicines were used. Each family owned its working tools. The head was a sheik having 300 related horsemen who fought under him and were members of his clan. Recreations were noncommercialized. Community well-being depended chiefly on solidarity. Property consisted of 17,869 francs, mostly in animals, and 6,946 francs in furniture and clothing. Income was 14,744 francs, of which 6,071 francs was in money. Property contributed 1,047 francs; subventions, 1,508 francs; labor, 3,312 francs; and industry, 8,877 francs. Food cost 5,613 francs; household, 947 francs; clothing, 1,484 francs; moral, recreative, and health needs, 2,373 francs; and all else, 1,832 francs, 496 francs being saved. Notes are given concerning the community regime in Haourân; agricultural communities viewed historically; the

regime of polygamy; domestic labors in the district and their agricultural practices; weights and measures; and the tributes which the sedentary pay to the Bedouins.

ABU-IZ'IDDIN, FUAD, and HAKIM, GEORGE

(1332)

A CONTRIBUTION TO THE STUDY OF LABOUR CONDITIONS IN THE LEBANON. Internatl. Labour Rev. 28 (5): 673-682, illus. 1933.

"The following article is based upon an unpublished thesis in which the authors gave an account of personal investigations made by them in 1932 \* \* \* into conditions of labour in the Lebanon. The investigations covered 272 factories and workshops, employing some 4,000 workers. Information was obtained partly from answers to questionnaires sent to employers, but mainly by personal visits to undertakings, in the course of which the authors noted systematically their observations and the replies to questions put by them to managements and workers, and by enquiry in the workers' homes." Personal investigations into the expenditures of 50 working families showed an average monthly expenditure of 420 francs for a family of five, or 285 francs for a single worker. Average expenditures for the family of five were: For rent, 60 francs; for food, 210 francs; for clothing, 70 francs; for fuel and light, 20 francs; miscellaneous (amusements and medical), 60 francs. Average expenditures for the single worker were: For rent, 40 francs; for food, 120 francs; for clothing, 50 francs; for fuel and light, 15 francs; miscellaneous, 60 francs. The average wage per day was 11 francs, skilled laborers receiving 21 francs. Food consisted mainly of bread, rice, olives, potatoes, pulses, fruit, and some jam. Meat, eggs, and tea were luxuries. Housing and clothing standards were low, and medical expenses heavy. Employment being irregular, the majority of Syrian workers supplemented their income by farming and gardening.

#### TURKEY

DAUX, A., and LE PLAY, F.

(1333)

FORGERON BULGARE DES USINES À FER DE SAMAKOWA (TURQUIE CENTRALE). JOURNALIER-PROPRIÉTAIRE DANS LE SYSTÈME DES ENGAGEMENTS FORCÉS, D'APRÈS LES DOCUMENTS RECUEILLIS SUR LES LIEUX EN 1848 ET EN 1849. *In* Les Ouvriers Européens, ed. 2, v. 2, pp. 231-271. Paris. 1877.

This study, made in 1848 and 1849, describes workers who were free in principle but whose debts placed them in fact under a feudal regime. The conditions of their life go to show that poor workers in eastern Europe were more fortunate than workers in the rich cities of western Europe whose wages were 10 times as high. One family consisted of the head (37), his wife (32), two sons (12 and 4), and a daughter (10). Morals and health were good. The feudal lord furnished medical aid. The head worked in the iron forge and also at agriculture. Recreations included smoking, drinking, and family ceremonies. Their well-being rested on the feudal system and its obligations, family savings in the form of jewelry, the spirit of charity emphasized by Mohammedan law, and the land system which permitted the individual to secure subsistence and a homestead on public property by paying a slight rental fee to the church. Property consisted of 413 francs in a household, money, and working equipment, and 270 francs in furniture and clothing. Income was 448 francs, of which 237 francs was in money. Property accounted for 15 francs income; subventions, 91 francs; labor, 308 francs; and industries, 304 francs. Food cost 233 francs; household, 39 francs; clothing, 96 francs; moral, recreative, and health needs, 37 francs; and all else, 30 francs. Savings were 15 francs. Notes are given on systems of landholding in Turkey; the debts which bound Christian workers to Mohammedan feudal lords; the influence of savings in clothing and jewelry on the oriental families; and the civil courts in this territory.

MOURI, NIMET

(1334)

THE BUDGET OF A TURKISH FAMILY I KNOW. Jour. Home Econ. 17: 212. 1925.

This family of 2 adults and 3 children had an income of 3,000 £ Tqs. a year (value of pound (£ Tq.) was \$0.53); 30 percent of this was put aside for the purchase of a home, travel, summer holiday, education, and provision for old age; 25 percent went for food; 15 percent for the rent of a six-room house in a good quarter of Stamboul; 15 percent for clothing (of this 200 Tqs. went for the wife's garments and 175 Tqs. for the husband); 15 percent of the income went for operating expenses of the household, which included water, electricity, and domestic service. The data probably refer to a period not long previous to April 1925, the date when the article was published.



## AFRICA

## ALGERIA

DARASSE, VINCENT

(1335)

PAYSANS EN COMMUNAUTÉ ET COLPORTEURS ÉMIGRANTS DE TABOU-DOUCHD-EL-BAAR (GRANDE-KABYLIE), PROVINCE D'ALGER. OUVRIERS-PROPRIÉTAIRES DANS LE SYSTÈME DU TRAVAIL SANS ENGAGEMENTS, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN 1884. Les Ouvriers des Deux Mondes (1) 5: 459-502. 1885.

The family community of the Kabyles was preserved as a remedy against the evil of extreme division of property. Although attached to ancient customs, the Kabyles excelled in finding and using the good in European progress. This family was respected by compatriots because of its property and outside contacts. In 1884, the year of the study, the household consisted of the head (60), his wife (55), their eldest son (35), his wife (28), their daughter (1), the second son (30), his wife (20), their daughter (1), the third son (26), his wife (20), their son (6 months), the fourth and fifth sons (24 and 18), and a shepherd (14). Three daughters had died, and three were married. Each of the sons had in turn been a shepherd. Paternal authority was respected, and morals were good. Health was excellent. The chief work of the men was cultivating grain and gathering olives. Sheep's wool brought additional income. The women made pottery utensils and clothes. The third and fourth sons migrated each winter to Algeria, where they sold souvenirs and thus contributed to the family income. Recreations consisted of bodily exercise and feasts. Well-being rested on their love of work, desire for property, and the customs of the patriarchal family unit. Property consisted of dwellings 6,000 francs, 46 hectares of land 20,000 francs, animals 6,140 francs, tools 951 francs, and furniture and clothing 6,024 francs. Income was 12,651 francs, of which 5,152 francs was in money. Property accounted for 1,985 francs; subventions, 930 francs; labor, 1,893 francs; and industries, 7,843 francs. Food cost 8,627 francs; household, 887 francs; clothing, 974 francs; moral, recreative, and health needs, 387 francs; and all else, 142 francs. Savings were 1,635 francs. Notes are given on the origin of the Kabylie population, their customs and communal life, the mixed communities, their commercial aptitudes and migratory habits, and the social relations of the Kabyles of the Grande-Kabylie.

GEOFFROY, AUGUSTE

(1336)

BORDIER (FELLAH) BERBÈRE DE LA GRANDE-KABYLIE (PROVINCE D'ALGER). PROPRIÉTAIRE-OUVRIER DANS LE SYSTÈME DU TRAVAIL SANS ENGAGEMENTS D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN JUILLET 1884. Les Ouvriers des Deux Mondes (2) 2: 53-92. 1890.

This patriarchal family lived in a group bound by blood ties. It had furnished several village chiefs, its property was among the best, and the head had traveled and had assimilated good traits. In 1884, when the study was made, the household consisted of the head (38), his wife (30), a son (17), and two daughters (10 and 6). The head could read and write in Arabic and French and knew the French system of weights and measures. The son was attending school. Morals were excellent and charity an outstanding trait. Health conditions were fair. All the family assisted in the cultivation of the land and in the care of the animals. Recreations comprised only talking and religious ceremonies. This family continued in the old patriarchal custom of keeping the land intact in spite of the French law of partition. In addition to this assurance of well-being, there was rigidity of morals, frugality, love of work, and special ability. Property consisted of dwelling and land valued at 1,850 francs, animals at 263 francs, tools at 53 francs, money 375 francs, and furniture and clothing at 319 francs. Income was 1,313 francs, of which 311 francs was in money. Property accounted for 89 francs; subventions, 216 francs; labor, 875 francs; and industries, 133 francs. Food cost 930 francs; household, 77 francs; clothing, 87 francs; moral, recreative, and health needs, 35 francs; and all else, 32 francs. Savings were 153 francs to buy land for marrying the son. Notes are given on the individuality of the Berber race, the variety of their costumes and mores, and the social organization of the Kabyles before introduction of French law.

Cos, M.

(1337)

PRÉCIS D'UNE MONOGRAPHIE DU PAYSAN COLON DU SAHEL (ALGÉRIE). OUVRIER-PROPRIÉTAIRE ET CHEF DE MÉTIER DANS LE SYSTÈME DU TRAVAIL SANS ENGAGEMENTS (1885). Les Ouvriers des Deux Mondes (2) 2: 93-108. 1890.

This Spanish peasant came to Algeria 17 years before, established himself with borrowed money, and became a respected citizen because of his success and good reputation. When this study was made in 1885, the household consisted of the head (57), his son (28), the son's wife (25), and their son (3), and the peasant's daughter (19); his wife had died 6 years before. Another son was married and lived nearby. Their only recreation consisted of the day of rest on Sunday. Family well-being rested on perseverance in work, economy, and love of property. The French law of property division made the future uncertain for the heirs. The father gave 10 hectares of new land to his second son, since he could not leave it intact. Property consisted of dwelling and outbuildings valued at 1,400 francs; 2 hectares, 50 acres of vineyards, 7,500 francs; 2 hectares, 75 acres in cultivation 5,500 francs; animals, 595 francs; tools, 1,192 francs; and furniture and clothing, 832 francs. Income was 2,498 francs. Property was credited with 650 francs, labor 1,268 francs, and industries 580 francs. Food cost 718 francs; household, 50 francs; clothing, 60 francs; moral, recreative, and health needs, 21 francs; and all else, 135 francs. Savings were 1,514 francs. This study is only the outline of a regular Le Play case and lacks many details ordinarily given.

GEOFFROY, AUGUSTE

(1338)

ARABES PASTEURS NOMADES DE LA TRIBU DES LARBAS (RÉGION SAHARIENNE DE L'ALGÉRIE). OUVRIERS CHEFS DE MÉTIER, PROPRIÉTAIRES, DANS LE RÉGIME DES NOMADES ET DANS LE SYSTÈME DU TRAVAIL SANS ENGAGEMENTS, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN MARS, AVRIL ET MAI 1885. Les Ouvriers des Deux Mondes (2) 1: 409-464. 1887.

This was a typical Arabian patriarchal family in which social status was measured by the number of children, the practical knowledge of the pastoral art, and the fortune. The head of this family was of great renown. In 1885 at the time of the study, the household consisted of himself (39), 3 wives (32, 25, and 14), 3 sons (20, 15, and 13), the wife of the eldest (12), 2 daughters (8 and 6), and three slaves (60, 40, and 20). Two married brothers with tents nearby completed the group. The father was attached to his children when they were small, but severe in the exercise of his authority when they grew up. The children had no respect for their mother. Health was excellent. Medical attention was free. The men were taught to make a living by the age of 20. The women did all the work around the tent. Recreations were noncommercialized. Well-being rested on the strong tribal organization and the ability to conquer the natural elements. Property consisted of dwelling valued at 2,925 francs; money, 125 francs; animals, 28,000 francs; tools, 721 francs; and clothing, 1,699 francs. Income was 7,977 francs, of which property was credited with 2,079 francs; subventions, 301 francs; labor, 2,370 francs; and industries, 3,228 francs. Food cost 3,544 francs; household, 1,081 francs; clothing, 617 francs; moral, recreative, and health needs, 1,820 francs; and all else, 915 francs, there being no savings. Notes are given on the geography of Algeria, marriage and divorce, paternal authority, taxes, and the past and future of the Larbas.

## EGYPT

BRUGSCH, HEINRICH

(1339)

DIE KOSTEN DES HAUSHALTS IN ALTAR ZEIT. Volksw. Zeitfragen., v. 89, 31 pp. Berlin. 1890.

In writing this article, published in 1890, the author used information assembled from papyri and stones. He attempts to give the cost of some foods and houses in ancient Egypt. The old silver coin is converted into marks and pfennigs according to its silver content.



LEGRAIN, GEORGES

(1340)

FELLAH DE KARNAK (HAUTE-EGYPTE). JOURNALIER DANS LE SYSTÈME DES ENGAGEMENTS MOMENTANÉS, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX DE 1895 À 1900. Les Ouvriers des Deux Mondes (3) 1: 289-336, illus. 1904.

This study conducted from 1895 to 1900, concerns a village unchanged for many thousands of years. Improvident, but hoping sometime to purchase a piece of land, the peasant worked part time in the excavations, and another part at day labor near or in Luxor. The household consisted of the head (24), his wife (22), two sons (5 and 1), and the peasant's mother (50). The head of the family could not read. Recreations consisted of weekly trips to market, smoking, and various religious ceremonies. Their well-being was assured only by the future possibilities of the children's work. Property consisted of land valued at 60 francs, animals 21 francs, tools 1 franc, and furniture and clothing, 44 francs. Income was 235 francs, of which 216 francs was in money. Property contributed 10 francs; subventions, 11 francs; labor, 160 francs; and industries, 56 francs. Food cost 132 francs; household, 10 francs; clothing, 53 francs; moral, recreative, and health needs, 33 francs; and all else, 1 franc. Savings were 6 francs. Notes are given on superstitions and the moral traits of the Egyptian peasant.

BENNETT, T. L.

(1341)

REPORT ON COST OF LIVING. SUPPLEMENT TO EGYPT, MINISTRY OF FINANCE. Statist. Dept., Monthly Agr. Statist. November 1920. [Original not seen.]

The records of expenditure of 263 families were analyzed in March 1920.

EGYPT, MINISTRY OF FINANCE.

(1342)

REPORT ON COST OF LIVING. 10 pp., illus. Cairo. 1920. [Original not seen. Summary in U. S. Dept. Labor, Bur. Labor Statist. Monthly Labor Rev. 12 (4): 62-63. 1921.]

Records of expenditure were collected from 594 families in Egypt in 1920. They were roughly classified as clerks, artisans, and laborers. The respective average monthly expenditures were £E 22.9, £E 12.2, £E 6.2. No great difference in level of living was found between classes 2 and 3. A deficit appeared in almost every case.

## FRENCH WEST AFRICA

SIMONIN, L.

(1343)

MULATRE AFFRANCHI DE L'ÎLE DE LA RÉUNION (Océan Indien). OUVRIER JOURNALIER ET DOMESTIQUE DANS LE SYSTÈME DES ENGAGEMENTS MOMENTANÉS D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX DE MARS À JUILLET 1861. Les Ouvriers des Deux Mondes (1) 4: 159-195. 1862.

This family lived in the city of St. Paul, Island of Réunion, where the man was a mason or, during slack times, a domestic servant. His wife did laundry work. He and his wife were formerly slaves; he was freed when 22. He was the son of a French army officer. In 1861, at the time of the study, the household comprised himself (34), his wife (35), and three daughters (10, 4, and 1½). He had two other daughters (13 and 3) born out of wedlock to different mothers. Health conditions were excellent, and medical service was free. There were no commercialized recreations other than smoking. The emancipation of the slaves (who had no foresight or idea of saving) had led to degradation and misery. This worker could not support his family without his wife's aid. When old, they would be dependent on their children and public charity. Property consisted of 49 francs in working equipment and 371 francs in furniture and clothing. Income was 1,303 francs, of which 1,235 francs was in money. Property contributed 5 francs, subventions 65 francs, labor 1,221 francs, and industries 12 francs. Food cost 758 francs; household, 161 francs; clothing, 328 francs; moral, recreative, and health needs, 42 francs; and all else, 14 francs, there being no savings. Notes are given on the Island of Réunion, its natural products, history, and commerce, the production of sugar cane, the different races of men, the color problem, the immigration of foreign labor, the colonial regime of France and the absenteeism of the landlords, and the emancipation of slaves.

ESCARD, PIERRE

(1344)

PRÉCIS D'UNE MONOGRAPHIE D'UN CULTIVATEUR-PÊCHEUR-PORTE-CANNE DU PAYS ADIOKROU-BOUBOURY (CÔTE D'IVOIRE). OUVRIER POLYGAME, CHEF DE MÉNAGE, PROPRIÉTAIRE, DANS LE SYSTÈME DU TRAVAIL SANS ENGAGEMENTS D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX DE 1903 À 1909. *Les Ouvriers des Deux Mondes* (3) 3: 110-141. 1910.

This study, conducted from 1903 to 1909, illustrates life on the Ivory Coast of Africa. The people of Toupa sold grain and oil received from farming and fishing. The French occupation facilitated trade by assuring intertribal peace. Inheritance was through the female line. The household of the study consisted of the nominal chief (70), his nephew, Kokra, the real chief (42), Kokra's brother (35), Kokra's 2 wives (29 and 20), Kokra's 3 sons (9½, 7, and 4), Kokra's daughter (5), the grandson of the old chief (18), and a slave boy (15). Family feeling was strong, and relations were good. The first wife was mistress, and her permission was asked before a second wife was taken. The slave was treated as one of the family. The chief was illiterate, but his sons would learn to read and write French in a French school in Toupa. The chief drank steadily. Health conditions were good. Medical service was through the government dispensary. The men tilled the soil and fished. The head was also a government agent, working about 3 days a week. The principal recreations were feasting, religious celebrations, and dancing, in all of which the women joined. Their love of display caused them to be spendthrifts. Net income was 2,334 francs. Property was credited with 288 francs income; subventions, 412 francs; labor, 300 francs; and industries, 1,334 francs. Food cost 1,189 francs; household, 516 francs; clothing, 247 francs; moral, recreative, and health needs, 253 francs; and all else, 60 francs. Savings were 70 francs. Many statistical details of income and expenditure are omitted.

## MOROCCO

COTTE, N.

(1345)

MENUISIER-CHARPENTIER (NEDJAR) DE TANGER (PROVINCE DE TANGER—MAROC). OUVRIER CHEF DE MÉTIER ET PROPRIÉTAIRE DANS LE SYSTÈME DU TRAVAIL SANS ENGAGEMENTS D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN 1855-1856. *Les Ouvriers des Deux Mondes* (1) 2: 105-144. 1858. [Reprinted in *Le Play, F., Les Ouvriers Européens*, ed. 2, v. 2, pp. 398-446. Paris. 1877.]

This entrepreneur had from 2 to 4 assistants. When the study was made in 1855-56 the family consisted of the husband (40), his wife (32), two sons (18 and 10), and a female Negro slave (25). The head had good relations with the Europeans, which guaranteed him regularity of work but made him envied by his competitors. Health was fair. Their well-being was described as due to his religion, good relations with the French, and adherence to monogamy. Property consisted of 24,703 francs in land, money, industrial materials, and the slave, and 12,606 francs in furniture and clothing. Income was 4,320 francs, of which 4,119 francs was in money. Property accounted for 1,237 francs; subventions, 12 francs; labor, 449 francs; and industries, 2,623 francs. Food cost 1,073 francs; household 455 francs; clothing, 542 francs; moral, recreative, and health needs, 165 francs; and all else, 50 francs. Savings were 2,034 francs. Notes give data on political and social organization of Morocco, its slavery, organization of the family and property rights, social life and the private morals, and the progress of Christianity.

## TUNISIA

COTTE, NARCISSE, and HARATRI, SOLIMAN EL

(1346)

PARFUMEUR DE TUNIS (RÉGENCE DE TUNIS—AFRIQUE) DU BAZAAR APPELÉ: EL ATTHARIN-EL-KEBAR (LES GRANDS PARFUMEURS). OUVRIER CHEF DE MÉTIER DANS LE SYSTÈME DU TRAVAIL SANS ENGAGEMENTS D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN 1858. *Les Ouvriers des Deux Mondes* (1) 3: 285-326. 1861.

This perfumer of Tunis was respected even as far as Syria and Egypt and had the most clients in the bazaar. He made and sold his own perfumes and was a consultant astrologist. When the study was made in 1858 the family consisted of the husband (52), his wife (45), married son (25), son's wife (18), another son (17), and a servant (20). The two sons were also perfumers and lived at home. The father had a patriarchal influence over the children. The father read assiduously on alchemy, astrology, geomancy, the supernatural, and other subjects of interest to the Arabs. He was well educated and knew the Koran by heart. Health



conditions were excellent. Recreations were noncommercialized. Well-being depended on family and religious solidarity and the family virtue and intelligence. Property consisted of 800 francs for a home, 40,000 francs in money, 10,000 francs capital of the younger son, 245 francs in working materials, and 7,454 francs in furniture and clothing. Income was 11,510 francs, of which 10,691 francs was in money. Property contributed 4,505 francs; labor, 432 francs; and industries, 4,573 francs. Food cost 1,802 francs; household, 739 francs; clothing, 703 francs; moral, recreative, and health needs, 617 francs; and all else, 30 francs. Savings amounted to 7,618 francs. Notes are given on the protectorate of Tunis, the lake and the vestiges of ancient Carthage, the Christian population, the public revenues and the army, street entertainments and prostitution, and the Christian missions of l'Abbé Bourgade, chaplain of the Chapel of Saint-Louis.

#### UNION OF SOUTH AFRICA

UNION OF SOUTH AFRICA, ECONOMIC COMMISSION. (1347)

REPORT OF THE ECONOMIC COMMISSION. JANUARY 1914. 84 pp., illus. Pretoria. 1914. [Original not seen. Summarized from International Labour Office, Methods of Conducting Family Budget Enquiries, pp. 55-56. Geneva. 1926.]

In the course of an inquiry into the cost of living, working conditions, and the cost of production in industrial centers of the Union of South Africa in 1914 the economic commission collected about 100 records of expenditure dealing especially with food and rent. In connection with the same inquiry, the Transvaal Chamber of Mines collected and analyzed 138 records of expenditure. The commission also made use of 22 records of families living in Johannesburg on approximately the income of an artisan, collected by Alexander Aiken and analyzed in a paper which he read to the British association in 1907.

UNION OF SOUTH AFRICA, SPECIAL COMMISSIONER ON COST OF LIVING. (1348)

REPORT OF THE SPECIAL COMMISSIONER APPOINTED BY THE GOVERNMENT TO ENQUIRE INTO THE COST OF LIVING IN THE UNION. 32 pp. Cape Town. 1916.

UNION OF SOUTH AFRICA, DEPARTMENT OF LABOR, COST OF LIVING COMMITTEE. (1349)

REPORT OF THE COST OF LIVING COMMITTEE. Cape-Town. 1925. [Original not seen. Summary in U. S. Dept. Labor, Bur. Labor Statis. Monthly Labor Rev. 23 (1): 152-153. 1926.]

One of the main objects of this inquiry was to determine the expenditure necessary to maintain a typical family in certain industrial areas on an average civilized level of living. Records of expenditure were kept by 404 families for a period of a week or a month in 1925. About one-quarter of these were families of bank officials, while the rest were the families of manual and nonmanual workers in a number of different occupations. The families were classified in three income groups—those with annual incomes of under £240, from £240 to £360, and from £360 to £500. Separate data were given for each of these groups and also for each district. The American scale was used for calculating averages per consumption unit.

#### ASIA

##### ARABIA

UNITED STATES DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS. (1350)

WAGES AND COST OF LIVING IN ADEN, ARABIA. U. S. Dept. Labor, Bur. Labor Statis. Monthly Labor Rev. 15 (4): 65-66. 1922.

The wages and cost of living per month in 1921, for laborers representing 18 trades (barbers, blacksmiths, butlers, etc.) are tabulated here. In 1922 the wages ranged from Rs.15 (Rs.3.45 to the dollar) to Rs.120 a month, while the cost of living ranged from Rs.10 to Rs.90 a month. In no case was there a deficit, but in order to meet expenses the lowest paid class, i. e., the coolies, which formed about 40 percent of the working class, lived in caves rather than in houses. The average working day was 8 hours.

## CEYLON

TURNER, L. S. B.

(1351)

FIRST REPORT ON THE PRELIMINARY CENSUS OF POVERTY IN THE CITY OF COLOMBO. 24 pp., illus. Ceylon. 1926.

This study of income and expenditure covered the worst slum area of Colombo, and included 1,313 persons—710 earners (541 males and 169 females) and 603 dependents (209 of the latter being under 10 years of age). Singhalese, Tamils, Moors, Burghers, Eurasians, Malays, Cochinese, and Malayese were represented. Expenditures of 394 families in 1924 were dealt with, 95 in detail. The standard adopted was assumed to represent the minimum requirements of the working-class family: Rs.9 per month for a man, Rs.7 for a woman, Rs.6 for a child from 6 to 14, and Rs.2.50 for a child under 6, with Rs.2.50 per household for light and fuel. Out of 313 records of family expenditures, 98 were below the standard, 215 were above. Twenty income groups were considered, from Rs.10 up to Rs. 100 and above. The proportion of rent to income increased with the decrease of income and reached high figures at the lower ranges of income. Better housing for laborers was recommended as a step toward the lessening of poverty.

CHINA<sup>7</sup>

OUANG-TCHING-YONG, and DONNAT, L.

(1352)

PAYSANS EN COMMUNAUTÉ DU NING-PO-FOU (PROVINCE DE TCHÉ-KIAN, CHINE). PROPRIÉTAIRES-OUVRIERS DANS LE SYSTÈME DU TRAVAIL SANS ENGAGEMENTS D'APRÈS LES FAITS OBSERVÉS SUR LES LIEUX DE 1842 À 1846. Les Ouvriers des Deux Mondes (1) 4: 84-158. 1862.

This study, made during the period from 1842 to 1846, deals with a family living in an agricultural village. Its real head was the widowed grandmother, despite the ascendancy of paternal authority in China. The family consisted of the grandmother (90), her eldest son (51), his wife (43), his 3 sons (15, 12, and 9), and 3 daughters (7, 5, and 2); her second son (40), his wife (35), 2 sons (8 and 3), and daughter (11); her youngest son (31), his wife (29), and 2 sons (3 and 1). The paternal authority was strong. Polygamy was rare. Education was based on Confucius. Health was excellent. The women bound their feet. This family owned 100 acres of land and also worked for wages. Recreations consisted of village and religious festivals, birth and death ceremonies, drinking, and smoking. Their only assurance of well-being was the respect for parental authority and old age, which made the children support their aged parents. There were no charitable institutions nor community subventions. Property consisted of 3,250 francs in real property, 265 francs in domestic animals, 545 francs in working materials, and 1,086 francs in furniture and clothing. Income was 935 francs, of which 315 francs was in money. Property contributed 96 francs; subventions, 19 francs; labor, 511 francs; and industries, 307 francs. Food cost 517 francs; household, 97 francs; clothing, 101 francs; moral, recreative, and health needs, 118 francs; and all else, 12 francs, there being no savings. Notes are given on Chinese paternal authority, the communities, marriage ceremonies, rice cultivation, and inheritance customs of the Ning-Po-Fou villages, marriage and the woman's role in China, the municipal institutions and religious festivals of Ouang-Fou, Buddhism, the true religion of China, the manufacturing of Deu-Vou, rice beer, and the measurements, weights, and coinage of China.

SIMON, G.-E., and ESCARD, P.

(1353)

PRÉCIS D'UNE MONOGRAPHIE D'UN PÊCHEUR-CÔTIER MAÎTRE DE BARQUES DE L'ARCHIPEL CHUSAN (CHINE). OUVRIER-PROPRIÉTAIRE, CHEF DE MÉTIER DANS LE SYSTÈME DU TRAVAIL SANS ENGAGEMENTS, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN 1867. Les Ouvriers des Deux Mondes (3) 1: 61-87. 1904.

Coast fishing was an important industry in China. Each person consumed 20 to 25 kg of fish a year. The industry employed 8 to 10 million men at the time of the study in 1867. This family owned six deep-sea-fishing boats and 34 mows of land in addition. The household consisted of the head (42), his wife, (40), son (22) and wife (19), and daughter (17). Health was excellent. The head

<sup>7</sup> Unless specified in text, money values in this section are given in silver dollars of local currency known colloquially as Mexican dollars.



cultivated enough land to occupy himself when the fishing season was not on. Recreations consisted of the use of tobacco and occasional trips to the theater. Well-being depended on their love of work and respect for parental authority. Property consisted of dwelling, land, fishing boats and tackle, and animals valued at 78,741 francs, and furniture and clothing 2,879 francs. Income was 34,517 francs. Property contributed 8,226 francs income, subventions 84 francs, and industries 26,292 francs. Food cost 6,353 francs; household, 1,584 francs; clothing, 400 francs; moral, recreative, and health needs, 823 francs; and all else 51 francs. Savings were 25,306 francs. Notes are given on the land and the family, the Chinese family books, and the rites of respect and feasts to the ancestors in China.

MENG, TIEN-P'EI, and GAMBLE, S. D.

(1354)

PRICES, WAGES, AND THE STANDARD OF LIVING IN PEKING, 1900-24. Chinese Social and Polit. Sci. Rev. 10 (Sup.), 113 pp., illus. 1926.

The purpose of this study is to answer the question "How do the workers live?" when prices are raised and wages remain stationary. The answer was found in the study of merchants' accounts and records of family expenditures from Peiping, in 1900-24. Figures and tables on price fluctuations were included. Those chosen for study were artisans and coolies whose wages were less than \$160 per year. The distribution of the items of family expenditure as determined by a combination of seven different studies made in Peiping was: For food, 70 percent; for clothing, 12 percent; for rent, 8 percent; for light and fuel, 5 percent; and for miscellaneous items, 5 percent. There is an evident tendency to fix the wages of the unskilled laborer, even though they were controlled by the guild, at the subsistence minimum. Wages of unskilled workers were so low that many of the men remained unmarried, while the incomes of the married workers had to be supplemented by other members of the family or by charity. The majority of the workers would prefer to decrease their hours of work rather than to raise their level of living.

REYNAUD, LOUIS

(1355)

PRÉCIS D'UNE MONOGRAPHIE D'UN COOLIE TERRASSIER SETCHOANNAIS DE LA PROVINCE DU SETCH'OUAN (PRÉFECTURE DE KIA-TING-POU, CHINE). JOURNALIER TRAVAILLANT SUR LES CHANTIERS DU CHEMIN DE FER DU YUNNAN DANS LE SYSTÈME DES ENGAGEMENTS MOMENTANÉS, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN 1907. Les Ouvriers des Deux Mondes (3) 3: 265-291. 1912.

This study describes a migratory railroad worker similar to many in China. There was some family property left from a previous more prosperous time. In 1907 at the time of the study the household consisted of the head (42), his wife (37), 4 sons, 3 daughters, and the wife's mother. Health conditions were good. The migratory father and son supported themselves by working after hours for neighboring farmers, leaving all their regular wages for the family. The wife and children cultivated the farm, sometimes using a hired laborer. Their well-being depended chiefly on family unity. Property consisted of dwelling valued at 900 francs; land, 2,300 francs; money, 12 francs; tools, 85 francs; animals, 95 francs; and furniture and clothing, 952 francs. Income was 1,045 francs, 108 francs from property, 822 francs from labor, and 115 francs from industries (making of straw sandals). Food cost 660 francs; the household, 263 francs; clothing, 75 francs; moral, recreative, and health needs, 80 francs; and all else, 84 francs. There was a deficit of 116 francs. They gambled and attended the theater rarely.

CHEN, TA

(1356)

PRICES AND THE COST OF LIVING IN JAPAN AND CHINA SINCE THE WORLD WAR. U. S. Dept. Labor, Bur. Labor Statist. Monthly Labor Rev. 13 (6): 5-7. 1921.

This article, published in 1921, presents figures showing the rise in prices since 1914, and the estimated expenditures of unskilled and semiskilled cotton-mill workers in Shanghai. Particular attention is given to the survey made by Tsing Hua College near Peiping of 195 Chinese and Manchurian families, living in 12 villages, and including farmers, laborers, and artisans (1357). They were grouped into seven classes according to their expenditures, and for each of these classes figures are given to show average total income and average expenditures for food, clothing, light and fuel, rent, and miscellaneous items. Mention is also made of the survey conducted by the South Manchuria Railway of the expenditures among the farmers in about 100 villages. The level of living was

found to be distinctly lower than that among farmers in Japan. The investigation covered food, clothing, fuel, heat and light, education, and miscellaneous expenses. (See *The Keizai Ronso* 8 (3): 427-433.)

DITTMER, C. G. (1357)

AN ESTIMATE OF THE STANDARD OF LIVING IN CHINA. *Quart. Jour. Econ.* 33: 107-128. 1918. [Also printed in Remer, C. F., *Readings in Economics for China*, pp. 241-263. Shanghai. 1922.]

In this article published in 1918, the author makes use of the survey of 195 Chinese and Manchu families and 93 servants at Tsing Hua College (1) to test Engel's conclusions as applied to family expenditures in a rural suburb of Peiping, (2) to present a picture of real pressure as it existed in the Orient, and (3) to show the minimum limits to which existence can be pushed. The survey, made by college students of Tsing Hua, covered representatives of families from all classes. The median group had expenditures of between \$70 and \$89. The author reached the following conclusions: (1) The average amount spent for food and rent increased, but not proportionately, as income increased; (2) the average amount and percentage spent for clothing and miscellaneous items tended to increase with increasing income; (3) increase in general expenditure was associated with increased average size of family; and (4) as general expenditure increased, the average amount spent for light and fuel increased noticeably, but the proportionate amount only slightly.

GAMBLE, S. D., and BURGESS, J. S. (1358)

PEKING: A SOCIAL SURVEY. 521 pp., illus. New York. 1921.

Although the purpose of this book was to make a survey of present-day social conditions (1918-19), it contains no complete records of family expenditures. It covers the 811,556 inhabitants of Peiping, which were composed of four racial groups (Manchus, Mongols, Chinese, and Tibetans) and a religious group which was separate from these, the Mohammedans. Such topics as education, health, climate, geography, history, religion, recreation, prostitution, prisons, community activities, government, crime, and commerce are included, also a special study of the Teng Shi K'ou district and a church survey of the Pei T'ang and C'hi Hua Men districts. Here the family was studied as a unit, the average size being 3.7 persons. Charts are given for incomes. Rents in money expenditures, homes owned, and free homes are given. Statistics on church affiliation and attendance are cited. Nowhere are figures on family expenditures on food or clothes mentioned. The appendix includes many tables.

DITTMER, C. G. (1359)

DENSITY OF POPULATION AND THE STANDARD OF LIVING IN NORTH CHINA. *Amer. Sociol. Soc. Pub.* 19: 196-199. Chicago. 1924.

The purpose of this study was to find what level of living could be maintained in six Provinces of North China under existing conditions of population density. A survey was made between 1918 and 1921, of 434 families with an income range of \$20 to \$1,000 per year, the modal group being \$82. The average size of family in the modal group was 4.4 individuals. The study estimates the value of goods furnished and the rental value of owned homes but does not give the method of determining them. The author estimated that \$100 was necessary to keep a Chinese family in normal comfort according to local standards; one-half the families of this study lived on less than this amount. The Peking Union Medical School estimated that between \$150 and \$160 was necessary to maintain a family of five on a normal efficiency diet basis. Of the families in this study, 71 percent had less than this amount for all purposes.

LAMSON, H. D. (1360)

THE PEOPLE'S LIVELIHOOD AS REVEALED BY FAMILY BUDGET STUDIES. *Chinese Econ. Jour.* 8: 449-485. 1931.

This is an analysis of material drawn from data on household expenditures of 5,110 families for various years from 1918 to 1930. The units of comparison were both the family and the adult unit. It is in part, a contradiction of Engel's law and a support of Tschajanow's generalizations. The poverty line for a family of five in 1925-26 was found to be \$450. It was also found that higher incomes were associated with an increased number of adult male units.



GAMBLE, S. D.

(1361)

THE HOUSEHOLD ACCOUNTS OF TWO CHINESE FAMILIES. China Inst. in Amer.  
23 pp. New York. 1931.

The household expenditures of two Peiping families, one of the lower middle class and the other of the well-to-do class, were used for this study; the data apply to a period between 1919 and 1924. Family A had 12 members. The head of the family was a clerk or secretary in one of the government boards. Family B had 13 members, 6 of whom were servants. The head of the family held an administrative position. In family A 40 percent of the expenditures were for food, 11.8 percent for clothing, 12.2 percent for rent, and 5.6 percent for heat, light, and water. Comparisons are made with families in other places, such as Australia, New York, and San Francisco. Family A had a surplus only 1 year out of 5 and then it amounted to only \$1.84. Family B had a deficit in 1924, due to large entertainments, one of which cost \$1,000. Of the total expenditures of this family, 13.3 percent was for food. Accounts are so different that it is difficult to draw averages.

