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## FLUCTUATIONS IN WHEAT FUTURES

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LETTER FROM THE SECRETARY OF AGRICULTURE TRANSMITTING, IN RESPONSE TO SENATE RESOLUTION NO. 222, OF JUNE 9, 1926, A REPORT OF THE GRAIN FUTURES ADMINISTRATION RELATIVE TO THE EXTREME FLUCTUATION IN THE PRICE OF WHEAT FUTURES DURING THE EARLY PART OF 1925


JUNE 28 (calendar day, JUNE 25), 1926.-Referred to the Committee on Agriculture and Forestry

## SENATE RESOLUTION 265

## REPORTED BY MR. NORRIS

In the Senate of the United States, June 23 (calendar day, June 26), 1926.
Resolved, That the report of the Grain Futures Administration on the special investigation occasioned by the extreme fluctuations in the price of wheat futures during the early part of 1925, submitted in response to Senate Resolution 222, Sixty-ninth Congress, be printed with illustrations as a Senate document.

Attest:

Edwin P. Thayer, Secretary.

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## LETTER OF TRANSMITTAL

## Department of Agriculture, Washington, June 24, 1926.

Sir: In response to Senate Resolution No. 222, adopted by the Senate on June 9, 1926, I have the honor to transmit herewith the report of the Grain Futures Administration of the United States Department of Agriculture, occasioned by the extreme fluctuation in the price of wheat futures during the early part of 1925.

In order to comply promptly with the request of the United States Senate the report is submitted in manuscript form. Should the Senate elect to order this report printed I shall be pleased to supply the original drawings for the illustrations, as the illustrations accompanying the manuscript are not suitable for satisfactory reproduction.

Sincerely yours,

> W. M. Jardine, Secretary.

To the President of the United States Senate, Washington, D. C.

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## LETTER OF SUBMITTAL

## United States Department of Agriculture, Grain Futures Administration, Washington, D. C., June 22, 1926.

SIR: There is submitted herewith a report entitled "Fluctuations in Wheat Futures." This is a report of the special investigation undertaken pursuant to your instructions of March 18, 1925, to ascertain the character of the operations in wheat futures and the extent to which such operations were responsible for the erratic and extreme fluctuations in the price of wheat futures during the early months of that year.
At the outset of this investigation it was believed that the information furnished daily to the Grain Futures Administration, and especially the reports of large accounts showing a net "long" or a net "short" position of one-half million bushels or more in any one future as specified under authority contained in section 2, paragraph (f) of the rules and regulations pertaining to the enforcement of the grain futures act, would supply adequate information upon which to base fair and just conclusions. However, a study of these special reports, supplemented by the examination of books and records, revealed instances of transactions being so distributed or split into different accounts-in some instances apparently for the purpose of avoiding the necessity of making a daily report-as to render conclusions based on these data alone unsatisfactory.

It therefore became evident that a more intensive study would be necessary. Accordingly, with the cooperation of representatives of the Department of Commerce and the Department of Justice, steps were taken to secure a complete record of all accounts for which there had been either purchases or sales amounting to 100,000 bushels or more on any single day, such reports showing by days and by futures all transactions for the period from January 2 to April 18, 1925, inclusive. This period was selected because it covered not only the drastic decline in price during the month of March, but also included the advance of nearly 30 cents per bushel during the month of January when the "public" was participating heavily in the market, while the larger speculators as a group were liquidating their "long" lines.

In securing this information the Grain Futures Administration enjoyed the full cooperation of the majority of the clearing members of the Chicago Board of Trade. However, repeated excuses of four of the important clearing members whose combined transactions involved more than 15 per cent of the total volume of trading, and covered 22 per cent of the total number of special accounts of 100,000 bushels or more, caused serious delay at the outset of this investi-
gation. The matter finally reached a stage when it was taken up officially with the president of the board. This action resulted in all of the additional reports being filed within 9 days, 76 days having elapsed since the reports first were requested.

The analyses of these data, covering all transactions during the period of 89 trading days, involved an enormous mass of detail, much of which has been omitted necessarily from this report. Moreover, with a full appreciation of the confidential character of the information involved, the work was handled by the regular personnel. Even though this plan required a longer period of time to complete the investigation it was deemed necessary in order to safeguard the identity of the individual traders. As a further safeguard, all accounts were handled under key numbers, both as to firms and individuals.

As set forth in the body of this report, the majority of the days on which there were wide and erratic price fluctuations were days on which one or more of the large traders bought or sold May wheat to the extent of $2,000,000$ bushels or more. During this period there were eight traders who accumulated a "long" or a "short" line of $2,000,000$ or more, but only five of these traders ever bought or sold as much as $2,000,000$ bushels of May wheat during any single trading day. These large speculative operations were important price making factors and the results show the need for the development of some plan of limiting excessive speculative transactions or otherwise preventing sudden and abnormal price fluctuations that have but little, if any, relationship to supply and demand.

Although not embodied in this report, additional studies clearly indicate the desirability that the exchanges prohibit the making of new contracts after, say, the 15 th of the current delivery month. This would give ample time for the settlement of outstanding contracts and would do much toward preventing a "squeeze" such as occurred in July wheat (1925), when the price advanced 9 cents on the last day of the month.

In order to eliminate some of the detail from the body of the report a number of important tables have been placed in the appendixes. The report also includes 23 illustrations, and these, together with the material in the appendixes, are essential to a full understanding of the text.

In connection with this investigation, special and very helpful assistance was rendered by representatives of the Department of Commerce and the Bureau of Investigation of the Department of Justice. I also wish to acknowledge the painstaking and loyal services rendered by Mr. Paul Mehl, Dr. George Wright Hoffman (now assistant professor of insurance at the University of Pennsylvania), Mr. J. M. Mehl, Mr. E. W. McGillivray, and others of the Grain Futures Administration for valuable assistance in the preparation of the material contained in this report.

Very respectfully,
J. W. T. Duvel,

Chief Grain Futures Administration.
Hon. William M. Jardine,
Secretary of Agriculture.


## FLUCTUATIONS IN WHEAT FUTURES

## SUMMARY AND CONCLUSIONS

## CAUSE OF WIDE FLUCTUATIONS

While this investigation did not reveal any concentrated action for the deliberate purpose of manipulating the market, most of the wide and erratic price fluctuations that occurred in wheat futures at Chicago during the early part of 1925 were largely artificial and were caused primarily, either directly or indirectly, by heavy trading on the part of a limited number of professional speculators. Some of the speculators, and especially those operating first on one side of the market and then on the other, were able to take advantage of the technical conditions of the market by forcing prices into stop-loss orders or to a point of exhausted margins. These large-scale buying and selling operations completely disrupted the market and resulted in abnormal fluctuations, which were felt in every other large grain market in the world.

Among the professional speculators were also those who operated, for the most part and up to a certain point, with apparent due regard for fundamental conditions, and with probable constructive influence. However, the rapid liquidation of these relatively large commitments, in an already demoralized market, aided in widening the daily fluctuations. Likewise, the operations of professional speculators were facilitated to a considerable degree by the large participation in the market by the general public during the latter part of January, after material advance in price had occurred, and again the latter part of February and early in March just prior to the drastic decline.

In this connection, and in order that erroneous conclusions may not be drawn regarding the functions of speculators generally, it should be noted that in so far as this study touches the operations of so-called scalpers and spreaders, it does not appear that this class of trading although large in volume had any measureable effect in causing the wide day-to-day fluctuations. What their effect may be in causing smaller minute-to-minute fluctuations is not determined. During this period hedging operations were carried on, if at all, only with great difficulty and with extremely unsatisfactory results. Neither the placing of hedges nor their removal or shifting from one month to had any appreciable effect in disturbing the market or causing the wide fluctuations.

## FACTS LEADING TO INVESTIGATION

During the period from July 8, 1924, to the end of January, 1925, the price of May wheat advanced from $\$ 1.193 / 8$ to $\$ 2.057 / 8$, or $861 / 4$ cents, a most unusual adrance in price during peace times. The
first rapid advance was from $\$ 1.30$ in late August to over $\$ 1.55$ in early October. A second upward movement started in early November and with but occasional small recessions the price continued to advance until January 28, when it reached the peak of $\$ 2.057 / 3$. From this high point the price suffered a severe break in early Feb)ruary, and by February 11 had dropped to $\$ 1.771 / 2$, a loss of $283 / 8$ cents in 12 trading days. The price then turned upward, going to $\$ 2.02$ on March 2. After this second sharp advance the market suffered an utter collapse, prices successively breaking throughout March to a low for the May future on April 3, of $\$ 1.361 / 2$, a loss of $651 / 2$ cents from the secondary high.

During the decline in price of the May wheat future which took place in March, there were a number of days when fluctuations went far beyond the most liberal allowance for legitimate change in wheat values. On four days, March $6,13,17$, and 30 , the range for the day was over 10 cents per bushel. Ranges of $131 / 4$ and $131 / 2$ cents, respectively, were recorded for March 13 and March 30. The violent and unusual price changes occurring throughout this period practically paralyzed the grain and milling business and led to much dissatisfaction and discontent among wheat producers everywhere. Strong protests were made by growers and by various associations and trade bodies. The result was that the Secretary of Agriculture ordered a thorough investigation to be made by the Grain Futures Administration.

## BASIS OF STUDY

As a basis for this investigation special reports were obtained from 89 clearing members of the Chicago Board of Trade covering a period of 89 trading days from January 2 to April 18, 1925, supplemented by special examination of books and records at all important centers. The data obtained brought under review all accounts on the books of clearing members that at any time during the period had shown purchases or sales on any single day to an amount of 100,000 bushels or more in any one future. There were 948 accounts in all reported, covering dealings in the Chicago May wheat future, but when these reports were brought together they were found to represent 627 persons, firms, or corporations. For the purpose of convenience and uniformity in treatment, these have been designated as "traders," and are classified according to the character of their trading as follows: A, nonclearing commission firms, 132; B, hedgers, $62 ; \mathrm{C}$, scalpers, $96 ; \mathrm{D}$, speculators, 302 ; E , spreaders, 7 ; and F , speculative scalpers, 38. The class last named is composed of pit scalpers who occasionally carried speculative holdings to the extent of 100,000 bushels or over. Since the reports secured from clearing members include only those accounts showing purchases or sales of 100,000 bushels or more within a single trading day and in any one future, it follows that another class of traders (under 100,000 bushels) must be accounted for. This was accomplished by subtracting from the total volume of trading, by days, the combined volume of trading of the six classes above, thus giving the seventh class, designated as G , miscellaneous. This includes the "under 100,000 bushel" traders who are treated as a residual group of unknown number.

## IMPORTANCE OF TRADING DETERMINED

An appreciation of the relative importance in the market of those "traders" who buy or sell as much as 100,000 bushels or more in a single day, as distinguished from those who trade in smaller amounts, may be had when it is considered that although the " $G$, miscellaneous" class is made up literally of thousands of small traders, over 70 per cent of the whole volume of trading in May wheat during the period was accounted for in the transactions of the 627 "traders" making up the " 100,000 or over" classes. The importance of the comparatively small number of very large operators becomes even more strikingly apparent by analyses of "traders" of the " 100,000 bushels or over" classes. For example, in class A, nonclearing commission houses, out of 132 "traders" only 31 traded to the amount of 500,000 bushels or more on any one day. The remaining 101 all, traded in smaller amounts. In class B, hedgers, out of 62 "traders" there were 28 whose net position in the market reached 500,000 bushels. The remaining 34 never reached a net position of this amount. In class D, speculators, out of 302 traders, only 57 were long or short as much as 500,000 bushels or more at some time during the period, while 245 of the traders never took a net position as large as 500,000 bushels. Of the 57 who were long or short as much as 500,000 bushels, only 38 bought or sold as much as 500,000 bushels on any single trading day. Of these 38 traders only 14 bought or sold on one or more days as much as $1,000,000$ bushels or more; of the 14, only 5 bought or sold $2,000,000$ bushels or more within a single day.

Daily trades, i. e., the net of purchases and sales, aggregating 500,000 bushels or more, for an individual trader on a single day, occurred to the number of 204. Trading, by individuals, to the extent of 500,000 bushels or more net in a single day was recorded on 69 of the 89 trading days. All of such trades were for the account of some trader in the group of 38 mentioned. Of the 204 daily net trades referred to, 125 were selling operations amounting to a total of $126,130,000$ bushels of May wheat. Seventy-nine were buying operations amounting to a total of $69,485,000$ bushels. Some of the selling was in liquidation of long holdings, and some of the buying was to cover short interests.

## TYPES OF TRADING COMPARED

After being divided into classes according to character of trading, the separate accounts of each class were combined. This afforded an opportunity to compare the trading day by day of each class, and to determine how, if at all, the different types of trading influenced prices. The main results of this analysis are as follows:
(1) The daily changes in the net position in the market of the hedgers, scalpers, spreaders, and speculative-scalpers do not show any marked relationship to the changes in wheat prices during the period under study.
(2) The changes in net position from day to day of the professional speculators, taken as a class, are almost exactly opposite to the changes in net position of the "commission house" and the "under 100,000 bushel" classes. Expressed differently, whenever the professional speculative class bought, either the "commission house" class or the "under 100,000 bushel" class or both sold; and
whenever either one or the other, or both, of the latter classes bought, the former class sold.
(3) The changes in the net position from day to day of the speculative class directly correlate with the changes in the price of May wheat, while the changes in the net position of the "commission house" and "under 100,000 bushel" classes correlate inversely with changes in price.

## LARGE-SCALE TRADING ANALYZED IN RELATION TO PRICE CHANGES

The operations of the speculative class, because of their direct relation to prices, were analyzed further by dividing them into four groups ranging in size from "under 500,000 bushels" to " $2,000,000$ bushels or over." When changes in net position of these four groups of speculators were compared separately with price changes, it was found that the " $2,000,000$-or-over" group showed the closest relationship to price changes. A closer analysis of this " $2,000,000$ or over" group revealed that only five of the eight traders composing it changed their individual positions in the May future on a single day by $2,000,000$ bushels or more. On 15 days, one or more of these five traders changed their net position by this amount. On 12 of the days the price moved in the same direction as the trading, and in three instances it moved in the opposite direction.