UNITED STATES DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS. (1362)

LABOR CONDITIONS AMONG TEXTILE WORKERS IN INDIA, CHINA, AND JAPAN.

U. S. Dept. Labor, Bur. Labor Statis. Monthly Labor Rev. 23 (5):  
14-29. 1926.

In China, the earnings of the head of a family, among farmers and artisans, were so low as to necessitate working by the women and children. A study published in 1925 by Professor Sarvis of Nanking University states that the average annual per capita income of the poorest 75 percent of the population of China did not exceed \$10 to \$15 a year (in United States currency). Some studies in the vicinity of Peiping led to the conclusion that a family of five could live "in comparative comfort, according to local standards", on an income of \$100 a year. Food was of the cheapest, clothing was limited to two garments a year, underwear, shoes, etc., apparently being omitted. The data apply to 1919-25.

BUCK, J. L.

(1363)

CHINESE FARM ECONOMY. Inst. Pacific Relations. 476 pp., illus. Chicago.  
1930.

This study of 2,866 farm families was primarily concerned with farm management, special attention being given to 2,370 families to determine the level of living. These families were taken from six provinces in north and east-central China, and data on cost of living were obtained for one year between 1921 and 1925. The adult-male unit according to Atwater's scale for food consumption was used. The average size of the 2,370 families was 5.7 persons, and the average size of the household was 5.94 persons or 4.56 adult units. Expenditures were distributed as follows: For food, 59 percent; for fuel, 12 percent; for clothing, 7 percent; for rent, 5 percent, and for other expenses, 16 percent. In conclusion the author states that the farmer's level of living is determined by the family, which in turn is determined by the density of population. Close interdependence between food habits and crops grown and fuel supply were shown. There is slight evidence to check Tschajanow's law.

(1364)

AN ECONOMIC AND SOCIAL SURVEY OF 150 FARMS, YENSHAN COUNTY, CHIHILI  
PROVINCE, CHINA. Univ. Nanking, Col. Agr. and Forestry. 110 pp.,  
illus. Nanking. 1926.

The purpose of this study was to determine the factors which make farming successful or unsuccessful in a normal year in a region often subjected to famine conditions. Of the operatives, 97 percent were born in the village in which they were living. The average size of the "greater" family was 5.35 persons. The redivision of land through inheritance made for smaller farms. Food constituted over one-third of the cash expenditures, of which vegetables constituted 12.8 percent. Only 15 out of the 150 farmers bought any meat during 1922, the year of the study. Most of them were reduced to a mere subsistence income. As solutions of the population problem, Professor Buck enumerates the following: Greater production of foodstuffs, emigration to more sparsely settled places, development of home or city industries, supplementing of farm work, and limiting population in accordance with the food supply.

TAYLER, J. B. (1365)

THE STUDY OF CHINESE RURAL ECONOMY. II. THE RESULTS OF THE FAMINE COMMISSION'S INVESTIGATIONS. Chinese Social and Polit. Sci. Rev. 8: 196-226, 230-258. 1924.

The second part of the investigation of Chinese rural economy made by the famine commission was carried on about the year 1922 and covered 240 villages, located mainly in Chihli, also in Kiangsu, Shantung, Anhui, and Chekiang. There was an average of 5.24 persons in the families studied.

MILAM, A. B. (1366)

A STUDY OF STUDENT HOMES IN CHINA. 89 pp. New York. 1930.

Chinese family life in the families from which college students and students in other higher schools come was studied in order to have a background for starting courses in homemaking and organizing a home economics department in Yenching University, Peiping; 16 complete and 1,270 partial records of family expenditures were used as sources of data and refer to a period from October 1922 through March 1923. The families were divided into two types: (1) "Greater families", composed of several generations, and (2) "marriage families", composed of two generations. The size of family ranged from 2 to 38. The average of families whose size was reported was 9 members per family; 8.6 percent reported concubines. The median annual income for those families reporting concubines was \$3,600 (Mexican). Only 33 percent reported no servants. The median income of all families reporting exact income in dollars was \$960. An average of 1.9 families per house was reported. The families were scattered from Peiping to Canton and as far west as Hankow.

(1367)

STANDARDS OF LIVING AMONG INTERMEDIATE INCOME GROUPS IN CHINA. Jour. Home Econ. 19: 427-435. 1927.

Chinese home life in north, central, and south China is illustrated by a detailed study of 16 families in 1922-24. Incomes range from \$81 to \$3,410. The 16 families belonged in or above the comfort level. Only 28 percent of the total expenditure was spent, on the average, for food.

CHEN, TA (1368)

COST OF LIVING OF TSING HUA EMPLOYEES, PEKING, CHINA. Chinese Econ. Monthly 2 (1): 5-12. 1924.

This study, published in 1924, deals with the monthly cost of living of 141 individuals, of whom only 3 were single. These individuals were Chinese workers of all grades, employed by the college in running their plant. The data tend to refute Engel's law.

CHINA, GOVERNMENT BUREAU OF ECONOMIC INFORMATION. (1369)

ECONOMIC STUDY OF PEKING RICKSHA PULLER. Chinese Econ. Jour. 3: 253-265. 1926.

This investigation covered 1,000 Peiping jinrikisha pullers, their ages, incomes, and personal and family expenditures in 1924. It was found from previous data that the Peiping jinrikisha pullers constituted 7 percent of the total population and 11 percent of the male adults. Twenty-five percent of the pullers were Manchus. The expenditure on food totaled 80 percent. The average monthly expenditure per family was \$14.25; the average net earnings were \$11.30. The deficiency was made up by the earnings of other members of the family or by borrowing from friends or pawnbrokers. Clothing was often purchased second-hand as an economic measure.

CHEN, TA (1370)

SOCIO-ECONOMIC CONDITIONS IN TWO CHINESE VILLAGES. U. S. Dept. Labor, Bur. Labor Statis. Monthly Labor Rev. 20 (5): 34-36. 1925.

Two social surveys were made in villages near Peiping among 91 Chenfu and 56 Hupien families, chiefly Manchus of reduced economic circumstances and poor Chinese. The Chenfu group included carpenters, mat makers, servants, cooks, jinrikisha pullers, agricultural and educational workers, and those engaged in military and commercial pursuits. The average monthly earnings per person were \$7.76 (Mexican). The average daily cost of food per adult was 15 coppers in Chenfu, 16 in Hupien. The average rent paid by 52 families was 105 coppers per month. The data is probably for a period just prior to 1925, the date when the article was published.



SARVIS, GUY W.

(1371)

THE STANDARD OF LIVING IN CHINA AND ITS MEANING. Jour. Appl. Sociol. 9: 187-195. 1925.

On the basis of certain aspects of some recent studies, this article, published in 1925, draws the conclusion that the annual per capita income of the poorest 75 percent of the Chinese population did not exceed \$10 to \$15 in United States currency. A number of persons working independently concluded that \$30 per year represents a minimum standard for a family of five consuming barely enough for maintenance of health. Tayler put the minimum standard at \$75 per year per family of five. Unquestionably the majority of the population was below the poverty line. There was a surplus of labor in China and a scarcity of capital and accessible land.

YOUNG, MAO

(1372)

SURVEY OF 202 FARM FAMILIES IN CHINA. Jour. Pan-Pacific Research Inst. 1 (3): 2. 1926.

This survey covered an area including six villages near Changchow. The number of families studied was 202. The average number of families per village was 33.7, and the average number of persons per family was 4.8. The percentages for land tenure are given as follows: 88 percent of the farmers were owners, 5 percent were tenants, 7 percent were landlords who kept part of the land under their own management. Those keeping hired labor comprised 44 percent. The average number of rooms per family was 5.6. The family income from all sources was \$317, from the farm only \$234. The data probably refer to a period just previous to 1926, the date when the study was published.

GAMBLE, S. D.

(1373)

PEIPING FAMILY BUDGETS. Ann. Amer. Acad. Polit. and Social Sci. 152: 81-88. 1930.

This article examines the level of living of the poorer classes of Peiping by means of a study of the household expenditures of 113 families for the year 1926-27. The families were in the \$10-to-\$25-a-month class. Heads of 75 percent of the families were natives of Peiping; the rest were from nearby provinces. The average size of family was 4.1 persons. There was an average of 1.2 rooms per family. The average family income was \$17.53 per month. The percentage expenditures for various items were 53.2 percent for food, 4.6 percent for clothing, 9.4 percent for rent, 11.8 percent for heat, light, and water, 16 percent for miscellaneous. The accounts of 77 families showed a surplus for the year. The data on family composition seem to support Tschajanow's generalizations.

LIN, SUNG-HO

(1374)

FACTORY WORKERS IN TANGKU. China Foundation for the Promotion of Education and Culture. 128 pp., illus. Peking. 1928.

Two factories of the modern type are studied—the Chiu Ta salt refinery and the Yung Li soda works at Tangku. The workers were divided into resident workers and those living with families. The predominating type of family had 4 to 7 members. Among the resident workers, the expenditure for food tended to refute Engel's law. Of the 86 resident workers, 73 had an average surplus of about \$40 and 13 had an average deficit of about \$10, for the year 1926-27. Money was remitted home by 75. The 61 families of Chiu Ta workers averaged 3.72 persons. Expenditures were distributed as follows: For food, 55.7 percent; for rent, 7.1 percent; for clothing, 9.5 percent. Detailed data are given for 50 workers of the Pacific Alkali Works, most of whom were from Chihli and Shantung. Food constituted 63.9 percent of the total expenses. Proportionate expenditures for food were highest among the mechanics and lowest among the common laborers.

TAO, L. K.

(1375)

LIVELIHOOD IN PEKING. China Foundation for the Promotion of Education and Culture. 158 pp. Peking. 1928.

This study is an analysis of 300 account books collected from Peiping families; 12 are the account books of school teachers for November 1926, and 288 are books of 48 working families for 6 months in 1926-27. The jinrikisha men receive special attention in a separate chapter. Atwater's scale, based on food consumption, was used to determine consumption units. Twenty-five of the families were Chinese, 12 were Manchus, and 11 were Mohammedans. Expenditures of working families were: For food, 71.2 percent; for fuel, light, and water, 11.3 percent; for rent, 7.5 percent; for clothing, 6.8 percent; and

miscellaneous, 3.1 percent. Half the families had from 2.5 to 3.5 equivalent male adults; four-fifths had less than 4 equivalent adults each. It was found that percentage expenditure for food was no smaller in the higher income groups, a fact which seems to contradict Engel's law, but which may be accounted for by the different sizes of the families. The data verify Schwabe's and Tschajanow's laws.

YANG, SIMON

(1376)

AN INDEX OF THE COST OF LIVING IN CHINA. China Found. Bull. 1. Peiping. 1928.

An index of the cost of living constructed for the Peiping working classes was based on a study of the account books of 48 families for 1926-27. The basic budget covered the annual consumption of a family of 3.38 equivalent adults. Price quotations were furnished by 42 shops. The formula used was the aggregate weighted by the base year quantities. The average prices of 1927 were used as the basis for the index calculations.

LEE, F. C. A., and CHIN, T.

(1377)

VILLAGE FAMILIES IN THE VICINITY OF PEIPING. Social Research Dept., China Foundation. 65 pp. Peiping. 1929.

The living conditions of rural-surburban families in 1927, in the vicinity of Peiping, are described. Of the 100 families of Kua-Chia T'un, 83 were Chinese, 15 Manchu, and 2 Mohammedan—a racial distribution similar to that of Peiping. The average size of the 100 families was 4.06 persons. According to Sundbärg's classification, the age distribution of Kua-Chia T'un is of the stationary type. The total average income per family in the year was \$181; average annual expenditure was \$164. The expenditure was distributed as follows: For food, 64 percent; for clothing, 8 percent; for rent, 4 percent; for light and fuel, 8 percent; and miscellaneous, 16 percent. The 64 families in Hei Shan Hu, Ma Lien Wa, and Tung were largely Chinese, only 1 being Manchu. For almost three-quarters of the families the annual income was less than \$300. The average total expenditure was \$235 per year, distributed as follows: For food, 66 percent; for miscellaneous, 14 percent; for light and fuel, 13 percent; for clothing, 5 percent; and for rent, 3 percent. The data tend to refute Engel and Schwabe but to support Tschajanow.

YANG, S., and TAO, L. K.

(1378)

A STUDY OF THE STANDARD OF LIVING OF WORKING FAMILIES IN SHANGHAI. Inst. Social Research Monog. 3, 86 pp. Peiping. 1931.

A study was made of the level of living among cotton-mill working families in Shanghai in the year 1927-28. The average size of the family was 4.72 persons, 3.75 equivalent adults. The average monthly income per family was \$33. The fact that the husband earned only 44 percent of the total family income indicated that the old type of Chinese family was destined to disappear, at least in the towns. Expenditures were distributed as follows: For food, 56 percent; miscellaneous, 21 percent; for clothing, 9 percent; for fuel and light, 8 percent; for rent, 6 percent. The average monthly expenditure was \$32.50. Of all the families, 51 percent in the lower income groups had deficits. The average number of persons and equivalent adults per room were 3.29 and 2.59, respectively. According to Professor Bowley's criterion, 99 percent of the families under investigation were living in overcrowded conditions. The data support Tschajanow and Schwabe, and in part, Engel.

NANKAI WEEKLY STATISTICAL SERVICE.

(1379)

STANDARD OF LIVING OF WORKING CLASSES IN CHINA. Nankai Weekly Statis. Serv. 3 (10): 45, 48-50. 1930.

In order to furnish a concrete basis for compilation of a cost-of-living index for China, 48 families were studied over a period of 6 months beginning with October 1928. Most of these were jinrikisha men. Tables were compiled from 28 studies.

FONG, H. D.

(1380)

HOSIERY KNITTING IN TIENTSIN. Nankai Univ., Com. on Social and Econ. Research Bull. 3, 76 pp. Tientsin. 1930.

This survey covers 199 families of Chinese workmen living in Tientsin in the year 1929 and representing five important industries. The average size of the family studied was 4.4; the average annual earnings, \$152.30. Data regarding food conform very closely to Engel's law.



- FONG, H. D. (1381)  
 TIENSIN CARPET INDUSTRY. Nankai Univ., Com. on Social and Econ.  
 Research. 77 pp. Tientsin. 1929.

This study, published in 1929, is a sample study of Tientsin to be used as a basis for learning the extent and effect of industrialization in China. The monthly earnings for 83 percent of the total fluctuated between \$11.50 and \$14.00.

- LAMSON, H. D. (1382)  
 THE STANDARD OF LIVING OF FACTORY WORKERS: A STUDY OF THE INCOMES  
 AND EXPENDITURES OF 21 WORKING FAMILIES IN SHANGHAI. Chinese  
 Econ. Jour. 7 (5): 1240-1256. Shanghai. 1930.

An investigation was made of the level of living of 21 working families of Shanghai in 1929. Higher incomes were found to be associated with a higher average number in the family, and with an increased number of adult male units based on Atwater's scale of food consumption. The percentage which the wife contributed to the family income steadily declined with increasing income groups.

- NANKING BUREAU OF SOCIAL AFFAIRS. (1383)  
 A STUDY OF 65 LABOR FAMILIES IN NANKING. Chinese Econ. Jour. 9: 1002-1007. 1931.

The families whose living conditions were the subject of this study varied in size from 3 to 7 persons. The data refer to a period between October 1929 and March 1930.

- LAMSON, H. D. (1384)  
 THE EFFECT OF INDUSTRIALIZATION UPON VILLAGE LIVELIHOOD. Chinese  
 Econ. Jour. 9: 1025-1082. 1931.

The purpose of this study was to investigate the effect of industrialization upon 50 families (economic rather than biological units) in four villages in the vicinity of Shanghai. The data collected refer to a period between 1929 and 1931. The size of these families ranged from 2 to 13, the mode being 5 persons, 58 percent females. It was found that increased incomes were associated with increased number of persons, wage earners, and equivalent adult-male units per family. Thirty-five families owned their own homes, the average value of owned houses in 19 cases being \$574. As incomes increased, a larger proportion of the families owned their homes. The average value of crops raised (exclusive of fuel) was \$32 per mow; this is not to be considered net income. The average family expenditure for the year was \$618; 22 families showed a deficit, and 39 a surplus at the end of the year. Food averaged 66 percent of the family expenditure, clothes 11 percent, fuel and light 7 percent, house rent 2 percent, and miscellaneous items 15 percent. Luxury items of wine and tobacco absorbed 11 times as much money as books and education. The status of women had been improved through economic independence.

- CHINA, MINISTRY OF INDUSTRY, COMMERCE AND LABOR. (1385)  
 COST OF LIVING OF 1,638 WORKING FAMILIES IN 30 CITIES, 9 PROVINCES FOR THE  
 PERIOD JANUARY TO JUNE, 1930. Nanking. 1930. [In Chinese.]

Workers in modern factories and old-style handicraft shops were studied in order to determine the cost of living of industrial workers. For the first 6 months of 1930 the average monthly income per family was \$26.03, and the average monthly expenditure was \$27.22. The Provinces in which studies were made were Kinsu, Chekiang, Ankui, Kiangsi, Hupek, Shantung, Kwangtung, Kwangsi, and Fukien.

- FU-AN, FANG (1386)  
 SHANGHAI LABOR. Chinese Econ. Jour. 7: 853-885, 989-1012. 1930.

This study, published in 1930, is divided into four parts, of which the first is a survey of labor conditions. The second part describes 100 families of the Yangtze-poo district, size of family and racial origin being given. According to the Sundbärg classification, the age distribution of these laborers was of the stationary type. The third part deals with 85 families whose heads worked in the Shanghai post office. Material was gathered by interviews. These employees were highly educated; 27 percent were natives of Shanghai. Averages are given for income and expenditure, and the size of family is given. The fourth section is concerned with 100 families whose heads were commercial-press workers. Aver-

age family size was 4.4. The number of females was greater than the number of males, the sex ratio being 94:100. Age distribution, as in the first group, was of the stationary type. At the end of the year 38 families had a surplus, 50 a deficit. Data from all these investigations tended to disprove Engel's law and to corroborate Schwabe's and Tschajanow's generalizations.

HANGCHOW BUREAU OF SOCIAL AFFAIRS.

(1387)

A STUDY OF 262 LABORERS IN HANGCHOW. *Chinese Econ. Jour.* 8: 309-317. 1931.

This is a sample study of the social and economic conditions in the year 1930 of 262 workers of Hangchow, 96.55 percent of whom were natives of the Province of Chekiang. About two-thirds of them were able to read and write. Among the 262 workers, 99 male workers and 108 women workers had sufficient earnings to meet their expenses; 6 male and 3 female workers had a surplus; and 40 male and 6 female workers had a deficit. The size of the workers' families ranged from 1 to 13; most of the families had a membership of from 3 to 5.

NANKAI WEEKLY STATISTICAL SERVICE, THE BUREAU OF SOCIAL AFFAIRS, AND THE MINISTRY OF INDUSTRY, COMMERCE AND LABOR. (1388)

THE HIGH COST OF LIVING. *Far East. Rev.* 26 (8): 408-409. 1930.

This study, published in 1930, utilizes secondary material compiled from various estimates and studies of the level of living of the poorer classes of Shanghai. The laborers were divided into three income groups, with monthly incomes of \$10 to \$15, \$15 to \$25, and \$25 to \$40. They were also divided into skilled and unskilled laborers. The wages received by industrial workers in Shanghai were one-fourth of the minimum paid to foreign industrial workers in America and Germany.

INTERNATIONAL LABOUR OFFICE.

(1389)

SOME RECENT FAMILY ENQUIRIES IN SHANGHAI. *Internatl. Labour Rev.* 23 (4): 550-557. 1931.

This study, published in 1931, composed entirely of secondary material, furnishes a summary of recent articles on the level of living in Shanghai, which fall into two types of studies. The first was concerned with conditions in localities not materially affected by modern industrialism. L. K. Tao's study of conditions in Peiping is of this type. The second dealt with living conditions of workers in modern factories. Included in this is a summary of the inquiry of the National Tariff Commission of 230 families of cotton-mill workers, and the three inquiries of 100 working-class families in the Yangtzepoo quarter of Shanghai, 100 commercial-press workers, and 85 post-office employees in Shanghai, of Fang Fu-an.

NANKAI WEEKLY STATISTICAL SERVICE.

(1390)

WAGES, HOURS, AND FAMILY BUDGETS OF THE CHINESE LABORERS, 1930.

*Nankai Weekly Statis. Serv.* 4 (38): 177-180. 1931.

This study deals with 1,527 families from various cities in China, most of them belonging to the unskilled laboring classes in various factory industries. The data probably refer to a period not long prior to 1931, the date when the article was published; they indicate some support of Engel's Law.

TAO, L. K.

(1391)

THE STANDARD OF LIVING AMONG CHINESE WORKERS. *China Inst. Pacific Relations*, v. 5, 37 pp. Shanghai. 1931.

This work, published in 1931, gives a brief summary of 82 studies on the level of living in China, conducted among both rural and urban working families, mostly along the seacoast, since 1917. The majority of working families had an annual income and living expense of \$25 to \$100. This represented by no means the poorest class. For the 69 studies made in Peiping and Shanghai, the modes of the percentages for 5 groups of living expenses were: For food, 57.5 percent; for clothing, 7.5 percent; for rent, 7.5 percent; for light and heat, 10 percent; and miscellaneous, 17.5 percent. Studies of the dietaries reveal that the caloric requirements of the Chinese farmer were sufficiently supplied. However, the protein quality in the Chinese diet was inferior. In some cases more than two families occupied a single room. The effects of overcrowding cannot be exaggerated. Clothing formed only an inconsequential part of the living of working families. Fuel constituted a less important item in village than in urban families.



GAMBLE, SIDNEY D.

(1392)

HOW CHINESE FAMILIES LIVE IN PEIPING. 348 pp., illus. New York. [Original not seen. Summarized from a review in Survey 70 (1): 26. 1934.]

A careful analysis is given here of the living of 233 families whose monthly incomes ranged from \$8 to \$550, Chinese currency. Topics dealt with include expenditures for food, clothing, housing and rent, heat, light, water, and miscellaneous items (among which weddings and funerals are stressed). Detailed studies of 20 individual records of family expenditure are given, together with many valuable tables and charts. The data probably refer to the period not much prior to 1934, when the book was reviewed.

## CHOSEN (KOREA)

BRUNNER, E. DE S.

(1393)

RURAL KOREA: A PRELIMINARY SURVEY OF ECONOMIC, SOCIAL AND RELIGIOUS CONDITIONS. Jerusalem Meeting of Internatl. Missionary Council, v. 6, ch. 4., illus. New York. 1928.

This report includes data on family expenditures for 1928, obtained by a combination of the survey and the estimate method. A composite budget for an unstated number of families representative of a village in northern Chosen is presented, together with the average record of 60 families of Christian church members in a similar village. Much of the difficulty of the farmer was found to be due to his attempt to live on too small a holding.

## DUTCH EAST INDIES

JAVA KANTOOR VAN ARBEID.

(1394)

ARBEIDSTOESTANDEN IN DE METAAL INDUSTRIE TE SOERABAJA. [CONDITIONS OF LABOR IN THE SURABAYA (JAVA) METAL INDUSTRY.] [Summarized in Internatl. Labour Rev. 15: 888-908, illus. 1927.]

The Government of the Dutch East Indies ordered an investigation of living conditions among the metal workers of Surabaya, Java, in 1925 to determine the justice of their demands on occasion of the strike in December of that year. The investigation covered 29 undertakings, employing 11,500 native workers and from 750 to 1,500 casual laborers. Most of the laborers, skilled and unskilled, were native. About one-third earned less than a guilder a day; one-third, 1 to 1.50 guilders; and one-third, over 1.50 guilders. Deductions for fines, taxes, rent, and membership in cooperative societies amounted to about 1 day's pay a week. Pension schemes were enforced by law; medical assistance was meager; sick relief almost nonexistent. Housing conditions were deplorable, 8 to 9 coolies living in a single room. The working day ranged from 7 to 10 hours; there was much overtime, night, and Sunday work, and much absenteeism. No records of family expenditures were available, but other records showed that the average expenditure for food was 55 percent and for clothing 7½ percent of the income. Fifty-three percent of the cases studied showed that the wages were insufficient to furnish proper food and clothing, because of the heavy charges for rent, water and light, transportation and taxes. Practically none of the workers were free from debt. Wages were "sold" to moneylenders at a high rate of interest.

NETHERLANDS EAST INDIES.

(1395)

STATISTICAL ABSTRACT. No. 6, p. 297. 's-Gravenhage. 1928.

A table shows the average expenditure of 314 households in August 1925. No descriptive background or explanation of the method used is included. Incomes ranged from below 100 to over 2,400 guilders.

(1396)

DUTCH EAST INDIES, DEPARTEMENT VAN LANDBOUW, NIJVERHEID EN HANDEL ONDERZOEK NAAR GEZINSUITGAVEN IN NEDERLANDSCH-INDIE GEDUREND. AUGUSTUS 1925, EN HET JAAR 1926. [INQUIRY INTO FAMILY BUDGETS IN THE DUTCH EAST INDIES DURING AUGUST 1925 AND THE YEAR 1926.] 225 pp., illus. Weltevreden. 1928.

Household accounts were kept for a month in 1925 by 314 families, 255 of which were European and 59 native, situated on Java and the outer islands. The monthly incomes of the families ranged from under 100 to over 24,000 florins. The expenditures were reduced to those of the so-called "model household" by factors estimated "by means of personal experience and by taking into consideration motives of probability." A number of conclusions were drawn from the data, showing the effects of income, size of the family, and race, on diet, housing, and

other expenditures. It appeared that, as the income increased, the expenditure on food did not increase so rapidly as the total expenditure. In 1926 a similar study was conducted throughout the entire year; 34 households took part, largely those that had kept accounts in 1925. The results of the 1926 investigation, though rather incomplete, served to confirm the conclusions of the earlier inquiry: with an increasing number of household units, a proportionately smaller part of the total expenditure was spent on food; with an increase in income, rice tended to be supplanted by potatoes and bread as the principal articles of diet.

JAVA KANTOOR VAN ARBEID.

(1397)

RAPPORT VAN HET HOOFD VAN HET KANTOOR VAN ARBEID OVER DE ARBEIDSTOESTANDEN IN DE METAALINDUSTRIE TE SVERABAJA. [REPORT OF THE CHIEF OF THE KANTOOR VAN ARBEID ON THE METAL INDUSTRY IN SURABAYA.] 144 pp., illus. 1926. [Original not seen. Summary in International Labour Office, Conditions of Labor in the Surabaya (Java) Metal Industry. Internatl. Labour Rev. 15: 888-908, illus. 1927.]

The purpose of the study was to investigate working conditions which had resulted in a strike. Rough estimates of expenditure during February and March 1926 were collected from 606 families. Wage estimates were given for skilled and unskilled workers. Wages ranged from less than 1 guilder to over 1.5 guilders. Considerable description of housing is included.

#### FRENCH INDIA

DELAIRE, E.

(1398)

PETIT FONCTIONNAIRE DE PNOM-PENH (CAMBOGE), SALARIÉ DU TRÉSOR PUBLIC DANS LE SYSTÈME DES ENGAGEMENTS VOLONTAIRES PERMANENTS, D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX PENDANT L'ANNÉE 1897. *Les Ouvriers des Deux Mondes* (2) 5: 437-483. 1899.

The expenditure record of this schoolmaster serves to illustrate the small expenses of a family living in the Orient. He was in favor with one of the princes, was generally respected, and owned his own home. In 1897, at the time of the study, the household consisted of the head (40), his wife (38), two sons (8 and 5), and a daughter (3). There was also a debt slave (30). They were of good morals. They were sober, although the man considered a small glass of rice brandy indispensable at each meal. The parents were not well and two children had died in infancy. Western medicine was making slow headway. The man was one of five native teachers under a French director in a government school. He also acted as a translator and taught Cambodian to French officials. The slave carried water for sale. Recreations consisted of feast days and ceremonies, tobacco, and betel. Well-being rested on the respect for paternal authority and the family unity. Property consisted of dwelling and land valued at 313 francs, slave 95 francs, tools 10 francs, money 22 francs, animals 3 francs, and furniture and clothing 165 francs. Income was 944 francs, of which 774 francs was in money. Property contributed 97 francs; subventions, 43 francs; labor, 756 francs; and industries, 46 francs. Food cost 425 francs; household, 167 francs; clothing, 88 francs; moral, recreative, and health needs, 150 francs; and all else 60 francs; savings were 54 francs. Notes are given on slavery in Cambodia (Cambodia) and a comparison of the foregoing data with other records.

(1399)

PRÉCIS D'UNE MONOGRAPHIE D'UN MANOEUVRE-COOLIE DE PNOM-PENH. JOURNALIER DANS LE SYSTÈME DES ENGAGEMENTS MOMENTANÉS D'APRÈS LES RENSEIGNEMENTS RECUEILLIS SUR LES LIEUX EN 1897. *Les Ouvriers des Deux Mondes* (2) 5: 484-500. 1899.

The conditions of the poorest families in Cambodia are described in this monograph. The worker was honest but ignorant. When the study was made in 1897 the household consisted of the head (32), his wife (28), son (5), and daughter (2½). Pay was so poor and unemployment so frequent that it was practically impossible to save. Health was very bad. The French hospital gave them care and medicine when necessary. A midwife assisted at births. The woman had a small shop where she sold fruit, vegetables, and fish. They attended public and religious festivals and the man smoked and chewed betel moderately. Their only hope of well-being lay in an improvement in general conditions in Cambodia. Property consisted of money valued at 10 francs and clothing at 24 francs. Income was 292 francs, of which 252 francs was in money. Subventions were credited with 41 francs income; labor, 212 francs; and industries, 40 francs. Food



cost 169 francs; household, 44 francs; clothing, 18 francs; moral, recreative, and health needs, 51 francs; and all else, 10 francs. Separate notes are given on the family law of Cambodia.

## INDIA

## INDIA, THE FAMINE COMMISSION.

(1400)

PUNJAB REPORT IN REPLY TO THE INQUIRIES ISSUED BY THE FAMINE COMMISSION. 2 v., 930 pp. Lahore. 1878-79.

In this work, published in 1878-79, there is considerable discussion of the consumption of the different kinds of grain per head of the population and per family, according to district and to occupation. There is also a good deal of material on the economic conditions of the agricultural population of the Punjab. Answers from 18 district officers are summarized. Each district reported on a number of families for such items as status; the composition of the family; the area cultivated; 1 year's produce in amounts and values; other miscellaneous income; total income in rupees; expenditures for taxes and rent, and for grains used respectively for food, seed, and other purposes by types, amount, and value; expenses for labor, for necessities not produced by the farm or the family labor, and total expenditures. This is followed by an analysis of the surplus, if any, with the method of disposal or investment. A description is given of the residence, of the cattle, and of the chattels. A summary gives the reasons for incurring debts, the amounts of these debts, and the percentage they formed of total annual income. In the case of certain castes, such as the Brahmans, auxiliary incomes from religious dues are described and evaluated. These typical families are placed in relation to the total families of the province which they represented. A special table gives a statement for 23 agricultural families summarizing debts and property holdings.

## SHIRRAS, G. F.

(1401)

REPORT ON AN ENQUIRY INTO AGRICULTURAL WAGES IN THE BOMBAY PRESIDENCY. 152 pp., illus. Bombay. 1924.

The object of this inquiry is to ascertain the annual changes in agricultural wages throughout the Bombay Presidency from 1900 to 1922. The first half of the period was marked at the beginning by famine (1900-1) and also by a considerable development in trade (especially 1904-5). The second half of the period included the World War, the great influenza epidemic of 1918, and the severe famine of 1918-19. Statistics were collected for all the districts of the Presidency for (1) field labor, (2) ordinary labor, and (3) skilled labor. Real wages in urban areas as compared with the pre-war level had increased for all classes of labor; in rural areas real wages had also risen for skilled labor but had fallen slightly in the case of ordinary and field labor. The value of the study lies in the basis it affords for a study of secular changes in level of living.

## DIGBY, W.

(1402)

THE FOOD OF THE PEOPLE OF INDIA. 32 pp. 1902. [Pamphlet collection, London School of Economics Library.]

## JACK, J. C.

(1403)

THE ECONOMIC LIFE OF A BENGAL DISTRICT. 158 pp., illus. Oxford. 1916.

This study of the Indian district of Faridpur was written by a member of the Indian civil service who was anxious to vindicate the British Government of the charge that it had milked the province dry. The conclusions are based on data collected by officials for an estimated year between 1906 and 1910. A description is given of the occupations and the meals of a typical day. Seventy-seven percent of the population was agricultural. Budgets were estimated for families of five people in four different classes of comfort. All items supplied by the farm were valued at current market price; everything was reduced to monetary value, although many of the figures must have been merely estimates. All the people looked well fed. Among the families observed (*ca.* 342,000), 49 percent belonged in the class which lived in comfort. The government taxation was found not to be excessive.

## MUKERJEE, RADHAKAMAL

(1404)

THE FOUNDATIONS OF INDIAN ECONOMICS. 515 pp., illus. London. 1916.

The purpose of this book is to describe the main features of Indian industrial life in 1915 and to formulate a program of Indian economic expansion. The rural unemployed emigrate to the city. When they return to the village, they have

become accustomed to a higher level of living. This was one factor in the 32-percent increase in the cost of foodstuffs. The consumption was determined largely by family, caste, and religious ideas and was being modified only gradually. Standard family budgets, giving percentage distribution of expenditures, are given for each of six classes of laborers—a day laborer, agriculturist, carpenter, blacksmith, shopkeeper, and poor middle class, in the year 1915. The proportion spent on food was 95, 94, 84, 79, 78, and 74 percent, respectively. Clothing was irregular—4, 3, 12, 11, 9, and 5 percent, respectively. The amounts spent on medicine and education, religious and social ceremonies, and luxuries definitely increased with increased income. This table is compared with similar figures for Europe and America (source not given), and after a résumé of Engel's laws, the author concludes: "(a) That even the lower middle classes of our country are much poorer than ordinary laborers of America and Europe. (b) That the luxuries of the lower middle classes are not justifiable if we consider their proportionate expenditures for food and education. (c) That the condition of our day laborers is miserable to the extreme. (d) That amongst all classes the expenditure for the social and religious ceremonies and friendly dinners is inordinate. (e) That the poorer classes are gradually adopting the luxuries of the poor middle classes." The rest of the book is devoted to a discussion of India as the land of cottage industries, its credit and trade system, and the outlining of an economic program.

HORNE, E. A.

(1405)

SOME FAMILY BUDGETS FROM BIHAR. *Econ. Jour.* 26: 369-379. 1926.

Six records of family expenditure collected by the Chanakya Society of Patna College, are given for three different classes in Bihar for 1916. Two budgets each represent (1) the petty-clerk class, (2) the better-paid part of the rural population which was "in service", and (3) agricultural laborers. In each case, the family situation is given in detail. By reckoning 2 children as 1 adult or unit and omitting infants, an average expenditure per unit was derived. Thus, the first case in class 1 had a total annual income of £40, and expenditure of £38 10s., or £6 8s. 4d. for each of 6 units; the second family in class 1 had 7 units and an income of £28 10s., and spent £48 or £6 17s. 2d. for each unit. The first case of class 2 with  $6\frac{1}{2}$  units and an income of £34 10s., spent £28 or £4 6s. 2d. per unit; the second of  $2\frac{1}{2}$  units and £17 income (omitting value of clothing) spent £12 15s., or £5 2s. per unit. The two examples of class 3 had 4 and  $4\frac{1}{4}$  units, incomes of £7 10s. and £6, respectively, and spent £1 16s. and £1 6s. 8d. per unit. These six families spent for food £26, £7, £9 10s., £7 15s., £4 10s., and £4 15s., respectively. The unexpected differences are due to the fact that sons were counted as members of the family, even though they lived away from home. The budgets of two expenditure records are also included.

MANN, HAROLD

(1406)

LAND AND LABOUR IN A DECCAN VILLAGE. *Bombay Univ. Econ. Ser.* no. 1, 194 pp., illus. 1917.