On March 4 one trader, in switching from a long to a short position, sold during the day $3,200,000$ bushels of May wheat, and the closing price that day was $71 / 8$ cents below the close of the previous day. On March 6 one trader sold $2,200,000$ bushels; the net sales of six other traders amounted to $4,575,000$ bushels, and the price that day declined $111 / 4$ cents. On March 13 one trader sold $3,000,000$ bushels; seven other traders together sold to the extent of $6,110,000$ bushels and the price declined $143 / 4$ cents. On March 17 one trader sold $3,085,000$ bushels and another $2,240,000$ bushels, while a third bought $3,200,000$ bushels and the price that day declined $113 / 8$ cents. On March 30 one trader sold $3,000,000$ bushels; five other traders together sold $3,575,000$ bushels and the price declined $101 / 2$ cents. There were other days on which large purchases and large price changes occurred, though not so extreme. Thus, on January 12, a trader bought $3,750,000$ bushels and the price advanced $41 / 8$ cents. On each of two days, February 7 and March 20, this same trader bought $2,000,000$ bushels and the price adranced $41 / 2$ cents and $41 / 4$ cents, respectively.

Considering briefly the effect upon price changes by days in the case of 201 instances in which individual traders to the number of 38 bought or sold as much as one-half million bushels or more during a single day, and taking them progressively as the net of the purchases or sales combined for the group increased, we have the following results:

[^1][^2]On 13 days, when a $3,000,000$-bushel or over net change was involved, the price moved in the same direction eleven times, or 85 per cent of the time.

On 8 days, when a $4,000,000$-bushel or over net change was involved, the price moved in the same direction seven times, or 87 per cent of the time.

On 4 days, when a $5,000,000$-bushel or over net change was involved, the price moved in the same direction four times, or 100 per cent.

## SPECULATION VERSUS MANIPULATION

Professional speculators may be divided roughly into two groups: (1) Those who trade on the basis of rational appraisement of present and prospective conditions affecting supply and demand, without at the same time trading in a manner or with aids designed to augment or artificially hasten the market results expected. These have been considered as belonging to what might be called the "constructive" group. (2) Those who trade largely on the basis of mob psychology and faith in their ability through heavy trading to bring about temporary market conditions of which they may take advantage to make profits. Their operations and presence in the market are distinctly destructive, regardless of whether their operations serve to move prices up or down.

A few large professional speculators belonging to what has been termed the "constructive" group, with full knowledge and appreciation of world conditions, bought wheat at the lower price levels which prevailed early in the season and gradually accumulated relatively large lines. Most of their purchases were made at a time when hedging pressure was the heaviest and consequently gave support to the market when it was most needed and when farmers were marketing heavily. These professional speculators, from all appearances, bought wheat futures because they really believed that the price of wheat at the time was low compared to what it would be at a future date, considering the existing and prospective supply and demand for wheat.

Later this group liquidated under pressure of a demoralized market. In liquidating, large "long" lines were disposed of in a comparatively short space of time, causing the price to break sharply. This investigation does not reveal that the motives of these speculators were questionable, though the extent and sudden changes in their market position had the result of causing large breaks in wheat prices.

Other large professional speculators traded in a very different manner and apparently with a different motive than those just mentioned. Instead of assuming a long or short position in the market, in the light of fundamental world conditions, their efforts were directed to creating a technically weak market condition, either buying the market into new high ground or selling it down and later taking advantage of its disturbed condition. This was particularly true of one trader who changed his position from the long to the short side of the market, or vice versa, 11 times during the period under investigation, generally buying or selling within individual trading days amounts of immense proportions. Such operations, while not always profitable, not only cause large price changes but also unbalance the whole market. They can hardly be viewed as other than manipulative and destructive in character.

## CONCLUSIONS

In the report of the president of the Chicago Board of Trade for the year 1925, in discussing the unusual market situation which existed during the early part of the year, and the remedial measures adopted, reference is made to "* * * those who would take advantage of technical conditions and abuse the market for the sheer purpose of advancing their own selfish aims." He says:

Regardless of whether such unfair tactics were but temporary they were nevertheless very disconcerting to the trade in general, for they churned the markets in a manner that prevented legitimate grain interests from carrying on their hedging and speculative business in a normal way.

It was further indicated in that report that the unusual market situation with which the year began "* * * developed into an emergeney for which the exchange, in spite of its efficient administrative machinery, was not fully prepared to meet in a wholly satisfactory manner."

The observations of the president of the Chicago Board of Trade, above indicated, appear to be rather fully supported by the findings of this report and would seem to suggest that the conditions described not only challenge attention on the part of the public generally, but that they are a more or less constant menace to the proper functions and facilities of the organized grain exchanges as well.

This study clearly indicates that large speculative operations, either on the long or the short side, contain an element of grave danger. They are a constant hazard in the market, the force of which may move prices far out of line with the normal and, temporarily, at least, destroy completely the hedging value of the futures market.

The traders whose net holdings in the May wheat future amounted to $2,000,000$ bushels or more were those whose trading revealed a pronounced relation to price changes during this period. This does not mean, of course, that those traders whose position in the market exceedel $1,000,000$ bushels, but did not reach $2,000,000$ bushels, had no influence on wheat prices. Their influence during the period, however, was not as outstanding as that of the "over $2,000,000$ bushel" group.

A limitation of some kind on the size of lines, long or short, and especially on the extent of buying or selling within a day by speculative traders, seems inevitable if there is to be eliminated from the market those hazards which are so unmistakably reflected as existing whenever excessively large lines are held by individuals.

It is believed that an effective limitation upon the trading operations of large speculators would prevent at the outset the accumulation of a "line" of excessive proportions, either long or short. In addition, it should tend to insure a more gradual accumulation or liquidation and thus make for greater stability of prices and more orderly price movements. This will be necessary if the futures market shall best serve hedgers and others who have need of it in the process of moving grain from the farms of this country to the consumers of this and other countries.

It is shown herein that those price fluctuations which so seriously upset the market during the period under investigation were largely of an artificial character and resulted mainly in response to pressure by large traders, who consciously or unconsciously were assisted in these operations at times by reason of the great interest taken in the
market by the general public. Attention may be directed once more to the arbitrary limitations upon unnatural price fluctuations. This is just one more means to discourage harmful practices and prevent erratic fluctuations. Any and all such limitations are in themselves artificial and unnatural, of course, but in dealing with unnatural and artificial means to move prices out of their normal course, we may be justified perhaps in using artificial and more or less arbitrary means by which to keep them within the reasonable bounds of natural movement as governed by the legitimate forces of supply and demand.

In fairness to the exchanges it is necessary to repeat that the investigation did not disclose evidence of any concerted action for the purpose of manipulating the market which would serve as a basis for the initiation of proceedings looking to the revocation of the designation of the board of trade as a contract market, as provided in the grain futures act. It was evident, however, from a careful analysis of the transactions that the heary trading by a few large professional speculators, aided by the reckless participation by the general public, was primarily responsible for wide price fluctuations, which were detrimental to legitimate grain interests. Assuming that this trading may have been based upon the bona fide judgment of the individual traders as to proper values, nevertheless it resulted in an abnormal movement of prices similar to that produced by willful manipulation. But whether or not there was manipulation of the market, it was perfectly apparent that some definite action must be taken to prevent wide price fluctuations. You will recall that this was the basis on which you called a conference of representatives of the contract markets early in the summer of 1925 .

At this conference you, as Secretary of Agriculture, clearly indicated that in order to continue to enjoy the privileges of a contract market it would be necessary for the exchanges, as they are required by the grain futures act, to prevent manipulation, to devise and put into effect some further means of controlling the trade operations of members to insure futures prices in keeping with values as determined by economic conditions. Two major proposals were agreed upon at the conference: (1) The establishment of a modern clearing system by the Chicago Board of Trade, and (2) the creation of a business conduct committee by each of the contract markets. Steps were taken immediately by the exchanges to put these into effect.

These business conduct committees have full power to investigate the dealings and transactions of members and are "* * * charged with the duty and authority to prevent manipulation of prices, as provided in section 5 (d) of the grain futures act, and shall have general supervision over the business conduct of members." The full text of the regulation of the Chicago Board of Trade governing the business conduct committee is set out in Appendix B of this report. These committees are now functioning in close cooperation with the Grain Futures Administration. A careful study is being made of price movements and the transactions of individual operators in the various markets under the supervision of these business conduct committees. They have been in operation only a few months. Excellent results have been accomplished. It seems most important that this plan be given a fair trial before resorting to further regulatory legislation.



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## FLUCTUATIONS IN WHEAT PRICES, JANUARY 2 TO A PRIL 18, 1925

## INTRODUCTION

This is a report of the special investigation occasioned by the rapid and extreme fluctuations in the price of wheat futures during the early part of 1925 . There were many days on which the price of May wheat fluctuated through a range of 5 cents or more, several days of 10 cents or more, and on two occasions over 13 cents per bushel. The widest and most erratic daily fluctuations occurred during the month of March.

The details of this study cover a period of 89 trading days, from January 2 to April 18, 1925, with a general summary of the important price changes during the life of the May future. This period was selected because it covers the advance of nearly 30 cents in the price of May wheat at Chicago during January when the "public" was participating heavily on the buying side in anticipation of handsome profits. The period likewise covers the decline of $651 / 2$ cents from a secondary high of $\$ 2.02$ on March 2, to a low of $\$ 1.361 / \frac{1}{2}$ by April 3 .

The material for this report has been confined mainly to operations on the Chicago Board of Trade, as approximately 90 per cent of all trading in grain futures in the United States takes place on the Chicago Board of Trade. During the calendar year 1925 the aggregate volume of trading in wheat for future delivery on all exchanges was $20,623,939,000$ bushels bought, with an equal quantity sold. Of this total, $18,048,510,000$ bushels were on the Chicago Board of Trade. A comprehensive study has been made of all accounts involving purchases or sales of 100,000 bushels or more within a single trading day.

Special consideration has been given to accounts of 302 speculators who were active in the market during this period. Of this number there were only 38 whose net purchases or net sales within a single day amounted to 500,000 bushels or more. These 38 include 14 persons who bought or sold net on one or more days $1,000,000$ bushels or more. The latter group includes five individuals whose trading reached $2,000,000$ bushels or more. There were, however, eight whose open commitments at some time during the period amounted to $2,000,000$ or over.

While this report emphasizes large-scale operations, which are important price-making factors, it is essential to keep in mind that futures markets can not function effectively without an elernent of purely speculative activities. It is equally important to keep in mind that the transactions in futures on the Chicago Board of Trade are primarily speculative in character in that probably not more than 5 per cent of the total volume of trading in wheat represents hedging transactions. Just what volume and character of speculating trading is essential to best serve the hedging requirements of producers, dealers, exporters, and millers is an open question.

It seems apparent, however, that heavy speculative transactions by individuals who operate first on one side of the market then on the other in an effort to force sudden and erratic price changes that have but little, if any, relationship to supply and demand, hinder rather than help legitimate hedging operations.

While this report deals with price changes in wheat futures, it is important to keep in mind that cash prices generally advanced or declined with the dominant future, the cash transactions being based on the futures. As a means of ready reference, there is given in Appendix C a brief summary of the relationship between cash and future prices.

## DEMAND FOR AN INVESTIGATION

Urgent and persistent demand for an investigation of wheat price movements came from various sources. In late 1924 an investigation was demanded on the claim that manipulation was forcing the price of wheat higher than was justified by supply and demand, thereby bringing about abnormally high prices for flour and bread.

This group is exemplified by the request for an investigation made by the Trades Council Union News, of St. Louis, Mo., in its issue of December 26, 1924, and the Kansas City Labor News, in the issues of January 2, 9, and 16, 1925. Much of this criticism was directed against three persons who were accused of being in control of the market through their large operations. Frequently such allegations are not well founded, as was the case in this instance. An investigation revealed that one of the three persons was not even in the market, another had commitments representing hedging transactions only, while the commitments of the third were very much below the quantity that he was said to control, and for the most part represented purchases made at a time when the market needed support and at price levels much lower than those prevailing at the time of the complaint.

In the spring of 1925 another group wanted an investigation on the ground that manipulation was causing unwarranted downward fluctuations in the price of wheat. This group of complaints is Fillustrated by an appeal for an investigation from milling and cash grain interests who found the wide fluctuations and falling prices were proving to be materially injurious to their business. Customers were defaulting on contracts covering both grain and flour, made at much higher price levels, and practically no new business could be booked so long as prices were continually falling rapidly and fluctuating so violently. Exporters having grain afloat or contracts for deferred shipment were in danger of severe losses. In fact, all branches of the cash trade were more or less paralyzed as a result of the rapidly falling prices.
In reply to those who had complained late in 1924 that the price of wheat was being adranced unduly, a statement was made on January 6, 1925, by Hon. Howard M. Gore, then Secretary of Agriculture, to the effect that the price of wheat (the May future on that date closing at \$1.78) was not excessive if world conditions were taken into consideration. Looking backward and viewing the situation in the light of the world's carry over at the end of the year, and considering the large quantity of wheat taken by European
consuming countries at much higher price levels than those which existed in late December, 1924, and in early January, 1925, the statement made by Secretary Gore in justification of the price which prevailed at the time appears to have been conservative. If prices had been maintained near that level for a time it is probable that Europe would have taken even larger quantities of wheat from the United States and that later in the crop year the higher prices, finally reached, could have been supported. Excessive speculation, however, carried prices upward rapidly. With a recognized world shortage and frequent predictions of much higher prices, small traders and the general public, encouraged at times by professionals, bought wheat frantically as the market advanced in a blind anticipation of prices around $\$ 2.25$ or $\$ 2.50$. During this period the press carried front-page articles under alluring headlines, some of which are shown in Figure 1, referring to the enormous profits made by some traders. While some of these were only "paper profits" and were

Wheat Crosses \$1.50 Mark on Enormous Buying OTHER GRaINS Wildest Trading Since War WHEAT CLIMBS ALSO CLIMB; WHEAT CLIMBS RYE GAINS 8 C WHEAT CLIMBS Bulb whe sold oun scumbe TO NEW HIGHS; to Roinstate Lines as Cutton's Prediction Comes True.