The chief characteristics of Pimpla Soudagar, the village in the Deccan where this investigation was undertaken in 1916, are that rain crops were of great significance, the influence of irrigation was negligible, and the village was accessible to a large town (Poona) yet out of its immediate influence. The chief crops were jowar, bajri, wheat, vegetables, and roots. The village contained 111 families, a population of 556; 93 families were of the Marathas caste. The housing was better than that found in the usual Indian village. The average annual income was rs.218 per family, or rs.43-3 per head (when wages in kind were given money values). A minimum expenditure was calculated for a family of 2 adults and 2 children: Food—bajri and jowar grain, pulses, rice, wheat, salt, sugar, chillies, oils, and spices—required rs.142-80, of which rs.96 was for bajri and jowar grain. Rs.12 per annum each were necessary for the man and the woman for clothing, and half as much for each child. The other expenses, household needs, tobacco, holidays, etc., would absorb about rs.5 per rs.100 of income. Thus a necessary minimum would be rs.200-8. Of the 103 families for whom data were available there were 8 families whose income derived from land was sufficient on this basis; 28 families whose income derived from land plus outside labor was sufficient; and 67 families whose income was insufficient. For these 67 families, there was an average deficiency of rs.88 per annum per family.



SLATER, GILBERT

(1407)

SOME SOUTH INDIAN VILLAGES. Madras Univ. Econ. Studies, v. 1, 265 pp., illus. London. 1918.

A study of 18 south Indian villages was undertaken by students at the University of Madras in 1916-17, the chief emphasis being placed on a description of the population, statistics on land, agriculture, description of the village, subsidiary industries, sanitation, and education. The current prices of staples are given for practically all villages. Almost every family was indebted. Six approximately complete records of expenditure are given for Vadamalaipuram in the Ramnad district for one family of 13, two of 7, one of 4, one of 5, and one of 16. Their incomes were rs.4,600, rs.2,310, rs.910, rs.1,346, rs.237, and rs.240, respectively; and expenditures were rs.4,580, rs.2,285, rs.905, rs.1,349, rs.200 and rs.230, respectively. Two records of family expenditure are given for Gangaikondan in the Tinnevely district—one for a family of four with rs.450 income and rs.410 expenditure; and the other of four persons with rs.117 income and rs.113 expenditure. In the Tanjore district the typical Nayudu had rs.2,000 income and expenditure of the same amount. In Guruvayur, in the Malabar district, the average yearly income per head was rs.20-13-9 or rs.146 per family. It was estimated that the necessary minimum per year for a family of seven was rs.248. In practically every case in this series of studies, the picture is one of physical inefficiency due to economic suffering and early marriages. Two records of expenditure are given for Vatanamkurussi, a Malabar village—one for a family of 11 with income between rs.4,600 and rs.5,000 and expenditures of rs.4,532; and the other for a family of four with rs.630 income and expenses of rs.144 for food. The expenses of a family of 2 adults and 2 children in the south Kanara district total rs.136-7-2; this record is minutely itemized for food and clothing. Two records of family expenditure are presented from the Trichinopoly district—one for a family of 6 with income of rs.834 and rs.732 expenditure, and the other for a family of 4 with rs.300 income and rs.356 expenditure. In all these records estimates are given for food and clothing expenditures. The general conclusion was that India was a very rich country inhabited by very poor people. The worker earned low wages, lived on a low level, and attained a low level of efficiency.

BURNETT-HURST, A.

(1408)

LABOUR AND HOUSING IN BOMBAY; A STUDY IN THE ECONOMIC CONDITIONS OF THE WAGE-EARNING CLASSES IN BOMBAY. 152 pp., illus. London. 1925.

An attempt is made to show that the relatively small industrial output of India was due to the inefficiency of the laborers who lived in the squalor and unhygienic conditions of city tenements. The author describes the life and labor of the industrial classes in Bombay, basing his conclusions upon (1) personal observation and inquiries during his residence in Bombay, 1916-19; (2) the Bombay Labour Office study of 1921-22; (3) a study in 1917-18 of working classes in Bombay (Parel Ward), made by the author and several social workers (a random sample of 121 out of 2,420 wage-earners' families were visited, the rooms were found to be much overcrowded, the families varied greatly in size and belonged to all castes, the average monthly earnings of the men were rs.19-1, the proportion of rent to incomes confirmed Schwabe's law); and (4) expenditure records of 8 families of mill hands selected from the original 121. Fairly complete descriptions of these families are given, but they are not representative of any particular population group. In the general discussion of dock laborers, mill hands, etc., the author gives a complete description of the housing conditions and dietaries of the workers. Workers never saved money; they were usually in debt and paid a high rate of interest.

GUPTA, RAJ BAHADUR

(1409)

THE RELATION OF HOUSE-RENT TO INCOME. Indian Jour. Econ. 6: 82-113, illus. 1925.

The author discusses the housing problem arising from the increasing industrialization of the main cities of India. He describes the unsanitary, dark, and ill-ventilated rooms in which most city workers had to dwell, and for which they must pay at least 10 to 15 percent of their meager earnings. Such living conditions led to drinking and debauchery. Various tables show that, while in Europe and the United States wages had increased faster than rent since the World War, in India rents had gone up, but wages had remained stationary. The author maintains that percentage expenditure on house rent in Indian cities was

higher than in any other country in the world. The study refers chiefly to conditions between 1916 and 1924 and is apparently based largely on secondary data, although the author mentions individual records of family expenditures and house-to-house inquiries made in Ahmedabad.

MANN, H. H., and KANITKAR, N. V.

(1410)

LAND AND LABOUR IN A DECCAN VILLAGE. Study no. 2, 182 pp., illus. London. 1921.

A fairly complete picture is given of village economy in Jategaon Budruk in the section of the Bombay Deccan where rainfall is highly uncertain. This village differed from the one studied in the first report of the same title by being distant from the city of Poona. Besides a discussion of land, crops, stock, etc., a study was made of the 147 families (736 people) of the village in 1917. There were members of 10 castes, but the majority were Marathas. The average income was rs.167-13 per year. A minimum level of living for a self-respecting family was estimated on the basis of a great many personal inquiries: rs.160 per year per family for food, rs.40 for clothing, and rs.6-12 for other expenses. Few of the families were able to maintain anything like this standard.

LUCAS, E. D.

(1411)

THE ECONOMIC LIFE OF A PUNJAB VILLAGE. pp. 104-116, illus. Lahore. 1920.

The inhabitants of the village of Kabirput are divided into three classes, farmers being the most prosperous, skilled weavers being the middle class, and unskilled laborers the third class. The number of families whose expenditures were studied was 10, 28, and 19, respectively, and the average number of persons per family was 4.5, 4.29, and 4.84, respectively. The gross income of a farmer's family amounted in 1918, a normal year, to rs.85-66 plus 22.58 mounds (1 mound equals  $1\frac{1}{4}$  bushels) of wheat and maize for home consumption. Taxes amounted to rs.19-88. Average annual consumption of sugar, tobacco, cloth, kerosene, salt, mustard oil, meat, vegetables, implements, livestock, etc., absorbed rs.62-9. A deficit of 3.72 mounds of wheat and maize, converted into money, made an annual deficit per family of rs.9-52. The net income of the weaver amounted to rs.157; he spent rs.105 for wheat and maize and rs.57 for other items, as did the farmer, with an annual deficit of rs.5-45. The net income of the field laborer amounted to rs.153, of which rs.15 was paid on debts and interest, rs.97 on maize and wheat, and rs.37 on other household items, with a balance of rs.2. Wheat and maize were valued at 10 seers to the rupee; other farm products were not evaluated. All classes were perpetually in debt. The farmers usually owned their farms.

SHIRRAS, G. F.

(1412)

REPORT ON AN ENQUIRY INTO WORKING CLASS BUDGETS IN BOMBAY. 299 pp., illus. Bombay. 1923.

This 1921-22 inquiry into cost of living and well-being of Bombay working classes deals with size and earnings of families, cost and consumption of food, fuel and lighting, clothing, miscellaneous articles, house rent, and housing conditions. Hindus comprised 90.3 percent of the group, Mohammedans 6.2 percent, and Christians 1.8 percent. Half of the workers were employed in the mills. By income, 34 percent fall between rs.40 and rs.50, and 40 percent between rs.50 and rs.70. The average working-class family consisted of 4.2 persons, the number increasing with income. The average monthly earnings per family were rs.52-4-6; per single man, rs.43-10-3. Of the earners, rs.42-5-7 was the men's share of the income, rs.16-11-6 the women's, and rs.13-13-5 the children's. The level of life was not high. The average distribution of expenditure was: For food, 56.8 percent; for fuel and lighting, 7.4 percent; for clothing, 9.6 percent; for rent, 7.7 percent; and miscellaneous, 18.5 percent. The varying percentage expenditures for the different income groups are given for food, fuel and lighting, clothing, rent, and miscellaneous items. These tend to support Engel's law. When the number in the family is reduced to "men," according to Lusk's coefficients, the expenditure per family for food varied from rs.18-2-7 to rs.41-12 (or 70.5 to 41.8 percent) from lowest to highest income class. About 97 percent of the families lived in single rooms; monthly rents ranged from rs.3-8 to rs.5-8. Forty-seven percent of the families were in debt to money lenders. Of the records of 603 single men's expenditures, one-third had an income of rs.40 to rs.50; with increasing income the proportion for remittances home increased. Distributions of expenditures are given for the following countries in comparison with Bombay: Other parts of India, Japan, China, Great Britain, Ireland,



France, Italy, Switzerland, Norway, Denmark, Sweden, the Netherlands, Belgium, Germany, Hungary, Egypt, Australia, New Zealand, Canada, United States, Uruguay, Argentina, and Trinidad. Representative expenditure accounts and a bibliography are included.

PANANDIKAR, S. G.

(1413)

THE WEALTH AND WELFARE OF THE BENGAL DELTA. 364 pp. Calcutta. 1926.

This is a study of the economic conditions of part of the deltaic portion of Bengal in 1921-23. The delta receives 80 percent of its wealth from agriculture, 6 percent from industry, and 7 percent from commerce. A short discussion of home industries shows the income of weavers to have been about rs.12 per month, while that of landless agricultural laborers was rs.15. Eighty percent of the weavers also engaged in agriculture. Potters, carpenters, and blacksmiths had incomes averaging about rs.15 a month. Rice and jute were the most important crops. Evidences are given of a level of living slightly improved over that of their grandfathers. A comparison is made with the peasantry of northern Italy. The level of living here was superior to that in other parts of India. The delta was almost entirely immune from plague, but not from cholera. The difference between those cultivators not in straitened circumstances and the needy ones was that the latter cut down on different expenditures but never left out anything. There were only 3 months of hard work in the year. The strict purdah system kept women at home. The land required to raise food for a family varied between 2 and 3 acres in different districts. There was excessive subdivision of land. The levels of living of families are described as starvation, above starvation, below comfort, and comfort, data being obtained through personal investigation. The results are not given in statistical form. The average income per head of the agricultural population was between rs.50 and rs.60. Wealth on the whole was evenly distributed except in Mymensingh where 4 percent obtained a net profit of rs.800 or more, 36 percent a profit of rs.240 or more, and 60 percent were on a subsistence level with no net profit. Among nonagricultural classes, the wealth was much more unevenly distributed and there was a greater variation in the level of living. The author concludes with a discussion of the factors that tended to keep the level of living low, and proposes certain industrial and agricultural remedies.

UNITED STATES DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS. (1414)

LABOR CONDITIONS AMONG TEXTILE WORKERS IN INDIA, CHINA, AND JAPAN.

U. S. Dept. Labor, Bur. Labor Statis. Monthly Labor Rev. 23 (5): 14-29. 1926.

India, China, and Japan all fall below the standards of western nations as to hours and working conditions. The average earnings of a male textile worker in India for August 1923 amounted to \$10.93 (rs.33-1-10). Considerable evidence goes to show that, making due allowance for low standards, these were not subsistence wages for a man with a family, and the labor of women and children was necessary to make up even the minimum income on which living was possible. A study of records of expenditures of 2,473 working-class families and 603 single men, collected in 1922 and published by the Bombay Labour Office in 1923, showed that the incomes of mill workers ranged from rs.30 to rs.90 and over per month, being under rs.60 in 69 percent of the cases. The expenditures varied widely, but in general a low level of comfort was shown. The percentage spent for food by those whose income was below rs.60 varied from 56 to 60.5 percent; even this did not allow for a normal diet. The conclusion was reached that industrial workers consumed the maximum of cereals allowed by the Famine Code, but less than the diet prescribed in the Bombay Jail Manual. The expenditures for education were little or nothing. The families were not able to save for sickness or old age. The average expenditure for rent was 8.9 percent of the income. Of 2,473 families, 97.3 percent lived in 1-room tenements. Nearly one-half of the families studied were in debt.

ANONYMOUS.

(1415)

STANDARD OF LIVING AMONG MIDDLE-CLASS INDIAN FAMILIES IN BOMBAY.

Bombay Labour Gazette, December 1924 and April 1925. [Summary in U. S. Dept. Labor., Bur. Labor Statis. Monthly Labor Rev. 21 (1): 65-67, illus. 1925.]

This summary presents data concerning the level of living among Indian middle-class families in 1924. Records of the expenditures of 1,748 families of clerical workers were obtained. The average size of family was 4.93, but the largest

number of families had four members each. The range of monthly incomes was from under rs.60 to rs.400, the average being rs.169. The percentage distribution of expenditure was food 42 percent, fuel and light 5 percent, clothing 10 percent, household 3 percent, rent 14 percent, and miscellaneous 26 percent. Three-fourths of the families lived in tenements of 1 and 2 rooms.

BOMBAY LABOUR OFFICE.

(1416)

REPORT ON AN ENQUIRY INTO FAMILY BUDGETS OF COTTON MILL WORKERS IN SHOLAPUR CITY. 73 pp., illus. Bombay. 1928.

An investigation of the records of family expenditures of cotton-mill workers in Sholapur City was conducted by the Bombay Labour Office in 1925. The cotton industry was almost the only source of maintenance for the industrial workers (54.6 percent of the population). The interview method was used, and 1,055 expenditure records were collected and tabulated. Part 1 deals with 902 records for Sholapur proper, and part 2 with 153 families in the Criminal Tribes Settlement. The range of income per family for the city of Sholapur was from below rs.20 to rs.90 monthly; 69 percent had incomes between rs. 20 and rs.50. This included grain allowance. There was an average of 4.68 persons per family of whom 4.57 lived at home; of these 1.96 were workers and 2.61 dependents. In the natural families (44 percent of total), the husband was the sole earner in 59.8 percent of the cases; in the joint families (56 percent), the head was the only earner in 17 percent of the cases and the head and his wife in 11 percent. The percentage distribution of expenditure was as follows: For food, 49 percent; for fuel and light, 10 percent; for clothing, 12 percent; for household necessities, 1 percent; for rent, 6 percent; miscellaneous 22 percent. When expenditures are classified by income groups, it is seen that as income increased, the proportion spent on food and clothing remained practically constant, the miscellaneous group increased from 18 to 26 percent, and the proportion spent on other items decreased. The average monthly expenditure on food per adult male (according to the scale adopted by the Inter-Allied Food Commission) was rs.4-13-11. The housing conditions were superior to those of workers in Bombay and Ahmedabad; the majority of workers lived in two or more rooms, and 65 percent paid monthly rent of less than rs.3. Over 60 percent of the workers were in debt. Of the 153 families, the majority had incomes below rs.40 per month. Average family consisted of 4.90 persons, 1.93 of whom were workers and 2.97 dependents. Monthly incomes ranged from below rs.6 to rs.45, including the grain allowance. The percentage distribution of expenditure was: For food, 53 percent; for fuel and light, 10 percent; for clothing, 11 percent; for household, 1 percent; for rent, 2 percent; miscellaneous 21 percent.

DARLING, M. L.

(1417)

THE PUNJAB PEASANT IN PROSPERITY AND DEBT. 298 pp., illus. London. 1925.

This book, published in 1925, describes the living conditions of the Indian peasant in the Punjab. The greater part of the proprietors of the Province were in debt. Credit was cheap, and the rise in level of living had been based on increased borrowing on the security of land, rather than on increased production. A detailed account is given of the changes in food, dress, housing, etc., which marked the rise in the level of living. The more exacting the labor, the more ample was the diet. No individual cases are dealt with.

DASS, ANCHAL, and CALVERT, H.

(1418)

AN ECONOMIC SURVEY OF TEHONG, A VILLAGE IN THE JULLUNDUR DISTRICT OF THE PUNJAB. Punjab Bd. Econ. Inquiry. Punjab Village Surveys no. 3, 345 pp. Lahore. 1931.

This is the third of a series of village surveys in the Punjab Province. Tehong was in a congested district; the population was large, and the density per cultivated area high. The evils of land subdivision were slowly being done away with. At the time of investigation, 1925, there was a population of 2,738 persons, or 510 families, with an average of 5.3 persons per family. Of these, 207 families were entirely dependent on agriculture for a livelihood and 145 were partly dependent. The artisans were paid chiefly in kind. The chief crops are listed. Education was considered a drawback to a village boy in that it led him to adopt too high a standard of living. Of 185 cultivators, 135 were indebted, 31.7 percent of the total sum being due to personal expenditure and 68.3 percent to agricultural needs. Consumption is discussed with regard to five classes: (1) The well-to-do landowners; (2) the small owners and well-to-do tenants; (3)



small tenants and agricultural laborers; (4) village menials; and (5) well-to-do nonagriculturists. Except for class 5 the general rule was to have 3 meals a day for 8 months (March to November) and 2 meals a day for the remaining 4 months. Class 5 had two meals a day throughout the year. Wheat for the 8-month period and maize for the 4-month period were the staple cereals. Different types of food are listed. Certain changes in diet had occurred in the 15 years prior to this survey; whereas barley was formerly used, it had come to be considered inferior; poorer classes used to gather piazzi seeds after the spring harvest, but in 1925 those seeds were given to cattle; there had also been a fall in the consumption of ghee and milk.

SAUNDERS, A. J. (1419)  
VILLAGE ECONOMIC ENQUIRIES. Indian Jour. Econ. 6: 184-192. 1926.

The author describes the results of an investigation into household accounts for 1925 which he made in Madichiyam, a village in Madura. In order to test what he calls the "random sample" method of village economic inquiry, four families were chosen at random from various income classes. The head of the first family was a clerk with an annual income of about rs.765, of which he spent rs.40 per month on food. The family was able to get along without incurring a deficit. Family possessions were evaluated. The second household was that of a weaver with a yearly income of rs.540 of which he spent rs.45 per month for food and rs.50 per annum for clothes. The weaver was constantly running into debt. The next case was of a coolie mill worker whose yearly earnings were rs.432, of which rs.30 were spent monthly for food. The family saved itself from indebtedness by not being addicted to drinking toddy. An agriculturalist and landowner's family was the last case investigated; total income was rs.1,040. Rs.30 per month were spent for food, and the family was able to save about rs.100 to rs.200.

BOMBAY LABOUR OFFICE. (1420)  
REPORT ON AN ENQUIRY INTO WORKING-CLASS FAMILY BUDGETS IN AHMEDABAD.  
48 pp., illus. Bombay. 1928.

Experts studied the expenditures of 872 working-class families of Ahmedabad, from February to August 1926, under the supervision of the Labour Office. About 81 percent of the families had a monthly income between rs.20 and rs.60. Three-fourths were Hindus and the rest mostly Mohammedans. The average number of persons per family<sup>a</sup> was 4, 3.87 of whom lived at home. Increased income was associated with increased size of family. Of 3.87 in the working-class family, 1.66 were workers. The number of workers in a family also increased with the income; about half the families had 1 wage earner, and nearly 40 percent had 2. When families are classified as "joint" or "natural" increased income was associated with decreased percentage of natural to total households and increased percentage of joint households. Among joint households, nearly 71 percent had more than 1 earner, whereas only 42 percent of the natural families had more than 1. The average monthly income per family was rs.44-7-2, ranging from rs.17-0-8 (the average for the lowest income group) to rs.83-10-7 (the average for the highest income group). The percentage distribution of expenditure by income class shows an increasing proportion spent on food up to the next highest group, the average being 57.9 percent. Fuel, lighting, and house rent decreased proportionately with increasing income, the averages being 7.04 percent and 11.74 percent, respectively. The percentage spent on clothing shows a very slight increase, and on miscellaneous items a decided increase, the averages being 9.45 percent and 12.7 percent, respectively. There was no one outstanding staple food here as in other cities studied; wheat and rice were equally important and bajri was used a great deal. The total expenditure for wheat was 12 percent, for rice 11 percent. Other important food items were ghee, pulses, vegetables, milk, buttermilk, condiments, and spices. Average monthly expenditure on clothing was rs.3-11-6. Seventy-three percent of the families lived in one-room tenements, average rent being rs.4-9-11. The Ahmedabad workers were heavily indebted, probably on account of religious and social customs. Comparisons are made with the studies in Bombay and the city of Sholapur.

IYENGAR, S. K. (1421)  
RURAL ECONOMIC CONDITIONS. Indian Jour. Econ. 6: 193-199. 1926.

The author investigated the economic conditions of 562 families living in nine villages in the Mysore State, one of the most advanced in the East. His method was to question members of the family and their neighbors and to check his results

by examination of village records. Practically the only results of the inquiry given here are the average income per family (rs.359-5-2 per year) and the average expenditure (rs.387-4-5). A health examination showed that rural poverty, with its insanitary houses, poor food, etc., had reduced the population to a destitute state. The period to which the data refer is not stated, but it probably was just prior to 1926, the date when the article was published.

IYENGAR, S. K. (1422)

STUDIES IN INDIAN RURAL ECONOMICS. 34 pp., illus. London. 1927.

This book embodies the results of a study of the level of living of 562 families (2,771 persons) comprising the population of 9 villages in the particularly backward rural area of the Mysore Malnad, in 1926. The average family expenditure in 5 of the villages was rs.68-11-8; in the other 4, rs.80-14-7. By way of comparison, the central jail in Bangalore spent rs.131-4-4 per convict head for the year 1924. The villagers lived on this low level by accepting charitable donations, picking up fruits, roots, etc., and by stifling their appetite rather than trying to meet it properly. Of the families examined 139 belonged to the untouchable caste; they lived on dead domestic animals and the scraps from their employers' tables; they spent no money on clothes and lived in the worst kind of hovels. The author urges that intensive surveys should be made in all parts of the country.

MUKERJEE, RADHAKAMAL (1423)

THE RURAL ECONOMY OF INDIA. 262 pp. London. 1926.

A section of this book deals with the economic life of Asiatic nomads living in the high peaks of Tibet. The period to which the data refer was probably not long prior to 1926, the date when the study was published. Types of food and clothing are listed. More than 90 percent of the agriculturist's income in India was spent on staple food, rent, and clothing. Among all classes, expenditure for social and religious ceremonies and caste dinners was excessive and caused a large proportion of family indebtedness. The Punjab was dominated by the money lender. Factors leading to indebtedness and poverty were the limited nature of the crops, leading to long periods of idleness; social environment and customs; and the lack of banks. The law of succession led to unduly subdivided holdings and to the overcrowding of the villages. An example is given of a Rajshahi family of four persons in which the gross income of the man cultivating 10 bighas was about rs.213. Rs.45 per head was the sum required for maintenance and comfort (a total of rs.180); seed required rs.5; depreciation and upkeep of cattle and agricultural implements, rs.13; the man was left with practically no surplus after paying rs.1-5 per bigha for rent. A man with an income of rs.320 and a holding of 15 bighas would have a total expenditure of rs.228, leaving rs.92 for luxuries. The level of living is discussed from the points of view of population density and productivity of the land. The author points out that the low density, the extension of canal irrigation, and multiple cropping bring the level of living of the average Punjabi peasant distinctly above that of a large portion of the peasantry of southern and eastern Europe.

PUNJAB BOARD OF ECONOMIC INQUIRY. (1424)

AN ECONOMIC SURVEY OF GAGGAR BHANA, A VILLAGE IN THE AMRITSAR DISTRICT OF THE PUNJAB. Punjab Village Surveys no. 1, 235 pp., illus. Lahore. 1928.

One chapter on food consumption is contained in this report of the general economic conditions of the village of Gaggar Bhana, a typical Jat Sikh village of the central part of the Punjab. The inhabitants of the village were divided into two classes: (1) Castes doing hard bodily labor; and (2) trading and non-agricultural castes. Accounts were kept of quantities of various foods consumed by five families for from 2 to 7 days in March and April 1926. Four of the families were those of cultivators, one that of a weaver. The size of the families ranged from 6 to 9 persons. Consumption was tabulated by age groups. The averages obtained from these five families were then applied to the entire population to find monthly wheat consumption among the various castes of the village. The basis of the diet was the chapatti (cake of unleavened bread). Whenever there was a scarcity, the poorer inhabitants replaced wheat with maize, sold their milk animals, and if necessary went outside the village to find work. Very little change had taken place in the diet of the people during the 15 years prior to this report.



BENNISON, J. J.

(1425)

REPORT OF AN ENQUIRY INTO THE STANDARD AND COST OF LIVING OF THE WORKING CLASSES IN RANGOON. 221 pp., illus. Rangoon. 1928.

This study of the working classes of Rangoon, undertaken in 1926-27, deals with 4,309 expenditure records from five Indian races (1,748 Telugus, 768 Hindustani, 654 Chittagonians, 289 Tamils, and 128 Uriyas) and 992 Burmese. Practically all forms of labor are represented. Most of the records were for single men. The Lusk standard was used. The average family was composed of 3.71 persons or 3.01 units. When incomes were divided into five groups, the monthly average for the lowest was rs.54 11a. 5p. and the highest rs.65 13a. 8p., the total average being rs.58 8a. 3p. The percentage distribution of expenditures was: For food, 53 percent; for clothing, 11 percent; for rent, 14 percent; for fuel and light, 5 percent; for household necessities, 3 percent; and miscellaneous, 15 percent. The tables show that "as the income per unit increases, the percentage spent on food decreases, while that on miscellaneous items increases." The average monthly expenditure for food was rs.29 14a. 6p. Gross and percentage calorie intakes are given for the five groups. The average rent for all families was rs.7 14a. 3p. The percentage expenditures for food, clothing, rent, fuel and lighting, household requisites, and miscellaneous are given for the five groups. Detailed tables are given for different income groups showing the average monthly expenditures and percentages of total income for the Burmese; the Tamils, Telugus and Uriyas; the Hindustanis; and the Chittagonians. An investigation of Indian occupational (single men's) expenditure records shows that the daily calorie intake varied from 2,880 to 3,589. An analysis of the records of expenditures of single Indians shows an income and expenditure of rs.27 7a. 8p. and rs.17 12a. 3p. respectively for the Tamils, rs.28 14a. 10p. and rs.19 11a. 10p. for the Telugus, rs.35 3p. and rs.14 13a. 5p. for the Hindustani, and rs.29 5a. 3p. and rs.17 5a. 1p. for the Chittagonians. Other parts of the book deal with cost of living in Rangoon, the conditions of labor, and housing and social conditions.

DESHPANDE, S. R., and GHURYE, G. S.

(1426)

SOME VILLAGE STUDIES. Indian Jour. Econ. 7: 467-490. 1927.

This article describes the social and economic life of a village as seen through the study of 145 families in four villages in the Kolaba district. Although no date is given for the period of the study, it was probably made just prior to 1927, when the article was published. The villages studied had a closely knit social organization, almost all the inhabitants belonging to one caste. The average family consisted of 5.66 persons. Three-fourths of the total expenditure went for food. The authors conclude that 56 percent of the villagers were living below the minimum subsistence level. A great deal of indebtedness existed. The authors point out that disease and hardship were common in these villages, contradictory to the common beliefs regarding ideal village life. The data support Schwabe's and Tschajanow's laws but contradict Engel's, possibly because such a large proportion of the population did not have even the minimum for subsistence.

MUKHTYAR, G. C.

(1427)

LIFE AND LABOUR IN A SOUTH GUJARAT VILLAGE. 303 pp., illus. Calcutta. 1930.

The data for this economic and social survey of Atgam in South Gujarat were collected in 1927. The population was 2,560 persons, comprising 23 castes and 461 families. Only 711 persons (28 percent) were active workers. The most important food crops are given. The routine of daily life was monotonous. Ninety-eight percent of the population depended on agriculture as a source of income. The population is divided into three groups: (1) The Kaliparaj (consisting of four castes); (2) the Ujaliparaj (except Brahmins, Banias, Parsis, and Christians); and (3) those excepted in (2). A standard budget was constructed for a typical family and compared with averages obtained from a few records of weekly expenditures. Staple foods are given for the three groups. The average family in the first group consisted of 1.67 men, 1.54 women, and 2.48 children; their annual expenses totaled rs.277-8, of which food accounted for rs.207 12a 9p., clothing rs.40 4a 1p., and other expenses rs.29 7a 2p. The diets for the second group are given. Their clothing was more ample and varied, and amounted approximately to rs.20 for a man or a woman, and rs.10 for a child. The 12 records collected for the third group show a range of total expenditure of rs.400 to rs.1,500; food rs.306 to rs.880, and clothing rs.40 to rs.300. Their diet was varied and ample. Education and recreation were large items. The village average shows

that 52.2 percent of the income was derived from land, 8.3 percent from animals, 26.2 percent from labor, 10.4 percent from external sources, and 2.9 percent from other sources. The percentage of income spent on current living was 84.8, repairs 4.2, land revenue 4.8, and interest charges 6.2 percent. Other averages were: Size of family 4.9 persons, income per family rs. 342, expenditure per family rs. 334, and average indebtedness per family about rs. 211. The average per capita income, expenditure, and indebtedness were rs. 70, rs. 68, and rs. 43, respectively. When 450 families were divided into three economic groups, there were 36 families in which the income derived from land was sufficient, 185 families in which income from land and other sources was sufficient, and 229 families in which economic position in an average year was unsound, even when income from all sources was included. Average family income and expenditures for the three groups, and the principal causes of poverty are given.

IYENGAR, S. K.

(1428)

ECONOMIC INVESTIGATIONS IN THE HYDERABAD STATE, 1929-30. General Survey, v. 1, 178 pp., illus. Hyderabad Deccan. 1931.

The objects of this inquiry are to ascertain to what extent registered holders of land in Hyderabad State had been dispossessed of their holdings during the past 25 years and to determine the extent of indebtedness of the existing holders. Four villages each in the districts of Mahboobnagar and Nizamabad, and 12 villages in each of the districts of Nanded, Warangal, Aurangabad, and Raichur were studied in 1929-30. The chief crops were jowar, cotton, wheat, tur, and flax. The average indebtedness (other than land mortgages) was rs. 289 per family indebted in Aurangabad; including land mortgages the average debt per resident family was rs. 150. In the districts where wages were low, underfeeding existed. Supplementary sources of income were roots and herbs, fish, and salt (all of which might be obtained free), earnings of women and children, produce of a small garden, etc. When climatic conditions were not congenial, each family had a greater expenditure for clothing, house room, medical expenses, etc. Discussions of mortgages, tenancy, money lenders, and debts occupy the bulk of the book. The main causes of debt are household expenses, marriage expenses, litigation, and cultivation expenses. The level of living among the rayyats in Aurangabad and Nanded was the highest of any in the districts studied. Jowar was the staple, while bajri and wheat were also used. Raichur came next, but a general underfeeding prevailed due to infertility of the soil and insufficiency of rainfall. Warangal was at the lowest level; the milk and water supply were poor, and there was too much drinking.

EMERSON, GERTRUDE

(1429)

VOICELESS INDIA. 458 pp., illus. Garden City, N. Y. 1930.

In this book, published in 1930, an American woman describes her personal experiences in a tiny Indian village, Pachperwa. From her own observation of the some 200 families in this village, and from secondary accounts, she draws various conclusions concerning the diet, housing, clothing, etc., of the Indians. The people ate only about one-third as much food as was consumed by the people of the United States and it was of a much lower quality. Pulse formed the basis of the diet. Anywhere from one-third to one-half the total income was spent on food. No records of family expenditures are given, and no attempt is made at statistical analysis.

MUKERJEE, R. K.

(1430)

FOOD AND FOOD REQUIREMENTS OF THE INDIAN LABOURERS. Indian Jour. Econ. 12: 254-264, illus. 1932.

The author wished to show that the hours of labor in factories should be regulated in some measure according to the variation of the metabolic rate of the workers through the seasons. Studies were made of the food consumption of five Indian factory workers' families in Cawnpore about the year 1931. These households were selected from the highest, lowest, and middle grades of workers' families; their income ranged from rs. 12 to rs. 40 per month. The size of the family ranged from 1 to 5. The caloric value of these dietaries was compared with requirements estimated by the food committee of the Royal Society, and found to be inadequate to allow efficient work. (The surplus available to the Indian laborer in excess of requirements of an adult at rest was 960 calories, as compared with the Royal Society's estimates for moderate work of 700 to 1,100 calories, and for heavy work of 1,100 to 1,200 calories.)



NEHRU, S. S.

(1431)

CASTE AND CREDIT IN THE RURAL AREA, VII. 174 pp., illus. New York. 1932.  
(With an introduction by Radhakamal Mukerjee.)

Social stratification in India is studied here by means of statistical observation of the correlation between caste and economic conditions and between caste and family conditions in the year 1931. Social position was a factor in economic matters, the upper castes having the advantage of prestige, but the lower castes having the compensating advantage of being willing to work and having no inhibitions concerning the necessity for economic production. Practically all castes were agricultural. Borrowed money was seldom used for the purpose for which it was borrowed, but the peasant was noted for his ability to repay his loans. Castes were ranked by occupation, social and religious status, financial condition, and labor value. Each had its ordinary and extraordinary functions. The credit and deficit side of expenditures are particularly emphasized, showing the peasant ability to balance finances.

## JAPAN

MORIMOTO, KOKICHI

(1432)

THE STANDARD OF LIVING IN JAPAN. 147 pp., illus. Baltimore. 1918.

In 1913 schedules were collected from 217 tenants of the college farms situated in four different parts of Hokkaido (the northern island of Japan). The families selected were chosen as representative of general economic conditions. Each family was self-supporting and consisted of 2 parents and from 2 to 4 children under 15 years of age. The average capital owned was 1,330 yen; the average income 589 yen; and the average expenditure 216 yen for farming and 303 yen for living. Goods furnished were valued according to the prevailing prices. Ideal budgets were presented to show (1) the absolute level of living (i.e., the minimum budget), and (2) the efficient level. Various other data had been collected by the author from 1913 to 1915. From these, he gave an account of the diet of the small farmer in which 60 percent of the total food expenditure went for rice and barley and of a poor working-class family in the city of Sapporo in which 84 percent of the total food expenditure went for rice alone. The author found that expenditure for clothing relative to total expenditure in the incomes studied decreased with increasing income; that expenditure for housing tended to increase rapidly as the income increased; that the expenditures for food, clothing, and housing were related to each other in the total family expenditure (i. e., underconsumption of food and improper housing, or either one of them, was associated with a greater expenditure for clothing, etc.). Numerous other conclusions were drawn regarding clothing and housing expenditures.

(1433)

THE EFFICIENCY STANDARD OF LIVING IN JAPAN. Japan Council of Inst. of Pacific Relations. 76 pp., illus. Tokyo. 1931.

The purpose of this study was to secure a picture of current living conditions and to determine what constituted an efficient level of living. The chief sources of income were commerce, salaries, land, and house rent, etc. Figures are taken from the Japanese Bureau of Statistics' study of 1926-27. A summary of 12 Japanese reports (not from the bureau of statistics) on family expenditures of laborers shows a range of 19 to 53 percent spent for food, 2 to 16 percent for clothing, and 14.5 to 61 percent for sundries. The cost of living, using 1914 as a base, increased in 1919 to 317 and then decreased to 144 in 1930. The principal food item was rice. A discussion of the national diet includes the consumption of grains, vegetables, meat, etc., and the trend of changes in diet. Food, clothing, and housing are discussed from the viewpoint of the efficient level of living.

TAKANO, I.

(1434)

ÜBER HAUSHALTUNGSERHEBUNGEN UND DEREN DURCHFÜHRUNGEN IN JAPAN.  
Bull. Inst. Internatl. Statis. 25 (2): 335-342. 1931.

Three studies made of urban family expenditures are summarized. One was made in 1916 and the others in 1918-19. The first concerns 20 members of a Japanese labor union. Each family kept daily records of income and outgo for a month. The wages of the head of the household constituted 83 percent of the family income. The income was used as follows: for food, 41.42 percent; for dwelling, 17.56 percent; for fuel and light, 6.14 percent; for clothing, washing, shoes, 7.50 percent; for health, 8.17 percent; and for sundries, 19.21 percent. The other two studies consisted of 40 laborers' households in the Tsukishima district of Tokyo and 95 households of elementary school teachers in the whole

city. The laborers kept records for 183 months or an average of about 5 months per family. In both cases the wages of the head of the household amounted to 87 percent of the family income. Food accounted for about 47 percent of the workers' expense and only 40 percent of the teachers' expense. Necessities (food, dwelling, fuel, light, clothing, washing, shoes, etc.) accounted for 77.35 percent of the workers' expense and only 69.93 percent of the teachers' expense. When the families were arranged in income groups with a range of 10 yen starting with "under 49 yen" and ending with "over 110 yen" the 3 lower groups of the laborers had deficits and the 4 lower groups of the teachers and the highest group (over 110 yen per month) also spent more than current income. The last two studies were made during an epidemic of influenza (1918-19), and this partly explains the deficits. Only percentages and the methods used in collecting materials are discussed. The analysis is limited to the author's own studies. References are given to the original Japanese publications.

OSAKA MUNICIPAL BUREAU OF LABOR RESEARCH. (1435)

COST OF LIVING AMONG LABORERS IN OSAKA, JAPAN. Osaka Munic. Bur. Labor Rept., Ser. X, 123 pp. Osaka. 1921. [Original not seen. Summarized in U. S. Dept. Labor, Bur. Labor Statis. Monthly Labor Rev. 13 (4): 88-90. 1921.]

The families of 99 skilled factory laborers living in Osaka kept household accounts for the 12-month period from July 1919 to June 1920. The families ranged in size from 2 to 9 persons, and from 1.8 to 7.5 equivalent adult males according to the United States standard. The families were arranged in 13 income groups from under 600 yen to 1,920 yen and under 2,040 yen. The percentage distribution of expenditures for all the families combined was: for food, 47; for housing, 10.02; for clothing, 11.64. Rice and other cereals formed 58.74 percent of the diet; sea foods, 7.48 percent; and meat, 3.53 percent. The study used the cost of clothing for a man between the ages of 26 and 30 as a unit, and based clothing expenditures for other age groups on this unit. One section of the report shows monthly fluctuations in cost of living; this reveals that the cost of clothing fluctuated most, that of food least. Many detailed data were secured regarding each individual family.

CHEN, TA (1436)

PRICES AND THE COST OF LIVING IN JAPAN AND CHINA SINCE THE WORLD WAR. U. S. Dept. Labor, Bur. Labor Statis. Monthly Labor Rev. 13 (6): 1-5. 1921.

In addition to general figures showing the rising trend of prices, 1914-21, and the distribution of expenditures, special attention is devoted to the survey made in 1920 of income and living costs of 775 male and 444 female school teachers in Tokyo. (See also the Keizai Ronso 12 (1): 154-171.)

UNITED STATES DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS. (1437)

LABOR CONDITIONS AMONG TEXTILE WORKERS IN INDIA, CHINA, AND JAPAN. U. S. Dept. Labor, Bur. Labor Statis. Monthly Labor Rev. 23 (5): 14-29. 1926.

A report issued in 1924 by the Japanese Department of Commerce and Industry is summarized. Of a total of 893,266 factory workers, 78.8 percent were women and girls; one fourth of the workers were under 16 years of age, 95 percent of these being girls. The average daily wages for 6 months in 1923 were 1.33 yen (66.3 cents) for men and 0.87 yen (43.4 cents) for females. No inquiries into the cost of living of working-class households were made on a large scale, but the studies made indicate that the average household consisted of 5 persons, including 3.2 adults, and that an income of 70 yen a month barely balanced expenditure. Expenditure for food amounted to 40 to 50 percent, and for housing to about 10 percent of total expenditure.

MATSUDA, TAIJIRO (1438)

THE FAMILY BUDGET ENQUIRY IN JAPAN, 1926-1927. Bull. Inst. Internatl. Statis. 25 (2): 265-301, illus. 1931. [See also Internatl. Labour Rev. 23: 338-399, illus. 1931.]

This study is a summary by the chief statistician of the bureau of the main results of the four volume report published in Japanese by the Bureau of Statistics of the Imperial Cabinet. This was the first governmental household investigation undertaken in Japan. It was carried out for the year 1926-27 in various parts of the country and among various classes, as follows: 2,236 low-salaried families in 11 large cities; 3,008 families of factory workers in 12 leading industrial



centers; 520 families of mining laborers in 5 mining districts; 633 families of wage earners in communications, and 663 families of day laborers in the 6 principal cities; and 736 farm families of small income in 9 Prefectures. Of these families, 6,505 completed their record of expenditure. The salaried workers had incomes averaging 137 yen a month, of which they spent 32.7 percent for food and drink; the wage earners had 102 yen, of which 39.7 percent went for food; and the peasants had 96 yen, of which the output for food was 45.7 percent. For the urban groups, expenditures for food and sundries appeared to follow Engel's law; dwelling and clothing expenditure showed no general regularity of movement with income; and the percentage for heating and lighting showed a gradual decline with increasing income. The value of income in kind was approximated by the record keepers. Quantities and prices are not given in the tables appended to this summary, but in the original accounts, expenditures of the most minute nature were listed.

One volume of 10 original studies gives methods and general results; a second gives the detailed tables for the urban families; the third contains further detailed tables and makes comparisons between the salaried workers and the wage earners; and the fourth summarizes the conditions of the farm families and gives 22 detailed tables concerning these families. In general, the investigation follows the best statistical procedures used by western countries. The summary and chief tables are available in English.

NASU, SHIROSHI

(1439)

LAND UTILIZATION IN JAPAN. 262 pp., illus. Tokyo. 1929.

This book is concerned with the problem of whether Japan can supply herself with sufficient food by means of better land utilization. Some scanty data on family expenditures are included for illustrative purposes. The results of an investigation covering 1 year from September 1926 to September 1927, conducted by the Bureau of Statistics of the Japanese Government, are given. The results are also analyzed of the investigation made by the Ministry of Agriculture and Forestry from February 1926 to February 1927 of farmers who tilled an average of 1.7 cho of land per family. An average peasant could not make ends meet, and the indication was that the level of living among farmers would probably decline in the future. No new data on family expenditures are included.

YANAGISWA, Y.

(1440)

OUTLINES OF INQUIRY REGARDING FAMILY BUDGETS IN JAPAN. Bull. Inst. Internatl. Statis. 23 (2): 768-774, illus. Cairo. 1928.

The Japanese investigation of 1926-27 on family expenditures is described giving the methods of selecting households, the method of inquiry, the number of families used, etc. The results had not been secured at the time of publication of this article. They appeared later in an article entitled "The Family Budget Enquiry in Japan 1926-27," by Taijiro Matsuda.

#### PHILIPPINE ISLANDS

CLARK, VICTOR S.

(1441)

LABOR CONDITIONS IN THE PHILIPPINES. U. S. Bur. Labor Bull. 58. Washington, D. C. 1905. [Summarized from Philippine Agr. 22: 746. 1934.]

In Clark's study of labor conditions in the Philippine Islands, he made the following observations on the cost of articles of necessity. The food ration of a Filipino laborer consisted of a chupa of rice, some fish, and vegetables. The cost of a full ration was estimated to be equivalent to \$0.12½ (United States money). Rice in Manila cost \$2.52 per cavan, fresh beef about \$0.20 a pound, Chinese eggs about \$0.12½ per dozen, water for household purposes less than \$0.005 per 5 gallons. The data probably refer to a period just prior to 1905, the date when the study was published.

PHILIPPINE ISLANDS, DEPARTMENT OF COMMERCE AND COMMUNICATIONS. (1442)

COST OF LIVING. Labor Bull. Bur. Labor 4 (26): 89-94, illus. Manila. 1927. [Also summarized from Philippine Agr. 22: 746. 1934.]

Average budgets are given for the Philippines which were estimated by the various agents assigned by the Bureau of Labor to the Provinces and to Manila. The budgets are for 1910, 1918, 1920, 1925, and 1926. The average size of the family was five. The data are vague, incomplete, and inexact. An ideal budget is presented on the authority of "those persons who are well versed in questions of domestic economy." The Manila laborer is inclined to dress well even to the extent of sacrificing his meals. The total expenses for a family of five were 59 percent higher in 1918 than in 1910. In 1920 and 1925 the total expenditure

decreased as prices went down. In 1910 the average daily expenses of a laboring man's family of five members was 1.24 pesos distributed as follows: For food, 0.66 peso; for clothing, 0.15 peso; for rent, 0.15 peso; for fuel and light, 0.08 peso; for education of children, 0.05 peso; and miscellaneous, 0.15 peso. In 1918 the total was 1.96 pesos; in 1920, 2.54 pesos; and in 1925, 2.22 pesos. In 1926 the estimated cost of living of laborers employed in trades and industries in Manila was as follows: Average daily expenditure for a family of five was 2.32 pesos, of which 59 percent was for food, 7 percent for clothing, 11 percent for rent, 6 percent for fuel and light, 5 percent for education of children, and 12 percent for miscellaneous.

BURTON, A. M.

(1443)

AGRICULTURAL CONDITIONS IN THE SUB-PROVINCE OF BENQUET. Philippine Agr. Rev. 6: 345-347. 1913.

In Benquet, a subprovince of the mountain province of Luzon, the natural conditions fostered agriculture and cattle raising. In 1912, 8,627 cavans (1 cavan equals 75 liters) of rice were produced, 79,038 cavans of corn (on cob), and 350,000 kilos of tobacco. Much of the food consumed was produced in the home gardens. Much of the farming was done by the community, men and women working together. The Igorots, or laborers, earned an average of 0.50 peso per day. No other data are given.

CONCEPCION, I.

(1444)

THE ECONOMIC ASPECT OF NUTRITION OF OUR MASSES. Jour. Philippine Islands Med. Assoc. 1931: 80-93, illus. 1931.

The term masses is here applied to common and skilled laborers and farmers; the data given refer to the period around the year 1918. The study includes (1) a group from Manila (number not stated), and (2) 1,000 families chosen at random in the various islands. In the first group, estimates are derived from data collected by the Bureau of Labor. The average income per capita for married and single skilled laborers was 2.25 pesos, and of unskilled laborers 1.50 pesos. The total expenditure for married laborers, skilled and unskilled, exceeded the average income. Married laborers, skilled and unskilled, spent 64 and 76.6 percent, respectively, of their total income for food. The family of the married laborer averaged five persons. The estimates for the second group are based on Musgrave's report. The 1,000 families are divided into two groups—those with an income of less than 50 pesos a month, and those with an income of 50 to 100 pesos a month. The first group spent 41 percent of the total income for food, the second group 50 percent. Another study was made of 191 families from three islands whose average annual income ranged from 1,300 to 1,350 pesos. These groups devoted 68, 61, and 48 percent, respectively, of their total expenditure to food. The average food expenditure for all groups studied was 60 to 65 percent of the total expenditures; the nutritive content was very low, especially in calcium, fat, and vitamins. The average size of the family in this group was five. Findings for the first group contradict Engel's law. In the second group studied, the incomes were approximately the same, but the percentage spent for food varied because of local conditions.

BUTLER, O. M.

(1445)

THE PHILIPPINE ISLANDS. U. S. Dept. Com., Bur. Foreign and Dom. Com., Trade Promotion Ser. 52, 130 pp., illus. Washington. 1927.

In this commercial survey, expenditures in the year 1926 for a family of two adults in Manila are analyzed. Of the total daily expenditure of \$1.16, over one-half was for food. The adult's working day ranged from 5 to 10 hours. Wages in the Philippines had so increased since the American occupation that few local industries were able to compete with those of neighboring countries.

PHILIPPINE ISLANDS, DEPARTMENT OF COMMERCE AND COMMUNICATIONS. (1446)

COST OF LIVING OF FAMILIES OF A REPRESENTATIVE NUMBER OF EMPLOYEES IN VARIOUS OFFICES OF THE INSULAR GOVERNMENT. Labor Bull. Bur. Labor 1929 (27): 96-97, 174-175, illus. 1930. [Also summarized from Philippine Agr. 22: 747-748, 1934.]

The families of 283 insular government employees in Manila were studied for the year 1927. The inquiry was limited to married employees whose salaries ranged from 50 to 200 pesos a month. The average number of persons per family was 4.92. As the income grows, the lesser is the percentage which goes to food, but increment is noticeable in clothing and some luxuries. The proportion of the expenses which goes to food is 47 percent for these employees. The yearly



expenditures are tabulated in six income groups ranging from under 600 to 1,800 to 2,400 pesos. Yearly expenses ranged from 711 to 1,822.91 pesos. Percentage expenditures were also given in these six income groups for food, clothing, rent, fuel and light, and miscellaneous. Average yearly expenses were 1,250.26 pesos; average yearly percentages were food, 47.48 percent; clothing, 10.10 percent; rent, 15.77 percent; fuel and light, 6.37 percent; and miscellaneous, 20.28 percent.

PHILIPPINE ISLANDS, DEPARTMENT OF COMMERCE AND COMMUNICATIONS. (1447)  
SPECIAL INQUIRY INTO THE SOCIO-ECONOMIC CONDITIONS OF TOBACCO WORKERS  
IN THE CITY OF MANILA. Labor Bull. Bur. Labor 1929 (27): 90-96, 165-  
175, illus. Manila. 1930. [Also summarized from Philippine Agr. 22:  
747. 1934.]

The Bureau of Labor sent six deputies to the homes of 837 Manila laborers selected at random in the cigar industry to ascertain whether a general increase in pay was justifiable. Of the 837 laborers, 454 were male and 383 female; 67 percent had families. The survey extended from March to May 1927. The average weekly earning was 7 pesos. Three hundred and fourteen owned their homes. Average number of persons in the family was 4.92. The earnings of the laborers investigated were found to be insufficient to maintain their families; therefore, 70 percent were assisted by members of their families. Classified by income, all the laborers included in the study were distributed as follows: Eight percent earned from 3 to 5 pesos per week; 28.83 percent from 5 to less than 7 pesos; 48.75 percent from 7 to less than 10 pesos; 2.75 percent from 10 to less than 12 pesos; and 1.67 percent 12 pesos or more. The average weekly expenditures for all families was 12.84 pesos or the equivalent of 667.68 pesos a year distributed as follows: For food, 68 percent; for clothing, 4 percent; for shelter, 8 percent; for fuel and light, 8 percent; and miscellaneous, 12 percent. Analyzing the expenditures by income groups it was observed that as income increased, the percentage expenditures for food decreased; for clothing, remained the same; for shelter, increased; for fuel and light, approximately the same; and for miscellaneous, almost the same. It was found further that the average expenditures of a family in all income groups exceeded the income of the head of the family.

AGBANLOG, A.

(1448)

A STUDY OF THE STANDARD OF LIVING IN THE TOWNS OF BALUNGAO AND  
SAN CARLOS, PANGASINAN. Philippine Agr. 18: 581-603, illus. 1930.

An earlier survey by the Bureau of Labor (1926) compared the cost of living in the Philippines with that in various rural communities in the United States. As that survey was based on inadequate data, the present more comprehensive survey was made in 1927-28. Income from all sources was taken into consideration. The results obtained confirm Engel's and Schwabe's laws. The proportions spent for clothing remained about the same, but the expenditures for all else tended to increase with increase in income. The regions studied were typical. Farmers constituted 93 percent of the total population in Balungao and 73 percent in San Carlos; the rest were merchants, professional men, and laborers. In San Carlos the subdivision of farms, due to the increase of population, had made it impossible for farm production to maintain the level of living. A number of farmers had, therefore, joined the professional class. The average family size in San Carlos was 6.1, in Balungao 5.1, and in the whole Philippines 5.98. The size of the families did not correlate with family income. The average current value of the house of a family in San Carlos was 297 pesos and in Balungao 135 pesos. Most of the families in both places owned their homes. The average annual income of a family in San Carlos was 1,649 pesos and in Balungao 1,450 pesos, including cash income and money value of family labor. The average annual expenditure of a household of 6.1 persons in San Carlos was 754 pesos, and of a household in Balungao (5.1 persons) 493 pesos. In both areas the income of the farmer was lower than that of other occupations. The family debts averaged 3.47 pesos in San Carlos and 15 pesos in Balungao. The average value of land owned by families in San Carlos was 1,424 pesos, and in Balungao 881 pesos. Tables are given showing household groups, number of children, education, relation of families to income, expenditure and value of land, and distribution of expenditures.

BANDONG, CESARIO

(1449)

A PRELIMINARY INVESTIGATION ON THE LIVING CONDITIONS OF COMMON  
LABORERS IN THE COLLEGE OF AGRICULTURE. Univ. Philippine Col.  
Agr., no. 797. Los Banos Laguna. 1929.

VELMONTE, JOSÉ E., SUMAGUI, JUAN O., and VIRAY, PEDRO H. (1450)  
 LIVING CONDITIONS IN FARM HOMES IN MENDEZ NUNEZ AND AMADEO, CAVITE;  
 MANGATAREM, PANGASINAN; AND CAMILING, TARLAC. Philippine Agr. 22:  
 745-776, illus. 1934.

The object of this work was to study agricultural households and families as to ages and literacy of members, living conditions, the cost of living, and the level of living by tenure groups. Investigations were conducted in the municipalities of Mendez Nunez and Amadeo, Cavite Province, from June 1929 to January 1930; and in the municipalities of Mangataram, Pangasinan Province, and Camiling, Tarlac Province, from August 1929 to January 1930. In Cavite, the farmers raise principally rice, corn, bananas, vegetables, and fruits; in Pangasinan and Tarlac, principally rice. There is some livestock raising in all three provinces. Two schedules were used. The first was filled out by the investigator; and the second, which covered daily expenditures, was filled out by the family. Evaluation of goods raised and consumed on the farm (45.6 percent) was based on the prevailing market prices. Although the studies only ran for 8 and 6 months, figures were estimated for a full year. The study included three types of tenure—peasant ownership, part ownership, and tenancy. The family and household are used here as units of comparison. Because of the great difference in size of families, the per capita unit, adult equivalent, or adult-male equivalent, and cost-consumption unit were also used for greater accuracy. Kirkpatrick's classification of goods was used. The average number of persons per family was 5.12 and of the household 5.65. Of the 240 farm families (1,358 persons), 58.9 percent were literate in their own vernacular, 50.98 percent in English, and 2.59 percent in Spanish. Average value of all goods used was 529.10 pesos per household. Average percentages spent were: For food, 53.6; for clothing, 7; for housing, 8.7; for furnishings and equipment, 1.2; for operation goods, 8; for maintenance of health, 1.3; for advancement, 12.3; for personal goods, 5.8; and others, 2.1. Six tables were also given at the back covering size of family and household, number of children of various age groups, literacy, formal education of children, value of houses and house furnishings, and average value of goods used during 1 year.

#### SIAM

ZIMMERMAN, CARLE C. (1451)  
 SIAM: RURAL ECONOMIC SURVEY 1930-31. 321 pp., illus. Bangkok. 1931.

A study was made of the economic conditions of 2,000 families in 40 villages of Siam for 1930 and 1931. The data were obtained by personal investigation. Estimates for the year are given for each of the four major economic and cultural areas—north, northeast, center, and south. The average income of families in the center was 279 baht (gold value at that time was 44 cents in American currency), of which 55 percent came from crops, 3 percent from animals, 1 percent from fish sales, and 41 percent from miscellaneous. Since the depression hit the center first, the income there was placed at 330 baht to make it comparable with the other districts. The average income in the north was 176 baht, 39 percent of which came from crops, 4 percent from animals, 1 percent from fish, and 57 percent from miscellaneous. (Wages and rentals are the chief items under miscellaneous in the center; home industries and jungle products have more significance in the other sections). The average income in the south was 125 baht, of which 31 percent was derived from crops, 10 percent from animals, 4 percent from fish, and 56 percent from miscellaneous sources. The average income of the northeast was 83 baht, of which 21 percent came from crops, 12 percent from animals, 9 percent from fish, and 28 percent from miscellaneous sources. These figures show that in the central district, incomes came more largely from crops and less from other sources. The lower the cash income, the more diversified were the sources from which it came. There were two main groups of expenditures: (1) Those dealing with farm costs, taxation, etc.; and (2) living expenses. The central farmer did not produce so large a part of his living at home as did farmers in other districts; in the outlying districts most of the clothing was woven at home. There was a close correlation between income and basic living expenditures. Living expenses absorbed from 52 to 69 percent of all cash expenditures; food took 17, 23, 26, and 32 percent of total expenditures in center, north, south, and northeast, respectively; clothing took 6, 7, 9, and 8 percent; household took 7, 8, 10, and 9 percent, and other expenses 22, 21, 24, and 19 percent in the center, north, south, and northeast, respectively. In self-sufficing districts, the fuel, to a large extent the house, most of the furniture, a large share of the light, most of the rice, fish, vegetables,



and other foods, and nearly all the clothing were produced at home. The food expenditure per household averaged 63 baht in the center, 44 in the north, 35 in the south, and 29 in the northeast. The proportion of food expenditures used for rice declined with the approach to commercialized farming districts. There was little difference in the amount of clothing used or worn, the differences in expenditure among the various districts—20 baht in the center, 13 in the north, 12 in the south, and 7 in the northeast—being due to the fact that clothing was bought in the inner districts and was woven at home in the outlying ones. Household items include fuel, light, insect protection, kitchen utensils, etc. Matches were used almost universally. Mosquito nets and screens were slowly coming into use. Incidentals include health, tobacco, betel and areca, drugs, alcohol, wedding and marital customs, religious rites and ceremonies. A food analysis was undertaken in order to find the extent to which Siamese people had approached the level of bare subsistence, and the extent to which particular food inhibitions and practices had brought about cases of malnutrition. The basis of the diet was rice, with fish wherever possible, and fruit as often as possible. Vegetables were used daily, varying with the season. Areca nut and betel leaf were chewed almost universally. Meat, poultry, and egg products were used less than twice a month and in most cases less than once. The white-rice eaters (south and central) consumed about 2,000 calories per adult per day, while the glutinous-rice eaters (north and northeast) used about 2,500 calories; but the white-rice eaters were more wealthy, lived nearer the coast, and ate more fish. Salt was eaten in unduly large quantities. Of 9,428 persons examined, only 30 showed clear cases of diet deficiency. Extensive physical examinations were made, and a program of administrative reorganization was suggested.

## AUSTRALASIA

### AUSTRALIA

AUSTRALIA MINISTRY FOR HOME AFFAIRS, BUREAU OF CENSUS AND STATISTICS. (1452)

INQUIRY INTO THE COST OF LIVING IN AUSTRALIA, 1910-11. G. H. KNIBBS, STAT. 20 pp., illus. Melbourne. 1911.

This government inquiry into the cost of living was prompted by a desire for reliable and comprehensive information regarding conditions in the Commonwealth. Account books were sent to 1,500 families. Of the 222 returned, 10 were rejected as inaccurate, leaving about 14 percent of those requested to serve as a basis for the statistics. The data refer to the year 1910-11. The results are presented without regard to industrial classification and with a rough grouping as to income. There were 107 families with over 4 members and 105 with 4 members or less; 113 families with incomes of over £200 a year and 98 with £200 or less. Urban families totaled 138 and rural 74. Servants were kept by 66 percent of the families. There were children in 180 of the families. One hundred and eighty-nine fathers were gainfully employed. Of the 212 heads, 21 were unskilled laborers, 52 were skilled laborers, 11 were agriculturists, 21 were commercial employees, 40 were clerical employees, 42 were professional men, and 25 had no occupation. The average weekly income was £3 19s. 5d.; 29 percent or £1 3s. 3¼d. went for food, 13.7 percent or 10s. 10¼d. went for housing, 10s. 1¼d. for clothing, and 2s. 9d. for fuel and light. The data secured confirm Engel's law. The proportion for clothing remained the same and that for advancement increased with income. Rent, fuel, and light expenditures varied in a way which contradicted Wright's version of Engel's law.

AUSTRALIA COMMONWEALTH BUREAU OF CENSUS AND STATISTICS, (1453)  
LABOUR AND INDUSTRIAL BRANCH.

EXPENDITURE ON LIVING IN THE COMMONWEALTH. Rept. no. 4, 36 pp., illus. Melbourne. 1914.

This survey covers the cost of living and expenditures for 1 month in 1913. Of the 392 families studied, 276 had over 4 members, and 176 had 4 or less. Incomes ranged from £3 or less a week to £4 or more, the majority of cases having £4 or more. Of the total 13.7 percent of the children were gainfully employed. The heads of 84 of the families were engaged in unskilled labor, 183 in skilled labor, 2 were farmers, 35 commercial workers, 43 clerical workers, and 34 professional men. The average weekly income was £3 16s. 8d., of which 12.36 percent was spent for housing, 41.16 percent for food, and 13.61 percent spent for clothing. Engel's law was confirmed, but not Schwabe's or Wright's version of Engel's law.

NEW SOUTH WALES COURT OF INDUSTRIAL ARBITRATION. (1454)  
INQUIRY ON COST OF LIVING AND LIVING WAGE. 1914.

NEW SOUTH WALES BOARD OF TRADE. (1455)  
LIVING WAGE. ADULT MALES. 121 pp., illus. Sydney. 1918.

The purpose of this study was to estimate a suitable minimum living wage for workers in the district around Sydney. The original data on which the estimates were based refer to 1914-16 and were obtained: (1) from accounts put in by employers from grocers, milk vendors, butchers, bakers, etc., regarding expenditure on food; and (2) through 4 interviewers who questioned housewives in 657 families; some of these wage earners' wives kept records of expenditures for from 1 to several weeks. The records examined by the board showed that people lived according to their income, whatever it might be; that meat was an important item in the diet; that families with 2 children spent a larger proportion of their income on meat than families with 4 children. The living wage for 1918 was established at £2 18s. 6d. per week. The data are rather incomplete.

WESTERN AUSTRALIA, ROYAL COMMISSION OF ENQUIRY. (1456)  
COST OF LIVING INVESTIGATION. 1917. [Original not seen. Summarized from International Labour Office, Methods of Conducting Family Budget Enquiries, pp. 58-59. Geneva. 1926.]

For this cost of living investigation in 1917, 66 families, covering 380 persons in Western Australia, kept records of their income and expenditure for (in most cases) 13 weeks. An abortive attempt was made, in the course of this inquiry, to determine the effects of recent fluctuations of prices upon the level of living of wage earners and others. As regards food expenditure per head, data are given (1) without taking account of differences in consumption of persons of different age and sex, and (2) taking these differences into account. The relative expenditure on food of the different age and sex groups was calculated by using the special scale called in the text the Australian scale.

AUSTRALIA COMMONWEALTH BUREAU OF CENSUS AND STATISTICS, (1457)  
LABOUR AND INDUSTRIAL BRANCH.

PRICES, PURCHASING-POWER-OF-MONEY, WAGES, TRADE UNIONS, UNEMPLOYMENT AND GENERAL INDUSTRIAL CONDITIONS, 1918. Rept. no. 9, 268 pp., illus. Melbourne. 1919.

Section 6 of this report is devoted to living costs in Western Australia. Facts were obtained by a Royal Commission of Enquiry, charged with investigating the effects of recent fluctuations of prices upon the level of living of wage earners. Account books were distributed among householders who were asked to keep accounts for 13 weeks in 1917-18. The returns are classified according to income only—those with a weekly wage of less than £3, £3 to £3 10s., £3 10s. to £4, £4 to £4 10s., £4 10s. to £5, and over £5. Most of the families fell into the second and third categories. The families averaged 5.76 persons (not adult units). The first and fourth groups showed a deficit; the general average income for all families was £4 9s. 4d.; the general average expenditure £4 12s. 7d.; the average deficit 3s. 3d. The records were neither complete nor accurate. The average weekly expenditure for housing was 7s. 11d., for food £2 3d., and for clothing 14s. 7d. As to food, in every case save fruit, the amount consumed was less than the estimated required amount. Within the limited range of income, Engel's law is confirmed, but not Schwabe's.

NEW SOUTH WALES BOARD OF TRADE. (1458)  
COMPENDIUM OF LIVING WAGE DECLARATIONS AND REPORTS. 132 pp., illus. Sydney. 1922.

The commission appointed by the Board of Trade of New South Wales reported that the income of the average worker, urban and rural alike, in 1918, was insufficient to cover his expenses. The incomes ranged from £3 to £4 a week. The family averaged four members. The houses averaged four rooms. The food allowance was 3,400 calories a day for the adult male. The living of large families was found to be cheaper per unit than that of small families. Within the narrow range of income Engel's law was confirmed.

(1459)  
COMPENDIUM OF LIVING WAGE DECLARATIONS AND REPORTS. 139 pp., illus. Sydney. 1921.

This study is mainly devoted to estimates concerning the minimum living wage in New South Wales; but appendix 2 contains a set of questions used in a survey made by the board among 178 farmers, graziers, dairy hands, and orchardists,



selected at random from various sections of New South Wales about 1919. Questions were included on the weekly cost of various categories of food, and the change in dietaries of employees during the period of the war. The replies to the questionnaires were very incomplete, and the results obtained were negligible.

NEW SOUTH WALES BOARD OF TRADE. (1460)  
REPORT ON LIVING WAGE (ADULT FEMALES.) 620 pp. Sydney. 1920.

AUSTRALIA, ROYAL COMMISSION ON THE BASIC WAGE. (1461)  
REPORT (AND SUPPLEMENTARY REPORT). illus. Melbourne. 1920 [-21].  
[Original not seen. Summarized from International Labour Office,  
Methods of Conducting Family Budget Enquiries, p. 59. Geneva. 1926.]

This included an inquiry into the actual cost of living according to reasonable standards of comfort for a man with a wife and three children under 14 years of age. The data probably refer to the period just prior to 1920.

AUSTRALIA, COURT OF ARBITRATION OF WESTERN AUSTRALIA. (1462)  
BASIC WAGE DECLARATION. Perth. 1926. [Summarized in U. S. Dept.  
Labor, Bur. Labor Statis. Monthly Labor Rev. 23 (4): 208-209. 1926.]

The court of arbitration of Western Australia is required to determine before June 14 of each year a basic wage for male and female workers. It must be sufficiently large to provide for comfortable living and for domestic obligations. In 1926 this wage was fixed at £4 5s. a week for adult males and £2 5s. 11d. a week for adult females. The average family was comprised of 2 adults and 2 children under 16 years. Food was rated at £1 16s. a week, rent at £1, clothing at £13 6s., and miscellaneous expenditures at £15 6s.

CAMPBELL, PERSIA, MILLS, R. C., and PORTUS, G. V. (1463)  
STUDIES IN AUSTRALIAN AFFAIRS. 269 pp., illus. Melbourne. 1928.

This book, published in 1928, contains a chapter on the Australian standard of living, by D. T. Sawkins, in which an attempt is made to estimate an average Australian income. The author deplores the scantiness of the material at hand, especially the data on actual expenditures. There are no original data.

WOOD, GORDON LESLIE (1464)  
MEMORANDUM ON THE WORLD DEPRESSION AND THE AUSTRALIAN STANDARD  
OF LIVING. Inst. Pacific Relations, Australian Group. 8 p., illus. 1931.  
[Mimeographed.]

While this is primarily a study on the effects of the depression, some data are given regarding the cost of living. The average wage in Melbourne in 1930 was £90, which meant that the level of living was below subsistence. The average was 48 hours of labor per week. Over half the wages went for food in 1922; by 1930 nearly all of the income was used for food.

#### NEW ZEALAND

COLLINS, J. W., ed. (1465)  
ENQUIRY INTO THE COST OF LIVING IN NEW ZEALAND, 1910-1911. New  
Zealand Department of Labour. 29 pp., illus. Wellington. 1912.

Sixty-nine account books were kept by the families of workers and trade unionists in 1910-11 in the four chief centers of New Zealand—Auckland, Wellington, Christchurch, and Dunedin. The families averaged about four persons. They were arranged in income groups of over £169, between £169 and £143, and under £143. The most important item of food expenditures was meat; then followed other items, butter and cheese, vegetables, etc. Engel's law for food was corroborated by the data.

NEW ZEALAND CENSUS AND STATISTICS OFFICE. (1466)  
PRICES: AN ENQUIRY INTO PRICES IN NEW ZEALAND, 1891-1919. 191 pp.,  
illus. Wellington. 1920. [Original not seen. Summarized from Inter-  
national Labour Office, Methods of Conducting Family Budget Enquiries,  
p. 71. Geneva. 1926.]

Weekly expenditure records were kept for 6 months in 1919 by 109 families. The class of person who filled in the books was clearly representative of the more thrifty part of the population, and thus not a representative sample of the whole community. Households were divided into two income groups—those receiving more and those receiving less than £4 10s. per week.

NEW ZEALAND CENSUS AND STATISTICS OFFICE.

(1467)

A STUDY OF FAMILY BUDGETS IN NEW ZEALAND. Monthly Abs. Statis. Wellington. November 1930. [Summarized in U. S. Dept. Labor, Bur. Labor Statis. Monthly Labor Rev. 32 (2): 241-244, illus. 1931.]

Account books were distributed by the New Zealand Office of Census and Statistics to large cities, small towns, and rural localities in order to discover the living costs among the people of all classes from March to June 1930. The average size of the families covered was 4.33; 140 heads of families were in clerical occupations, 16 were farmers, 34 were laborers, 27 were salesmen, 82 were tradesmen, and 19 were in miscellaneous occupations. The average earnings were £5 6s. a week, of which 29.52 percent went for food, 21.93 percent for rent, 12.61 percent for clothing. The proportion of expenditure on food decreased with an increase in the total income of the family; the rent showed the same variations but clothing costs increased with the increase of the income—results which confirm Engel's and Schwabe's laws but not C. D. Wright's version of Engel's law.

## SEVERAL COUNTRIES

PETTY, SIR WILLIAM

(1468)

SEVERAL ESSAYS IN POLITICAL ARITHMETICK. 276 pp., illus. London. 1699.

These 10 essays, published in 1699, give the author's chief ideas on population, cities, wealth, and national economic policy. The most important sections are his comparisons of the national strength of the Netherlands and France with England. While his method is mainly descriptive, enough data are given to furnish a fair picture of the level of living and the distribution of expenditures of the major social classes in each of these countries at that time. In addition, there is some information on prices and land values. Many of the conclusions deal with the value of commerce and the influence of taxation on the wealth of the country. Data furnished in some of his other studies make possible a comparison of France, the Netherlands, and England, with Ireland. Comparisons are made of the agricultural productivity of the four countries in terms of the acreage required to feed a man. The poor of France had less wages but paid higher prices than those of England. The earnings of the British laborer were 4s. per week, 2s. of which went for food, 30s. per year for clothes, and 6s. per year for other necessities. The average workman's family lived on £7 per annum, but some rich men had as much as 20 times more than the laborer.

CHEYSSON, E., and TOQUÉ, A.

(1469)

LES BUDGETS COMPARÉS DES CENT MONOGRAPHIES DE FAMILLES PUBLIÉES DANS LES OUVRIERS EUROPÉENS ET LES OUVRIERS DES DEUX MONDES. Bull. Inst. Internatl. Statis. 5: 1-107, illus. Roma. 1890. [See also Cheysson, E., Les Budgets Comparés des Monographies de Familles. Réforme Sociale 21: 449-461. 1891.]

These articles summarize the 100 Le Play family monographs appearing in *Les Ouvriers Européens* and in *Les Ouvriers des Deux Mondes* for the period 1829-88. It describes the methods used, the composition of the families, and the conclusions. A specimen of the schedule used by Le Play is included, a bibliography of monographs and studies of family living, and statistical computations not appearing in the Le Play monographs. An analysis is made of these monographs according to statistical methods not presented in the original sources, and computed with great labor.

REYBAUD, LOUIS

(1470)

LA LAINE. NOUVELLE SÉRIE DES ÉTUDES SUR LE RÉGIME DES MANUFACTURES. 395 pp. Paris. 1867.

This book, published in 1867, deals with the condition of the laboring classes who worked in the wool industry. Neither dates nor places are fixed with precision, and figures given are always only relative and approximate. The author studied the wool industry in various parts of France, in England, Belgium, and Germany. He describes the industry in detail, giving its historical development in each place. The condition of the workers is given in very general terms; the character of the workers, their habits, morals, etc., are always given. Wages are given for each place. Estimated income and expenditure for families in four places are given: (1) A family of 4 in Sedan with an income of 1,875 francs per year (2 children working); (2) a family of 4 in Reims with an income of 1,200



frances per year; (3) a family of 5 in Roubaix, income 22 to 24 francs per week, only expenditures for food and household operation given; (4) a family of 4 in Amiens, income (both children working) 1,350 francs per year; (5) a family of 5 in Roubaix, income 2.70 francs per day, only expenditures for food and household operation given.

YOUNG, EDWARD

(1471)

LABOR IN EUROPE AND AMERICA. A SPECIAL REPORT ON THE RATES OF WAGES, THE COST OF SUBSISTENCE, AND THE CONDITION OF THE WORKING CLASSES IN GREAT BRITAIN, GERMANY, FRANCE, BELGIUM, AND OTHER COUNTRIES OF EUROPE, ALSO IN THE UNITED STATES AND BRITISH AMERICA. 864 pp., illus. Washington, Treasury Department, Bureau of Statistics. 1875.