Shorts in Wheat Cover and Prices Rebound
Great Clamor for that Cereal at the Opening at Much Higher Figures-Net Advances $31 / 2 \mathrm{c}$ to: $81 / 2 \mathrm{c}$-Corn Up $21 / 2 \mathrm{c}$ to $23 / 4 \mathrm{c}$.


Fig. 1.-Headlines in newspapers
permitted to drift into losses before the commitments were closed, they served to stimulate heavier participation by the general public and the uninitiated. On the other hand, seasoned traders generally recognize that whenever market activities assume sufficient importance to be given a front-page position by the press, the advance is nearing the danger limit. As a rule this is accepted as a signal to take profits on long holdings and to sell short. In this connection it is of interest to note that on January 12, 1925, there was a net purchase of $3,250,000$ bushels by operators who trade in one-half million bushels or more with an advance in price of $41 / 8$ cents from the previous close. From this date until February 6, the net of the large transactions of one-half million bushels or more was on the selling side, except on January 19 and 27, as shown in Table 14. Likewise, it was on January 12 that the combined holdings of the speculative class reached the peak, from which they showed a net decline until February 5, during which period they liquidated long
holdings to the extent of nearly $26,000,000$ bushels, as shown in Figure 10, and described more fully in another part of this report.

It was evident that the wide price changes and the erratic fluctuations had but little relationship to supply and demand for real wheat, and that the market was fundamentally speculative in character. In an effort to check these wide fluctuations the grain exchange supervisor at Chicago, on February 9, 1925, released a statement calling attention to the fact that it was difficult to justify the recent wide daily fluctuations with the law of supply and demand, and that it would be necessary to find some means of preventing them. Also that such remedial measures as might be necessary should come from within the grain exchanges rather than from without.

These violent fluctuations created severe criticism, not only in America but also in Europe, and resulted in the instigation of a special investigation by the United States Department of Agriculture with a view of ascertaining the reasons for the erratic price changes, the extent to which manipulation was a factor, and what steps ought to be taken to prevent a repetition of markets of this character.

The seriousness of the situation is well set forth in the action taken by the Millers' National Federation and the National Chamber of Commerce. At their convention on April 16 and 17 the Millers' National Federation adopted the following resolutions:
Resolved, That trading in futures is a necessary factor in the economic marketing of grain. Such trading should be confined to its legitimate purpose. Inordinate speculation, of which the widely fluctuating markets of the past several months have given renewed evidence, is an intolerable evil, destructive of legitimate business, and should be abolished. We urge upon the exchanges themselves the prompt elimination of this vast, indiscriminate speculation, and the formulation of such regulations as may restore trading in futures to its original and only justifiable purpose; be it also

Resolved, That a committee of five be appointed by the chairman of the board to consider methods, to confer with officials or committees of the grain exchanges regarding the removal of the existing recognized abuses, and to take such further action as they may find expedient.

At the thirteenth annual meeting of the National Chamber of Commerce held in Washington, D. C., in May, 1925, the following resolution under the heading of "Speculation in foodstuffs" was adopted:

The harmful effect of incessant wide speculative fluctuations in the price of grain upon all interests connected with the production, conversion, distribution, and export of our vast cereal crops, and upon our foreign commerce generally, is so self-evident as to seem to demand prompt remedial measures by the principal grain exchanges. We commend the efforts of the Department of Agriculture to bring about such voluntary constructive action.

## CORRECTIVE MEASURES ADOPTED BY THE EXCHANGES

While not directly connected with the period covered by this report it is essential, in order to complete the picture, to review briefly the action taken by the Chicago Board of Trade to prevent the recurrence of wild fluctuations in prices such as occurred during the early part of 1925. These corrective measures were taken as a result of the conference called by the Secretary of Agriculture in the summer of 1925, following the preliminary report on the results of this investigation. It was clearly set forth by you, as Secretary of Agriculture, that "it is imperative for the board of trade without delay to set up the admin-
istrative machinery to prevent recurrence of such a condition. A failure on the part of the board of trade to take these steps immediately will leave to me, under the terms of my plain obligations, no alternative than to inaugurate action looking to the suspension or revocation of the designation of the Chicago Board of Trade as a contract market."

The plan as outlined provided for: (1) The establishment of a modern clearing system by the Chicago Board of Trade, (2) the adoption of a rule giving the board of directors of each of the contract markets power to limit daily fluctuations in the market prices of grain during emergency periods, such as occurred during the early part of 1925, and (3) the creation of a business conduct committee by each of the contract markets. The exchanges showed an excellent spirit of

 inclusive
cooperation, and these proposed reforms have been put into effect. The business conduct committee of each of the contract markets has broad disciplinary powers over the transactions of members, being "charged with the duty and authority to prevent manipulation of prices, as provided in section 5 (d) of the grain futures act, and shall have general supervision over the business conduct of members." The full text of the regulation of the Chicago Board of Trade governing the business conduct committee is contained in Appendix B of this report.

The creation of a business conduct committee is undoubtedly" a most far-reaching progressive step and this plan of preventing wide and unwarranted price fluctuations and excessive speculative trading and manipulation should be given a fair trial before resorting to more drastic regulatory measures.

## PURPOSE OF THE STUDY

The purpose of the study was to determine the causes of the unusual and erratic fluctuations in the daily prices of wheat futures, and to what extent, if any, the abnormal price changes were due to excessive speculation, or to transactions of a manipulative character.

In order to present a better picture of the abnormal price changes during the early part of 1925, there is reproduced herewith Figure 2 which shows, by months, the high and the low prices for the dominant wheat future on the Chicago Board of Trade for the period from July, 1921, to June, 1925, inclusive. The prices on which this figure is based are shown in Table 1. This composite price curve shows that during this period, with the one exception of February, 1922, there were no wide monthly ranges in the price of the dominant future such as those which occurred from December, 1924, to April, 1925. Most of the monthly ranges in price from July, 1921, to June, 1922, were between 10 and 20 cents per bushel, the average being just under 17 cents.
From July, 1922, to June, 1923, the monthly price ranges were less than 13 cents per bushel, with an average of 10 cents. From July, 1923, to June, 1924, most of the monthly ranges were less than 10 cents per bushel, with an average of $71 / 4$ cents. From July, 1924, to June, 1925 , the monthly ranges in price varied from 13 to $611 / 2$ cents, with an average monthly range for the year of $25 \frac{1}{2}$ cents. The $611 / 2$-cent range occurred during the month of March, 1925 , and it was the extreme daily changes within this month that created the most disturbance.

Table 1.-Monthly ranges in price of the dominant wheat future on the Chicago Board of Trade during the period from July, 1921, to June, 1925, inclusive

| Month and year | Future with the largest volume of trading for the month | Date on which the highest price occurred | Highest price of the dominant future during the month | Date on which the lowest price occurred | Lowest price of the dominant future during the month | Range for the month |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | September, 1921. | July 15 <br> Aug. 2 <br> Sept. 10 <br> Oct. 3 <br> Dec. 1 |  | July ${ }^{6}$ |  |  |
|  | -...-do........... |  | 1291 |  | 114 | 203 \% |
|  |  |  | 1371/4 | Sept. 29 | 1191/2 | 173 |
|  | May, 1922 |  | $1253 / 4$ | Oct. 20 | 10714 | 181/3 |
|  | do |  | 1181/4 | Nov. 4 | 1031/4 |  |
|  | do |  | 119 | Dec. 15 | 1103/8 | 85/8 |
| January 1922 | May, 1922 | Jan. 31 |  |  |  |  |
| February | - | Feb. ${ }^{\text {Mar. }}{ }^{27} 8$ | $1197 / 8$ | Jan. 3 | $\begin{aligned} & 1071 / 2 \\ & 1181 \end{aligned}$ | $123 / 8$ |
| March | , |  | $\begin{aligned} & 1499 / 8 \\ & 148 \end{aligned}$ | Mar. 27 |  |  |
| April. | do | Apr. 22 | 1491/8 | Apr. 6 | $1283 / 4$ | 203/8 |
| June | July, 1922 | May 3 | 12914 | May 31 | 1177 |  |
|  | - .-.do-... |  |  | June 16 |  | 1138 <br> $12^{7 \%}$ |
| August | September, 1922 December, 1922 | July 3 | 1181/8 | July 31 Aug. 21 | 1051/4 |  |
| Septembe | December, 1922 | Sept. 22 | 10938 | Aug. 14 | 1008 |  |
| November |  | Oct. 18 |  | Oct. 2 |  |  |
|  | May, 1923 | Nov. 22 | $\begin{aligned} & 1188^{2} \\ & 126{ }^{4} \end{aligned}$ | Nov. Dec. | $\begin{aligned} & 1115 / 8 \\ & 11418 \end{aligned}$ | $\begin{array}{r} 713 \\ 121 / 8 \end{array}$ |
|  |  |  |  |  |  |  |
| January 1923 |  |  |  |  |  |  |
|  | May, 1923 | Jan. 2 | 1221/2 | Jan. 23 | 1151/4 |  |
| February | do... | Feb. 14 | 12318 |  | 1164 | 858678 |
| April. |  |  |  | Mar. 5 |  |  |
|  | July, 1923 | Apr. 26May 1 | ${ }_{123} 125$ | Apr. ${ }^{3}$May 29 | ${ }_{112} 118$ | 914 |
| May |  |  |  |  |  |  |
|  |  |  |  |  | 10136 | 123/6 |

Table 1.- Monthly ranges in price of the dominant wheat future on the Chicago Board of Trade during the period from July, 1921, to June, 1925, inclusiveContinued

| Month and year | Future with the largest volume of trading for the month | Date on which the highest price occurred | Highest price of the dominant future during the month | Date on which the lowest price occurred | Lowest price of the dominant future during the month | Range for the month |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1923 |  |  |  |  |  |  |
| July | September, 1923. | July 5 | 104 | July 17 | 953/8 | 85/8 |
| August | December, 1923. | Aug. 25 | $1081 / 2$ | Aug. 4 | 995/8 | $87 / 8$ |
| September | --..-do.-.-....-- | Sept. 1 | 1073/4 | Sept. 17 | $1013 / 8$ | $63 / 8$ |
| October |  | Oct. 8 | $1103 / 4$ | Oct. 19 | 1043/8 | $63 / 8$ |
| November | --. | Nov. 3 | 108 | Nov. 19 | 1011/8 | $67 / 8$ |
| December | May, 1924 | Dec. 6 | 1113/4 | Dec. 26 | 1053/8 | $63 / 8$ |
| January .-.---.-.-.-- | May, 1924 | Jan. 31 | 1111/2 | Jan. 4 |  |  |
| February | May, 1924 | Feb. 5 | $1131 / 4$ | Feb. 16 | $1093 / 8$ | 37/8 |
| March | do | Mar. 5 | 1121/8 | Mar. 28 | 1001/4 | 117/8 |
| April | do | Apr. 21 | 1051/4 | Apr. 10 | 1007/8 | $43 / 8$ |
| May | July, 1924 | May 26 | 109 | May 12 | 1043/4 | $41 / 4$ |
| June | September, 1924. | June 19 | $1191 / 8$ | June 3 | 1041/2 | 145/8 |
| July | -..do | July 26 | 1357/8 | July 8 | 1121/8 | $233 / 4$ |
| August | December, 1924. | Aug. 16 | 1383/4 | Aug. 27 | 1231/2 | 151/4 |
| Septembe | do | Sept. 30 | 1425/8 | Sept. 3 | 1261/2 | 161/8 |
| October | do | Oct. 16 | 1523/4 | Oct. 25 | 1397/8 | 127/8 |
| November | May, 1925 | Nov. 24 | 1641/4 |  | 1441/2 | 193/4 |
| December | - | Dec. 27 | 1837/8 | Dec. 3 | 1583/4 | 251/8 |
| January 1925 | May, 1925 | Jan. 28 | 2057/8 | Jan. 6 | 1731/2 |  |
| February |  | Feb. 2 | 2021/4 | Feb. 13 | $1771 / 2$ | $243 / 4$ |
| March | do | Mar. 2 | 202 | Mar. 31 | 1401/2 | $611 / 2$ |
| April | do | Apr. 13 | 1621/4 | Apr. 3 | 1361/2 | 253/4 |
| May | July, 1925 .-..-- | May 28 | 1661/4 | May 1 | 1421/2 | $233 / 4$ |
| June | September, 1925 | June 5 | 1671/2 | June 29 | 1411/4 | $261 / 4$ |
| A verage of the monthly pice ranges for the crop year of- |  |  |  |  |  | Cents |
|  |  |  |  |  |  | 16.96 |
| 1922-23 |  |  |  |  |  | 9.97 |
| 1923-24 |  |  |  |  |  | - 7.23 |
| 1924-25 |  |  |  |  |  | -- 25.60 |

January, February, March, and April are months in which views with regard to the world's wheat situation usually undergo readjustment. The reasons for it are: The week-to-week developments with respect to the foreign demand, the rapidity of domestic mill consumption, the prospective size of the carry over, the quantity of wheat available for export from countries in the Southern Hemisphere, and the new crop outlook. Although this does occur, it was alleged that there were other reasons accounting for the extreme fluctuations in prices in the early months of 1925. It was claimed that large speculators had used their influence in bringing about a sharper decline than would have been the case had supply and demand operated unhindered. This study by the Grain Futures Administration was undertaken for the purpose of ascertaining what factors were primarily responsible for the erratic price movements.