In addition to a general discussion of labor conditions in the ancient and medieval world, and in the modern period after the introduction of machinery, the author deals with labor conditions in the various European countries, the United States, and Canada, for the 3 or 4 years prior to the date of publication (1875). For each country, detailed studies are given of wages, prices of commodities, and records of average weekly or annual expenditures of laborers' families. Frequent mention is made of dietaries, leisure-time activities, types of dwelling, types of clothing, consumption of alcoholic beverages, etc. Much of the material was gathered personally by the author; other sources were government statistics, questionnaires, and diplomatic and consular reports. Money units were converted into American dollars. Records of the expenditures of workmen's families in Birmingham, Bradford, Huddersfield, Manchester, and Sheffield, England, 2 in Leith and Dundee, Scotland, and 2 in Cardiff and Croydon, Wales, give the average weekly expenses as \$7.62 and average weekly earnings as \$9.21 in 1872. Each family consisted of 2 adults and from 2 to 6 children. The average expenditure for meat was found to be less than one-fifth the total expenditure for food. A report for 1871 gives the average expenditure of a French day-laborer's family whose diet was substantially inferior to that of the English workman. The amount required for bread was more than twice that for all other items of food. An article on prices and wages in Paris in 1870 and 1872 gives the average expenditures for a workingman's family consisting of five members with average daily earnings of \$1.07. A trifle less than one-fourth of the total expenditure was devoted to bread. Three other records from France show expenses of a laborer's family of 2 adults and 3 children in Nice, and of 2 families of 2 adults and 2 children in Marseilles. The total weekly expenses, exclusive of clothing, were \$7.23, \$3.10, and \$4.32, respectively. No averages were computed. Labor statistics from the German chamber of commerce reports give the annual expenses for an average family (2 adults and 3 children) living in each of 10 districts of Lower Silesia; the range was from \$80 to \$173. Tables are presented showing the cost of subsistence in rural districts of Prussia for a workingman's family of from 4 to 6 members for 1860. The range is from \$43 to \$185. Similar tables with averages are given us for the governmental districts of Prussia. The average total was \$84, of which \$43 or 52 percent went for provisions. Expenditure records for 13 German families living in Barmen, Essen, Aix-la-Chapelle, Düsseldorf, Dresden, Stuttgart Munich, and Frankfurt-am-Main are given individually for 1872 and 1873 and the averages computed. The size of the family was 2 adults and from 2 to 5 children. The average total earnings were \$358, and the expenses were \$313, of which \$282 went for provisions and rent. The records of expenditure of five workmen's families in Basel, Switzerland, in 1872 were itemized individually. The annual earnings ranged from \$401 to \$562, and the annual expenditures from \$311 to \$460. The families consisted of 2 adults and from 2 to 4 children; one family kept a servant. A weekly food record for a laborer's family of 2 adults and 6 children at Berne is itemized as to quality, quantity, and average prices. Yearly clothing expenses for a man, a woman, and a boy are also tabulated. The average weekly expenditures in 1873 of 5 Italian families consisting of 2 adults and from 2 to 5 children, living in Milan, Venice, Messina, Brindisi, and Sarnepiedara, ranged from \$3.35 to \$12. The lowest weekly income was \$4; the income of the family having the largest expenditure was unknown. The record of a workingman's family of 2 adults and 2 children in Piraeus, Greece, in 1872 and 1873 shows the average weekly expenditures to be \$4.24 in 1872 and \$2.95 in 1873. The weekly earnings were \$5.13 in 1872 and unknown in 1873. The lowest possible weekly expenses in 1854 for

a Belgian factory laborer's family with 4 young children in Ghent are given at \$2.44. A minutely itemized account for a laborer's family of 6 persons in the district of Brussels shows the total annual income, including farm and garden products, to be \$239, and total expenditures \$238, of which \$123 went for food. Expenditure records for 1854 of 27 families living in the Province of Brabant are analyzed, but no averages are computed. Three classes are represented: (1) Indigent laborers partly supported by public charity, (2) indigent laborers not supported by public charity, and (3) workmen in independent positions. The size of family is not indicated. The range of total expenses was from \$93 to \$432; income ranged from \$82 to \$443. (All from tables by E. Duepétiaux published in 1855.) The one new record which the circular called forth was not felt to be representative because of the unusually large amount expended, \$10.65. The weekly earnings were not stated. An estimated annual budget for a workman, his wife, and 3 children in Sweden is given as \$212, of which \$109 is allowed for food. However, no statistics were available on which to base conclusions. The principal articles of diet for the working class were potatoes, rye bread, milk, and salt herring. Rations for a week for a garrison soldier at Kristiania, Norway, are given and the retail cost of this multiplied by 2 to estimate the subsistence cost for a year for a workman's family of 5 members; this amounted to \$146. Two records for 1872 of families in Copenhagen, Denmark, the head of one a mechanic having a wife and 2 children, and the head of the other a shoemaker having a wife and 3 children, show their average weekly earnings to be, respectively, \$5.25 and \$4.65, and their expenditures \$5.03 and \$4.14. The estimated minimum for the necessary expenses of families of the laboring classes in Denmark was placed at \$133, of which \$101 was allowed for food; the maximum was placed at \$323, including \$192 for food. For the Netherlands, expenditure records are presented for a blacksmith with a wife and 1 child, for a mason with wife and 2 children, for a bricklayer with wife and 4 children, and for a bricklayer's laborer with wife and 4 children. Their total weekly expenses are \$3.81, \$5.03, \$3.90, and \$3.49, respectively. In Russia, the total weekly expenses for a workman's family of 2 adults and 5 children in Odessa in 1873 were given as \$12.80, and the earnings were \$15. In Africa, a record for 1873 for a family in Tunis consisting of 2 adults and 5 children and one for a family in Tripoli of 2 adults and 3 children gave the total weekly expenses as \$13.60 and \$2.67, respectively. Comparative figures are given for the United States and Canada.

UNITED STATES DEPARTMENT OF STATE.

(1472)

STATE OF LABOR IN EUROPE: 1878. REPORT FROM THE UNITED STATES CONSULS IN THE SEVERAL COUNTRIES OF EUROPE ON THE RATES OF WAGES; COST OF LIVING TO THE LABORERS; PAST AND PRESENT RATES; PRESENT CONDITION OF TRADE; BUSINESS HABITS AND SYSTEMS; AMOUNT OF PAPER MONEY IN CIRCULATION, AND ITS RELATIVE VALUE TO GOLD AND SILVER; FOR THE SEVERAL CONSULAR DISTRICTS. 428 pp., illus. Washington. 1878.

This is made up of a series of reports made by several United States consuls in each of the following countries: Canada, England, Ireland, Scotland, France, Germany, Belgium, Italy, Spain, the Netherlands, Sweden, Norway, and Denmark. In their general discussions of labor, wages, prices of necessities, etc., the reports make frequent allusions to typical dietaries of laborers, consumption of alcoholic beverages, typical distribution of expenditure of money and of time savings, and leisure-time utilization. The information refers to the year 1877; the data on expenditures are usually scanty, frequently roughly estimated, and not collected according to any consistent scheme throughout. Thus, little attempt was made to compare them. Several general conclusions were stressed, such as: that only the relatively low level of living in European countries made living costs of foreign workers cheaper than those in America; that the average American workman performed from one and a half to twice as much work, in a given time, as the average European workman, etc. Some description of meals is included.

GRUBER, IGNAZ

DIE HAUSHALTUNG DER ARBEITENDEN KLASSEN. Jena. 1887. (1473)

This book, published in 1887, combines the more important data from Engel, Le Play, Von der Goltz, etc., and discusses their general conclusions. No new material is included.



## UNITED STATES DEPARTMENT OF LABOR.

(1474)

COST OF PRODUCTION: IRON, STEEL, COAL, ETC. U. S. Dept. Labor, Commr.  
Labor Ann Rept. (1890) 6: 605-1376. 1891.

In 1888 a commission of six officials of the United States Department of Labor began an investigation of labor conditions in the United States, Belgium, France, and Great Britain (226, 517, 655, 978), as concerned workers in coal and metal. Data came from 454 American and 164 European firms. Records of the expenditures of 2,490 American and 770 European laborers were selected as the basis of the tabulations. The statistics show that the American families were smaller than the European, and more of them were home owners. They also paid more for rent and clothing than did the Europeans; food costs were less than in England, but more than on the Continent. The English spent less for clothing, while Americans spent more for books and newspapers. American workers spent more for food as a sum total, though less per person. German laborers spent 23 percent of their income for food, Belgian 47 percent, English 50 percent, and United States 52 percent. Engel's and Schwabe's laws are confirmed.

## DALLA VOLTA, RICCARDO

(1475)

LA SPESA PER L'ABITAZIONE. [HOUSING COSTS.] Riforma Sociale 1: 365-373, illus. 1894.

While this study, undertaken between 1888 and 1891, was for the Italian Government, the results tabulated relate to all important European cities. The average house was a six-room apartment. The average rent was lowest in Breslau, 34 lire a month, and highest in Paris at 335 lire a month. For Rome there are other tabulations showing the different rents in various zones. Rents in France ranged from 33 percent of an income of 1,000 francs to 11½ percent of an income of 50,000 francs; in Leipzig, from 22 percent of an income of 1,000 francs to 5 percent of an income of 50,000 francs; in Prussia, from 23 percent of an income of 1,000 francs to 15 percent of an income of 7,000 francs—data which confirm Schwabe's law within certain limits. The author considers that Schwabe's law must be modified, as the researches of Laspeyres and Hampke demonstrate that it is only above a certain income (3,000 marks) that the relative or proportional expense of housing decreases.

## LANDOLT, CARL

(1476)

METHODE UND TECHNIK DER HAUSHALTSTATISTIK. 104 pp., illus. Freiburg und Leipzig. 1894.

This book explained the method of keeping household statistics and gave one example of a worker's household in St. Gallen, Switzerland. Tables give 1 year's income and expenditures for 1 Swiss middle-class family, 12 Swiss, and 2 German workers' households between 1888 and 1891. The families comprised 2 adults and up to 8 children. Total money income and money value of goods received in kind ranged from 1,194.25 to 2,425.33 francs. Total expenditures for food, clothing, rent, fuel and light, health, care of one's self, education, upkeep of furnishings, taxes, dues, pleasure, and savings ranged from 1,256.49 to 2,402.16 francs. The families lived in Frankfort, Basel, Thurgau, and St. Gallen. Gifts and goods produced by the household less their cost were evaluated as money income and expenditure.

(1477)

LOHNSTATISTIK UND HAUSHALTUNGSBUDGETS. Schweiz. Bl. Wirtschaft-u. Sozialstatist. Jahrg. 3: 729-746, illus. Bern und Leipzig. 1895.

This study of the expenditures of 17 families of various sizes emphasized the calorie consumption of the households. The economic status of the families ranged from that of industrial workers to officers and commissioners. Ten were from Basel, 2 from Frankfort, 4 from Thurgau, and 1 from St. Gallen. The data refer to a period between 1888 and 1892; the incomes ranged from 1,194.25 to 5,000 francs, and expenditures from 1,248.49 to 4,759.73 francs. The percentage of expenditure for food ranged from 25 to 57. The article included several tables showing distribution of income and expenditure, and comparisons of two families of different status. The supplementary table includes a description of each family, with total income, total expenditure, food expenses, and daily consumption of calories of albumen, fat, and carbohydrates. This table shows also a plus or minus figure for each family, indicating a comparison of the actual calorie consumption with the theoretical caloric need. Of the 17 families only 2 had a plus number, the others ranged from minus 57 to minus 5.

WAXWEILER, ÉMILE

(1478)

LES HAUTS SALAIRES AUX ÉTATS-UNIS. 108 pp. Paris. 1895.

In this discussion of the effect of high salaries in the United States on international labor conditions, there is much information given as to prices and wages in Europe in 1891. The average daily salary of the American laborer ranged from 4.52 to 11.86 francs; of the European from 2.44 to 6.50 francs for unskilled labor. Skilled laborers in the United States received an average of 12.20 francs a day; in England 6.25 francs; in France 4.15 francs; and in Belgium 3.20 francs. Food costs in the United States averaged 1,095.79 francs a year; in Europe as a whole 689.46 francs; and in Belgium 1,269.36 francs for unskilled labor. Other expenditures are given in proportions, and not in exact figures. The American laborer was better nourished than the European and infinitely better than the Belgian laborer. The high salaries had not increased the cost of production in the United States. The data furnished confirm Engel's law but not Schwabe's.

GREAT BRITAIN BOARD OF TRADE.

(1479)

BRITISH AND FOREIGN TRADE AND INDUSTRY. Pp. 207-258. Cd. 1761. London. 1903.

This report contains the analyses of a number of studies made in the United Kingdom, United States, Germany, France, Belgium, and Switzerland, on the cost and consumption of food by workmen's families, chiefly in 1903 but also for the years 1892-1902. The sources used were: Results of a direct investigation among agricultural laborers in England, reports by the board of trade, reports by the United States Department of Labor, and unofficial studies made in Great Britain and in European countries. The family of an average agricultural laborer in England in 1902 consisted of 2 adults and 4 children; their weekly income was 18s. 6d., and their expenses for food were 13s. 6½d. (73 percent of total expenditures), of which 56 percent was spent on bread, flour, and meat. Families living in the low-wage counties (eastern) used more bread and less meat, those in the high-wage counties (northern and midland) spending a larger amount on meat. The average rent was 1s. 6d. per week. Expenditure records of 286 urban workmen (of whom 101 were from London) in 1903, representing districts all over Great Britain, show that the average family of 2 adults and 3 children had a weekly income of 29s. 10d., and spent on bread, flour, and meat 9s. 10½d. As incomes increased, expenditures for meat increased. From 88 records of urban workmen's expenditures, further information was obtained as to the weekly consumption and cost of other important food items. Urban laborers used more beef and mutton, whereas agricultural laborers used more pork and bacon, and nearly double the amount of potatoes. Twenty-four records from Booth, Rowntree, and the economic club show that 57 percent of total food expenditure was accounted for by bread, flour and meal, and meat. Statistics of the United States Department of Labor for 1891 for 455 normal families (2 adults and no more than 5 children) in the United Kingdom show the average weekly income to be 33s. 10½d., and expenditure for food 15s. 8d. Tables giving the retail prices of food show a steady decrease from 1877 to 1901. The average percentage of expenditures accounted for by clothing varied from 15 to 17 percent, and with an increased income, there was an increased amount spent on clothing. From various records the average weekly rents for municipal tenements in London, Manchester, and Liverpool were estimated at 5s. 9d., 3s. 9d., and 3s. 8d., respectively. For houses let by cooperative societies in 12 provincial towns, the rent averaged 5s. 2d. Comparisons between the United Kingdom and foreign countries are made with regard to consumption and cost of food, retail prices, clothing, and rent; in the appendix are given the complete tables and records from which this material was summarized (there were 455 accounts for Great Britain, 2,541 for the United States, 150 for France, 42 for Germany, 39 for Belgium, and 14 for Switzerland). These show that the weekly incomes ranged from 19s. 11¼d. in Germany to 46s. 4¼d. in the United States; that the percentage of expenditures used for food varied from 41 percent in the United States to 53 percent in Switzerland; that rent took from 8.7 percent of the expenditures in Germany to 15.1 percent in the United States; and that clothing absorbed from 14.3 percent in Switzerland to 20.4 percent in Belgium, although actually more money was spent for clothes by American workmen. The cost of meat consumed in Great Britain and the United States was more than double that in France, Germany, Belgium, and Switzerland. Other accounts from unofficial sources are given for France (a total of 1,915 from Manuel Général de L'instruction Primaire, 1901), Germany (16 from Wie der Arbeiter Lebt, 1897) and Belgium (145 from Salaires et Budgets Ouvriers en



Belgique, 1891). All comparisons are offered with the idea in mind that customs and conditions of the peoples of various countries differ so that a determination by any statistical method of the comparative welfare of the working classes is practically impossible.

VECCHIO, GUSTAVO DEL

(1480)

RELAZIONI FRA ENTRATA E CONSUMO. [RELATIONS BETWEEN INCOME AND CONSUMPTION.] 114 pp., illus. Roma. 1912.

This analysis, published in 1912, is based on statistics gathered from the publications of Le Play, Ducpétiaux, and Engel, and from 40 or 50 other studies of family living. The originality lies in the analysis, rather than in the data used. The purpose of the author is to study the practical application of Engel's law, to devise formulas for the logarithmic law of food consumption, and to find a general theory of relation between income and expenditure. The food law is that the percentage of expenditures or incomes used for food decreases as the logarithm of the total expenditure or income increases. The predicted logarithmic expenditures are compared to the actual amounts for groups and agree rather closely for the studies considered except for the low income groups. Del Vecchio attempts to justify the use of total expenditures in place of incomes on the ground that the logarithmic law of relationships expressed above applied equally well to either. This law is independent of the composition of the family. There was a lower value of theoretical consumption in comparison with the actual amounts for the lowest income class. This indicates that the increase of consumption between the first and second class is less than the increase of the logarithm of increase. It is probable that food costs in the poorer classes should be extended in proportion to the increase of income and should not follow the increase corresponding to the increase of the logarithm of the income. It is a common error in the family budget for the income to appear less than it really is, and the expenditure higher. The actual measure of the consumption of the first class is less than that obtained from statistics and greater than that obtained by a simple logarithmic formula. More than 50 studies are summarized in order to compare the elasticity of food consumption. The formula of elasticity is made by relating the increase of food costs to the logarithm of income increase and dividing this by the average consumption for the group under consideration. The elasticity of food expenditures according to this formula varies from 0.95 for a study of peasants on the Island of Jutland in 1897 to 3.66 for a group of laborers in American factories in 1891. It was found that among the many factors influencing the elasticity of food expense, income was very important. The higher incomes showed a less elastic expenditure for food. Furthermore, increase in family size decreased the elasticity of the expenditure for food. The inclusion of expense for lodging, clothing, alcohol, and coffee in the same type of logarithmic analysis showed that, with greater indexes of elasticity, their behavior approximates the same law. All the conclusions are valid only for limited social classes and professions and do not generally apply to the lowest income groups. The results are compared with the Bernouillian law (the advantage or the sacrifice resulting from the acquisition or loss of patrimony increases in arithmetical ratio, while the patrimony increases or decreases in geometrical ratio); with the Weber-Fechner law (sensation increases or diminishes in arithmetical ratio while stimulus increases or diminishes in geometrical ratio); and with Gini's law (consumption increases or diminishes in arithmetical ratio while prices increase or diminish in geometrical ratio). The conclusion is reached that the logarithmic law given above and Gini's law correspond to the Weber-Fechner theory. The variation in consumption increases with income and with the size of the family. It is less for food and for lodging; less for lodging than alcohol; and less for alcohol than for clothing. Consumption is to be explained by psychological laws and not by physiological data.

TYSZKA, CARL VON

(1481)

LÖHNE UND LEBENSKOSTEN IN WESTEUROPA IM 19. JAHRHUNDERT (FRANKREICH, ENGLAND, SPANIEN, BELGIEN). NEBST EINEN ANHANG: LEBENSKOSTEN DEUTSCHER UND WESTEUROPÄISCHER ARBEITER FRÜHER UND JETZT. Schr. Ver. Sozialpolitik 145 (3): 1-291, illus. München und Leipzig. 1914.

This study, published in 1914, presents no original data. Wages, cost of living, and a few household expense accounts are quoted from statistical sources published in the individual countries—France, England, Spain, Belgium, and Germany.

## SPAIN, INSTITUTE DE REFORMAS SOCIALES.

(1482)

ENCARECIMIENTO DE LA VIDA DURANTE LA GUERRA. 99 pp., illus. Madrid. 1918.

The purpose of this study, published in 1918, is to show the increase in cost of living which was brought about during the war, especially in Denmark, the Netherlands, Germany, and Switzerland. The data used were not original, but were taken from various previously published studies made in the countries concerned. The major part of the study consists of a comparison of prices of staple foods (meat, bread, etc.) before and during the war.

## INTERNATIONAL LABOUR OFFICE.

(1483)

RECENT FAMILY BUDGET ENQUIRIES. Internatl. Labour Rev. 28 (5): 635-672, illus. 1933.

This study is an attempt to compare family expenditures in different countries during the 1920's. Attention is drawn to the difficulty of international comparisons due to differences in scope, methods, and data of investigations. Incomes and expenditures per family of the upper class have been transposed into dollars of 1930. The average family consisted of husband, wife, and 2 or 3 children, ranging from 3.8 members in Denmark to 5.5 in Basel, Switzerland, an average of 4.5 persons. Average income for these groups was higher than the average given in official wage statistics. Monthly income ranged from \$10.29 in China (1926-27) to \$143 in the United States (1930). Average monthly incomes in terms of the 1930 dollar for the remaining countries were as follows: Germany (1927-28) \$60.68; Belgium (1928-29) \$38.86; Finland (1920-21) \$30.95; India (1926) \$14.69; Japan (1926-27) \$44.35; Norway (1927-28) \$89.42; Sweden (1923) \$73.46; Switzerland (1923) \$81.68; and Czechoslovakia (1927-28) \$64.45. The number of families studied ranged from 18 in Switzerland to 3,210 in Japan, with more than 100 for most of the countries. Widely different localities were studied, but the surveys were confined to industrial communities. In the United States, Detroit was used as the standard; in Germany 41 large cities, 16 medium-sized cities, and 1 small town were taken. The proportion of the family income derived from earnings was almost the same in all countries, in no case less than 90 percent and in only one (the Netherlands) more than 94 percent of the total income. Income from other sources was evaluated. Comparison of quantities of food consumed was impossible, and qualitative consumption differed on account of national habits and resources. Other items covered were housing, heating and lighting, clothing, and miscellaneous, yearly expenditures being given. Percentage expenditures for different items varied. In the United States food formed 33 percent of total expenditure and in China 72 percent, the average being about 50 percent. Housing, subject to rent regulations, was between 10 and 20 percent; clothing ranged from 10 to 15 percent; miscellaneous expenditures were about 15 percent. Engel's law is rejected for comparisons of data from different countries. Expenditures for clothing, rent, fuel, and light varied geographically rather than according to income. The scope of the inquiry did not include facts relative to either Rowntree's law or the law of present-future competition.

## GREAT BRITAIN COLONIAL OFFICE.

(1484)

INFORMATION AS TO THE CONDITIONS AND COST OF LIVING IN THE COLONIES, PROTECTORATES, AND MANDATED TERRITORIES. Colonial no. 56, 187 pp., illus. London. 1930.

## RICHARDSON, J. H.

(1485)

INTERNATIONAL COMPARISON OF REAL WAGES. Jour. Roy. Statis. Soc. 93: 398-441, illus. 1930.

The material for this paper, read before the Royal Statistical Society, April 1930, is based on all the available records. The information that they furnished was neither complete nor uniform. There were also considerable differences between the purchasing powers of a unit of currency in the different countries. "If Engel's law be true internationally, for populations of approximately similar race and habits of consumption, as well as for different income classes within a single country, the lower percentages will represent the higher standards of living, and vice versa." Costs in national currency, in dollars and index numbers, with Great Britain as a standard, for food, fuel, light, and soap are given for Australia, Austria, Canada, Czechoslovakia, Denmark, Estonia, France, Germany, Great Britain, Irish Free State, Italy, the Netherlands, Poland, Spain, Sweden, Switzerland, and the United States. Food costs were highest in the



United States and lowest in Poland. Comparison of wages are given for a number of trades and for unskilled labor, for Berlin, Brussels, Dublin, Lodz, Madrid, Milan, Ottawa, Paris, Philadelphia, Prague, Rome, Stockholm, Sydney, Vienna, and Warsaw, London being considered as a base. Tabulations were also made for the countries mentioned above, both of wages and of consumption. Because of unsatisfactory records, no general conclusions could be drawn.

#### INTERNATIONAL LABOUR OFFICE.

(1486)

AN INTERNATIONAL ENQUIRY INTO COSTS OF LIVING. Ser. N (Statistics), no. 17, pp. 1-209, illus. Geneva. 1931. [See also Internationales Arbeitsamt. Beitrag zur Frage der Internationalen Gegenüberstellung der Lebenshaltungskosten, Reihe N (Statistik), Nr. 17. Geneva. 1933.]

This inquiry, the results of which were published in 1931, had as its object to discover how much would need to be spent by employees in certain European cities in order to have a level of living approximately equivalent to that of a Detroit employee whose expenditure in 1929 was about \$1,720. Investigations were made in Berlin, Frankfurt-am-Main, Copenhagen, Stockholm, Helsingfors, Paris, Marseilles, Antwerp, Rotterdam, Manchester, Cork, Warsaw, Barcelona, and Istanbul. Returns were finally tabulated in terms of the 1931 dollar giving an equivalent expenditure of about \$1,550 for Detroit. Equivalent "standards of satisfaction" with allowance for national customs and tastes were sought. The only records of expenditure studied were those of 100 Detroit working families consisting of 2 adults and 2 or 3 children. The German edition contains a more systematic summary and an analysis of method of international comparisons (by H. Stähle and R. Guye) which are not in the English edition.

#### ZIMMERMAN, C. C.

(1487)

ERNST ENGEL'S LAW OF EXPENDITURES FOR FOOD. Quart. Jour. Econ. 47 (1): 78-101. 1932.

The object of this article, published in 1932, is to show that Engel's law of food expenditure has been misinterpreted, and that it is not of universal application; Engel's chief points are: (1) The poorer a family is the greater is the proportion of total outgo which must be used for food; and (2) the proportion of outgo used for food, other things being equal, is the best measure of the material standard of living of a population. A summary of various studies shows that data on German and Indian peasants, Chinese with low income, the 40-percent rural Siamese in the lower income groups, Indian workmen, Hawaiian families, as well as data for England, France, Italy, Switzerland, and the United States, contradict this law—that is, they prove that, at lower levels, as the expenditure increases, an increasing proportion is often devoted to food. In the highest income group, proportion for food does not indicate the level of living. Engel's food-expenditure law is not true under all normal circumstances because of two sets of factors: (1) Those which give unusual elasticity to food expenditures or which cause a rapid increase in the demand for money used for food; and (2) those which tend to reduce the elasticity, or keep down the demand, for other wants beside food. The studies show that food expenditures nearly always increase with total expenditures because of (1) the change from unappetizing to more tasty foods, (2) the change from foods of vegetable origin to those of animal origin, (3) the lack of social stimulus in rural societies to a conspicuous expenditure on other than food items, and (4) the variation between the amount adults can live on and what they actually consume. "After a certain level is reached, food consumption seems to furnish an increasing food expenditure dollar, but the rate is so slow that the proportion diminishes. This is where 'Engelism' begins—and probably ends." The author concludes that the interpretation of Engel's law as being true at every point of the income scale (while actually the range is very limited) has thrown a barrier against the further development of analytical studies of the distribution of family expenditure.

## KEY TO MATERIAL IN STUDIES IN THE UNITED STATES AND CANADA

The key which follows indicates the type of material presented in each of the studies of family living in the United States and Canada. General types of expenditures are grouped together. The numbers at the right and left of each page are a code to be interpreted as follows:

Code no.	<i>Item</i>
1.	Date to which information applies.
2.	Number of cases to which information applies.
3.	Total income.
4.	Sources of income.
5.	Total <b>savings</b> .
6.	Life insurance.
7.	Payments on principal of mortgages on own home or farm.
8.	Investments in own business.
9.	Savings other than life insurance, payments on home or farm, or investments in own business.
10.	Surplus of money income over expenditures.
11.	Deficit of money income under expenditures.
12.	Total money value of current consumption.
13.	Total money expenditures.
14.	Total money value of goods and services furnished.
15.	Total money expenditures for food.
16.	Total money value of food furnished.
17.	Number of types of foods purchased for which expenditures are given.
18.	Number of types of foods furnished for which money values are given.
19.	Number of types of foods purchased for which quantities are given.
20.	Number of types of foods furnished for which quantities are given.
21.	Nutritive content of diet.
22.	Total money expenditures for clothing.
23.	Total money value of clothing furnished.
24.	Clothing expenditures of individuals.
25.	Number of types of clothing for which expenditures are given.
26.	Number of types of clothing for which quantities purchased are given.
27.	Total current expenditures for housing for all tenure groups.
28.	Total current expenditures for housing for home owners.
29.	Total current expenditures for housing for tenants (including rent, repairs, etc.).
30.	Detailed housing expenditures.
31.	Expenditures for rent only.
32.	Rental value of houses owned and occupied.
33.	Number of items given regarding type of housing and/or household facilities.
34.	Inventory of furnishings and equipment.
35.	Expenditures for furnishings and equipment.
36.	Total money expenditures for household operation.
37.	Total money value of operation goods furnished.
38.	Expenditures for light and/or power.
39.	Expenditures for fuel.
40.	Money value of fuel furnished.
41.	Details for other operation expenditures.
42.	Household production.
43.	Expenditures for paid household service.
44.	Expenditures for automobile.
45.	Expenditures for reading.
46.	Expenditures for recreation.
47.	Expenditures for wine, beer, etc.
48.	Expenditures for tobacco.
49.	Expenditures for medical care.
50.	Expenditures for labor organizations.
51.	Expenditures for other vocational purposes.
52.	Expenditures for formal education.
53.	Expenditures for community welfare (charity).



Code no.

54. Expenditures for religion.
55. Types of leisure-time activities.
56. Participation in community organizations.
57. Reading materials utilized.
58. Use of free community facilities.
59. Physical health.
60. Mental development.
61. Formal education of parents and/or children.
62. Family relationships.
63. Family or individual mobility.
64. Purchasing procedures.
65. Recommended budget.
66. Bibliography, not annotated.
67. Bibliography, annotated.

The reports to which the key refers are listed in the same order in which they appear in the annotated bibliography. The citation numbers of the studies are printed at the top of the columns on each page of the key. Beneath the citation number of each study appears the date to which the consumption data apply, except where this information was not available; in such a case, the date of publication of a study is used, with a footnote to indicate this fact.

In indexing the material of a given report, an asterisk (\*) has been placed opposite the appropriate code number if figures for individual families are presented in the report, or figures showing frequency distributions, or summary figures of any kind. An asterisk is also used if detailed figures given in the report could be combined into a figure properly designated by the code number. A numerical figure, however, and not an asterisk, is required by code nos. 2, 17, 18, 19, 20, 25, 26, and 33.

Code nos. 14, 16, 18, 20, 23, 32, 37, and 40 refer to furnished goods or services—that is, to the use of the house and to goods or services received as gifts, or received from farm, countryside, or garden without direct money payment, or produced by the household.

Household production (code no. 42) has been starred if a report presented any data on types of goods and services produced in the home for the family, on hours of work, and/or on members of the family taking part in the work.

If figures for items represented by two code numbers were found in a given report in an undifferentiated total, the figure or the asterisk is entered opposite the first code number, and a footnote indicates the other code number to which it refers.





## KEY TO MATERIAL

[illegible]

[illegible]

<sup>2</sup> Refers also to following code number.

**NOTE.**--Instructions for using this key, showing material included in each study, are given on pages 453-454.

Date of publication.

**NOTE.**--Instructions for using this key, showing material included in each study, are given on pages 453-454.



## KEY TO MATERIAL—Continued

United States: Studies numbered—															Code no.
Code no.	16	17	18	19	20	21	22	23	24	25	26	27	28	29	
1	1914-15	1917	1918-22	1919	1919	1919-20	1919-20	1919-20	1919-21	1920	1920-21	1920-21	1920-24	1920-24	1
2	103	91	7, 738	861	368	154	861	861	861	657	402	402	44	44	2
3										*					3
4															4
5															5
6				*		*		*			*	*			6
7															7
8															8
9															9
10															10
11			*	*	*	*	*	*			*	*			11
12		*				*		*			*	*			12
13			*		*	*	*	*			*	*			13
14		*	*	*	*	*	*	*			*	*	*		14
15		*		*	*	*	*	*			*	*	*		15
16			*	*	*	*	*	*			*	*	*		16
17		6													17
18			12							29			4	11	18
19															19
20			10											11	20
21				*	*	*	*	*			*	*			21
22		*			*						*	*			22
23											*	*			23
24		*									*	*			24
25															25
26															26
27						*					*				27
28						*									28
29						*									29
30															30
31				*		*	*	*				*			31
32			*		2	1	1	1		26	9	*	4		32
33	2	8				*	*	*			2	2			33
34				*		*	*	*							34
35				*		*	*	*							35

NOTE.—Instructions for using this key, showing material included in each study, are given on pages 453-454.



## KEY TO MATERIAL—Continued

United States: Studies numbered—															Code no.
Code no.	30	31	32	33	34	35	36	37	38	39	40	41	42	43	Code no.
1	1921	1921-25	1921-25	1921-28	1922	1922	1922	1922-23	1922-23	1922-23	1922-23	1922-23	1922-23	1922-24	1
2	261	54	270	69	500	998	1,014	1,337	1,331	1,289	1,337	87	451	2,886	2
3	---	*	*	---	*	*	*	---	---	---	---	---	---	---	3
4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	4
5	---	---	*	---	---	---	---	---	---	---	---	---	---	---	5
6	---	---	---	---	*	---	---	---	---	---	---	---	---	---	6
7	---	---	---	---	---	---	---	---	---	---	---	---	*	---	7
8	---	---	---	*	*	---	---	---	---	---	---	---	---	---	8
9	---	---	---	---	---	---	---	---	---	---	---	---	---	---	9
10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	10
11	---	---	---	*	---	---	---	*	---	*	*	*	*	---	11
12	*	---	---	*	---	---	---	---	---	*	*	*	*	*	12
13	*	*	*	*	---	---	---	---	---	*	*	*	*	*	13
14	*	*	*	*	*	*	*	---	---	*	*	*	*	*	14
15	*	*	*	*	*	*	*	---	---	*	*	*	*	*	15
16	*	*	---	*	---	---	*	---	283	---	---	*	*	*	16
17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	17
18	---	---	---	6	---	---	---	---	---	---	---	---	---	---	18
19	---	---	---	---	---	28	---	---	283	---	---	---	---	---	19
20	---	---	---	5	---	10	---	---	---	---	---	---	---	---	20
21	---	---	---	---	---	---	---	---	---	---	---	---	---	---	21
22	*	*	---	---	---	---	---	*	---	---	---	*	*	*	22
23	---	---	---	---	---	---	---	---	---	---	---	---	*	*	23
24	---	---	---	---	---	---	---	---	---	---	---	---	---	---	24
25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	25
26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	26
27	---	---	---	---	---	---	---	230	---	---	---	---	---	---	27
28	---	---	---	---	---	---	---	---	---	---	---	---	*	*	28
29	---	---	---	---	---	---	---	---	---	---	---	---	*	*	29
30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	30
31	---	---	---	*	---	---	---	---	---	---	---	*	---	---	31
32	---	---	---	---	---	---	---	---	---	---	---	---	---	---	32
33	3	---	---	---	6	12	18	---	---	1	---	---	9	2	33
34	---	---	---	---	---	---	---	---	---	30	---	---	*	*	34
35	---	---	---	---	---	---	---	---	---	*	---	---	---	*	35

[illegible]<sup>2</sup> Refers also to following code number.

NOTE.—Instructions for using this key, showing material included in each study, are given on pages 453-454.



## KEY TO MATERIAL—Continued

Code no.		United States: Studies numbered—													Code no.
	44	45	46	47	48	49	50	51	52	53	54	55	56	57	
1	1922-24	1922-24	1923	1923	1923-24	1923-24	1923-24	1923-24	1923-24	1923-24	1923-24	1923-24	1923-24	1923-25	1
2	10	1,425	207	451	86	86	498	329	328	342	340	340	142	56	2
3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3
4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4
5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5
6	—	—	—	*	—	—	*	—	—	—	—	*	—	—	6
7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7
8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8
9	—	—	—	—	—	—	—	—	—	—	—	—	—	*	9
10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10
11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11
12	—	—	—	*	*	*	*	—	*	—	*	*	*	*	12
13	*	*	—	—	—	—	—	—	—	—	—	*	*	*	13
14	—	—	—	*	—	*	*	—	—	*	—	*	*	*	14
15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15
16	*	—	—	*	—	*	*	—	—	*	—	*	—	*	16
17	10	—	—	—	—	2 107	—	—	—	12	—	—	—	—	17
18	7	—	—	—	—	—	—	—	—	10	—	—	—	—	18
19	—	—	—	—	—	*	—	—	—	28	—	—	—	—	19
20	—	—	—	—	—	—	—	—	—	23	—	—	—	—	20
21	—	—	—	—	—	*	—	—	—	—	—	—	—	—	21
22	*	*	—	*	*	—	*	—	*	—	—	*	—	*	22
23	—	—	—	—	—	—	—	—	—	—	—	—	—	—	23
24	—	—	—	*	216	—	—	—	*	—	—	—	—	—	24
25	8	—	—	—	—	—	—	—	4	—	—	—	—	—	25
26	—	—	—	—	216	—	—	—	—	—	—	—	—	—	26
27	—	—	—	—	—	—	*	—	—	—	—	—	—	—	27
28	—	—	—	—	—	—	—	—	—	—	—	—	—	—	28
29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	29
30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	30
31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	31
32	—	—	—	*	—	—	*	—	—	—	*	*	—	*	32
33	—	—	—	—	—	—	—	8	—	—	7	1	—	—	33
34	—	—	—	—	—	—	*	—	—	—	*	*	—	*	34
35	*	—	—	—	—	—	*	—	—	—	*	*	—	*	35

36	*
37	2 *
38	*
39	*
40	
41	*
42	
43	*
44	*
45	*
46	*
47	
48	*
49	*
50	
51	*
52	
53	
54	
55	
56	*
57	*
58	*
59	*
60	*
61	*
62	*
63	*
64	*
65	*
66	*
67	*

<sup>2</sup> Refers also to following code number.