## price movements during the life of the may future

A brief review of the price movements in May wheat during the life of that future, together with a summary of trade opinions regarding factors responsible for some of the price changes, will help to a better understanding of the general market situation during the period covered by this detailed study.

The seasonal range in the price of the 1925 May wheat future was unusually large in comparison with the ranges for the three previous years. The difference between the low and the high figure during the life of the 1922 May wheat future was $465 / 8$ cents; the 1923 May, $221 / 4$ cents; the 1924 May, $143 / 8$ cents; and for the 1925 May, $861 / 4$ cents.

The advance of $861 / 4$ cents in the price of the 1925 May wheat future, from a low of $\$ 1.195 / 8$ on July 8 , to a high of $\$ 2.057 / 8$ on January 28, and the wide daily fluctuations, principally after January 1, 1925 , together with the sharp decline in price to $\$ 1.361 / 2$ on April 3, were the underlying reasons for creating such general dissatisfaction with grain price movements. Fugure 3 shows the opening, high, low, and closing prices, by days, for the 1925 May wheat future at Chicago, together with the volume of trading and the contracts open for customers on the books of clearing members. The prices, net change from the close of the previous day, and the daily price ranges are given in Table 2 for the period from January 2 to April 18.

During the life of the 1925 May wheat future many sharp price changes occurred. On numerous days the price range was 5 cents, on others as high as 10 cents or more, and on two occasions it was over 13 cents. In order to study the trend of the 1925 May wheat future prices the life of this future has been divided into three main divisions: The first covering the interval from June 29, 1924, to January 28, 1925, or the advance to $\$ 2.057 / 8$; the second, from January 28 , to April 3, or the decline to $\$ 1.361 / 2$; and the third, from April 3, to May 29,1925 , when the future expired, closing at $\$ 1.653 / 8$ to $\$ 1.66$.

## A. Period from June 29, 1924, to January 28, 1925

The adrance from $\$ 1.195 / 8$ to $\$ 2.057 / 8$.-Prior to October 1 the daily volume of trading in the 1925 May wheat future was not very large when compared with the total number of bushels traded in during the life of the future. Although the price of May wheat on that date was $\$ 1.45$, it having previously advanced 26 cents from $\$ 1.195 / 8$ to $\$ 1.45$ as early as August 18, the major increase of more than 60 cents was realized after October 1. The rise in price on the whole was fairly uniform and reached the peak on January 28, at $\$ 2.057 /$. During this period the daily range, with but few exceptions, was less than 5 cents per bushel.

The fundamental factors which contributed to the rise to $\$ 2.057 / 8$ were these: (a) A decrease of over 200,000,000 bushels in the 1924 Canadian wheat crop was compared with that for 1923; (b) the short wheat crop in Argentine which was more than $50,000,000$ bushels less than in 1923; (c) the uncertainty, early in the season, as to the outcome of the Australian wheat crop, and the hampering of the export movement from Australia in January because of the striking of "dock hands"; (d) a material decrease of over $600,000,000$ bushels in the 1924 corn crop of the United States as compared with that for the previous year; (e) the anticipation of a world scarcity in wheat. The best estimates of the world shortage in 1924 ranged from 340,000,000 to $440,000,000$ bushels; and $(f)$ the unusual demand from European importing countries.

FIg. 3.-Opening, high, low, and closing prices of May wheat as related to daily volume of trading and customers open contracts, Chicago

Table 2.-The average opening, high, low, average close, the daily range and net change from the previous close in the price of the 1925 May wheat future, by days, from January 2 to A pril 18, 1925


Table 2.-The average opening, high, low, average close, the daily range and net change from the previous close in the price of the 1925 May wheat future, by days, from January 2 to A pril 18, 1925-Continued

| Date | Average opening | High | Low | A verage close | Net change from close of previous day | Range for the day |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Cents | Cents | Cents | Cents | Cents | Cents |
| Apr. 1 | 1481/2 | 1493/4 | 1463/4 | 1493/8 | +31/8 | 3 |
| Apr. ${ }^{2}$ | $1463 / 8$ | 147 | 142 | 1427/8 | -61/2 |  |
| Apr. ${ }^{\text {Apr. }}$ | 1427/8 13818 | 145 | $1361 / 2$ | $1383 / 8$ | $-41 / 2$ +43 | $81 / 2$ |
| Apr. ${ }_{\text {Apr. }}$ | $1381 / 8$ | $1433 / 4$ | 1373/44 | $143{ }^{1 / 8}$ | +43/4 | 6 |
| Apr. 7 | 14878 | $1513 / 4$ | 147 | 1507\% | + $41 / 2$ | 438 |
| Apr. 8 | 1507/8 | $1531 / 2$ | 150 | 1507/8 |  | $31 / 2$ |
| Apr. ${ }^{9}$ | 1487/8 | 1531/4 | 1481/4 | 1523/4 | +178 | 5 |
| Apr. 11. | 159 | 1621/4 | $1573 / 4$ | 1621/8 | +93/8 | $41 / 2$ |
| A pr. 13 | 1613/4 | $1621 / 4$ | $1561 / 2$ | 1565/8 | $-51 / 2$ | $53 / 4$ |
| Apr. 14 | 1551/4 | 1601/2 | $1531 / 4$ | 1603/8 | +334 | $71 / 4$ |
| Apr. 15 | 1593/8 | 1611/2 | 1511/2 | 1513/4 | -85/8 | 10 |
| Apr. 16 | 1511/2 | 152 | 144 | 1447/8 | -67\% | 8 |
| Apr. 17 | 1463/4 | $1513 / 4$ | 1443/4 | 1515/8 | +63/4 | 7 |
| Apr. 18. | 151 | 1513/4 | 1463/4 | 1473/8 | -41/4 | 5 |

## B. Period from January 28 to April 3, 1925

The decline from $\$ 2.057 / 8$ to $\$ 1.361 / 2$.-Between January 28 and April 3, 1925, the price of May wheat declined $683 / 8$ cents. In the early part of this period the price declined under heavy selling, from $\$ 2.057 / 8$ to $\$ 1.771 / 2$. A reaction, however, initiated by heavy speculative buying, first by the professions and later by the general public, carried the price back to $\$ 2.02$. From that figure it fell to $\$ 1.51$ from which point it advanced to $\$ 1.71 \frac{1}{4}$, only later to drop to $\$ 1.361 / 2$ per bushel on April 3. In the nine weeks covered by this second division when the market declined from $\$ 2.057 / 8$ to $\$ 1.361 / 2$, there were 25 days on which the daily range in price was 5 cents or more, whereas in the 29 weeks prior to January 28, there were only five days on which the range was as much as 5 cents. On two days, March 13 and 30 , the range was over 13 cents.

The following is a brief summary of what members of the grain trade expressed in their market letters and "gossip" as being the main factors that brought about the violent changes in price during the period of January 28 to April 3. These explanations are presented herewith as a matter of interest and because of their relation to price movements. In this connection it is essential to keep in mind that every important price movement is accompanied by a flood of explanations.

The decline from $\$ 2.057 / 8$ to $\$ 1.771 / 2$. -The important factors contributing to the decline in price to $\$ 1.771 / 2$, according to market reports, were the breaks in the prices at Liverpool and Buenos Aires, increased world shipments of wheat, heavy selling of wheat futures by professional speculators to the point of uncovering stop-loss orders, liquidation of corn and oats futures, lack of export demand on various days, a decrease in the visible supply at a less rapid rate than expected, the liberal receipts of wheat at primary markets, a decreased participation by the public in the market, a report that Germany was planning to release a reserve of $10,000,000$ bushels of bread grains to take care of an emergency, that Europe was buying many sub-
stitutes, and the introduction of resolutions calling for an investigation of the grain trade.

The advance from $\$ 1.771 / 2$ to $\$ 2.02$. - The recovery in price was attributed by members of the trade to liberal short covering; the buying of futures by cash grain houses and by eastern interests; a marked decrease in receipts at primary markets; the strengthening of prices in Liverpool; an improvement in the export demand especially in the Southwest; the demand for new crop futures by the general public, the stimulus being the crop damage reports from the Southwest; the anticipation of a government report that farm reserve stocks of wheat would be low; and the substantial buying of new crop wheat futures by Europe.

The decline from $\$ 2.02$ to $\$ 1.361 / 2$.-The break to $\$ 1.361 / 2$ was said by members of the trade to be due to heavy liquidation and short selling in the May wheat futures accompanied by the uncovering of stop-loss orders, the weakness in Liverpool and Buenos Aires markets, a slow export demand, the failure of the wheat shortage to materialize, reports of crop improvement in the Southwest, the weakness in the stock market on March 27, slower decreases in the visible supply of wheat than expected, reports of governmental investigation of the grain markets, the increase in margin requirements, and the lack of trading by the general public.

Three reactions in the price occurred during the decline to $\$ 1.361 / 2$ but they were only temporary. They were attributed to the strengthening of prices in Winnipeg, heavy short covering, and the extensive buying of July wheat because of the damage reports coming from the Southwest forecasting the abandonment of a large wheat acreage. Another factor was the great reduction in the exportable surplus in Canada as compared with the previous year.

## C. Period from April 3 to May 29, 1925

During April 3 to 11 the price of May wheat advanced from $\$ 1.361 / 2$ to $\$ 1.621 / 4$. Trade opinions attributed this temporary advance to short covering, the tightening of the domestic cash wheat situation in the terminal markets, the unusually large abandonment of wheat acreage and drought in the Southwest, an improved export demand, the strength in Winnipeg, reinstating of long lines by professional speculators, and the switching of the "general trade" from the May to the July future.

A marked decline took place, beginning on the 15th of April, with the price receding to $\$ 1.421 / 2$ by April 20 . Market letters attributed this decline to heavy selling of May futures, the report that spring wheat in Duluth would be brought to Chicago for delivery on May contracts, the lessened public interest in futures, the increased demand by millers and exporters for eash grain, a small foreign demand, and advices that rains had relieved the dry condition in the Southwest. A reaction lifted the price to a high of $\$ 1.56 \frac{3}{4}$ on April 22 . This was followed by another temporary setback to a low of $\$ 1.441 / 2$ on April 27. From the 27 th on the tendency was for the price to rise sharply making another secondary high of $\$ 1.741 / 4$ on May 18 , and the future expiring at $\$ 1.65 \frac{3}{8}$ to $\$ 1.66$.

The factors which stimulated buying on this last advance were said to be these: The returning of Holland and England to a gold standard, the establishing of a $\$ 300,000,000$ trading credit by England in the United States, the report that grain stocks in Germany were running low, improvement in the domestic demand by millers, the belief that heavy liquidation in futures had ceased, the anticipation of bullish crop reports in early May by crop experts, the decrease in the primary receipts of wheat, considerable short covering, and the transferring of hedges to more distant months. It was also claimed that much buying was done in anticipation that deliveries on May contracts would be light. Additional reasons given by the trade and which tended to increase the price were: Smaller world shipments of wheat; unfavorable crop reports from Kansas, Missouri, Ohio, and Illinois; the congestion in the May wheat future in Chicago; the decreasing United States visible supply of wheat; and the strength shown in Liverpool and Winnipeg on different days.

## SCOPE OF THE INVESTIGATION

The membership of the Chicago Board of Trade is normally about 1,600 . Some few of the larger firms are represented by several individual memberships held by officers and employees. Of the whole number of persons, firms, or corporations represented by memberships, 116 were active members of the clearing association during the early part of 1925. These are known as clearing members. Under the rules of the board all trades for future delivery must clear through a clearing member; hence all trades, regardless of their origin, find their way eventually into the books of some clearing member.

The general rules and regulations for carrying out the provisions of the grain futures act of September 21, 1922, require each clearing member of a "contract market" to make a daily report to the Grain Futures Administration showing: (a) The volume of purchases and sales; (b) the aggregate of the "long" and of the "short" accounts open for customers; and (c) the open commitments of special accounts showing a "long" or a "short" position of such quantities as may be designated from time to time by the grain exchange supervisor. The amount specified for the special accounts on the Chicago Board of Trade is 500,000 bushels in the case of wheat, corn, and oats, and 200,000 bushels for rye.

As a general rule, the daily reports served to keep the Grain Futures Administration fully informed as to the operations of traders whose transactions were of such volume and character as to exert an important influence on the market. However, an examination of books and records at the outset of this investigation uncovered a number of instances where the same trader had several accounts of less than one-half million bushels. In one case a single trader carried six different accounts aggregating over $2,000,000$ bushels. They were for $550,000,200,000,400,000,300,000,300,000$, and 305,000 bushels. Five of these accounts were on the books of a single clearing member. The books of this same clearing member also showed an account of 450,000 bushels for the wife of the trader. Only one of these accounts was reported to the Grain Futures Administration, the remainder all
being under the 500,000 -bushel requirement of paragraph 2 (f) of the Rules and Regulations. ${ }^{1}$

It therefore became necessary to plan a more comprehensive study. Accordingly each clearing member was requested to furnish a complete report of the trading for each account involving either purchases or sales amounting to 100,000 bushels or more within a single trading day. These records covered the trading, by days and by futures, for the period from January 2 to April 18. The records were complete for the period even though trading to the extent of 100,000 bushels did not take place on more than one day. These reports were supplemented by special examination and investigation of the accounts of nonclearing members and members generally wherever the volume of their business suggested the need.

This plan brought reports from 89 of the 116 clearing members, and embodied 1,036 accounts, of which 956 were from the United States, 63 from Canada, and 14 from other foreign countries. The remaining 27 clearing members had no customers who bought or sold as much as 100,000 bushels on any single day. Of these 1,036 accounts 948 showed trading in the May future only, this being the future in which the speculative activities were primarily centered. The accounts in the May future were for 627 "traders," which term includes individuals, firms, and corporations. The detailed information for the accounts of these 627 "traders" covered 70 per cent of the total volume of trading in May wheat during the period under study, the remaining 30 per cent being distributed among a large number of small traders of a miscellaneous character widely scattered throughout the United States and foreign countries. The 89 clearing members from whom detailed reports were received handled during this period 97.5 per cent of the total volume of trading in all wheat futures. This same group of clearing members likewise held 98.5 per cent of the "long" commitments, and 96.7 per cent of the "short" commitments in May wheat.

These 627 individuals, firms, and corporations were classified as A, commission houses; B, hedgers; C, scalpers; D, speculators; E, spreaders; and F , speculative scalpers. A more detailed account of these various classes and their distribution is given in a later section of this report.

## STUDY based primarily on the may future

The material presented in this report is based primarily on the oporations in the May future. The details of the transactions in the July and September futures have been intentionally omitted in order to make possible a clearer presentation of the situation. Moreover, the analysis of the figures for the July and September futures shows

[^3]that the conclusions herein contained are in no sense impaired as a result of their being confined to the operations in May wheat. A brief statement as to the relative importance of the various futures will serve to show the correctness of this position, and to demonstrate that the analysis for the period is based on adequate information.


Fig. 4.-The combined net position in the 1925 May wheat future and in all wheat futures for two classes of "traders," by days, from December 31, 1924, to April 18, 1925

During the period of January 2, to April 18, 1925, the volume of trading in all wheat futures on the Chicago Board of Trade for all customers was $6,183,219,000$ bushels. Of the total volume of trading for this period, $4,635,571,000$ bushels, or 75 per cent, was in the 1925 May wheat future. From the standpoint of customers' open commitments the aggregate for all futures at the close of the market
on December 31, 1924, was $115,784,000$ bushels. Of this, $101,114,000$ bushels, or 87 per cent, was in the May future. At the close of business on April 18, 1925, the aggregate of the customers' open commitments was $92,796,000$ bushels, of which 50 per cent was in the May.

Of the volume of trading in May wheat during this period, 3,230,534,000 bushels, or 70 per cent, was credited to accounts for which the purchases or sales of "May" amounted to 100,000 bushels, or more during a single trading day. Of the trading in the July and September futures, 69 per cent was for this same group of accounts. Likewise, this group controlled a distinct majority of the open commitments comprising an average of about 65 per cent of the open interest in the May wheat future on December 31, 1924, and 75 per cent of that in the July future. Trading in September wheat did not start until January 2, 1925, therefore no open interest existed in this future prior to that date. The position of the open interest on April 18, 1925, represented by traders of the " 100,000 -bushel-orover" class, averaged about 68 per cent of the long and short interest in the May future, 63 per cent in the July, and 64 per cent in the September future. This relationship is summarized for the various classes of traders in Table 3 and is set forth in detail in Tables 29 and 30 of the appendices.

Table 3.-Comparison of the net long and of the net short "open interests" of the various classes in the different futures and their relationship to the "open interests" of all customers on December 31, 1924, and April 18, 1925

| Classes ${ }^{1}$ | Dec. 31, 1924, future |  |  |  | Apr. 18, 1925, future |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | May |  | July |  | May |  | July |  | September |  |
|  | Long | Short | Long | Short | Long | Short | Long | Short | Long | Short |
| A. Commission houses (nonclearing members) | $\begin{array}{r} P . c t . \\ 20.4 \end{array}$ | $\begin{array}{r} P . c t . \\ 9.3 \end{array}$ | P. ct. 43. 0 | $P$. ct. 34.4 | $\begin{array}{r} P . c t . \\ 44.6 \end{array}$ | P.ct. | $\begin{array}{r} P . c t . \\ 24.8 \end{array}$ | $\begin{array}{r} P . c t . \\ 26.1 \end{array}$ | $P$. ct. 36. 2 | P. ct. 33.6 |
| B. Hedgers | 1.5 | 40. 1 | 10. 5 | 4.0 | 5. 6 | 17.7 | 4.1 | 20.8 | 8.4 | 3.0 |
| C. Scalpers. |  |  | 2.1 | 2. 2 | 0.6 | 0.5 | 1. 2 | 0.8 | 3.3 | 1.0 |
| D. Speculators | 40.1 | 10.1 | 16.0 | 30.5 | 14.9 | 29.3 | 25.5 | 13.6 | 12.9 | 20.3 |
| E. Spreaders. | 0. 2 | 4.6 | 0.7 | 1.6 | 0.3 | 0.5 | 3.1 | 3. 5 | 0.2 | 5.6 |
| F. Speculative scalpers | 2. 3 | 0.7 | 3.9 | 1. 2 | 7.0 | 1. 5 | 0.4 | 2.4 | 0.3 | 2.5 |
| Total | 64.4 | 64.8 | 76.2 | 73.9 | 73.0 | 62.6 | 59.1 | 67.2 | 61.3 | 66.0 |
| G. Miscellaneous | 35.6 | 35.2 | 23.8 | 26.1 | 27.0 | 37.4 | 40.9 | 32.8 | 38.7 | 34.0 |
| Grand total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

${ }^{1}$ For details as to the composition of each class see next section.
Figure 4 makes possible a better understanding of the outstanding importance of the May future. In addition to the price curve there are included curves representing the net position of the two most important groups of accounts, designated as classes B and D. The position of these two classes is shown separately for May wheat and for all wheat futures combined. It will be noted that they are very similar and that their trend was determined largely by the trading operations in May wheat. The curve for all futures combined of class D lies under that for the May future for most of the period. This is due to the combining of the net positions of the various, futures, indicating that a part of the open trades were "spreads"
between futures with May on the "long" end and July and September on the "short." Figure 4 should be studied in connection with Figures 3, 10, and 14.

## CLASSIFICATION OF TRADERS

This investigation brought under review the transactions of 627 persons, firms, and corporations who were known to have bought or sold as much as 100,000 bushels of May wheat within a single day during the period under study. Ordinarily, these would be referred to and treated as accounts. However, since in a number of instances different accounts were found to belong to the same person or firm, it has been found desirable to consolidate them and treat them as "traders," after first classifying them according to the dominant character of their operations.

These 627 "traders" were classified as commission houses, hedgers, scalpers, speculators, spreaders, and speculative scalpers. For convenience they have been designated as classes A, B, C, D, E, and F. These six classes were responsible for approximately 70 per cent of the total volume of trading in May wheat. The remaining 30 per cent of the volume of trading represents a large number of miscellaneous traders designated as class G . A more detailed description of the various classes of traders follows.

Class A, commission houses.-This class is made up of 132 "traders" comprised of nonclearing firms, mostly houses doing a general commission business. Ten were located in Chicago, 41 in New York City. The remaining 81 were scattered in various points in the United States and in foreign countries. The trading by this class represents primarily the business of small speculators, although a few of these accounts show a fair volume of hedging transactions.

Of the total number of "traders" in the 100,000 bushel or over group, 21.1 per cent are included in class A. During the period from January 2, to April 18, the volume of trading by this class was approximately 15 per cent of the total for all customers. Their purchases of May wheat amounted to $693,667,000$ bushels and their sales, $690,346,000$ bushels. Of the 132 "traders" in class A, 31 traded at times to the extent of 500,000 bushels or more in one day. The remaining 101 traded in smaller amounts.

Class B, hedgers.-Sixty-two "traders" were placed in class B. They consist primarily of terminal elevator and large milling interests and exporters, comparatively few other hedgers having occasion to buy or sell as much as 100,000 bushels in a single day. Ten of these traders were located in Chicago, 7 in Minneapolis, 11 in New York City, 3 in Buffalo, 5 in Kansas City, 4 in Omaha, and 3 in St. Louis. The other 19 were widely scattered. During the period this hedging class of 62 "traders" bought 137,275,000 bushels of May wheat and sold $103,791,000$ bushels. The purchases represent 2.9 per cent of the total trading for all customers and the sales 2.2 per cent of the total. In a few cases some speculative trading may have been included, but the transactions of the "traders" in class B as a whole were distinctly of a hedging nature.

Of the 62 "traders" in class B, 28 at some time during this period had a net position of 500,000 bushels or more. The open hedges of the remaining 34 never reached one-half million bushels.

Class $C$, scalpers.-This class is composed of 96 individuals, all residents of Chicago, and are commonly known as "pit" traders or scalpers. They constitute 15.3 per cent of the total number of "traders" in classes A to F. During the period under study they bought $1,060,960,000$ bushels of May wheat and sold $1,061,002,000$ bushels. Their transactions represent 22.9 per cent of the total trading in May wheat for all customers. Although the scalpers in class © purchased a considerable quantity during the day they usually sold a like amount and at the end of the day were practically, if not exactly, even. None of the persons in this class was ever "long" or "short" overnight to the extent of 100,000 bushels. Pit traders who took a "long" or "short" position of 100,000 bushels or more were classified as speculative scalpers, class F. Of the 96 persons represented in class C, 30 traded at some time during the period in 500,000 bushels or more in one day and 66 traded in smaller amounts.

Class D, speculators.-This class includes more "traders" than any of the other " 100,000 -bushel-or-over" classes, the total number being 302 , or 48.2 per cent of all trades in classes A to F combined. With but few exceptions they were individuals known as professional or semiprofessional speculators who trade on a relatively large scale as compared with those making up what is commonly termed the "general public." Of the 302 speculative traders 57 at some time during the period were either "long" or "short" 500,000 bushels or more and 38 bought or sold net at times to the extent of 500,000 bushels within a single trading day.

Of the total number 181 were located in Chicago (including suburbs), 22 in New York City, 15 in Canada, and 4 in European countries. The remaining 80 were scattered in 22 different States, Indiana and Missouri leading with 11 each, Minnesota 9, Illinois (outside of Chicago) and Nebraska 7 each, and California, Lowa, Michigan, and Washington with 5 each.

During the period the speculators in class D bought $615,087,000$ bushels of May wheat and sold $652,005,000$ bushels. Their purchases represent 13.3 per cent of the total trading in May wheat for all customers, and their sales 14.1 per cent.

Class E, spreaders.-Class E is composed of persons known to carry on primarily spreading operations; for example, buying the May future and simultaneously selling the July future, or buying the May future in Chicago and selling the came future in Minneapolis, Winnipeg, or other market. Because of the difficulty of identifying spreading transactions, especially where the spreads were between Chicago and some other futures market, this class of traders is not quite complete. Only seven individuals were included in this class, six being located in Chicago. Their purchases of May wheat for the period were $58,401,000$ bushels and their sales $54,042,000$ bushels.

Class F, speculative scalpers.-This class differs from class C only in that sometime during the period these traders assumed a speculative "long" or "short" position in May wheat to the extent of 100,000 bushels or more in addition to carrying on scalping operations. This class is represented by 28 persons, all pit traders located in Chicago. During the 89 -day period they bought $667,690,000$ bushels of May wheat and sold $666,801,000$ bushels, or 14.4 per cent of the total trading in the May delivery.

The trading in May wheat by class F, 14.4 per cent, combined with the trading by class C, 22.9 per cent, gives a total of 37.3 per cent, which represents the greater portion of the trading by pit scalpers. There was, however, a fair volume of scalping operations by persons who never traded to the extent of 100,000 bushels within a single day. Of the 28 persons represented in class F, 12 traded at some time during the period to the extent of $1,000,000$ bushels or more in one day and 16 always traded in smaller amounts.

Class $G$, miscellaneous.- The volume of trading in the 1925 May wheat future by all customers during the period of January 2 to April 18, inclusive, was considerably more than the combined volume traded in by classes A, B, C, D, E, and F, as these latter classes included only transactions involving purchases or sales at some time during the period of 100,000 bushels or more during a single day. The difference between the volume for all customers and that for classes A to F combined represents the trading of those who throughout the period never bought or sold as much as 100,000 bushels on any single day. This "under 100,000 bushel" class has been designated as class G. No detailed records were obtained regarding the trading of individuals in this class, but the class as a whole represents trades of a miscellaneous character. It includes the trading of small speculators whose orders feed direct into Chicago over the vast network of private wires. It also includes the business of small commission houses; hedging transactions of small cash grain houses, country elevators and small mills; and the business of the 27 clearing members who had no single accounts showing trading to the extent of 100,000 bushels during a single day. It likewise includes a liberal percentage of trading by local speculators who operate in a small way.

In point of numbers the "traders" in this class greatly exceed the 627 traders included in classes A to F. They were widely scattered over the United States and to some extent in foreign countries. No


Fig. 5.-The average daily "open interest" and the average daily volume of trading in the 1925 May wheat future by varjous classes of "traders" during the period of January 2 to A pril 18, 1925 detailed records were secured of the trading by this class. During the 89-day period covered by this investigation their purchases of the May future amounted to $1,402,491,000$ bushels against sales of $1,407,584,000$ bushels, or 30.2 per cent and 30.3 per cent, respectively, of the total trading in May wheat for all customers.

## VOLUME OF TRADING BY CLASSES

The total volume of trading, one side only, for all customers in the 1925 May wheat future on the Chicago Board of Trade from January 2 to April 18 was $4,635,571,000$ bushels. Of this amount classes A to F, inclusive, bought $3,233,080,000$ bushels and sold $3,227,987,000$
bushels, the average of the purchases and sales being 3,230,534,000 bushels, or approximately 70 per cent of all trading in the May delivery.

The volume of trading by the various classes and the relationship between the classes is summarized in Table 4. The table shows that the purchases of class A for the period were 15 per cent of the total for all customers; of class B, 2.9; of class C, 22.9; class D, 13.3; class E, 1.3 ; class F, 14.4; and class G, 30.2 per cent. From the standpoint of the total volume of trading in May wheat the sales of class A were 14.9 per cent; class B, 2.2; class C, 22.9; class D, 14.1; class E, 1.2; class F, 14.4; and class G, 30.3 per cent. The average volume of daily trading and the daily average "open interest" of the various classes of "traders" are shown in figure 5.