NOTE.—Instructions for using this key, showing material included in each study, are given on pages 453-454.





**NOTE.**—Instructions for using this key, showing material included in each study, are given on pages 453–454.



## KEY TO MATERIAL—Continued

Code no.	United States: Studies numbered—													Code no.	
	72	73	74	75	76	77	78	79	80	81	82	83	84	85	
1	1925-26	1925-26	1925-26	1925-26	1925-29	1925-31	1926	1926	1926	1926	1926-27	1926-27	1926-28	1926-28	1
2	65	1,800	852	488	154	296	574	594	100	300	13	40	117	179	2
3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	3
4	*	*	*	*	*	*	*	*	*	*	*	*	*	*	4
5	*	*	*	*	*	*	*	*	*	*	*	*	*	*	5
6	*	*	*	*	*	*	*	*	*	*	*	*	*	*	6
7	*	*	*	*	*	*	*	*	*	*	*	*	*	*	7
8	*	*	*	*	*	*	*	*	*	*	*	*	*	*	8
9	*	*	*	*	*	*	*	*	*	*	*	*	*	*	9
10	*	*	*	*	*	*	*	*	*	*	*	*	*	*	10
11	*	*	*	*	*	*	*	*	*	*	*	*	*	*	11
12	*	*	*	*	*	*	*	*	*	*	*	*	*	*	12
13	*	*	*	*	*	*	*	*	*	*	*	*	*	*	13
14	*	*	*	*	*	*	*	*	*	*	*	*	*	*	14
15	*	*	*	*	*	*	*	*	*	*	*	*	*	*	15
16	*	*	*	*	*	*	*	*	*	*	*	*	*	*	16
17	*	*	*	*	*	*	*	9	*	31	10	*	*	*	17
18	*	6	*	*	*	*	*	9	*	12	10	*	*	*	18
19	*	*	*	*	*	*	*	9	*	26	*	*	*	*	19
20	*	*	*	*	*	*	*	*	*	11	*	*	*	*	20
21	*	*	*	*	*	*	*	*	*	*	*	*	*	*	21
22	*	*	*	*	*	*	*	*	*	2	*	*	*	*	22
23	*	*	*	*	*	*	*	*	*	*	*	*	*	*	23
24	*	*	*	*	*	*	*	*	*	*	*	*	*	*	24
25	*	*	*	*	*	*	*	10	*	*	*	*	*	*	25
26	*	*	*	*	*	*	*	*	*	*	*	*	*	*	26
27	*	*	*	*	*	*	*	*	*	*	*	*	*	*	27
28	*	*	*	*	*	*	*	*	*	*	*	*	*	*	28
29	*	*	*	*	*	*	*	*	*	*	*	*	*	*	29
30	*	*	*	*	*	*	*	*	*	*	*	*	*	*	30
31	*	*	*	*	*	*	*	*	*	*	*	*	*	*	31
32	*	*	*	*	*	*	*	13	*	2	*	*	10	*	32
33	*	3	*	*	*	*	*	2	*	*	*	*	*	*	33
34	*	*	*	*	*	*	*	2	*	*	*	*	*	*	34
35	2	*	*	*	*	*	*	2	*	*	*	*	*	*	35

**NOTE.**—Instructions for using this key, showing material included in each study, are given on pages 453-454.





**NOTE.**—Instructions for using this key, showing material included in each study, are given on pages 453–454.



KEY TO MATERIAL--Continued

Code no.		United States: Studies numbered—													Code no.	
		100	101	102	103	104	105	106	107	108	109	110	111	112	113	
1	1927-28	226		1927-30	1928	1928-29	1928-29	1928-29	1928-29	1928-29	1928-29	1928-30	1928-30	1928-30	1928-30	1
2		*		74	138	161	90	37	240	4	138	200	53	900	900	2
3		*			*	*	*	*	*		*	*	*	*	*	3
4		*			*	*	*	*	*		*	*	*	*	*	4
5																5
6				*		*					*	*		*	*	6
7		*														7
8		*														8
9		*										*				9
10						*					*					10
11						*					*					11
12				*		*	*		*	*	*		*	*	*	12
13				*		*	*		*	*	*		*	*	*	13
14				*		*	*		*	*	*		*	*	*	14
15		*		*		*	*		*	*	*		*	*	*	15
16	*			*		*				4	*	*		*	*	16
17	2					17			29		31					17
18	3					18					15					18
19						19			28		24					19
20						20					14					20
21				*							*			*	*	21
22		*		*		*	*		*	*	*			*	*	22
23							*		*	*	*			*	*	23
24						24			30	*	*			*	*	24
25				5			200				*			*	*	25
26									31							26
27																27
28																28
29																29
30																30
31											*			*	*	31
32	1	3		*	*	2	*	6		8	*			*	*	32
33																33
34											*			*	*	34
35									*		*			*	*	35

[illegible]

**Refers also to following code number.**

**NOTE.**—Instructions for using this key, showing material included in each study, are given on pages 453–454.



## KEY TO MATERIAL—Continued

Code no.	United States: Studies numbered—														Code no.
	114	115	116	117	118	119	120	121	122	123	124	125	126	127	
1	1928-30	1929	1929	1929	1929	1929-30	1929-30	1929-30	1929-30	1929-30	1929-30	1929-30	1929-30	1929-30	1
2	43		34	70	80	368	150	70	76	84	52	150	80	110	2
3							*			*					3
4															4
5															5
6							*		*		*		*	*	6
7															7
8								*						*	8
9															9
10															10
11															11
12							*	*	*		*				12
13	*			*	*	*	*	*	*	*	*	*	*	*	13
14							*	*	*	*	*	*	*	*	14
15	*	*		*	*	*	*	*	*	*	*	*	*	*	15
16	*						*	*	*	*	*				16
17									27	4					17
18															18
19															19
20															20
21	*					*	*	*	*	*	*	*	*	*	21
22			*			*	*	*	*	*	*	*	*	*	22
23								*	*				*		23
24															24
25															25
26															26
27															27
28															28
29															29
30															30
31								*	*		*				31
32							*	*	*		*	4	9	14	32
33	3	10	3	9	10	5	*	4							33
34		*		*	*	*	*		*	*					34
35									*	*					35

[illegible]

<sup>2</sup> Refers also to following code number.

**NOTE.**—Instructions for using this key, showing material included in each study, are given on pages 453–454.



KEY TO MATERIAL—Continued

Code no.		United States: Studies numbered—													Code no.	
		128	129	130	131	132	133	134	135	136	137	138	139	140	141	
1	1929-30	40	1929-30	153	1929-31	559	1930	190	1930	235	1930	30	1930	130	1930	1
2	40				90	559	1930	190	1930	235	1930	30	1930	130	1930	2
3	*				*				*							3
4	*															4
5	*															5
6					*				*			*	*	*	*	6
7																7
8																8
9																9
10	*												*			10
11	*												*			11
12	*								*							12
13	*					*		*	*		*	*				13
14	*					*		*	*		*	*				14
15	*					*		*	*		*	*	*	*	*	15
16	*					*			*							16
17									23					5		17
18									8					5		18
19														15		19
20	10													2		20
21			*											*		21
22	*			*		*	*	*	*		*	*	*	*	*	22
23																23
24	*			*			*	*	*			*		*	*	24
25																25
26																26
27	*			*					*							27
28																28
29																29
30									*							30
31	*					*			*							31
32	*				*	6	9	8	12		10	9		6		32
33	6								*		*					33
34	*			*	*				*		*					34
35	*				*				*		*				*	35

[illegible]<sup>2</sup> Refers also to following code number.

4 Date of publication.

**NOTE.**—Instructions for using this key, showing material included in each study, are given on pages 453–454.





[illegible]

<sup>2</sup> Refers also to following code number.

NOTE.—Instructions for using this key, showing material included in each study, are given on pages 453-454.





**NOTE.**—Instructions for using this key, showing material included in each study, are given on pages 453–454.



36	*
37	*
38	*
39	*
40	2 *
41	*
42	*
43	*
44	*
45	*
46	*
47	*
48	*
49	*
50	*
51	*
52	*
53	*
54	*
55	*
56	*
57	*
58	*
59	*
60	*
61	*
62	*
63	*
64	*
65	*
66	*
67	*

1 Date of publication.

2 Refers also to following code number.

NOTE.—Instructions for using this key, showing material included in each study, are given on pages 453–454.





[illegible]

Refers also to following code number.

NOTE.—Instructions for using this key, showing material included in each study, are given on pages 453-454.





[illegible]<sup>2</sup> Refers also to following code number.

**NOTE.**—Instructions for using this key, showing material included in each study, are given on pages 453-454.











## KEY TO MATERIAL—Continued

Code no.	United States: Studies numbered—														Code no.
	240	241	242	243	244	245	246	247	248	249	250	251	252	253	
1	1891	1891	1891-92	1891-92	1892	1892-93	1892-93	1892-93	1892-93	1893	1893-94	1893-94	1893-94	1893-94	1
2	*	7	9,527	553	42	257	50	332	54	5,792	3,500	2,400	35	513	2
3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	3
4	*	*	*	*	*	*	*	*	*	*	*	*	*	*	4
5	*	*	*	*	*	*	*	*	*	*	*	*	*	*	5
6		*			*										6
7															7
8															8
9			*									*			9
10					*		*						*		10
11	*				*	*	*						*		11
12					*		*						*		12
13	*	*		*	*	*	*						*	*	13
14					*		*		*				*		14
15		*			*		*						*		15
16															16
17		21					6		259				6		17
18															18
19		11							259						19
20															20
21			*		*		*		*				*		21
22					*								*		22
23															23
24		*													24
25		19			*		2						2		25
26															26
27															27
28															28
29															29
30														*	30
31	*	*	*	*	*	*	*	*	*	*		*	*	*	31
32															32
33		1	1	1	1		1	3			1	1	1	3	33
34															34
35		*					*	*					*	*	35



[illegible]<sup>2</sup> Refers also to following code number.

NOTE.—Instructions for using this key, showing material included in each study, are given on pages 453-454.



[illegible]

**NOTE.**—Instructions for using this key, showing material included in each study, are given on pages 453-454.



## KEY TO MATERIAL—Continued

United States: Studies numbered —															Code no.
Code no.	268	269	270	271	272	273	274	275	276	277	278	279	280	281	
1	1898	1898-00	1899	1899	1899-1900	1899-1900	1899-1902	1900	1900-04	1901	1901	1901-02	1901-02	1901-02	1
2	294	477	111	713	135	156	2,567	403	30	9	148	614	152	501	2
3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	3
4															4
5															5
6				*	*		*								6
7															7
8															8
9	*			*			*	*				*	*		9
10													*		10
11					*		*	*					*		11
12							*	*							12
13	*	*		*			*	*		*		*	*		13
14															14
15				*	*		*	*	2 *	*		*			15
16															16
17							24		282				2		17
18							20		282						18
19															19
20															20
21				*	*		*	*	*	*		*	*		21
22															22
23							*						*		23
24															24
25															25
26															26
27															27
28															28
29				*			*						*		29
30															30
31	*		*	*	*		*	*		*		*	*	*	31
32															32
33													2	1	33
34															34
35							*						*	*	35

[illegible]

**NOTE.**—Instructions for using this key, showing material included in each study, are given on pages 453-454.

**NOTE.**—Instructions for using this key, showing material included in each study, are given on pages 453–454.





[illegible]

<sup>a</sup> Refers also to following code number.

**NOTE.**—Instructions for using this key, showing material included in each study, are given on pages 453–454.







## KEY TO MATERIAL—Continued

Code no.		United States: Studies numbered—														Code no.	
311	312	313	314	315	316	317	318	319	320	321	322	323	324			1	2
1907-09 6,715 *	1908 20 *	1908 66 *	1909 3,215 *	1909 531 *	1909 87 *	1909 3,215 *	1909 43 *	1909 212 *	1909 103 *	1909 24 *	1909-10 184 *	1909-10 6 *	1909-10 2,019 *			3	4
4	5	6															
6							*									7	8
7																	
8																9	10
9																	
10										*						11	12
11										*							
12																13	14
13										*							
14																15	16
15							*										
16																17	18
17																	
18							22			45	11					19	20
19										45							
20																21	22
21																	
22																23	24
23																	
24																25	26
25																	
26																27	28
27																	
28																29	30
29																	
30																31	32
31																	
32																33	34
33																	
34																35	36
35																	

[illegible]

Date of publication.

<sup>1</sup> Date of publication.

NOTE.—Instructions for using this key, showing material included in each study, are given on pages 453–454.

## KEY TO MATERIAL—Continued

Code no.	United States: Studies numbered—														Code no.
	325	326	327	328	329	330	331	332	333	334	335	336	337	338	
1	1000-10	1910-11	1911	1911-12	1912	1912	1912	1912-15	1913	1913	1914	1914	1915	1915, 1917	1
2	33	138	348	370	620	21		23	1	184	20	69	60	265	2
3	*	*	*	*	*			*	*		*	*	*	*	3
4	*	*	*	*	*			*	*		*	*	*	*	4
5	*	*	*	*	*			*	*		*	*	*	*	5
6								*		*	*				6
7															7
8															8
9															9
10														*	10
11														*	11
12								*	*	*	*	*	*	*	12
13	*	*				*		*	*	*	*	*	*	*	13
14			*			*		*	*	*	*	*	*	*	14
15						*		*	*	*	*	*	*	*	15
16								10							16
17															17
18															18
19															19
20															20
21														*	21
22			*			*		*	*	*	*	*	*	*	22
23								*	*	*	*	*	*	*	23
24								20							24
25															25
26															26
27								*							27
28								*							28
29															29
30															30
31	*		*	*		*		*		*	*			*	31
32			1					7	1				*		32
33								*					5		33
34															34
35								*			*			*	35





## KEY TO MATERIAL—Continued

Code no.	United States: Studies numbered—														Code no.
	339	340	341	342	343	344	345	346	347	348	349	350	351	352	
1	1916	1916	1916-18	1917	1917	1917	1917	1917-18	1917-19	1917-19	1917-19	1917-19	1917-19	1918	1
2	200	2,110	200	50	198	15	11	5,227	12,095	3,959	3,959	741	12,095	3,091	2
3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	3
4	*	*	*	*	*	*	*	*	*	*	*	*	*	*	4
5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	5
6	---	---	*	---	---	*	---	---	---	---	---	---	*	---	6
7	---	---	---	---	---	---	---	---	---	---	---	---	---	---	7
8	---	---	---	---	---	---	---	---	---	---	---	---	---	---	8
9	---	---	---	---	---	---	---	---	*	---	---	*	---	---	9
10	---	*	---	*	---	---	---	---	---	*	---	*	---	---	10
11	---	*	---	*	---	---	---	---	---	---	---	*	*	---	11
12	---	---	*	*	---	---	*	*	*	---	---	*	*	---	12
13	---	---	---	---	---	---	---	*	*	---	---	*	*	---	13
14	*	*	*	*	*	*	*	*	*	*	---	*	*	---	14
15	---	---	---	---	---	---	---	*	*	*	---	*	*	---	15
16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	16
17	---	---	---	---	5	---	---	36	---	---	---	---	---	---	17
18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	18
19	---	---	138	---	10	---	---	36	27	---	---	---	128	---	19
20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	20
21	---	*	*	*	*	---	---	---	*	---	---	*	*	---	21
22	---	*	*	*	---	---	---	---	---	---	---	*	*	---	22
23	---	*	*	---	---	---	---	---	*	---	---	*	*	---	23
24	---	*	---	---	---	---	---	---	---	---	---	---	---	---	24
25	---	---	---	---	---	---	---	---	---	---	---	---	6,000	---	25
26	---	---	123	---	---	---	---	---	---	---	---	---	5,500	---	26
27	---	*	*	---	---	---	---	*	---	---	---	---	---	---	27
28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	28
29	---	---	---	---	---	---	---	---	---	---	---	---	---	---	29
30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	30
31	---	*	*	2*	---	*	*	---	*	---	*	*	*	---	31
32	---	---	---	---	---	---	---	---	---	---	---	---	---	---	32
33	---	1	8	3	---	---	5	---	---	---	---	4	4	---	33
34	---	---	---	---	---	---	---	*	---	---	---	*	---	---	34
35	---	---	*	---	---	---	---	*	*	---	---	*	*	---	35

[illegible]<sup>2</sup> Refers also to following code number.

NOTE.—Instructions for using this key, showing material included in each study, are given on pages 453–454.



## KEY TO MATERIAL—Continued

United States: Studies numbered—															Code no.
Code no.	353	354	355	356	357	358	359	360	361	362	363	364	365	366	Code no.
1	1918	1918	1918-19	1918-19	1918-19	1918-19	1919	1919	1920	1920-21	1920-21	1921	1922	1922	1
2	366	240	696	100	92	200	45	643	1	1,819	82	2	433	11,275	2
3	*		*	*	*	*				*	*	*	*	*	3
4															4
5															5
6		*			*										6
7														*	7
8															8
9					*	*					*	*		*	9
10				*							*				10
11				*							*				11
12				*	*			*	*	1,819	*	*	*	*	12
13				*	*			*	*		*	*	*	*	13
14				*	*	*		*	*		*	*	*	*	14
15				*	*	*		*	*		*	*	*	*	15
16					*										16
17					18										17
18					10										18
19					14										19
20					7										20
21				*	*	*		*	*		*	*	*	*	21
22				*	*			*	*		*	*	*	*	22
23															23
24															24
25															25
26															26
27					*						*				27
28					*						*				28
29					*						*				29
30					*	*		*	*		*		*	*	30
31		*		*	*	*	*	*	*		*	*	*	*	31
32					6		1				2		6		32
33					*	*		*	*		*	*	*	*	33
34					*	*		*	*		*	*	*	*	34
35				*	*	*		*	*		*	*	*	*	35

[illegible]

1 Date of publication.

<sup>2</sup> Refers also to following code number.

NOTE.—Instructions for using this key, showing material included in each study, are given on pages 453-454.









[illegible]

<sup>22</sup> Refers also to following code number.

**NOTE.**—Instructions for using this key, showing material included in each study, are given on pages 453-454.

**NOTE.**—Instructions for using this key, showing material included in each study, are given on pages 453–454.



## KEY TO MATERIAL—Continued

United States: studies numbered—															Code no.
Code no.	395	396	397	398	400	401	402	403	404	405	406	407	408	409	
1	1929	1929-30	1929-30	1929-30	1929-31	1929-32	1929-32	1929-32	1929-32	1930	1930	1930	1930	1930	1
2	100	18	100	104	627	2,906	2,566	6,086	8,000	400	1,020	10	103	2,879	2
3	*		*		*	*	*	*	*	*	*	*	*	*	3
4															4
5															5
6	*		*	*						*					6
7	*											*			7
8												*			8
9		*	*							*		*	*		9
10	*		*										*		10
11	*	*	*							*		*			11
12	*		*							*		*	*		12
13										*			*		13
14	*	*	*	2						*		*	*		14
15										*			*		15
16															16
17	123									13	3				17
18															18
19	119				47					7				6	19
20															20
21	*	*	*	2						*		*	*		21
22	*														22
23	*		*							*		*	*		23
24															24
25	506	15	4		15					38					25
26	466		4							11					26
27			*												27
28			*									*			28
29			*												29
30	6											*			30
31	*	*	*	*						*					31
32	*														32
33	17		7	5	4					1					33
34	*		*	*	*					*		*	*	*	34
35										*					35









## KEY TO MATERIAL—Continued

Code no.	United States: Studies numbered—														Code no.
	427	428	429	430	431	432	433	434	435	436	437	438	439	440	
1	1911	1913	1914-15	1919	1920-21	1921-22	1925	1926-27	1926-27	1926-27	1927-28	1927-28	1928	1928-29	1
2	29	2	40	176	11	96	2,484	7	24	78	27	200	4	536	2
3	*	*	*			*	*	*	*	*		*	*	*	3
4							*		*	*		*	*	*	4
5		*	*			*			*	*		*	*	*	5
6									*	*		*	*	*	6
7	*								*	*			*	*	7
8									*	*			*	*	8
9	*					*			*	*			*	*	9
10									*	*			*	*	10
11									*	*			*	*	11
12									*	*			*	*	12
13	*	*	*	*	*	*	*		*	*			*	*	13
14							*		*	*			*	*	14
15			*	*	*	*	*		*	*			*	*	15
16			12										1		16
17															17
18															18
19											32				19
20															20
21		*	*	*	*	*			*	*	*		*	*	21
22	*	*	*			*			*	*	*		*	*	22
23			*			*			*	*			*	*	23
24	*		*			*			*	*			*	*	24
25			23												25
26										*					26
27									*	*			*	*	27
28									*	*			*	*	28
29									*	*			*	*	29
30									*	*			*	*	30
31	*		*	*	*	*	*		*	*	*	*	*	*	31
32					3	1			*	10	6			1	32
33						*			*		*				33
34			*	*					*		*				34
35				*					*		*		*	*	35

[illegible]

4 Date of publication.

<sup>2</sup> Refers also to following code number.

**NOTE.**—Instructions for using this key, showing material included in each study, are given on pages 453-454.



## KEY TO MATERIAL—Continued

Code no.	United States: Studies numbered—													Code no.
	441	442	443	444	445	446	447	448	449	450	451	453	454	455
1	1928-31	1929	1929	1929	1929-31	1930	1930	1930	1930-31	1931-32	1931-32	1935-05	1917	1918
2	8, 639	41	20	2	472	592	75	1, 362	19	289	1, 038	27	75	528
3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4		2												
5														
6														
7														
8			*				*				*			
9													*	
10													*	
11														
12		*	*	*						*	*	*		
13											*		*	
14		*	*	*			*		*	*	*	*	*	
15		*	*	*			*		*	*	*	*	*	
16														
17						3								
18														
19					47								8	
20														
21		*	*	*			*		*	*	*	*	*	
22														
23														
24					15									
25														
26			*	*			*			*				
27				*										
28				*										
29				*										
30														
31		*	*					*				*	*	
32			1		4			6					2	
33														
34					*									
35			*	*	*		*							

[illegible]<sup>22</sup> Refers also to following code number.

<sup>1</sup> Date of publication.

**NOTE.**--Instructions for using this key, showing material included in each study, are given on pages 453-454.

## KEY TO MATERIAL—Continued

Code no.	United States				Alaska			Hawaii			Puerto Rico		Canada				Code no.
	456	457	458	459	460	461	462	463	464	465	466	467	468	469	470	471	
1	1918	1920-24	1931	1929-30	1905	1910	1926	1928	1873	1896	1915	1931					1
2	33	50	75	2	*	363	1	*	*	*	*	129					2
3	*	*	*		*	*		*	*	*	*	*	*				3
4					*	*		*	*	*	*	*	*				4
5					*	*		*	*	*	*	*	*				5
6		*			*												6
7																	7
8																	8
9																	9
10									*								10
11		*			*			*	*				*				11
12		*			*			*	*				*				12
13		*			*			*	*				*				13
14		*			*			*	*				*				14
15		*			*			*	*				*				15
16					*				13				*				16
17													4				17
18																	18
19																	19
20																	20
21		*			*			*	*				*				21
22		*			*			*	*				*				22
23													*				23
24													*				24
25																	25
26																	26
27					*			*									27
28					*			*									28
29																	29
30																	30
31	*	*			*			*	*				*				31
32																	32
33		1											2				33
34													3				34
35								*					*				35





## KEY TO METHOD IN STUDIES IN THE UNITED STATES AND CANADA

In the key to method used in studies of family living in the United States and Canada, the reports are listed in the same order in which they appear in the annotated bibliography. The citation numbers of the studies are printed at the top of the columns on each page of the key. An asterisk (\*) means that a given method, indicated by the code number, has been used in the report analyzed.

The code numbers are listed at the extreme right and left of the pages of the key, and are to be interpreted as follows:

*Code  
no.*

### *Method of collecting data*

1. Record without supervision.
2. Record supervised by mail.
3. Record supervised by fieldworker.
4. Record kept by trained investigator.
5. Schedule.
6. Questionnaire.
7. Method not ascertained.

### *Method of measuring family or household size*

8. Persons.
9. Adult energy units.
10. Adult cost units.
11. Quets.
12. Other units.

### *Method of presenting data*

13. Individual cases.
14. Average for all cases.
15. Range.
16. Quartile range.
17. Frequency distribution by size of family or household.
18. Frequency distribution by occupation.
19. Frequency distribution by geographical location.
20. Frequency distribution by racial or national origin.
21. Frequency distribution by formal education of parents.
22. Frequency distribution: Farm families, by gross income.
23. Frequency distribution: Farm families, by net income.
24. Frequency distribution: Farm families, by value of living.
25. Frequency distribution: Farm families, by total family expenditures.
26. Frequency distribution: Farm families, by tenure of land or home.
27. Other statistical groupings: Farm families.
28. Correlation analysis: Farm families.
22. Frequency distribution: Nonfarm families, by income.
23. Frequency distribution: Nonfarm families, by value of living.
24. Frequency distribution: Nonfarm families, by total family expenditures.
25. Frequency distribution: Nonfarm families, by tenure of land or home.
26. Other statistical groupings: Nonfarm families.
27. Correlation analysis: Nonfarm families.

Three methods of collecting data are represented in the studies: (1) The record method, which makes use of household accounts, records of time utilization and/or records of various activities; (2) the schedule method, in which an investigator uses a specially prepared form for collecting data from a family, a household, or from individuals, by personal visit; and (3) the questionnaire method, in which a list of questions is sent out by mail to the persons from whom information is desired, and is returned by mail to the investigators.

If two or more methods of collecting data are used in the same study, two or more asterisks appear under the method heading.

Three general methods of measuring family size are found in the studies: (1) The adult energy unit represented by the various scales computed by Atwater, Holt, Lusk, and others, which are based on the relative energy needs of persons of different size, age, sex, and occupation; (2) the adult cost units which refer to the various scales based on the relative money cost of maintaining individuals of different age, sex, and occupation at a given level of living—for example, W. I. King's ammain scale, and E. L. Kirkpatrick's cost-consumption unit; and (3) the quet scale originated by Ernst Engel, and named by him after Quetelet.

The following methods of presenting the data occur: Individual cases, average of all cases, range, and frequency distribution. This last method has also been marked with an asterisk when the frequency distribution has not been given, but individual cases have been so presented that they could be grouped according to the classifications 17 to 27.



## KEY TO METHOD

United States: Studies numbered —																									Code no.
Code no.	1	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1													*												
2																									
3																									
4			*						*										*						
5	*	*				*	*				*				*	*			*	*		*	*		
6								*																	
7										*	*	*		*	*	*									
8	*	*							*	*	*				*	*			*	*					
9				*																		*			
10													*									*			
11																									
12			*					*	*	*		*			*	*	*	*	*	*		*	*		
13	*	*			*	*			*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		
14	*	*				*	*		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		
15																									
16																									
17						*	*			*	*				*	*	*	*	*	*	*	*	*		
18	*					*	*		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		
19	*	*													*	*	*	*	*	*	*	*	*		
20																				*	*	*	*		
21																			*	*	*	*	*		
22										*	*	*	*	*	*	*	*	*	*	*	*	*	*		
23													*	*	*	*	*	*	*	*	*	*	*		
24													*	*	*	*	*	*	*	*	*	*	*		
25															*	*	*	*	*	*	*	*	*		
26										*	*	*	*	*	*	*	*	*	*	*	*	*	*		
27						*	*						*	*	*	*	*	*	*	*	*	*	*		
28													*	*	*	*	*	*	*	*	*	*	*		

Code no.		United States: Studies numbered—																												Code no.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
1	2	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
1	---	---	---	---	*	---	---	---	---	*	---	---	---	---	---	---	---	---	---	---	*	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---</

NOTE.—Instructions for using this key, showing research method followed, are given on pages 522-523.





Code no.		United States: Studies numbered—																												Code no.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	91	92	93
1																														
2																														
3																														
4																														
5																														
6																														
7																														
8																														
9																														
10																														
11																														
12																														
13																														
14																														
15																														
16																														
17																														
18																														
19																														
20																														
21																														
22																														
23																														
24																														
25																														
26																														
27																														
28																														

NOTE.—Instructions for using this key, showing research method followed, are given on pages 522-523.

## KEY TO METHOD—Continued

United States: Studies numbered—																											
Code no.	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	Code no.			
1								*	*										*		*		*	1			
2									*		*							*			*			2			
3																								3			
4								*		*						*			*					4			
5		*	*	*				*					*				*		*					5			
6																								6			
7							*		*	*	*					*	*		*					7			
8					*		*		*					*		*	*		*	*				8			
9		*							*			*				*			*	*				9			
10												*												10			
11								*								*								11			
12			*				*	*								*	*	*		*	*			12			
13							*	*	*	*	*		*			*	*	*		*	*	*		13			
14	*			*			*	*	*	*	*	*	*			*	*	*		*	*	*	*	14			
15		*	*														*	*					*	15			
16														*			*		*	*				16			
17	*		*						*		*			*			*		*	*				17			
18										*	*						*	*	*	*				18			
19							*	*			*						*	*	*	*				19			
20																	*	*	*	*				20			
21			*					*	*	*	*	*	*	*	*	*	*	*	*	*	*			21			
22	*		*					*	*	*	*	*	*	*	*	*	*	*	*	*	*			22			
23			*						*	*	*	*	*	*	*	*	*	*	*	*	*			23			
24		*			*				*	*	*	*	*	*	*	*	*	*	*	*	*			24			
25	*								*	*	*	*	*	*	*	*	*	*	*	*	*			25			
26			*	*			*	*	*	*	*	*	*	*	*	*	*	*	*	*	*			26			
27	*		*		*		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*			27			
28	*	*						*	*	*	*	*	*	*	*	*	*	*	*	*	*			28			

United States: Studies numbered—																							Code no.
Code no.	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139
1							*							*					*				
2								*				*											
3					*							*											
4												*	*							*			*
5			*	*	*							*			*								
6	*	*							*		*						*						
7										*		*	*		*			*			*		
8			*	*	*	*	*					*	*	*					*	*		*	
9												*								*			
10																				*			
11																							
12																			*				
13					*										*					*			
14	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
15					*		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
16																							
17					*		*					*											
18																							
19																*							
20												*	*										
21					*							*								*			
22												*								*			
23												*										*	
24					*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
25			*									*	*	*	*	*	*	*	*	*	*	*	*
26					*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
27					*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
28														*	*	*	*	*	*	*	*	*	*

NOTE.—Instructions for using this key, showing research method followed, are given on pages 522-523.











United States: Studies numbered—																								Code no.
Code no.	200	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	Code no.
1					*																			1
2																								2
3																								3
4							*				*					*				*				4
5								*						*								*		5
6	*	*	*			*	*			*	*	*	*	*			*				*			6
7										*	*	*	*	*			*		*					7
8	*	*	*		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	8
9				*																				9
10																								10
11																								11
12																								12
13	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	13
14						*				*	*	*	*	*	*	*	*	*	*	*	*	*	*	14
15						*					*		*	*	*				*	*	*	*	*	15
16																								16
17	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	17
18	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	18
19	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	19
20							*		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	20
21																								21
22	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	22
23																						*	*	23
24	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	24
25	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	25
26	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	26
27																						*	*	27

NOTE.—Instructions for using this key, showing research method followed, are given on pages 522-523.



United States: Studies numbered—																											
Code no.	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	Code no.			
1																				*				1			
2																								2			
3		*	*	*																		*		3			
4		*									*		*							*				4			
5					*	*	*	*															*	5			
6	*								*	*					*		*	*	*		*			6			
7														*		*	*	*	*		*	*		7			
8	*	*	*	*	*	*	*	*	*	*	*			*	*	*	*	*	*	*	*	*	*	8			
9		*	*	*	*	*	*	*								*	*	*			*	*		9			
10																								10			
11																								11			
12																				*				12			
13	*		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	13			
14	*						*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	14			
15	*																			*	*	*	*	15			
16									*	*	*		*	*	*	*	*	*	*	*	*	*	*	16			
17	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	17			
18	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	18			
19	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	19			
20	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	20			
21																								21			
22	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	22			
23																				*	*	*	*	23			
24	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	24			
25	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	25			
26	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	26			
27			*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	27			
28																				*	*	*	*	28			

NOTE.—Instructions for using this key, showing research method followed, are given on pages 522-523.





## United States: Studies numbered—

United States: Studies numbered—																								
Code no.	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	Code no.
1																				*			*	1
2																								2
3		*																			*			3
4			*						*						*			*						4
5				*						*							*			*			*	5
6														*					*					6
7	*						*	*			*	*	*	*	*	*	*	*	*	*				7
8	*	*	*				*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	8
9									*										*					9
10								10																10
11								11																11
12																								12
13	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	13
14	*	*	*				*	*		*		*	*	*	*	*	*	*	*	*	*	*	*	14
15																								15
16																								16
17	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	17
18	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	18
19			*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	19
20		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	20
21																								21
22	*		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	22
23																			*	*	*	*	*	23
24	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	24
25	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	25
26	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	26
27																								27
28																								28

NOTE.—Instructions for using this key, showing research method followed, are given on pages 522-523.





United States: Studies numbered—																											
Code no.	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	Code no.			
1																*								1			
2																								2			
3																								3			
4	*	*	*	*	*			*	*	*		*		*		*	*	*	*	*	*	*	*	4			
5																								5			
6							*						*					*						6			
7						*	*			*	*	*		*		*	*	*		*	*	*	*	7			
8			*	*		*			*	*	*	*		*		*	*	*	*	*	*	*	*	8			
9	*	*	*	*	*				*	*	*													9			
10																								10			
11																								11			
12																								12			
13												*		*		*	*	*	*	*	*	*	*	13			
14	*	*	*	*	*	*	*	*	*	*			*		*	*	*	*	*	*	*	*	*	14			
15								*	*	*					*						*	*	*	15			
16																								16			
17							*		*		*	*	*	*		*	*	*	*	*	*	*	*	17			
18												*							*	*	*	*	*	18			
19	*	*	*	*																				19			
20																								20			
21								*	*	*			*				*	*	*	*	*	*	*	21			
22			*	*	*			*	*	*			*				*	*	*	*	*	*	*	22			
23													*				*	*	*	*	*	*	*	23			
24												*		*			*	*	*	*	*	*	*	24			
25										*		*		*			*	*	*	*	*	*	*	25			
26	*	*	*	*	*					*	*	*	*	*		*	*	*	*	*	*	*	*	26			
27	*	*	*	*	*					*	*	*	*	*		*	*	*	*	*	*	*	*	27			
28											*	*	*	*		*	*	*	*	*	*	*	*	28			

NOTE.—Instructions for using this key, showing research method followed, are given on pages 522-523.