Table 4.-Classification of "traders," the number in each class, and the percentage of the total volume of trading in May wheat by the various classes

| Class | Kind of trader | "Traders" |  | Per cent trading futures | of total <br> in May |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Number | Per cent of total, classes A to F | Purchases | Sales |
| A | Commission houses. | 132 | 21.1 | 15.0 | 14.9 |
| B | Hedgers...- | 62 | 9.9 | 2.9 | 2.2 |
| C | Scalpers. | 96 | 15.3 | 22. 9 | 22.9 |
| D | Speculators. | 302 | 48.2 | 13.3 | 14.1 |
| E | Spreaders.. | 7 | 1.0 | 1.3 | 1.2 |
| F | Speculative scalpers | 28 | 4.5 | 14.4 | 14.4 |
| G | Total, traders in amounts of 100,000 bushels or over Miscellaneous, traders in amounts less than 100,000 bushels. <br> Total | 627 | 100.0 | 69.8 | 69.7 |
|  |  | Unknown |  | 30.2 | 30.3 |
|  |  |  |  | 100.0 | 100.0 |

The volume of trading by the various classes is shown by months in Table 5 and in detail by days in Tables 21 and 22 in the appendixes.

Table 5.-Volume of trading in the 1925 May wheat future by various classes during the period from January 2, 1925, to A pril 18, 1925, by months, compared with the total volume of trading by all customers during the same period
[In thousands of bushels]

| Month, 1925 | Total volume of trading, all customers ${ }^{1}$ | Trading by classes |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Volume of trading |  | Per cent of total volume of trading by all customers |  |
|  |  | Bought | Sold | Bought | Sold |
| CLASS A |  |  |  |  |  |
| January | 1, 429, 310 | 209, 439 | 197, 269 | 14.7 | 13.8 |
| February | 1, 250, 557 | 183, 180 | 188, 108 | 14.6 | 15.0 |
| March | 1, 443, 625 | 225, 965 | 227, 156 | 15.7 | 15.7 |
| April | 512, 079 | 75, 103 | 77, 813 | 14.7 | 15.2 |
| Total | 4, 635, 571 | 693, 667 | 690,346 | 15.0 | 14.9 |
| CLASS B |  |  |  |  |  |
| January | 1, 429, 310 | 30, 743 | 22, 855 | 2.2 | 1. 6 |
| February | 1, 250, 557 | 35, 640 | 32, 349 | 2.8 | 2. 6 |
| March | 1, 443, 625 | 51, 515 | 36, 660 | 3. 6 | 2.5 |
| April | 512, 079 | 19,377 | 11, 927 | 3.8 | 2.3 |
| To | 4, 635, 571 | 137, 275 | 103, 791 | 2.9 | 2.2 |
| Class C. |  |  |  |  |  |
| January. | 1, 429, 310 | 344,637 | 345, 087 | 24.1 | 24.1 |
| February | 1, 250, 557 | 280, 004 | 279, 529 | 22.4 | 22.4 |
| March | 1, 443, 625 | 300, 612 | 300, 595 | 20.8 | 20.8 |
| April | 512, 079 | 135, 707 | 135, 791 | 26.5 | 26.5 |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Total | 4, 635, 571 | 615,087 | 652,005 | 13.3 | 14.1 |
|  |  |  |  |  |  |
| January | 1, 429,310 | 18,923 | 14,855 | 1.3 | 1.0 |
| February | 1,250,557 | 11, 495 | 12, 100 | . 9 | 1.0 |
| March | 1, 443, 625 | 20,847 | 21,351 | 1.4 | 1.5 |
| April | 512, 079 | 7,136 | 5,736 | 1.4 | 1.1 |
|  |  |  |  |  |  |
| CLASS F |  |  |  |  |  |
| January.- | 1,429, 310 | 194,742 | 195, 801 | 13.6 | 13.7 |
| February | 1,250,557 | 181, 022 | 179, 366 | 14.5 | 14.3 |
| March | 1, 443, 625 | 217,576 | 217, 235 | 15.1 | 15.0 |
| April | 512, 079 | 74,350 | 74,399 | 14.5 | 14.5 |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |  |
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|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| February | 1,250, 557 | 381, 682 | 393, 096 | 30.5 | 31. 4 |
| March | 1, 443, 625 | 434, 969 | 422, 342 | 30.4 | 29.3 |
| April | 512, 079 | 148, 747 | 148,604 | 29.0 | 29.0 |
|  | 4, 635, 571 | 1,402, 491 | 1, 407, 584 | 30.2 | 30.3 |
| Grand total | 4, 635, 571 | 4,635, 571 | 4,635, 571 | 100.0 | 100.0 |

${ }^{1}$ One side only-bought and sold sides the same.
104370 -S. Doc. 135, 69-1——4

## RANGE IN VOLUME OF TRADING BY CLASSES

The range in the daily volume of trading varied widely for the different classes. For classes A, D, and F, the daily purchases ranged mostly from $2,000,000$ to $13,000,000$ bushels and the sales from

$1,000,000$ to $11,000,000$ bushels. For classes C and G the range of the daily purchases was somewhat higher, or from $6,000,000$ to 20 ,000,000 bushels. Class B showed the smallest range, from less than $1,000,000$ to $3,000,000$ bushels.

While the greater portion of the trading for the various classes fell within the foregoing limits, there were days on which the trading was much broader. The entire range of the daily purchases for class A was from $2,000,000$ to $20,000,000$ bushels; class B, from less than 1,000 ,000 to $6,000,000$ bushels; class C, $5,000,000$ to $21,000,000$ bushels; class D, $1,000,000$ to $15,000,000$ bushels; class F, $2,000,000$ to $18,000,000$ bushels; and class G, from $6,000,000$ to $34,000,000$ bushels. From the standpoint of sales the entire range was as follows: Class 1 , $2,000,000$ to $20,000,000$; class B, from less than $1,000,000$ to $5,000,000$; class C, from $5,000,000$ to $20,000,000$; class D, from $1,000,000$ to $23,000,000$; class F, from $2,000,000$ to $16,000,000$; class G, from $6,000,000$ to $32,000,000$. The ranges in the daily volume of trading by classes A, B, C, D, F, and G are shown in Figure 6. The detailed data on which this figure is based are shown in Tables 21 and 22 of the appendices.

## GEOGRAPHICAL DISTRIBUTION OF " TRADERS "

In the consideration of the volume of trading from the standpoint of geographical distribution, it is especially important to keep in mind that it does not cover all of the trading in May wheat on the Chicago Board of Trade. It deals only with the 100,000 bushel or over accounts of the 627 "traders" grouped under classes A to F, inclusive. It covers, however, approximately 70 per cent of the total volume of trading in May wheat during the 89-day period covered by this report. Were a complete record available the situation with respect to the important points would not be changed materially. There would be, however, a large increase in the number of points to cover the smaller traders, whose orders reached Chicago either direct or through outside points of concentration, from a widely scattered territory throughout the United States and several foreign countries.

Figure 7 shows the various cities in which the "traders" were located who traded to the extent of 100,000 bushels on one or more days during the period from January 2, to April 18. The relative quantity of business from each locality is represented by the size of the circles or dots. Although a large number of cities are shown on the map the average volume of trading accredited to the majority of them is less than $5,000,000$ bushels for the period. Chicago leads with $2,302,000,000$ bushels, followed by New York with $420,000,000$ and Winnipeg with $49,000,000$. Next in order is Kansas City with $45,500,000$ bushels, Minneapolis $45,000,000$, New Orleans 43,500,000, Cincinnati $30,500,000$, Omaha 29,500,000, San Francisco 24,750,000, Portland, Ore9., 18,500,000; and Los Angeles with 10,750,000 bushels.

The foregoing does not include all of the trading originating in Chicago, for a fair percentage of the total volume represented by the small accounts that did not show a volume of 100,000 bushels on any one day also originated in Chicago. Likewise a fair percentage of the business done by the 27 clearing members who had no large accounts was of local origin. The Chicago volume is necessarily large because it includes the trading of the pit traders who contributed much to the flexibility of the market. New York includes, in addition to the accounts of individual traders, some foreign business as well as orders received through correspondents. For example,
of the volume shown for New York, a part of the business originated in Philadelphia, Washington, Asheville, Miami, and other points in the Atlantic coast States. Likewise, San Francisco includes orders originating at various points in California, through branch offices of


private wire systems leading to Chicago. A similar situation exists with reference to New Orleans, Kansas City, Omaha, Minneapolis, and other points of concentration. However, in so far as possible, all accounts of consequence were accredited to the city where the
trader maintains his permanent residence, regardless of where the order originated.

Considered from the standpoint of distribution by States, Illinois comes first with $2,333,000,000$ bushels. New York contributed $423,750,000$ bushels, Ohio $49,500,000$, Louisiana $43,500,000$, California $38,500,000$, Nebraska $33,500,000$, Indiana $20,500,000$, and Oregon 18,500,000 bushels.

The volume accredited to foreign countries is $87,000,000$, or 2.7 per cent of the total for the 100,000 -bushel classes. This figure is subject to slight adjustment by reason of the fact that some foreign business is included in the treatment of certain New York commission houses. Of the total volume accredited to foreign countries, orders for $80,258,000$ bushels came from Canada. The balance of the foreign business came from England, Holland, Italy, France, Hungary, Belgium, Germany, and Australia.

Of the 627 "traders" of the 100,000 bushels or over classes 328 , or 48.8 per cent, were located in Chicago and 75 , or 11.1 per cent, were located in New York City, making a combined total of 403, or 59.9 per cent, in these two cities. Considered on the basis of the volume of trading, Chicago and New York furnished more than 84 per cent of the $3,230,534,000$ bushels bought and sold by the " 100,000 bushels or over" classes and nearly 59 per cent of the total trading in May wheat which was $4,635,571,000$ bushels.

## accumulation and liquidation by certain classes of TRADERS

## Classes A, Commission Houses; B, Hedgers; and D, Speculators

The accumulation of large "lines" refers to the operations of traders in acquiring a substantial interest in the futures markets either on the "long" or the "short" side. Liquidation, as used in this report, refers to the disposal of a "long" interest, either through profittaking by selling on an advancing market or by selling under the pressure of a declining market. In some instances, where the meaning is entirely clear, the term liquidation has also been used to indicate the disposal of a "short" interest, otherwise the buying-in of a "short"" interest has been referred to as "short covering" or "covering." The trading by individuals in building up or reducing long or short "lines" is of interest in studying price movements.

Table 6 shows the daily increase and decrease in the long or short interests of classes A, D, and B. Figure 8 shows, in the form of bars, the purchases for long account and for short account, and the sales for long account and for short account of class D alone, and for classes $\mathrm{A}, \mathrm{B}$, and D combined.

January.-The table shows that during January the "longs" of class A, as a whole, purchased over $10,500,000$ bushels more May wheat futures than they sold and that the "shorts" purchased over 1,500,000 more than they sold. In contrast, both the longs and the shorts in class D sold more than they bought, the former to the extent of almost $15,000,000$ bushels and the latter more than $1,250,000$ bushels. In class B the combined purchases of the longs were 150,000 more than their sales and that of the shorts approximately $7,750,000$ bushels.

February.-In February the situation was somewhat reversed-the longs and the shorts of class $A$, as a whole, sold more than they bought. The sales by the longs were over $3,000,000$ bushels more than the purchases, and for the shorts over $1,750,000$. Class D, on the other hand, bought more than it sold. The longs combined increased their line by an amount over $7,250,000$ bushels and the shorts decreased


Fig. 8.-The volume of the 1925 May wheat future bought and sold for long and for short account by class $D$, classes $A, B$, and $D$ combined, with the range in price of the future, by days, from January 2 to A pril 18, 1925
their line by nearly $4,250,000$ bushels through short covering. In the B class the combined purchases for the "long accounts" "were nearly $2,000,000$ bushels larger than the sales and for the "short accounts" over $1,250,000$ bushels larger.

March. - The sales of May wheat futures for the longs of class A for the month of March were $3,000,000$ bushels more than their pur-
chases. The shorts, however, bought nearly $2,000,000$ bushels more than they sold. The combined operations of class D consisted of heavy liquidation and short selling. The long interests of class D were reduced during the month to the extent of $22,500,000$ bushels, whereas the line of the shorts, through additional short selling, was increased by more than $3,500,000$ bushels. In the case of class B, the sales for "long account" amounted to over $1,250,000$ bushels more than their purchases. A great deal of "lifting" or removing of hedges also occurred, as shown in Figure 10, the purchases for the shorts of class B exceeding the sales by $16,000,000$ bushels.

April.-Up to and including the 18 th of April the liquidation of ehe "long lines" in class A for the month was almost $4,000,000$ bushtls, while the "short lines" were decreased by nearly $1,250,000$ bushels. As in March, there was further reduction in the long holdings of class D of about $3,500,000$ bushels and an increase in the short interests of $2,750,000$ bushels. The long interest of class B was increased by over 250,000 bushels, while the short interest was reduced by nearly $7,250,000$ bushels.