## KEY TO METHOD—Continued

United States: Studies numbered—																									Code no.
Code no.	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393		
1			*	*					*				*												
2																			*						
3																									
4			*		*	*	*	*	*												*				
5																*							*		
6																									
7	*		*	*	*	*		*	*	*	*	*	*	*	*	*									
8	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*			*	*	*	*	*		
9	*		*		*	*		*	*	*	*	*	*	*	*	*			*						
10					*																				
11								*																	
12				*	*	*		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		
13			*	*	*	*		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		
14	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		
15			*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		
16					*	*		*							*	*									
17		*			*	*		*							*	*			*	*	*	*	*		
18					*	*		*		*	*	*	*	*	*	*			*	*	*	*	*		
19					*	*		*		*	*	*	*	*	*	*			*	*	*	*	*		
20					*	*		*		*	*	*	*	*	*	*			*	*	*	*	*		
21					*	*		*		*	*	*	*	*	*	*			*	*	*	*	*		
22	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*			*	*	*	*	*		
23					*	*		*		*	*	*	*	*	*	*			*	*	*	*	*		
24					*	*		*		*	*	*	*	*	*	*			*	*	*	*	*		
25					*	*		*		*	*	*	*	*	*	*			*	*	*	*	*		
26					*	*		*		*	*	*	*	*	*	*			*	*	*	*	*		
27					*	*		*		*	*	*	*	*	*	*			*	*	*	*	*		
28					*	*		*		*	*	*	*	*	*	*			*	*	*	*	*		







Code no.	United States: Studies numbered—														Alaska	Hawaii			Puerto Rico	Canada				Code no.		
	444	445	446	447	448	449	450	451	453	454	455	456	457	458		459	460	461		462	463	465	466		468	469
1		*						*		*															1	
2																									2	
3																									3	
4		*		*					*		*		*									*		*	4	
5														*				*							5	
6								*									*		*						6	
7	*				*				*	*		*	*		*	*	*	*	*	*	*	*	*	*	7	
8	*		*	*				*		*							*	*	*	*	*	*	*	*	8	
9																	*		*						9	
10																									10	
11																									11	
12													*					*					*	*	12	
13	*			*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	13
14		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	14
15					*									*	*	*	*	*	*	*	*	*	*	*	15	
16																	*	*	*	*	*	*	*	*	16	
17			*		*			*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	17
18			*						*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	18
19								*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	19
20									*	*							*	*	*	*	*	*	*	*	20	
21								*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	21
22		*	*		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	22
23									*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	23
24						*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	24
25			*		*					*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	25
26			*		*				*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	26
27					*									*	*	*	*	*	*	*	*	*	*	*	*	27
28																									28	

NOTE.—Instructions for using this key, showing material included in each study, are given on pages 522-523.

## KEY TO MATERIAL AND METHOD IN STUDIES IN OTHER COUNTRIES

The key which follows indicates the type of material presented in the studies of family living in countries other than the United States and Canada, and the methods used in these studies. The arrangement of the key is similar to that used in the two preceding keys.

The code numbers used in indexing the studies are to be interpreted as follows:

*Code  
no.*

*Material*

1. Date to which information applies.
2. Number of cases to which information applies.
3. Total income.
4. Sources of income.
5. Total savings.
6. Life insurance.
7. Total money value of current consumption.
8. Total money expenditures.
9. Total money value of goods and services furnished.
10. Total money expenditures for food.
11. Total money value of food furnished.
12. Money values for specified types of food.
13. Quantities of specified types of food.
14. Nutritive content of diet.
15. Total money expenditures for clothing.
16. Total money value of clothing furnished.
17. Expenditures for specified types of clothing.
18. Quantities of specified types of clothing purchased.
19. Money expenditures for housing.
20. Rental value of owned homes.
21. Type of housing or household facilities.
22. Expenditures for furnishings and equipment.
23. Total money expenditures for household operation.
24. Total money value of operation goods furnished.
25. Household production.
26. Expenditures for paid household service.
27. Expenditures for automobile.
28. Expenditures for recreation.
29. Recreational activities.
30. Reading materials utilized.
31. Expenditures for religion.
32. Participation in community organizations.
33. Use of free community facilities.
34. Physical health and medical care.
35. Mental development.
36. Formal education of parents and/or children.
37. Family relationships.
38. Family or individual mobility.
39. Purchasing procedures.



The key below indicates the method used in the investigation. The numbers relate to the following methods:

*Code  
no.*

*Method of collecting data*

1. Record.
2. Questionnaire.
3. Schedule.
4. Method not ascertained.

*Method of measuring family or household size*

5. Persons.
6. Adult units.

*Method of presenting data*

7. Individual cases.
8. Average for all cases.
9. Frequency distribution: Size of family or household.
10. Frequency distribution: Occupation.
11. Frequency distribution: Racial or national origin.
12. Frequency distribution: Formal education of parents.
13. Frequency distribution: Economic status.
14. Frequency distribution: Tenure of land or home.
15. Other statistical groupings.

## KEY TO MATERIAL

Code no.	Mexico			Argentina							Peru	Uruguay			Code no.
	470	472	473	474	475	478	481	482	483	484	485	486	487		
1	1922	1	1926	1886-96	1905-12	1919	1925	1926	1928	1918	1913-19	1914-26	1920	1	
2		1,944		10		84	1,000	700	1,198	17				3	
3		*		*		*	*	*	*	*			*	4	
4														5	
5														6	
6														7	
7		*		*	*	*	*	*	*		*	*	*	8	
8				*		*	*	*	*		*	*	*	9	
9				*	*	*	*	*	*	*		*	*	10	
10		*		*		*	*	*	*		*	*	*	11	
11				*	*	*	*	*	*		*	*	*	12	
12			*	*	*	*	*	*	*		*	*	*	13	
13			*	*	*	*	*	*	*	*	*	*	*	14	
14		*		*	*	*	*	*	*	*	*	*	*	15	
15				*	*	*	*	*	*	*	*	*	*	16	
16				*	*	*	*	*	*	*	*	*	*	17	
17		*		*	*	*	*	*	*	*	*	*	*	18	
18				*	*	*	*	*	*	*	*	*	*	19	
19	*	*		*	*	*	*	*	*	*	*	*	*	20	
20				*	*	*	*	*	*	*	*	*	*	21	
21						*	*	*	*	*	*	*	*	22	
22	*					*	*	*	*	*	*	*	*	23	
23	*	*		*	*	*	*	*	*	*	*	*	*	24	
24						*	*	*	*	*	*	*	*	25	
25										*	*	*	*	26	
26				*	*	*	*	*	*	*	*	*	*	27	
27		*		*	*	*	*	*	*	*	*	*	*	28	
28	*	*		*	*	*	*	*	*	*	*	*	*	29	
29		*		*	*	*	*	*	*	*	*	*	*	30	
30	*	*		*	*	*	*	*	*	*	*	*	*	31	
31														32	
32														33	
33														34	
34	*	*		*	*	*	*	*	*	*	*	*	*	35	
35				*	*	*	*	*	*	*	*	*	*		

[illegible]

## KEY TO METHOD

1	*
2	-
3	-
4	-
5	*
6	-
7	*
8	-
9	-
10	*
11	-
12	-
13	*
14	-
15	-

NOTE.—Instructions for using this key, showing material included in each study, and method followed, are given on pages 544-545.





[illegible]

## KEY TO METHOD

[illegible]

**NOTE.**—Instructions for using this key, showing material included in each study, and method followed, are given on pages 544-545.

## KEY TO MATERIAL

Code no.		Belgium—Continued							Czechoslovakia							Code no.
537		539	540	545	546	547	548	550	551	552	553	554	555			
1	1906-08	1008	1000	1921	1921	1928-29	1929	1922	1922-25	1923	1923	1924	1925	1		
2	70	1,859	1,065	*	848	1,033	1,033	10	125	43	25	21	26	2		
3	*	*	*			*	*	*	*	*	*	*	*	3		
4	*							*						4		
5	*							*						5		
6	*							*		*	*	*	*	6		
7							*	*		*	*	*	*	7		
8								*	*	*	*	*	*	8		
9								*						9		
10	*	*		*	*	*	*	*	*	*	*	*	*	10		
11							*	*		*	*	*	*	11		
12	*	*			*	*	*	*		*	*	*	*	12		
13	*	*	*		*	*	*	*		*	*	*	*	13		
14	*		*		*	*	*	*	*	*	*	*	*	14		
15	*			*		*	*	*	*	*	*	*	*	15		
16								*		*	*	*	*	16		
17								*		*	*	*	*	17		
18								*	*	*	*	*	*	18		
19	*	*		*		*	*	*	*	*	*	*	*	19		
20	*							*		*	*	*	*	20		
21	*	*				*	*	*		*	*	*	*	21		
22	*					*	*	*	*	*	*	*	*	22		
23	*			*				*	*	*	*	*	*	23		
24								*		*	*	*	*	24		
25	*							*		*	*	*	*	25		
26								*		*	*	*	*	26		
27	*					*	*	*		*	*	*	*	27		
28	*					*	*	*		*	*	*	*	28		
29	*					*	*	*		*	*	*	*	29		
30	*					*	*	*		*	*	*	*	30		
31	*					*	*	*		*	*	*	*	31		
32	*		*			*	*	*		*	*	*	*	32		
33	*		*			*	*	*		*	*	*	*	33		
34	*		*			*	*	*		*	*	*	*	34		
35	*		*			*	*	*		*	*	*	*	35		







## KEY TO METHOD

[illegible]

1	*																		*	
2		*																		
3			*																	
4				*															*	
5	*				*															
6	*	*			*													*		
7	*	*	*		*													*		
8	*	*	*	*	*														*	
9	*	*	*	*	*	*													*	
10	*	*			*															
11											*									
12												*								
13												*	*					*		
14													*						*	
15														*				*		

**NOTE.**--Instructions for using this key, showing material included in each study, and method followed, are given on pages 544-545.



## KEY TO MATERIAL

Code no.	Estonia	Finland	France										Code no.	
			576	579	580	584	609	612	616	617	634	640		645
1	1925	1920-21	1000-1880	1832	1914, 1920	1764	1835-37	1848	1859	1862	1878	1885	1885	1885
2	283	554	*	2	1	1	*	1	*	*	*	*	1	3
3	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	*	*	*	*	*	*	*	*	*	*	*	*	*	*
6	*	*	*	*	*	*	*	*	*	*	*	*	*	*
7	*	*	*	*	*	*	*	*	*	*	*	*	*	*
8	*	*	*	*	*	*	*	*	*	*	*	*	*	*
9	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10	*	*	*	*	*	*	*	*	*	*	*	*	*	*
11	*	*	*	*	*	*	*	*	*	*	*	*	*	*
12	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13	*	*	*	*	*	*	*	*	*	*	*	*	*	*
14	*	*	*	*	*	*	*	*	*	*	*	*	*	*
15	*	*	*	*	*	*	*	*	*	*	*	*	*	*
16	*	*	*	*	*	*	*	*	*	*	*	*	*	*
17	*	*	*	*	*	*	*	*	*	*	*	*	*	*
18	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20	*	*	*	*	*	*	*	*	*	*	*	*	*	*
21	*	*	*	*	*	*	*	*	*	*	*	*	*	*
22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23	*	*	*	*	*	*	*	*	*	*	*	*	*	*
24	*	*	*	*	*	*	*	*	*	*	*	*	*	*
25	*	*	*	*	*	*	*	*	*	*	*	*	*	*
26	*	*	*	*	*	*	*	*	*	*	*	*	*	*
27	*	*	*	*	*	*	*	*	*	*	*	*	*	*
28	*	*	*	*	*	*	*	*	*	*	*	*	*	*
29	*	*	*	*	*	*	*	*	*	*	*	*	*	*
30	*	*	*	*	*	*	*	*	*	*	*	*	*	*
31	*	*	*	*	*	*	*	*	*	*	*	*	*	*
32	*	*	*	*	*	*	*	*	*	*	*	*	*	*
33	*	*	*	*	*	*	*	*	*	*	*	*	*	*
34	*	*	*	*	*	*	*	*	*	*	*	*	*	*
35	*	*	*	*	*	*	*	*	*	*	*	*	*	*

[illegible]

## KEY TO METHOD

[illegible]

<sup>1</sup> Date of publication.

**NOTE.**—Instructions for using this key, showing material included in each study, and method followed, are given on pages 544-545.





[illegible]

## KEY TO METHOD

[illegible]

NOTE.—Instructions for using this key, showing material included in each study, and method followed, are given on pages 544-545.



[illegible]

## KEY TO METHOD

1	*
2	-
3	-
4	-
5	*
6	-
7	*
8	-
9	-
10	-
11	*
12	-
13	-
14	-
15	-

NOTE.—Instructions for using this key, showing material included in each study, and method followed, are given on pages 544-545.





[illegible]

## KEY TO METHOD

[illegible]

NOTE.—Instructions for using this key, showing material included in each study, and method followed, are given on pages 544-545.

## KEY TO MATERIAL

## Germany—Continued

Code no.	749	750	751	752	754	757	759	760	761	763	766	767	770	Code no.
1	1 1874	1875	1875	1875	1876	1877-78	1878-1913	1 1879	1879-82	1882	1882	1882-86	1884	1
2	3	16		2	285	1	1	1	1	2	2	6	52	2
3		*	*			*		*	*	*	*	*	*	3
4		*	*			*		*	*	*	*	*	*	4
5									*					5
6												*		6
7		*		*	*	*	*	*	*	*	*	*	*	7
8	*							*	*	*	*	*	*	8
9						*	*	*	*	*	*	*	*	9
10	*	*		*	*	*	*	*	*	*	*	*	*	10
11						*	*	*	*	*	*	*	*	11
12	*	*		*	*		*	*	*	*	*	*	*	12
13								*	*	*	*	*	*	13
14	*	*			*		*	*	*	*	*	*	*	14
15	*	*		*	*	*	*	*	*	*	*	*	*	15
16						*	*	*	*	*	*	*	*	16
17							*	*	*	*	*	*	*	17
18							*	*	*	*	*	*	*	18
19	*		*		*		*	*	*	*	*	*	*	19
20								*	*	*	*	*	*	20
21						*	*	*	*	*	*	*	*	21
22				*	*	*	*	*	*	*	*	*	*	22
23				*	*	*	*	*	*	*	*	*	*	23
24														24
25														25
26							*							26
27							*							27
28	*	*			*	*	*	*	*	*	*	*	*	28
29						*	*	*	*	*	*	*	*	29
30						*	*	*	*	*	*	*	*	30
31				*	*		*			*				31
32							*							32
33				*	*	*	*	*	*	*	*	*	*	33
34	*	*		*	*	*	*	*	*	*	*	*	*	34
35							*	*	*	*	*	*	*	35



## KEY TO METHOD

[illegible]<sup>1</sup> Date of publication.

NOTE.—Instructions for using this key, showing material included in each study, and method followed, are given on pages 544-545.

## KEY TO MATERIAL

## Germany—Continued

Code no.	771	772	774	775	776	777	778	779	784	787	788	790	791	794	Code no.
1	1885	1885	1886	1887	1888-89	1888-91	1888-98	1888-1902	1890-1912	1892-97	1894	1894	1894	1897	1
2	1	13	3	1	104	45	5	24	3	20	91	70	450	15	2
3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	3
4	*	*	*	*	*	*	*	*	*	*	*	*	*	*	4
5	*	*	*	*	*	*	*	*	*	*	*	*	*	*	5
6						*				*		*		*	6
7		*			*		*			*		*			7
8	*	*		*	*					*		*		*	8
9										*		*			9
10	*	*	*	*	*	*	*	*	*	*	*	*	*	*	10
11		*		*	18	22		*	*	*		*		*	11
12	*	*	*	*	8	11		*	*	*		*	*	*	12
13		*	*	*	*	*		*	*	*		*	*	*	13
14		*	*	*	*	*		*	*	*		*	*	*	14
15	*	*		*	*	*	*	*	*	*	*	*	*	*	15
16															16
17		*		*				*							17
18		*		*				*	*	*		*		*	18
19		*		*			*	*	*	*	*	*		*	19
20															20
21		*		*	1	*	*	*	*	*	*	*	*	*	21
22		*		*	*	*	*	*	*	*	*	*	*	*	22
23	*			*			*	*	*	*	*	*	*	*	23
24															24
25															25
26										*					26
27										*					27
28		*		*	*	*	*	*	*	*	*	*	*	*	28
29				*			*			*		*	*	*	29
30				*			*			*		*	*	*	30
31					*	*	*			*		*	*	*	31
32		*					*			*		*	*	*	32
33							*			*		*	*	*	33
34	*				*		*			*		*	*	*	34
35				*			*			*		*	*	*	35

[illegible]

## KEY TO METHOD

[illegible]

1 Date of publication.

**NOTE.**—Instructions for using this key, showing material included in each study, and method followed, are given on pages 544-545.



## KEY TO MATERIAL

Germany—Continued															Code no.
795	797	798	799	801	806	820	822	823	826	833	834	836	837	Code no.	
1 1898	1899	1899-1901	1899-1902	1900	1901	1903	1903	1903	1903-05	1904	1904-07	1905	1905	1	
1	14	1	*	4	4	908	11	5,833	25	2	*	5,046	3	2	
*	*	*	*	*	*	*	*	*	*	*	*	*	*	3	
*	*	*	*	*	*	*	*	*	*	*	*	*	*	4	
*	*	*	*	*	*	*	*	*	*	*	*	*	*	5	
					*				*					6	
				*	*	*	*	*	*	*	*	*	*	7	
	*	*	*	*	*	*	*	*	*	*	*	*	*	8	
	*	*	*	*	*	*	*	*	*	*	*	*	*	9	
*	*	*	*	*	*	*	*	*	*	*	*	*	*	10	
				*	*								*	11	
*		*	*	*	*		*	*				*	*	12	
*		*	*	*	*		*	*			*	*	*	13	
		*	*	*	*	*	*	*		*	*	*	*	14	
*	*	*	*	*	*	*	*	*		*	*	*	*	15	
														16	
														17	
														18	
*	*	*	*	*	*	*	*	*		*	*	*	*	19	
														20	
	*	*	*	*	*	*	*	*		*	*	*	*	21	
						*	*	*		*	*	*	*	22	
	*	*	*	*	*	*	*	*		*	*	*	*	23	
														24	
							*	*						25	
								*						26	
								*						27	
	*	*	*	*	*	*	*	*		*	*	*	*	28	
	*	*	*	*	*	*	*	*		*	*	*	*	29	
	*	*	*	*	*	*	*	*		*	*	*	*	30	
								*					*	31	
								*					*	32	
								*				*	*	33	
*	*	*	*	*	*	*	*	*		*	*	*	*	34	
								*				*	*	35	

[illegible]

## KEY TO METHOD

[illegible]

1 Date of publication.

NOTE.—Instructions for using this key, showing material included in each study, and method allowed, are given on pages 544-545.





[illegible]

## KEY TO METHOD

1	*
2	-
3	-
4	*
5	-
6	-
7	*
8	-
9	-
10	*
11	-
12	-
13	*
14	-
15	-

1 Date of publication.

**NOTE.**—Instructions for using this key, showing material included in each study, and method followed, are given on pages 544-545.



## KEY TO METHOD

[illegible]

NOTE.—Instructions for using this key, showing material included in each study, and method followed, are given on pages 544-545.





[illegible]

## KEY TO METHOD

1	*
2	-
3	-
4	-
5	*
6	-
7	*
8	-
9	-
10	*
11	-
12	-
13	-
14	-
15	-

<sup>1</sup> Date of publication.

**NOTE.**—Instructions for using this key, showing material included in each study, and method followed, are given on pages 544-545.





[illegible]

## KEY TO METHOD

[illegible]

NOTE.—Instructions for using this key, showing material included in each study, and method followed, are given on pages 544-545.



[illegible]

## KEY TO METHOD

[illegible]

NOTE.—Instructions for using this key, showing material included in each study, and method followed, are given on pages 544-545.





[illegible]

## KEY TO METHOD

[illegible]

NOTE.—Instructions for using this key, showing material included in each study, and method followed, are given on pages 544-545.







## KEY TO MATERIAL

Code no.	Greece		Hungary		Italy								Code no.	
	1038	1043	1045	1047	1051	1053	1054	1055	1059	1061	1062	1063	1065	1066
1	1913-14 1923-24 1926-27	1923	1929	200- 100 B. C.	1875	1881	1885	1885	1890	1892-93	1893-95	1894	1901	1901
2	72	53	50	*	3	2	29	20	3	1	26	100	2	*
3	*		*	*	*	*	*	*	*	*	*	*	*	*
4														
5														
6														
7														
8	*		*		*	*	*	*	*	*	*	*	*	*
9					*	*	*	*	*	*	*	*	*	*
10	*		*		*	*	*	*	*	*	*	*	*	*
11				*										*
12														*
13	*		*			*	*	*	*	*	*	*	*	*
14	*	*	*		*	*	*	*	*	*	*	*	*	*
15					*		*	*	*	*	*	*	*	*
16												*	*	*
17			*	*								*	*	*
18			*	*								*	*	*
19	*		*	*	*	*	*	*	*	*	*	*	*	*
20				*	*							*	*	*
21				*	*	*	*	*	*	*	*	*	*	*
22	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23	*		*	*	*	*	*	*	*	*	*	*	*	*
24														
25														
26			*	*										*
27				*								*	*	*
28			*	*								*	*	*
29			*	*								*	*	*
30													*	*
31			*	*								*	*	*
32			*	*								*	*	*
33			*	*								*	*	*
34		*	*	*			*	*	*	*	*	*	*	*
35		*	*	*			*	*	*	*	*	*	*	*

[illegible]

## KEY TO METHOD

1	*
2	*
3	*
4	*
5	*
6	*
7	*
8	*
9	*
10	*
11	*
12	*
13	*
14	*
15	*

NOTE.—Instructions for using this key, showing material included in each study, and method followed, are given on pages 544–545.





[illegible]

NOTE.—Instructions for using this key, showing material included in each study, and method followed, are given on pages 544-545.





[illegible]

## KEY TO METHOD

[illegible]

NOTE.—Instructions for using this key, showing material included in each study, and method followed, are given on pages 544-545.

## KEY TO MATERIAL

Code no.	Poland—Continued					Portugal	Rumania	Russia			Sweden				Code no.
	1111	1112	1113	1115	1118	1119	1120	1133	1178	1216	1233	1234	1236	1237	
1	1922	1927	1927-28	1927-29	1932	1916	1895	1879	1908	1922-27	1907-08	1913-14	1916	1917	1
2	12	192	69	389	71	538	*	3	570	*	150	1,355	601	615	2
3	---	*	*	*	*	---	*	*	---	*	*	*	*	*	3
4	---	*	*	*	*	---	*	*	---	*	*	*	*	*	4
5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	5
6	---	*	*	*	*	---	---	---	---	---	---	*	*	---	6
7	---	---	*	*	*	---	*	*	*	---	---	*	*	---	7
8	---	*	*	*	*	---	*	*	*	---	*	*	*	*	8
9	---	---	---	---	---	---	*	*	---	---	---	*	*	---	9
10	---	*	---	---	*	---	*	*	*	---	*	*	*	*	10
11	---	*	*	*	*	---	*	---	---	---	---	*	*	---	11
12	---	*	*	*	*	---	*	*	---	*	---	*	*	*	12
13	---	*	*	*	*	---	*	*	---	*	---	*	*	*	13
14	---	*	---	*	*	---	*	*	---	*	---	*	*	*	14
15	---	*	---	*	*	---	---	*	*	---	*	*	*	---	15
16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	16
17	---	---	*	*	*	---	---	*	---	---	---	*	*	---	17
18	---	*	---	*	*	---	*	*	---	*	---	*	*	---	18
19	---	---	---	*	*	---	---	*	*	*	*	---	*	---	19
20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	20
21	---	---	---	---	---	---	*	*	*	---	---	*	*	---	21
22	---	---	---	*	*	---	*	*	---	*	*	*	*	---	22
23	---	---	---	---	---	---	---	*	---	*	*	*	*	---	23
24	---	---	---	---	---	---	---	---	---	---	---	---	---	---	24
25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	25
26	---	*	---	---	---	---	---	---	---	---	---	*	*	---	26
27	---	---	---	---	---	---	---	---	---	*	---	---	---	---	27
28	---	*	*	---	---	---	---	---	*	*	*	*	*	---	28
29	---	---	---	---	*	---	---	---	---	---	---	*	*	---	29
30	---	---	---	---	---	---	---	---	---	---	---	*	*	---	30
31	---	---	*	---	---	---	---	---	---	*	*	*	*	---	31
32	---	---	---	---	---	---	---	---	---	---	---	---	---	---	32
33	---	---	---	---	---	---	---	---	---	*	*	*	*	---	33
34	---	---	---	---	---	---	---	---	---	---	*	*	*	---	34
35	---	---	---	---	---	---	---	---	---	*	*	*	*	---	35













[illegible]

## KEY TO METHOD

1	*
2	-
3	-
4	*
5	-
6	*
7	*
8	-
9	-
10	-
11	-
12	*
13	-
14	-
15	-

NOTE.—Instructions for using this key, showing material included in each study, and method followed, are given on pages 544-545.



[illegible]

## KEY TO METHOD

1	*
2	-
3	-
4	-
5	*
6	-
7	-
8	*
9	-
10	-
11	-
12	-
13	*
14	-
15	-

NOTE.—Instructions for using this key, showing material included in each study, and method followed, are given on pages 544-545.





[illegible]

## KEY TO METHOD

[illegible]

1 Date of publication.

NOTE.—Instructions for using this key, showing material included in each study, and method followed, are given on pages 544-545.

## KEY TO MATERIAL

## China—Continued

Code no.	1380	1381	1382	1383	1384	1385	1386	1387	1388	1389	1390	1391	Code no.
1	1929	1 1929	1929	1929-30	1929-31	1930	1 1930	1930	1 1930	1 1931	1 1931	1 1931	1
2	199	354	21	65	50	1,638	285	202			1,527		2
3	*		*	*	*	*	*	*		*	*		3
4	*												4
5													5
6													6
7					*	*	*						7
8	*			*	*	*	*		*			*	8
9						*		*					9
10	*		*		*	*	*	*	*	*	*	*	10
11					*								11
12				*	*				*				12
13													13
14				*	*	*		*			*	*	14
15	*		*	*	*	*	*	*	*	*	*	*	15
16													16
17													17
18													18
19	*		*	*	*	*	*	*	*	*	*	*	19
20					*								20
21			*	*	*	*	*		*	*	*	*	21
22			*	*	*	*	*		*	*	*	*	22
23	*												23
24													24
25													25
26													26
27													27
28	*		*		*	*	*	*	*	*	*	*	28
29					*								29
30					*								30
31	*		*		*				*	*			31
32					*								32
33					*								33
34	*		*		*			*		*		*	34
35					*			*		*		*	35



[illegible]

## KEY TO METHOD

[illegible]

1 Date of publication.

**NOTE.**—Instructions for using this key, showing material included in each study, and method followed, are given on pages 544-545.

## KEY TO MATERIAL

Code no.	Chosen	Dutch East Indies				India								Code no.	
		1394	1395	1396	1397	1400	1403	1404	1405	1406	1407	1408	1409		1410
1	1923	1925	1925	1925-26	1923	1378-79	1906-10	1915	1916	1916	1916-17	1916-19	1915-24	1917	1
2	-----	11,500	314	348	603	261	4	1915	1916	103	-----	121	-----	147	2
3	*	*	*	*	-----	*	*	-----	*	*	*	*	*	*	3
4	*	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	4
5	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	5
6	-----	-----	-----	-----	-----	*	-----	-----	-----	-----	-----	-----	-----	-----	6
7	-----	-----	-----	*	-----	*	-----	-----	-----	-----	*	-----	-----	-----	7
8	*	-----	*	*	*	-----	*	-----	*	*	*	*	-----	*	8
9	-----	-----	-----	-----	-----	-----	*	-----	-----	-----	*	-----	-----	-----	9
10	*	-----	*	*	-----	-----	*	-----	*	*	*	*	-----	*	10
11	-----	-----	-----	-----	-----	-----	-----	-----	*	*	*	-----	-----	-----	11
12	-----	-----	-----	-----	-----	*	*	-----	*	*	*	*	-----	*	12
13	-----	-----	-----	-----	-----	*	*	-----	*	*	*	*	-----	*	13
14	-----	-----	-----	-----	-----	-----	*	-----	*	-----	*	*	-----	-----	14
15	*	-----	*	*	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	15
16	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	16
17	-----	-----	-----	-----	-----	-----	-----	-----	*	-----	-----	-----	-----	-----	17
18	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	*	-----	-----	-----	18
19	*	-----	*	-----	-----	-----	*	-----	-----	-----	-----	*	*	-----	19
20	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	20
21	-----	-----	-----	-----	-----	*	-----	-----	*	*	*	*	*	*	21
22	*	-----	-----	-----	-----	-----	*	-----	*	-----	*	*	-----	-----	22
23	-----	-----	-----	*	-----	-----	*	-----	-----	-----	-----	*	-----	-----	23
24	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	24
25	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	25
26	-----	-----	-----	-----	-----	-----	-----	-----	*	-----	-----	-----	-----	-----	26
27	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	27
28	-----	-----	-----	-----	-----	-----	-----	-----	*	-----	-----	*	-----	-----	28
29	-----	-----	-----	-----	-----	-----	*	-----	*	-----	*	*	-----	-----	29
30	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	30
31	*	-----	-----	-----	-----	-----	*	*	*	-----	*	*	-----	*	31
32	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	*	32
33	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	*	33
34	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	*	34
35	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	*	35

00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

## KEY TO METHOD

1	*
2	*
3	*
4	*
5	*
6	*
7	*
8	*
9	*
10	*
11	*
12	*
13	*
14	*
15	*

NOTE.—Instructions for using this key, showing material included in each study, and method followed, are given on pages 544-545.



## KEY TO MATERIAL

## India—Continued

Code no.	1411	1412	1413	1415	1416	1418	1419	1420	1421	1422	1424	1425	1426	1427	Code no.
1	1918	1921-22	1921-23	1924	1925	1925	1925	1926	1926	1926	1926	1926-27	1927	1927	1
2	57	2,373	*	4,748	1,055	510	4	872	562	562	5	4,309	145	*	2
3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	3
4	*	*	*	*	*	*	*	*	*	*	*	*	*	*	4
5	*	*	*	*	*	*	*	*	*	*	*	*	*	*	5
6															6
7	*						*		*	*		*		*	7
8	*	*					*		*	*		*		*	8
9		*					*			*		*		*	9
10	*	*					*			*		*		*	10
11					*										11
12		*			*			*						*	12
13		*	*		*	*		*		*	*	*		*	13
14		*			*		*	*	*	*	*	*	*	*	14
15		*			*		*	*		*		*	*	*	15
16					*							*		*	16
17		*										*		*	17
18		*					*	*		*	*	*	*	*	18
19		*					*	*		*	*	*	*	*	19
20							*	*							20
21		*	*	*	*	*		*				*	*	*	21
22		*	*		*		*	*				*	*	*	22
23	*	*			*		*	*				*	*	*	23
24															24
25															25
26												*			26
27												*		*	27
28			*		*	*	*	*			*	*	*	*	28
29					*	*	*	*			*	*	*	*	29
30							*			*		*		*	30
31	*	*	*				*			*		*		*	31
32								*	*	*		*		*	32
33			*					*	*	*		*		*	33
34			*					*	*	*		*		*	34
35	*							*	*	*		*		*	35

[illegible]

## KEY TO METHOD

1	*
2	*
3	*
4	*
5	*
6	*
7	*
8	*
9	*
10	*
11	*
12	*
13	*
14	*
15	*

<sup>1</sup> Date of publication.

NOTE.—Instructions for using this key, showing material included in each study, and method followed, are given on pages 544-545.





[illegible]

## KEY TO METHOD

[illegible]

NOTE.—Instructions for using this key, showing material included in each study, and method followed, are given on pages 544-545.



[illegible]

## KEY TO METHOD

[illegible]

1 Date of publication.

NOTE.—Instructions for using this key, showing material included in each study, and method followed, are given on pages 544-545.





## KEY TO METHOD

NOTE.—Instructions for using this key, showing material included in each study, and method followed, are given on pages 544-545.





# AUTHOR INDEX

	<i>Citation no.</i>		<i>Citation no.</i>
Anonymous.....	266,	Belgium, Ministère de l'Agriculture, de l'Industrie, et des Travaux Publics.....	521,
715, 760, 818, 949, 951, 952, 953, 954, 955, 958,		536, 544, 545, 546	
989, 1010, 1415.			
Author not ascertained.....	103 5,	Belgium, Ministère de l'Intérieur.....	505
1046, 1123, 1177, 1197, 1222, 1223, 1224, 1244, 1266		BELL, H. M.....	59
ABBOTT, W. L.....	51	BELL, H. W.....	51
ABELSDORFF, W.....	794	BENNETT, T. L.....	1341
ABU-IZZIDDIN, F.....	1332	BENNISON, J. J.....	1425
ACHINSTEIN, A.....	405	BÉRENGER, H.....	705
ACKERMANN, E.....	800,	Berlin Statistisches Amt.....	747, 820
1310, 1315, 1325		BERNOLET, J.....	542
AGBANLOG, A.....	1448	BÉROT-BERGER.....	686
ALAUDINE.....	1167	BERTHEAULT, M.....	649
ALBERTI, M.....	1076	BERTILON, J.....	689
ALBERTONI, P.....	1061, 1071	BERTRAND, L.....	504
ALBRECHT, G.....	867, 872, 916	BEST, R. D.....	1037
ALBRECHT, J.....	899	BEVIER, I.....	6, 258
ALDRICH, N. W.....	238	BEYER, W. C.....	341
ALLAN, F.....	1085	BEZARD, Y.....	582
Alsace, Société Industrielle.....	750	BIDOIRE, P.....	984
Alta Guberniya Statistical Bureau.....	1217	BIGOT, M.....	597
AMES, H. B.....	466	BIOLLAT, L.....	583, 613
Amsterdam, Bureau van Statistiek.....	1091, 1092, 1094	BISPHAM, A.....	51
ANDERSON, W. A.....	71, 78, 79	BITSCH, M.....	693
ANISIMOV, J. A.....	1279	BITTING, S. T.....	16
ANNENSKI, N. F.....	1170	BLACK, J. D.....	66, 72, 75
ANTHONY, K. S.....	328	BLANCHARD, F.....	1049, 1050
ANTONELLI, E.....	609, 692, 707	BLANQUI, J. A.....	617
ANUFRIÉVA, T.....	1226	BLANSHARD, P.....	392
Argentina Departamento Nacional del Trabajo.....	478, 479, 480, 481, 482, 483	BLIND, A.....	885
35, 58		BLOCHER, H.....	821
ARMENTROUT, C. B.....	598	BÖCKER, R.....	758
ARTIGUES, BARON D'.....	942	BODDY, L.....	1051, 1053
ASHBY, A. W.....	1062	BOGDANOFF.....	1141
ASSIRELLE, J. P.....	27	BÖHMERT, C. V.....	802, 1305
ATWATER, H. W.....	256, 257	Bombay Labour Office.....	1416, 1420
ATWATER, W. O.....	115	BONNEF, L.....	690
AUSMAN, L. V.....		BONNEF, M.....	690
Australia—		BOOTH, C.....	975
Commonwealth Bureau of Census and Statistics.....	1453, 1457	BÓREA, D.....	475
Court of Arbitration of Western Australia.....	1462	BOSANQUET, (Mrs.) B.....	986
Ministry for Home Affairs.....	1452	BOSANQUET, H.....	990
Royal Commission on the Basic Wage.....	1461	BOSWORTH, M. R.....	110
Austria, Arbeitsstatistisches Amt.....	500	BOWLEY, A. L.....	1002, 1021
AUVRAY, L.....	627	BOWMAN, A. E.....	119
AVALLE, E.....	592, 622, 628, 931, 932	BRADLEY, R.....	947
AVENEL, G. D'.....	581, 610, 611, 701	BRÄF, A.....	493
AXELRAD, S.....	417	BRAND, G.....	902
BABER-BUKHANOVSKI, L. M.....	1184	BRANTS, V.....	513, 675, 827
Baden, Fabrikinspektion.....	819	BRAUN, A.....	811, 812
Baden, Ministerium des Innern.....	716	BRINTON, G.....	87
BADIER, A. F.....	636	BROOKING, H. A.....	133
BAILEY, I. M.....	17, 27	Brookings Institution.....	463
BAKKE, E. W.....	1025	Brooklyn, N. Y., Chamber of Commerce Housing Comm.....	365
BALLIN, P.....	763	BROOKS, C. P.....	82
BANDONG, C.....	1449	BROWN, G.....	144
BARIVE, M. DE.....	586	BROWN, S. A.....	46, 58
Barmen, Statistisches Amt.....	847	BRUÈRE, M. B.....	11, 301, 424
Basel-Stadt Statistisches Amt des Kantons.....	1324	BRUÈRE, R. W.....	11, 301, 424
Bashkirs Republic, Central Statistical Bureau.....	1245	BRUGSCH, H.....	1339
BATCHELOR, C.....	386	BRUNNER, E. de S.....	1393
BAUDRILART, A.....	580	Brussels, Institute de Sociologie Solvay.....	549
BAUDRILART, H. J. L.....	580	Brussels Travaux Publics Minimum de Salaire.....	530
BAUER, W.....	884	BRUTZER, G.....	868
Bavaria, Königliche Bayrischen Fabrik und Gewerbe Inspektoren.....	801,	BRYANT, A. P.....	256
804, 806, 808, 815, 830, 838, 858		BUCHANAN, W. J.....	474
BEALL, T.....	153, 159	BÜCHER, K.....	841
BEAURIN-GRESSIER.....	667	BUCK, J. L.....	1353, 1364
BECK, H.....	778	Budapest Statistical Office.....	1044
		Buffalo Foundation.....	457