Table 6.-The increase and decrease in long and short holdings of the 1925 May wheat future, by days, for classes $A, D$, and B, during the period of January 2 to A pril 18, 1925
[In thousands of bushels, i. e., 000 omitted]

| Date | Class A |  |  |  | Class D |  |  |  | Class B |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Long holdings |  | Short holdings |  | Long holdings |  | Short holdings |  | Long holdings |  | Short holdings |  |
|  | $\begin{aligned} & \text { In- } \\ & \text { crease } \end{aligned}$ | $\begin{gathered} \text { De- } \\ \text { crease } \end{gathered}$ | $\begin{array}{\|c} \text { De- } \\ \text { crease } \end{array}$ | $\begin{aligned} & \text { In- } \\ & \text { crease } \end{aligned}$ | $\begin{gathered} \text { In- } \\ \text { crease } \end{gathered}$ | $\begin{aligned} & \text { De- } \\ & \text { crease } \end{aligned}$ | $\begin{gathered} \text { De- } \\ \text { crease } \end{gathered}$ | $\underset{\text { In- }}{\text { In-ase }}$ | $\begin{gathered} \text { In- } \\ \text { crease } \end{gathered}$ | Decrease | De- crease | $\begin{aligned} & \text { In- } \\ & \text { crease } \end{aligned}$ |
| $\begin{aligned} & 1925 \\ & \text { Jan. } \\ & 2 \ldots \ldots \end{aligned}$ | 1,400 | 424 | --785 | 585 476 |  | $\begin{array}{r} 710 \\ 270 \\ 2,099 \end{array}$ | 220 | 995 |  | 7515135 | $\begin{array}{r} 1,426 \\ 305 \end{array}$ | - |
| Jan. 5 | $\begin{aligned} & 2,176 \\ & 1,657 \\ & 1,454 \end{aligned}$ |  |  | $\begin{aligned} & 494 \\ & 1,805 \end{aligned}$ | 2,168 2,099 <br> 1,735  <br> $1,-\cdots$  |  | $\begin{array}{r} 688 \\ 1,420 \end{array}$ | 1,246 |  |  | , .-. |  |
| Jan. 6 |  |  |  |  |  |  |  |  |  |  |  | 135 | 57939376410160 |
| Jan. 7 |  | 664 | 130 |  |  |  | 435 |  | 40 100 |  |  |  |  |
| Jan. 9 | $\begin{aligned} & -343 \\ & 516 \end{aligned}$ |  | 297 |  | 380 |  |  | 265 |  |  |  |  |  |
| Jan. 10 |  | 178 |  | ---714 | 2, 674 |  | 1,149 |  |  | 40 | 261 |  |  |
| Jan. 12 | 850 |  | $\begin{aligned} & 653 \\ & 538 \\ & 835 \\ & 155 \end{aligned}$ |  |  | $\begin{aligned} & 2,031 \\ & 1,745 \\ & 3,350 \\ & 1,685 \end{aligned}$ | 636 | $\begin{array}{r} 739 \\ 445 \\ 260 \\ 1,510 \end{array}$ | $\begin{array}{r} 45 \\ 125 \end{array}$ | -- | 200 |  |  |
| Jan. 14 |  | 767 |  |  | ----------- |  |  |  |  |  | 296 |  |  |
| Jan. 15 | 2,964 |  |  |  |  |  |  |  |  | $\begin{array}{r} 15 \\ 100 \\ 90 \end{array}$ |  |  |  |  |
| Jan. I6 |  | $\begin{array}{r} 433 \\ 1,732 \\ 702 \end{array}$ |  | $\begin{aligned} & 102 \\ & 851 \end{aligned}$ | ---745 |  | 1,205 |  |  |  |  |  |  |
| Jan. 19 |  |  | 553 |  |  | 1, 485 |  | $\begin{array}{r} 80 \\ 337 \\ 2,118 \end{array}$ | - $35-1$. |  | 763 |  |  |
| Jan. 20 | $\begin{array}{r} 699 \\ 2,928 \end{array}$ |  |  | 196 |  | 378 |  |  | 150 |  | 888 |  |  |
| Jan. 21 |  | $319$ | 417 |  | ------ | 1,562 | 2,515 |  | 135 |  |  | $\left.\right\|^{-\cdots-176}$ |  |
| Jan. 23 | 1,916 |  | 427 |  |  | 1,459 |  | 300 | 25 |  | 665 |  |  |
| Jan. 24 |  | $2,147$ | 463588 |  |  | 1,018 |  | 92 | 85 |  |  | 211 |  |
| Jan. 26 |  |  |  | --155 | 2,917 | , 440 | 1,780 | 875 | 135230 | $\begin{aligned} & 75 \\ & 65 \end{aligned}$ | $\begin{aligned} & 425 \\ & 780 \\ & 950 \end{aligned}$ |  |  |
| Jan. 28 | $\begin{array}{r} 53 \\ 1,742 \\ 635 \end{array}$ |  | $\begin{array}{r} 757 \\ 694 \\ 419 \\ -\quad-\quad . \end{array}$ | $-221$ |  | $\begin{array}{r} 4,087 \\ 2,488 \\ 728 \end{array}$ |  | $\begin{array}{\|l\|} 518 \\ 1,012 \end{array}$ |  |  |  |  |  |
| Jan. 29 |  | 281 <br> $-\cdots . . . . . . . ~$ <br> $-\quad$. |  |  | 430 |  | $62$ |  |  |  | ---.-.----- | 268$-\quad 24$ |  |
| $\begin{aligned} & \text { Jan. } 30 \\ & \text { Jan. } 31 \end{aligned}$ |  |  |  |  |  |  |  |  |  | 50 |  |  |  |
| Net total. | 10, 584 | ------- | 1,586 |  | --..--- | 14,905 | -.--- | 1,263 | 150 | - .-. | 7,738 | ...... |  |
| Feb. 2 |  | $\begin{array}{r} 1,124 \\ 600 \end{array}$ |  | 1,049 |  | 1,308 | 1,328 | $\begin{array}{r} 630 \\ \hdashline 1,543 \\ 790 \end{array}$ | 90 | 280 | 1,265 | $\begin{aligned} & 1,217 \\ & 1,648 \end{aligned}$ |  |
| eb |  |  |  |  | 33 |  |  |  | 35 |  |  |  |  |
|  | 1,941 | $\begin{aligned} & 1,953 \\ & 298 \end{aligned}$ | $\begin{aligned} & 280 \\ & 266 \end{aligned}$ | 677 | $\begin{aligned} & 1,267 \\ & 1,940 \\ & 1,95 \\ & 1,98 \\ & 2,595 \end{aligned}$ | 105 |  |  |  | 44 |  | 41 |  |
| Feb. |  |  |  |  |  |  | $\begin{aligned} & 2,073 \\ & 1,040 \end{aligned}$ |  | $\begin{array}{r} 200 \\ 40 \end{array}$ |  | 195 | 1,539 |  |
| Feb. | 1,590 |  |  |  |  |  |  | 1,135 |  | 221 | $\begin{gathered} 666 \\ 509 \\ 471 \end{gathered}$ |  |  |
| Feb. 10 |  | $\begin{array}{r} 2,599 \\ 561 \end{array}$ | 791 | $1,003$ |  |  | 852 |  |  | 220 |  |  |  |
| Feb. 11 |  |  |  |  |  |  | 1,310 |  | 1,340 |  |  |  |  |

Table 6.-The increase and decrease in long and short holdings of the 1925 May wheat future, by days, for classes $A, D$, and $B$, during the period of January 2 to A pril 18, 1925-Continued
[In thousands of bushels, i. e., 000 omitted]


## Eight Large Speculators in Class D

In Table 7 is found the combined increase and decrease in the long and short holdings in the May wheat future of the eight traders composing the " $2,000,000$-bushel-or-over" group. It shows that by January 31 the long lines of this group were reduced by over 9,250,000


Fig. 9-The volume of the 1925 May wheat future bought and sold for long and for short account by the " 2 million bushels or over" group of class $D$, with the daily change in price of the future, by days, from January 2 to April 18, 1925
bushels. By February 28 they were increased by more than $3,250,000$ bushels. By the end of March the long interests were decreased by around $10,000,000$ bushels, and by April 18 further decreased by about 900,000 bushels. The short interests, on the other hand, were reduced by January 31 nearly 750,000 and by February 28 by over $2,000,000$ bushels. By the end of March they were
increased, through short selling, by 3,500,000 bushels and by April 18 by more than 750,000 .

The amount by which the long or short lines of the eight traders, taken as a whole, was increased or decreased each day is shown in Figure 9, by means of vertical bars. The bar curves for the group are very similar to those for class D, shown in Figure 8, thus suggesting that this group of eight evidently played a very important part in determining the trend of the curve for the speculative class. In comparing the two figures it should be kept in mind that the bar curves for the " $2,000,000$-bushel-or-over" group are on a different scale so as to bring out more fully the details of the operations of this group.

Of the net reduction of $14,905,000$ bushels in the long interest in the 1925 May wheat future of class D in January, 61.4 per cent was for the "2,000,000-bushel-or-over" group. The short interest of class D during the same month had a net increase of $1,263,000$ bushels, whereas that for the smaller group decreased 700,000 bushels net. Of the 7,738,000-bushel increase in the long line of class $D$ for February, 46.3 per cent was for the group of eight persons, and of the $4,163,000$-bushel decrease on the short side for class $D$ it was almost 50 per cent. For March, the net decrease in long interest of the group represented 45.1 per cent of that for class D , as a whole, whose total net decrease was $22,509,000$ bushels.
Table 7.-The volume of trading, the aggregate, and the combined increase and decrease in the long and short holdings in the 1925 May wheat
One trader switched from long to short side of the market.
[In thousands of bushels]

| Daily trades |  | $\begin{aligned} & \text { Number } \\ & \text { of } \\ & \text { traders } \end{aligned}$ | Longholdings in-creased | $\begin{aligned} & \text { Number } \\ & \text { of } \\ & \text { traders } \end{aligned}$ | Long decreased | Number of traders | Shortholdings decreased | $\begin{aligned} & \text { Number } \\ & \text { of } \\ & \text { traders } \end{aligned}$ | Shortholdings increased | Long holdings |  | Short holdings |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Bought | Sold |  |  |  |  |  |  |  |  | $\begin{aligned} & \text { Net } \\ & \text { increase } \end{aligned}$ | Net decrease | $\begin{aligned} & \text { Net } \\ & \text { decrease } \end{aligned}$ | $\begin{gathered} \text { Net } \\ \text { increase } \end{gathered}$ |
| $\begin{array}{r} 1,015 \\ \quad 60 \end{array}$ | $\begin{aligned} & 965 \\ & 400 \end{aligned}$ | 1 | 50 | 2 | 340 |  |  |  |  | 50 | 340 |  |  |
| 1,950 | 2,855 650 | ${ }_{2}^{2}$ | 900 125 | ${ }_{1}^{2}$ | 1,805 300 |  |  |  |  |  | 905 175 |  |  |
| 1,380 | 45 | 2 | 335 |  |  | 1 | 1,000 |  |  | 335 |  | 1,000 |  |
| 140 275 | 140 25 | 1 | 100 250 | 1 | 100 |  |  |  |  | 50 |  |  |  |
| 200 |  | 1 | 200 |  |  |  |  |  |  | 200 |  |  |  |
| 4,350 | 1,000 | 3 | 3,975 | 2 | 800 | 1 | 175 |  |  | 3,175 |  | 175 |  |
| 1,200 | 600 | 2 | 450 | 1 | 1 450 | 1 | 600 |  |  |  |  | 600 |  |
| 1,375 300 | 1,625 3,685 | 2 | 1,200 | 2 | 1,450 3,385 |  |  |  |  |  | $\begin{array}{r} 250 \\ 3,385 \end{array}$ |  |  |
| 2, 100 | 2,970 | 2 | 280 | 2 | 1,100 |  |  | 1 | 50 |  | 820 |  | 50 |
| 1,490 | 2,215 | 1 | 200 | 2 | 1,330 | 1 | 405 |  |  |  | 1,130 | 405 |  |
| 1,235 | 1,100 | 1 | 585 | 1 | 770 | 1 | 320 |  |  |  | 185 | 320 |  |
| 975 | 440 | 2 | 700 | 1 | 145 |  |  | 1 |  | 555 |  |  |  |
| 1,270 | 7,010 |  | 975 | 12 | 4, 565 |  |  | 2 | 2, 150 |  | 3, 590 |  | 2,150 |
| 1,450 | 1,910 |  |  | 4 | 1,390 | 1 | 930 |  |  |  | 1,390 | 930 |  |
| 200 | 930 |  |  | 3 | 730 |  |  |  |  | 235 | 730 |  |  |
| 1,465 | 2,500 | 2 | 295 |  | 1,710 | 21 | 380 |  |  |  | 1,415 | 380 |  |
| 2, 380 | , 175 | 2 | 1,280 | 2 |  | 1 | 1,000 |  |  | 1,205 |  | 1,000 |  |
| 1, 850 | 2,480 | 2 | 590 | 5 | 1,470 | 21 | 250 |  |  |  | 880 | 250 |  |
| 550 | 2,870 | 1 | 200 | ${ }^{3} 3$ | 675 |  |  |  | 1,845 |  | 475 |  | 1,845 |
| 210 | 425 | 1 | 200 | 2 | 250 |  |  | 1 | 165 |  | 50 |  | 165 |
| 520 | 245 | 2 | 410 |  |  |  |  | 1 | 135 | 410 |  |  | 135 |
| 28,825 | 37, 430 |  | 13, 535 |  | 22, 840 |  | 5, 065 |  | 4. 365 | 6,415 | 15,720 | 5,065 | 4,365 | ${ }^{3}$ Two traders switched from long to short side of the market.