	<i>Citation no.</i>		<i>Citation no.</i>
BUNGE, A. E.	476, 477	DANILOFF, M.	1124
BUNZEL, J.	499	DARASSE, V.	1335
BURGESS, E. W.	352, 455	DARLING, M. L.	1417
BURGESS, J. S.	1358	DASS, A.	1418
BURNETT-HURST, A.	1002, 1408	DAUBY, J.	508, 509, 510
BURT, J.	1028	DAUX, A.	1333
BURTON, A. M.	1443	DAVID, R. G.	596
BUSCH, A.	780	DAVIDOVICH	1180, 1185
BUTLER, O. M.	1445	DAVIE, M. R.	438
BYINGTON, M. F.	303	DAVIES, D.	928
CACHEUX, E.	651	DAVIS, M. M.	343, 353, 374
CALLAY	594	DAVIS, R. P.	341
CALVERT, H.	1418	DAVIS, W. S.	1047
CAMPBELL, H. S.	213	DEHN, P.	733, 738, 744, 764
CAMPBELL, M. V.	96	DELAIRE, A.	600
CAMPBELL, P.	1463	DELAIRE, E.	1398, 1399
Canada, Board of Inquiry into Cost of Living in Canada	468	DELBET, E.	590, 625, 1291, 1331
CANON, H.	94	DELBET, M. E.	588
CARPENTER, N.	378	DEMPSTER, A.	127, 137
CARROLL, M. R.	891	DENIS, H.	511, 516, 519
CATHCART, E. P.	1024	Denmark, Statistiske Departement	570, 571, 572, 573, 574
CAVE, R. A.	134	DENUNE, P. P.	68
Central Asian National University	1240	DERBENEV, A. G.	1238
Central Statistical Office of B. S. S. R.	1237	DESHPANDE, S. R.	1426
CHALE, T.	629	DESSIA TOV	1171
CHAPIN, R. C.	297	Deutscher Baugewerksbund	893
CHASSIGNET	665	Deutscher Metallarbeiterverband	856, 880
CHATELANAT, A.	1306	DEVAY, J.	931
CHELCHOWSKI	1144	DICKEY, J. A.	50
CHELINTSEV, A. N.	1189, 1194, 1200, 1201, 1204	DICKINS, D.	80, 88, 105
CHEN, T.	1356, 1368, 1370, 1436	DIETZ, A.	727
Cherepovets Guberniya Statistical Bureau	1206	DIGBY, W.	1402
CHESSA, F.	1065	DITTMER, C. G.	1357, 1359
CHEVERRY, V. DE	593	DITTMER, W. E.	106
CHEYSSON, E.	1469	DODD, F. L.	956
Chicago Comm. on Race Relations	361	DONNAT, L.	1352
CHICOS, S.	1121	DOWLING, H.	106
Chief Dept. of Land Cultivation and Organization	1174	Dresden Statistisches Amt	826
CHILDS, B. G.	362	DUBINSKA, I.	1198, 1203
CHIN, T.	1377	Du Bois, W. E. B.	8, 265, 267, 270, 312
China, Government Bureau of Economic Information	1369	DUCHATILLIER, A.	587
China, Ministry of Industry, Commerce and Labor	1385	DÜCKERSCHOFF, E.	969
Christiania Municipal Bureau of Statistics	1104	DUCPÉTAUX, E.	507
CHTCHERBAKOV	1150	DUNCAN, O. D.	69
CLAEYS, R.	1088	Dundee Social Union	992
CLARK, E. L.	37, 48	DUNNING, R.	945
CLARK, V. S.	1441	DURAND, P.	700
CLARKE, H. I.	458	Dutch East Indies, Department van Landbou, Nijverheid en Handel	1396
CLAYTON, C. F.	104	DUTHY, D.	960
CLOUET, H.	697	DUTTWEILER, M.	1307
COCHIN, A.	619, 632, 732	DUVELLEROY, M.	641
COCKERILL, P. W.	131	DYHRENFURTH, G.	911
COLGUHOUN, P.	959	EATON, I.	250
COLLINS, J. W.	1465	Economic Club	983
COLLINS, S. D.	401, 402, 403	EDEN, SIR F. M.	957
Colorado Bureau of Labor Statistics	214, 227, 269, 286	EDWARDS, P. K.	394, 442
Commission for the Investigations of Home Industry in Russia	1132	ELLS, W. C.	450
CONCEPCION, I.	1444	Egypt, Ministry of Finance	1342
Connecticut Bureau of Labor Statistics	216, 264	EHRENBERG, R.	728, 907
CONRAD, E.	861	Einheitsverband der Eisenbahner Deutschlands	894
CORONEL, S.	1085, 1086	Ekaterinoslav Guberniya, Statistical Bureau	1253
COS, M.	1337	EMERSON, G.	1429
COTTE, N.	1345, 1346	EMMINGHAUS, A.	904
COTTON, W. J. H.	332	ENGEL, E.	527, 737, 765, 768
COURTEILLE	635	EPSTEIN, A.	344
COVER, J. H.	393	ESCARD, F.	607, 647, 933, 1100
COWLES, M. L.	112, 113	ESCARD, P.	1344, 1353
Crimea Statistical Bureau	1208	Estonia, Riigi Statistika Keskbüroo	576
CRIPPS, A.	120	EULENBURG, F.	873
Czechoslovakia—		FALE, I. S.	441
Academy of Agriculture	556	FANJUNG, N.	669, 671
Statistisches Staatsamt	550, 552, 553, 554, 555, 557, 558, 560, 561, 562, 563, 564, 565	Far Eastern Kraistatistical Bureau	1280
Zprávy Státního úřadu Statistického	551, 559	FAVRE	1159
Daghestan Statistical Bureau	1241	FEDOROV	1147
DALLA VOLTA, R.	1475	FEIG, J.	788
Dallas, Tex., Civic Federation	456	Ferganska Dolina, Division of Waterways	1254
Dallas, Tex., Wage Commission	342	FERGUSON, M.	1007, 1009, 1011
DÁLNOKI-KOVÁTS, E.	1042	FERRARI, E.	473
		FERRERSTEIN, H.	835
		FÈVRE, L.	773
		FILEMONOV, C.	1143
		FILOPOV, A. F.	1246

	<i>Citation no.</i>		<i>Citation no.</i>
FINCH, J.	962	GÜNTHER, A.	866, 870, 896, 915
FINDLAY, L.	941, 1013	GUPTA, R. B.	1409
Finland, Industristyrelsen	577		
Finland, Statistiska Centralbyran	579	HAGEMANN, H.	721
FISCHER, R.	852	Hague Statistisch Bureau, The	1097
FISH, M.	107	HAKIM, G.	1332
FLESCH, K.	782	HALBWACHS, M.	608, 683, 685, 871
FLOR, A.	730, 731	Halle, Statistisches Amt Der Stadt	863
FOCILLON, A.	622, 623, 624, 633	HALLEN, A. W. C.	1033
FOLSON, J. C.	73	Hamburg Statistisches Landesamt	881, 882, 883
FONG, H. D.	1380, 1381	HAMMOND, B.	929, 961
FORCHHEIMER, K.	842	HAMMOND, J. L.	929, 961
FORMAN, S. E.	293	HAMPKE, C.	767, 909
FORTS, J. DES.	672	Hangchow, Bureau of Social Affairs	1387
FRAME, B. H.	67	HARATRI, S. EL.	1346
France—		HARBEN, H. D.	936
Commission Centrale d'Études Relatives		HARTWIG, G.	822
au Coût de la Vie	694	HARTWIG, J.	784
Conseil Supérieur du Travail	676	HASSE, E.	751
Ministère du Commerce, de l'Industrie, et		HAUSSONVILLE, G. P. V. DE C.	708
des Colonies	662	HAWLEY, E.	38, 49
Ministère du Travail	614, 679	HAWTHORNE, H. W.	18, 81, 103
Union Sociale d'Ingénieurs Catholiques	696	HAYBALL, E.	135
FREEMAN, R. C.	121, 143, 155, 164, 396, 411, 415, 418	HEATH, F. G.	935
PRENTZEL, J.	803	HEBERT, E. F.	625
FREVERT, E. F.	134	HECHT, A. R.	144
PRIEF.	491, 754	HEIBURG, P.	575
FRISSELL, H. B.	6	HEIDEN, J.	844
FU-AN, F.	1386	HEINRICH, C.	528
FUCHS.	807	HEISER-HARTTUNG, F.	720, 814
FUCHS, R.	828	Heller Com. for Research in Soc. Econ.	
FÜRTH, H.	795, 848, 849	Univ. of Calif.	375, 397
		HENDERSON, Y.	438
GABBARD, L. P.	34	HENKES, B.	117
Gainsborough Commission of British Work-		HENNIG, H.	862
men	843	HERBIG, E.	864
GALINE.	1139	HERBST, R.	865
GALLOWAY, Z. L.	103	HERRERA, L. A. DE.	487
GAMBLE, S. D.	1354, 1355, 1361, 1373, 1392	HERZFELD, E. G.	289
GAULDRÉE-BOULLEAU, M.	464	HIGGS, H.	985
GAUTIER, F.	637	HILL, A. B.	1019
GAUTIER, J.	635	HILL, R. C.	96
GEE, W.	95, 382, 437	HILLS, J. L.	10, 276
GENART, C.	522, 532	HINMAN, E. H.	55
GEOFFROY, A.	1336, 1338	HINTZ, U.	718
GEORGEN, D.	506, 739	HIRSCHBERG, E.	734, 823
GERLOFF, W.	857, 869, 913, 914	HIRSCHFELD, F.	834
Germany, Reichsarbeitsministerium	1089	HJELT, V. A.	578
Germany—Statistisches Reichsamt	850,	HOELLER, M. E.	736
876, 877, 878, 879, 886, 887, 888, 889,		HOFMANN, E.	1304
897, 910, 918, 919, 920, 921, 922, 923		HOFMANN, F.	762
GHURYE, G. S.	1426	HOGG, M. H.	1021
GIBBONS, C. E.	35, 59	HOLLOWAY, C. M.	379, 383
GIBBS, W. S.	454	HOMMELL, C.	602
GIBON, F.	654, 657	HOOD, K.	156
GILBERT, I. F.	1225	HOPPER, W. C.	406, 446
GILBERT, R.	663	HORNE, E. A.	1405
GILLET, L. H.	389	HOTT, N. M.	145, 146, 147, 148
GILLETTE, J. M.	19	HOUDOT, J.	673
GILLUM, I.	114	HOUGHTLING, L.	373
GINI, C.	1075	HOURLWICH, I. A.	1133
GOGUEL, L.	639	HOVERSTAD, T. A.	70
GOLTZ, T. VON DER.	711, 712	HOWE, C. B.	391
GOODMAN, A. K.	443	HOWELL, L. D.	64, 74
GOODYEAR, C.	285	HOYT, E. E.	86, 447
GORBUNOV.	1181	HUBERT, J. H.	387
Goss, A.	4, 5	HUDGINS, M.	31, 32
GOTTSCHALK, M.	547, 548	HUGHES, E. A.	376
GRAY, L. C.	24	HUGHES, G. S.	355
Great Britain—		HYDE, A. R.	449
Agricultural Wages Board.	939		
Board of Agriculture and Fisheries.	940	IAKIAMANSKI, V. A.	1218
Board of Trade.	314, 539, 682, 836, 976, 991, 1479	IGHNATIEV.	1151
Board of Trade, Land Enquiry Committee.	937	Illinois Bureau of Labor Statistics.	180, 190, 195
Charity Organisation Society.	1003	ILLYEFALVI, L. I.	1045
Colonial Office.	1484	India, The Famine Commission.	1400
Labour Committee on the Cost of Living.	1014	Indiana Department of Statistics.	239
Medical Research Council, Committee		Interchurch World Movement, Commission	
upon Quantitative Problems in Human		of Inquiry.	359
Nutrition.	1018	International Labour Office.	1389, 1483, 1486
Working Classes Cost-of-Living Commit-		Iowa Bureau of Labor Statistics.	229,
tee.	1005	251, 290, 292, 298, 315, 326	
GREENBLATT, N.	1226	Ireland, Ministry of Economic Affairs.	1016
GROSS, I. H.	110, 1043	Italy, Direzione Generale della Statistica.	1054
Grossherzoglichen Statistischen Bureau zu		IVANOV.	1157
Schwerin.	741	Ivanov-Voznesensk Guberniya Statistical	
GROTHAHN, A.	813	Bureau.	1227, 1271
GRUBER, I.	495, 1473	IVANTSOV, M. I.	1246
GRUBER, M.	789	IYENGAR, S. K.	1421, 1422, 1428
GÜERIN, U.	515, 599, 601, 644, 650, 659, 668, 977, 1057		



	Citation no.		Citation no.
JACK, J. C.	1403	LE PLAY, F.	488,
JACOBI, L.	746, 752		489, 585, 589, 619, 624, 626, 729, 735, 736, 963,
JANNET, C.	2		967, 968, 1039, 1040, 1099, 1124, 1125, 1127,
Jaya Kantoor van Arbeid.	1394, 1397		1123, 1129, 1292, 1303, 1333.
JEHAY, M. LE COMTE F. VAN DEN S. DE	512	LEVASSEUR, E.	176
JENSEN, A.	566	LEVI, L.	971
JOHNSON, J. C.	140	LIN, SUNG-HO.	1374
JOHNSON, L. H.	111	LINDSAY, D. E.	1001
JOHNSON, O. R.	14, 67, 96	LINDSEY, E.	142
JONES, D. C.	1022	LITOSHENKO, L. N.	1202, 1210, 1282
JOTEYKO, J.	538	LITTLE, E. L.	332
JULIN, A.	523, 524, 526	LIVELY, C. E.	65, 84, 85, 89
JURAVSKI, D. P.	1126	Liverpool Joint Research Committee.	997
		LOJODICE, D. A.	1068
K, KARL VON.	912	LOMBROSA, G.	1063
KAISER, A.	115	LORENZ, E.	796
KAJHANOV, N.	1190	LORENZ, J.	1320
KALISKY, K.	837	LORENZONI, G.	1070
Kaluga Statistical Bureau.	1163	LORTIE, S. A.	467
KAMIN, V.	1223	LOUIS, C. E.	678
KANITKAR, N. V.	1410	LÖWENFELD-RUSS, H.	501
Kansas Bureau of Labor and Industrial Statistics.	202, 207, 208, 219, 222, 244, 268	LUCAS, E. D.	1411
Kansas Bureau of Labor and Industry.	240,	LÜTGE, F.	895
	263, 271, 275, 279, 287, 294, 299	LYMAN, M. H.	388
KANTOROWICA, M.	890, 924	LYND, H. M.	372
KARL.	906	LYND, R. S.	372
KATAEV, I.	1143		
KATZ, J.	851	McCORMICK, T. C.	60
Kazan Guberniya Statistical Bureau.	1165	McGAUGHY, J. R.	433
KAZANSKI, F.	1281	MACKENZIE.	970
KELETTI, C.	1041	McKINLEY, B.	90
KELLER, K. V.	793	McKITTRICK, E. J.	91
KELLOGG, V.	543	McNALL, P. E.	33, 112, 113
KELSEY, C.	9	MADDEN, Sir F.	1026, 1031
KENDALL, M.	933	MAGNITSKY, N. K.	1283
KENNEDY, J. C.	322	MAILLARD, L. DE.	677, 681
KENNGOTT, G. F.	316	Maine Bureau of Industrial and Labor Statistics.	215, 235, 272
KERAVIC, YAN'	605, 666	Maine Bureau of Labor Statistics.	220
KESTNER, F.	829	Maine University, College of Agriculture, Extension Service.	123, 149, 157, 165, 399, 412, 416
Kharkov Guberniya Statistical Bureau.	1209	MAKAROV, N. P.	1243
Kharkov Rural Statistical Bureau.	1195	MAKEDONOV, A.	1173, 1175
KINDERMANN, C.	790	MALCHINE.	1145
KIPIANI.	538	MANN, A. E.	138
KIRKPATRICK, E. L.	21, 22, 23, 26, 27, 33, 37, 39, 40,	MANN, H.	1406, 1410
	42, 43, 50, 57, 70, 81, 112, 113, 120, 136, 398	MANN, P. H.	934
KISLIAKOV.	1182	MANTOVANI, F.	1062
KITREDGE, D. D.	282	MARCONINI, F.	1078
KLEM, M. C.	441	MARÉ.	1152
KOKULINA, A. A.	1219	MAROUSSEM, P. DU.	603, 604,
KOLLMAN, P.	903		606, 653, 660, 661, 664, 670, 704
KOSTROV, N.	1199	MARSHALL, R.	459
KOVALKOVSKI.	1140	MARTIAL, R.	684
KRESTOVNIKOV, A. N.	1179	MARTIN, A.	1000
KRIEGL, F.	798	MARTIN, A. E.	327
KRÖMELBEIN, F.	1318	Mariiska Autonomous Oblast Statistical Bureau.	1220
KRUG, H. A.	137	Maryland—	
KUENA, H.	791	Bureau of Industrial Statistics.	277
KURELLA, H.	831	Bureau of Industrial Statistics and Informa-	
KUZMINKH-LANIN, I. M.	1191, 1192	tion.	197
KUZNETSOV, V.	1169	Bureau of Statistics and Information.	283,
KYRK, H.	44, 347		291, 296
		MASE-DARI, E.	1066
LAMSON, H. D.	1360, 1382, 1384	Massachusetts—	
LANDMANN, J.	821	Bureau of Statistics.	317, 994
LANDOLT, C.	1312, 1313, 1314, 1317, 1476, 1477	Bureau Statistics of Labor.	1, 166, 167, 168,
LANDSBERG, E.	619, 620, 621		169, 170, 172, 173, 184, 193, 203, 280, 422, 973
LANE, F. P.	97	Commission on Cost of Living.	318
LAQUEUR, B.	845	MASSIE, J.	950
LASPEYRES, E.	733, 755	MASTERMAN, J. H. B.	1012
LA TOUCHE, C. D.	996	MATSUDA, T.	1438
Latvia Statistical Office.	1084	MAUERER.	809
LAVALLÉ Y GARCIA, H.	484	MAUTNER, B. H.	51
LAVOLLÉE, R.	492	MAY, M.	719, 787
LAYMAN, G.	1023	MAY, R. E.	759
LEAP, W. L.	122	MAYCOCK, R. B.	124
LEBÉDEV.	1148	Nechlenburg-Schwerin, Grossherzogliches	
LEBRUN.	686	Statistisches Amt.	839
LEBRUN, P.	680	MEEKER, R.	282
LE CORBEILLER, E.	702	MEERWARTH, R.	896
LEE, F. C. A.	1377	MEHNER, H.	775
LEEDS, J. B.	429	MEINERT, C. A.	774
LEGRAIN, G.	1340	MEINTS, V. C.	447
LEIFFER, M. H.	451	MENG, TIEN-FEI.	1354
Leipzig Armenamt.	859		
LENGERKE, A. VON.	710		

	Citation no.		Citation no.
MENZI, A.	1316, 1322	New York City Bureau of Standards.	335
Mexico—		New York City Joint Committee on Negro	
Departamento de la Estadística Nacional.	471	Child Study.	377
Oficina de Estudios Economicos, Ferrocarriles Nacionales.	472	New York State Bureau Statistics of Labor.	241
Secretaría de Industria, Comercio y Trabajo.	470	New York State Commission of Housing and	
MEYER-POLLACK, E.	908	Regional Planning.	368
Michigan Bureau of Labor and Industrial		New Zealand Census and Statistics Office.	1466,
Statistics.	3, 217, 223, 233, 242, 249, 254, 259		1467
MILAM, A. B.	1366, 1367	NICHOLLS, W. D.	61
Milano, Ufficio del Lavoro e della Statistica.	1081,	NICOLAI, E.	525
	1083	NINENBURG, B. M.	366, 369
Milano, Ufficio del Lavoro della Società		Nijhegorod Guberniya.	1229, 1230, 1231, 1232, 1248
Umanitaria.	1067, 1073	Nijhegorod Guberniya Statistical Bureau.	1256
MILLS, R. C.	1463	NOBLE, C. V.	357
MILOVZOROV, A. F.	1255	NORGAARD, U. J.	133
Minnesota Bureau of Labor, Industries and		North Carolina Bureau of Labor Statistics.	209,
Commerce.	319		210, 225, 232, 237
Minnesota University, Department of Agriculture.	154	North Carolina State College of Agriculture	
MIROTVORTSEV, K.	1205	and Engineering, Extension Service.	125
MISCHLER, E.	496	North Caucasus Kraistatistical Bureau.	1249, 1267
MISHKIN, A. S.	1211	North Ossetin Oblast, Statistical Bureau.	1250
Missouri Bureau of Labor Statistics.	187, 198,	Norway Statistiske Centralbyraa.	1101, 1103,
	199, 224, 230, 234, 371		1105, 1106, 1107, 1108, 1109
Missouri Bureau of Labor Statistics and In-		NOVI, I.	1061
spection.	236, 245		
MOLL-WEISS, A.	687, 706	OBER-TALLER, M. O.	1193
MONBERT, P.	799, 810, 832	OGBURN, W. F.	339, 348, 349, 358, 1006
MONESTIER, R.	688	OGLE, M.	981
Montana Bureau of Agriculture, Labor and		OGREN, H.	126
Industry.	246, 252	Ohio Bureau of Labor Statistics.	177, 178, 182,
MOORE, A.	329		186, 188, 189, 191, 194, 201, 206
MOQUETTE, J. J. R.	1087	Oklahoma Department of Labor.	302, 313, 320, 426
MORE, L. B.	284, 453	OLDFIELD, J.	995
MOREAU, LE CHEVALIER DE.	520	OLIVER, J. G.	160
MORGAN, E. C.	86	ORANO, D.	1072
MORGAN, E. L.	96	Orlov Guberniya Statistical Division.	1268, 1269
MORIMOTO, K.	1432, 1433	Osaka Municipal Bureau of Labor Research.	1435
MOSSELL, S. T.	356	OSKISON, J. M.	295, 425
MOST, O.	874	OSSADCHI, G. I.	1164
MOURI, N.	1334	Ossetin Research Institute on Regional	
MUKERJEE, R. K.	1404, 1423, 1430	Study.	1257
MUKHTYAR, G. C.	1427	Ossetinian Research Institute of Regional	
MULERT, O.	779	Study.	1272, 1273
MÜNZINGER, A.	723	OTREBSKI, E.	1113, 1118
Murmansk Guberniya Statistical Division.	1247	Ouang-Tching-Yong.	1352
MUSE, M.	82, 102, 111, 114	OSPENSKY.	1161
NAHUMOV, K.	1279	OYLER, M.	98, 109
Nankai Weekly Statistical Service.	1379, 1388,	PADOLKA, A.	1172
Nanking Bureau of Social Affairs.	1383	PALM, A. W.	127
NASSE, R.	980	PANANDIKAR, S. G.	1413
NAST, S.	1439	PANUNZIO, C.	397
National Child Labor Committee.	25	PARINET, ABBÉ EM.	652
National Education Association of the United		PARISSET, M.	740
States, Committee on Salaries, Tenure and		PARK, R. E.	15, 333, 428
Pensions of Teachers.	427	PARKER, C. V.	469
National Federation of Settlements, Unemployment Committee.	390	PASOLINI, M.	1059, 1064
Nebraska, Bureau of Labor and Industrial		PATON, D. N.	941, 988, 1013
Statistics.	231, 323, 330, 331	PAVIEZ, J.	648
Nebraska University, College of Agriculture,		PAYGERT, C. VON.	497
Extension Service.	130	PEET, L. J.	104
NEHRU, S. S.	1431	PEIXOTTO, J. B.	363, 432
NEILL, C. P.	300, 304, 305, 306, 307, 310	PELICHY, G. de.	529
NEISSER, E.	853	PÉLISSON.	618
Netherlands—		PELLOUTIER, F.	674
Bureau van Statistiek der Gemeente Amsterdam.	1093, 1096, 1098	PELLOUTIER, M.	674
Department van Arbeid.	1090	PELTNE.	1160
Statistisch Bureau der Gemeente s'-Gravenhage.	1095	PENNEY, N.	1034
Netherlands East Indies.	1395	Pennsylvania Department of Internal Affairs.	174,
NEUMANN, A.	709		175, 183, 211
NEUMANN, F. J.	792	Penza Guberniya Statistical Division.	1221
Nevada University, College of Agriculture,		PERCY, T.	1020
Extension Division.	108	PERETZ, A.	1142
New Hampshire Bureau of Labor.	247, 253, 260	PERROTT, G. St. J.	401, 402, 403, 404
New Jersey Bureau of Statistics of Labor and		PERUZZI, U.	1048
Industries.	179, 181, 185, 192, 196, 200, 205, 221	PERVUSHIN, S. A.	1186
New Jersey Conference of Social Work, Interracial Committee and New Jersey State		PETTY, Sir W.	946, 1468
Department of Institutions and Agencies.	413	PEIFFER, E.	742, 905
New South Wales Board of Trade.	1453,	Philippine Islands, Department of Commerce	
	1458, 1459, 1460	and Communications.	462, 1442, 1446, 1447
New South Wales Court of Industrial Arbitration.	1454	PIEPER, L.	805
		PIEQUET, M. O.	645
		PLUMLEY, M. L.	440
		Podoliye Guberniya Statistical Bureau.	1258
		POKROVSKI, V. I.	1137
		Poland—	
		Central Office of Statistics.	1114, 1116
		Głównego Urzędu Statystycznego.	1115



	Citation no.		Citation no.
Poland—Continued.		SCHIAVI, A.	1069
Główny Urząd Statystyczny	1112	SCHLIEBEN, R. VON	770
POLIAK	1136	SCHMIDT, G.	419, 452
POND, G. A.	28	SCHNAPPER-ARNDT, G.	714, 724, 725, 726, 757, 761, 769
POPOV, V.	1274	SCHÖFER, H.	498
PORTE, M.	691	SCHÖLKENS, J.	860
Portugal, Ministério do Trabalho e Previdência Social.	1119	SCHRADER, T.	898
PORTUS, G. V.	1463	SCHULER, F.	1308
PRATSIKA, N. P.	1038	SCHULTZE-GÄVERNITZ, G. VON	982
President's Conference on Home Building and Home Ownership, Committee on Negro Housing.	414	SCHWABE, H.	745
President's Conference on Home Building and Home Ownership, Committee on Relationship of Income and the Home.	407	SCHWEDLER, K.	743
PROKOPOVICH, S.	1178	SEMONOV, P. P.	1134
PUGLIESE, A.	1077, 1080	SEVERSON, J. B.	140
Punjab Board of Economic Inquiry.	1424	SHAPLEIGH, A.	248
QUARVE, G.	126	SCHERBINA, F.	1168
RADEMANN, O.	783	SHESHUNOFF	1146
RADU, V. L.	1120	SHIRBAS, G. F.	1401, 1412
RAHLSON, H.	824	SHUBAEV, K. V.	1285
RAINE, J.	1030	SIEBEN, C.	892
RANKIN, J. O.	52, 53, 54, 55, 62	SIMON, E.	653
RASTSETAEV, M. I.	1284	SIMON, G. E.	1353
RATIER, P. A.	1290	SIMONIN, L.	1343
REED, L. S.	139, 408	SINAI, N.	441
REED, R.	364	SITTE, A.	901
REEVES, M. S.	999, 1004	SKIBNEVSKI	1138
REOUTOVSKY.	1158	SERZYWAN, W.	1117
Research Institute of Agricultural Economics.	1270	SLATER, G.	1407
REVIER, VICOMTE J. de.	646	SLOAN, S. L.	113
REYBAUD, L.	634, 640, 1470	SLOSSE, A.	533, 540
REYNOLD, L.	1355	SMITH, M.	161
REZNIKOV, I.	1259	SMITH, T.	965
Rhode Island Bureau of Industrial Statistics.	212, 218, 243	SNYDER, M. F.	17
RIABOFF, R.	1125	SOSNITSKI, V. I.	1234
RICCI, U.	1079	SOUDAKOV	1135
RICE, F.	419, 452	SOUDER, M. A.	121, 396
RICE, P. B.	389	Spain, Instituto de Reformas Sociales.	1482
RICHARDS, E. H.	248, 423	SPOTO, H. S. See Santangelo-Spoto.	
RICHARDSON, J. E.	116, 128	STAFFORD, T. J.	996
RICHARDSON, J. H.	1485	STAUFFER, W. H.	95, 382, 437
ROBERT, C.	630, 631	STEARNS, M. E.	370
ROBINSON, L. N.	370	STEFFEN, G. F.	943
ROCHESTER, A.	431	STEFANOV, I. P.	1260
ROCKHILL, M.	118	STEWART, C. L.	24
ROEPPE, W.	816	STEBELING, H. K.	129
ROGERS, J. E. T.	925, 944	STITES, S. H.	345
ROQUES, A.	703	Stockholm Statistiska Kontoret.	1293
ROSSI, F.	1071	STOPANI, A. I.	1196
ROUSE, W. L.	103	STORSTEN, E.	1102
ROUSSEL, L.	698, 699	STRANFORD, Viscount.	1032
ROWE, R.	972	STRATTON, G. E.	162
ROWNTREE, B. S.	537, 938, 987	STREIGHTOFF, F. H.	336
ROZMAN, D.	99	STUDENSKI, G.	1207, 1286, 1287
ROZNATOVSKI, A.	1122	STUDLEY, L. A.	29
RUBIN, M.	563	STUDNICZKA, H.	998
RUDENSKI, V. K.	1233	SUAZEE, S.	1290
RUDLOFF, H. L.	717	SUMAGUL, J. O.	1450
RUSOV, A. A.	1131	SWANSON, R. O.	138
RUTTEN, G. C.	531	Sweden—	
S., E.	1183	K. Socialstyrelsen	1297, 1299, 1301, 1302
SAGLIO, A.	1040	K. Socialstyrelsen, Stockholms Stads Statistik	1300
SAINT-JEAN, M. D'E. DE	595	K. Socialstyrelsen, Sveriges Officiella Statistisk Socialstatistik	1294, 1296, 1298
SAINT-LÉGER, A. DE	489, 589, 590, 618, 729, 732, 1099, 1127, 1128, 1129, 1291, 1292	Statistiska Centralbyrån.	1295
SALOMON, J. H.	846	Switzerland—	
SAMTER, A.	748	Arbetersekretariat	1321
SANDERS, J. T.	20, 21, 22, 23, 63, 69	Office Fédéral du Travail	1327, 1328
SANDERS, W. J.	24	Secrétariat des Paysans Suisses au Département Fédéral de l'Economie Publique.	1330
SANDERSON, D.	56	Statistisches Amt des Kantons Winterthur.	1329
SANTANGELO-SPOTO, H.	1056, 1058, 1060	SYDENSTICKER, E.	403, 404
SARGENT, R. O.	46, 58	TÄGTMAYER, F.	854
SARVIS, G. W.	1371	TAKANO, I.	1434
SAUNDERS, A. J.	1419	TAO, L. K.	1375, 1378, 1391
SAVELIEV	1149	TAYLER, J. B.	1365
SAVOY, E.	534, 1319	TAYLOR, C. C.	36
SAVCHENKO	1153	TEMPLE, P.	1036
Saxony, Gewerbe und Berginspektion.	771	TEMPLE, W.	1036
SAYRE, L. C.	117	THADEN, J. F.	42, 47
SCARBOROUGH, D. D.	41	THEATE, T.	535
SCARBOROUGH, W. S.	30	THIERRY, J. N. A.	612
SCHAEFFER, H.	756	THOM, W. T.	7, 273, 278
		THOMAS, W. P.	135
		THOMPSON, S. H.	12
		THWING, M.	341
		TICHKOV	1154, 1155
		Time, Inc.	400, 445
		TOQUE, A.	1469



	<i>Citation no.</i>		<i>Citation no.</i>
TOUGH, E. G.	136, 398	WAITE, W. C.	391
TOUNISSOUX, ABBÉ	596	WALKER, A. L.	131
TOUSSAINT, P. A.	591	WARBER, G. P.	337
TOYTOT, E. de	642, 643	WARREN, E.	964
TSCHAJANOW, A.	1187, 1188	WARREN, G. F.	13
TUCHER, A.	900	Warsaw Municipal Statistical Office	1111
TUGENDHAT, O.	833	Washington—	
TULLY, A. M. T.	1015, 1017, 1020	State Bureau of Labor	288
TURNER, H. A.	24, 64	State Bureau of Labor Statistics and Factory Inspection	308, 325
TURNER, L. S. B.	1351	State College, Extension Service	150, 163
TYSZKA, C. VON	855, 1451	WAUGH, F. V.	409
TZILKO, F. A.	1289	WAXWEILER, E.	540, 541, 1478
U., C.	1275	WEBB, J.	1027
UJHANSKI, I. T.	1289	WEBER, G. A.	309
Ulianov Guberniya Statistical Bureau	1235	WELKER, G.	722, 875, 917
Union of South Africa—		WELLS, A. T.	141
Department of Labor Cost of Living Commission	1349	WERNICKE, E.	817
Economic Commission	1347	WESSELY, J.	490
Special Commissioner on Cost of Living	1348	WESTERGAARDE, H.	567
United States—		Western Australia Royal Commission of Enquiry	1456
Bureau of Labor	494, 514, 772, 974, 1055, 1309	WHITE, H. C.	10, 276
Congress, Senate Committee on Finance	238	WHITE, M. E.	151, 158
Department of Labor	226, 228, 261, 262, 517, 518, 655, 656, 776, 777, 973, 979, 1311, 1474	WHITNEY, F. L.	443
Department of Labor, Bureau of Labor Statistics	340, 346, 350, 351, 354, 367, 380, 384, 395, 434, 1082, 1350, 1362, 1414, 1437	Wiener Kammer für Arbeiter und Angestellte	502, 503
Department of Commerce and Labor	274, 460, 461	WILBOIS, A.	1130
Department of State	1472	WILLEFORD, M. B.	152
Federal Reserve Board	360, 430	WILLIAMS, F. M.	45, 83, 132, 419, 435, 452
Immigration Commission	311, 321, 324	WILLIAMS, J. R.	142
Railroad Administration	338	WILLSON, E. A.	76, 77
Treasury Department	421	WINSLOW, E. A.	993
Ural Oblast, Statistical Bureau	1261	WINTERS, J. C.	410
Uruguay—		Wisconsin Bureau of Labor and Industrial Statistics	204, 255
Ministerio de Industrias	486	WOOD, G. H.	966
Oficina Nacional del Trabajo	485	WOOD, G. L.	1464
U. S. S. R. Central Statistical Bureau	1213, 1214, 1215, 1216, 1239	WOODHOUSE, C. G.	83, 420, 435, 439
Uzbekistan Central Statistical Bureau	1262, 1263, 1276	WOODS, C. D.	257
VALDOUR, J.	695	WOOFER, T. J.	92, 100, 334
VALLIN, C.	638	WORCESTER, D. W.	310
VANDERLINT, J.	948	WORCESTER, W. F.	310
VECCHIO, G. DEL	1480	WÖRISHOFFER, F.	781, 785
VEDEL, A.	569	WORKS, G. A.	93
VEENSTRA, T. A.	448	WOYCICKI, A.	1110
VELMONTE, J. E.	1450	WRIGHT, H. R.	385
Verein für Sozialpolitik	797	WRIGHT, R. R.	281
Verein zur Förderung des Wohles der Arbeiter	713, 749, 766	WURM, E.	786
VERMENICHEV, I.	1279	YANAGISWA, Y.	1440
VESSELITSKY, V. DE.	1008	YANG, S.	1376, 1378
Viatka Guberniya Statistical Bureau	1251, 1252	YAROSHCHUK, E. A.	1278
Viatka Oblast, Agricultural Experiment Station	1288	YELTSOV, A. A.	1265
VILDO, U. I.	1289	YOUNG, A.	926, 927, 930
VILLENEUVE-BARGEMENT, A. DE.	584, 615	YOUNG, E.	171, 465, 1471
VILLERMÉ	616	YOUNG, M.	1372
VINOGRADOV, A. V.	1236	YUFEROV, V. I.	1176
VIRAY, P. H.	1450	YURACHSKI, A. M.	1212
Vologda Guberniya, Division of Peasant Budgets	1242	ZALESKY	1156
VON TUNGELN, G. H.	42	ZALESKI, V. F.	1166
VOROBIEV, N. I.	1243	Zentralverband der Baugewerblichen Hilfsarbeiter Deutschlands	840
Voronezh Statistical Bureau	1162	ZIMMERMAN, C. C.	36,
VORONOV, I. K.	1264, 1277		66, 72, 75, 101, 381, 436, 1451, 1487
WAIT, C. E.	10, 276	ZIMMERMAN, E. J.	825
		ZIMMERMANN, W.	896
		ZINGALI, G.	1074
		ZITLOW, C. I.	444
		Zürich Kantonales Statistisches Bureau	1323
		Zürich Statistisches Amt	1326