| Date | Daily trades |  | $\begin{gathered} \text { Number } \\ \text { of } \\ \text { traders } \end{gathered}$ | ```Long holdings in- creased``` | $\begin{aligned} & \text { Number } \\ & \text { of } \\ & \text { traders } \end{aligned}$ | Long holdings decreased | $\begin{aligned} & \text { Number } \\ & \text { of } \\ & \text { traders } \end{aligned}$ | Short holdings decreased | $\begin{aligned} & \text { Number } \\ & \text { of } \\ & \text { traders } \end{aligned}$ | Short holdings increased | Long holdings |  | Short holdings |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Bought | Sold |  |  |  |  |  |  |  |  | Net increase | Net decrease | Net decrease | Net increase |
| Feb. 2 | 840 | 400 | 2 | 450 |  |  | 1 | 390 | 1 | 400 | 450 |  |  | 10 |
| Feb. 4 | 2,980 | 2, 285 | 1 | 700 | 12 | 1,635 960 | 2 |  | 2 | 1,275 |  | $\begin{aligned} & 685 \\ & 260 \end{aligned}$ | 500 | 275 |
| Feb. 5 | 1,100 | 1,200 | 1 | 600 | 1 | 50 | 1 | 50 | 2 | 700 | 550 |  |  | 650 |
| Feb. 6 | 3,210 | 1,675 | 2 | 1,025 | 1 | 1,450 | ${ }^{2} 2$ | 2, 160 | 1 | 200 |  | 425 | 1,960 |  |
| Feb. 7 | 3,250 | 210 | 3 | 2,675 |  |  | 2 | 365 |  |  | 2,675 |  | 365 |  |
| Feb. 9 | 1,375 | 875 | 2 | 900 |  |  | 1 | 250 | 1 | 650 | 900 |  |  | 400 |
| Feb. 10 | 1,045 | 365 | 1 | 50 | 1 | 50 | 2 | 680 |  |  |  |  | 680 |  |
| Feb. 11 | 2,155 | 1,000 | 2 | 1, 200 | 2 | 850 | 2 | 805 |  |  | 350 |  | 805 | -------- |
| Feb. 13 | 915 | 265 | 3 | 745 | 1 | 250 | ${ }^{2} 1$ | 155 |  |  | 495 |  | 155 |  |
| Feb. 14 | 700 | 195 | 2 | 700 | 1 | 195 |  |  |  |  | 505 |  |  |  |
| Feb. 16 | 725 | 250 | 3 | 710 | ${ }^{1} 1$ | 50 | 11 | 15 | 1 | 200 | 660 |  |  | 185 |
| Feb. 17 |  | 750 |  |  |  |  |  |  | 1 | 750 |  |  |  | 750 |
| Feb. 18 | 600 | 200 |  |  | 11 | 35 | 1 | 500 | 1 | 65 |  | 35 | 435 |  |
| Feb. 19 | 1,125 | 100 | 3 | 575 |  |  | ${ }^{2} 1$ | 450 |  |  | 575 |  | 450 | ---- |
| Feb. 20 | 450 | 200 | 1 | 200 |  |  | 1 | 50 |  |  | 200 |  | 50 |  |
| Feb. 21 |  | 755 |  |  |  |  |  |  | 1 | 755 |  |  |  | 755 |
| Feb. 24 | 850 | 25 | 2 | 850 |  |  |  |  | 1 | 25 | 850 |  |  | 25 |
| Feb. 25 | 355 | 80 | 1 | 250 |  |  | 1 | 25 |  |  | 250 |  | 25 |  |
| Feb. 26 | 1,025 | 1,255 | 3 | 870 | 1 | 1,100 |  |  |  |  |  | 230 |  |  |
| $\text { Feb. } 27$ | 820 | 3, 600 | 2 | 620 | 1 | 3, 600 | 1 | 200 |  |  |  | 2,980 | 200 |  |
| $\text { Feb. } 28$ | 550 | 550 |  |  | 2 | 500 | 1 | 500 |  |  |  | 500 | 500 |  |
| Total | 24,820 | 19,400 |  | 14, 070 |  | 10,725 |  | 8,095 |  | 6, 020 | 8,460 | 5,115 | 6,125 | 4,050 |
| Mar. 2 | 980501,1502,8001,0001,0002502,9003503,4508801,925 | 1,6509504,2002,0003,3506304356504,3351,1004,8752,100 | 1 <br> 1 <br> $\cdots$ <br> 1 <br> 1 <br> $\cdots$ <br> 1 | 880 |  |  | 1 | 50 | 1 | 1,600 | 880 |  |  |  |
| Mar. 3 |  |  |  |  | 11 | 600 |  |  | 1 | , 300 |  | 600 |  | -300 |
| Mar. 4 |  |  |  |  | ${ }^{1} 1$ | 1,500 |  |  | 2 | 2, 450 |  | 600 |  | 2,450 |
| Mar. 5 |  |  |  | 500 | 1 | 500 | 1 | 2, 150 | 1 | 1,350 |  |  | 800 |  |
| Mar. 6 |  |  |  |  | 1 | 2, 200 | 1 | 500 | 2 | 650 |  | 2, 200 |  | 150 |
| Mar. 7 |  |  |  | 370 |  |  |  |  |  |  | 370 |  |  |  |
| Mar. 10 |  |  |  | 1,050 | 1 | 185 | 1 | 1,250 | 1 | 50 | 1,050 | 185 | 1,200 | ------ |
| Mar. 11 |  |  |  | 105 | 12 | 1,260 | 21 | 170 | 2 | 3,000 |  | 1,155 |  | 2,830 |
| Mar. 12 |  |  |  | 450 |  |  | 1 | 2,900 | 1 | 1,000 | 450 |  | 1,900 |  |
| Mar. 13 |  |  |  |  | 13 | 3, 135 |  |  | 3 | 860 |  | 3,135 |  | 860 |
| Mar. 14. |  |  |  | 300 | 3 | 1,650 | 22 | 1,200 | 1 | 25 |  | 1,350 | 1,175 | 00 |


| Mar. 15 | 415 | 1,025 |  |  | 11 | 350 | 1 | 290 | 2 | 550 |  | 350 |  | 260 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Mar. 17 | 4, 025 | 5, 775 | 2 | 580 | 13 | 5, 075 | - 22 | 3,345 | 1 | 600 |  | 4,495 | 2, 745 |  |
| Mar. 18 | 1, 980 | 480 | 3 | 1,135 | 1 | 200 | 1 | 565 |  |  | 935 |  | 565 |  |
| Mar. 19 | 2, 625 | 450 | 5 | 2, 540 | 12 | 400 | 42 | 85 | 1 | 50 | 2,140 |  | 35 | -- |
| Mar. 20 | 2, 100 | 325 | 2 | 2, 100 | 1 | 325 |  |  |  |  | 1,775 |  |  |  |
| Mar. 21 | 2,100 | 600 | 4 | 2,000 |  |  |  |  | 1 | 500 | 2,000 |  |  | 500 |
| Mar. 23 | 1,110 | 535 | 2 | 250 | 1 | 75 | 1 | 400 |  |  | 175 |  | 400 |  |
| Mar. 24 | 695 | 445 | 1 | 150 |  |  | 1 | 100 |  |  | 150 |  | 100 |  |
| Mar. 25 | 125 | 700 |  |  | 3 | 575 |  |  |  |  |  | 575 |  |  |
| Mar. 26 | 780 | 1,150 | 1 | 80 | 1 | 450 |  |  |  |  |  | 370 |  |  |
| Mar. 27 | 745 | 3, 160 | 2 | 350 | 14 | 2,215 | ${ }^{2} 1$ | 50 | 1 | 600 |  | 1,865 |  | 550 |
| Mar. 28 | 500 |  | 1 | 500 |  |  |  |  |  |  | 500 |  |  |  |
| Mar. 30 | 300 | 5,400 |  |  | 3 | 4,000 |  |  | 1 | 1,100 |  | 4,000 |  | 1,100 |
| Mar. 31 | 450 | 2, 040 | 1 | 400 | 1 | 100 |  |  | 2 | 1,890 | 300 |  |  | 1,890 |
| Total | 34,685 | 48,360 |  | 14,640 |  | 24,795 |  | 13, 055 |  | 16,575 | 10, 725 | 20, 880 | 8,920 | 12,440 |
| Apr. 1 | 1,725 |  | 2 | 610 |  |  | 1 | 1,115 |  |  | 610 |  | 1,115 |  |
| Apr. 2 | 100 | 100 |  |  |  |  |  |  |  |  |  |  |  |  |
| Apr, 3 | 50 | 500 |  |  | 1 | 450 |  |  |  |  |  | 450 |  |  |
| Apr. 4 | 500 |  | - |  |  |  |  |  |  |  |  |  | 500 |  |
| Apr. 7 | 190 940 | 50 100 | 1 | 200 | 1 | 50 50 | 1 | 190 |  |  | 150 | 50 | 190 |  |
| Apr. 8 | 1,780 | 325 | 2 | 450 |  |  | ${ }^{2} 2$ | 1,005 |  |  | 450 |  | 1,005 |  |
| Apr. 9 | 300 |  | 1 | 210 |  |  | ${ }^{2} 1$ | 90 |  |  | 210 |  | 90 |  |
| A pr. 11 | 200 | 1,050 | 1 | 200 | 2 | 1,050 |  |  |  |  |  | 850 |  |  |
| Apr. 13 | 550 | 3,475 |  |  | 12 | 1,025 |  |  | 1 | 1,900 |  | 1, 025 |  | 1,900 |
| Apr. 14 |  | 700 |  |  |  |  |  |  | 1 | . 700 |  |  |  | . 700 |
| Apr. 15 | 350 | 1,750 | 1 | 200 |  |  |  |  | 1 | 1,600 | 200 |  |  | 1,600 |
| Apr. 16 | 600 | 935 |  |  | 1 | 135 |  |  | 1 | 200 |  | 135 |  | 200 |
| Total | 7,285 | 8,985 |  | 1,870 |  | 2, 760 |  | 3,590 |  | 4,400 | 1,620 | 2,510 | 3,590 | 4,400 |

- Two traders switched from short to long side of the market.

The increase in the short interest for the group of eight during March ${ }^{2}$ was 96.8 per cent of the $3,636,000$ bushel increase for class $D$ On 18 days during March the net purchases or sales for this group were 50 per cent or more of that for class D. On 13 of the 18 days they were 75 per cent or more, thus showing that the change in the net position of the class as a whole was, to a large extent, accounted for by the change in the net position of the group of eight traders. The net reduction in the long holdings in April for class D was $3,392,000$ bushels. Of this amount 26.2 per cent was for the group of eight traders. The increase in the short interest was 29.4 per cent of that for the class.

The figures here presented indicate that the influence of the "2,000,000 bushels or over" group on class D's operations was very marked, especially on certain days. January 12 was the day when the long line of one of the traders was increased by almost $3,750,000$ bushels, thereby aiding in giving the price of the May future a good boost to higher levels before the heavy liquidation of long lines during the carly months of 1925 had set in. On January 15 the reduction of long lines was heavy. The combined liquidation for three individuals was considerably over $3,250,000$ bushels. Another large trader on the same day sold May wheat short to a net amount of 800,000 bushels. For the next five days the pressure on the market from the operations of the " $2,000,000$ bushel or over". group was not very great. On the 21 st of January it, however, again became very heavy. During that day two individuals decreased their long lines by a combined sum of over $4,500,000$ bushels. One of them not only sold out his long holdings but also went short $1,250,000$ bushels. This particular trader was the same person who on January 12 increased his long line by $3,750,000$ bushels. February 6 and 7 were days on which much buying was done by the group of eight. On the former date it was largely short covering and on the latter, buying resulted in the increasing of long holdings. One individual on each of these dates purchased $2,000,000$ bushels. On the 6th he switched from $1,000,000$ short to $1,000,000$ long, the latter being increased by additional purchases aggregating $2,000,000$ bushels on the 7th. On the 27th of February this trader liquidated his entire long holdings in May wheat, selling more than 3,500,000 bushels.

Heavy selling was done on March 4 by two individuals, one of whom liquidated a long line of $1,500,000$ bushels and in addition sold short nearly $1,750,000$ bushels. The other aided the $71 / 8$-cent decline, and $67 / 8$-cent daily range in price of May wheat by adding another 750,000 to his short interest in the May future. The following day the former trader increased his short line by more than $1,250,000$ bushels, whereas the latter covered to the extent of more than $2,000,000$ bushels.

The "break" in price on March 11 was in part brought about by the selling of $3,000,000$ bushels by one member of the group of eight who not only liquidated a million bushels which he purchased on the 10th, but also sold short, $2,000,000$ bushels. The short selling of $1,000,000$ bushels by a second trader aided in bringing about a decline in price. The latter trade on the 12 th covered a part of his short line by buying $2,900,000$ bushels, whereas the former trader increased his short interest by selling another million bushels.

The liquidation of $3,000,000$ bushels of long holdings in the May wheat future by a single trader, accompanied by short selling of nearly

900,000 bushels by three others contributed to the $131 / 4$-cent range in the price of the May wheat future on March 13.

On the 17 th of March one trade sold $3,000,000$ bushels, thereby closing out his long holdings. More than $2,250,000$ bushels of long May wheat were also liquidated on the 17 th by another trader. On the other hand, nearly $3,250,000$ bushels were bought the same day by a "short" who was covering a short line built up during the six days previous. On the 18th, 20th, and 21 st the latter trader accumulated a long line of $4,000,000$ bushels, which was largely responsible for the temporary advance in price. About $1,250,000$ bushels were also bought on March 19 by a different trade who was increasing his long interest in the market.

On March 27 about 2,250,000 bushels were sold for four "longs" one of whom switched to the short side of the market and assured a short position of more than 500,000 bushels. His short holdings were increased on the 30th of March by over $1,000,000$ bushels, and on the 31st by a further addition of little more than $1,250,000$. The liquidating of a long line to an amount of $4,000,000$ bushels, which was built up during March 18 to 21, was a large factor in causing the range of $131 / 2$ cents in May wheat on March 30 .

A large trader on April 11 decreased his long holdings by $1,000,000$ bushels. The next day he not only liquidated another million but also sold short $1,900,000$ bushels of May wheat. His transactions account for most of the operations for the group of eight on these two days.

The figures presented in the text and in Table 7 indicate, first, that the large-scale trading operations of the group of eight individuals were in no small measure responsible for the wide fluctuations in the price of the May wheat future during the period under study. Second, that although eight traders were included in the group usually not more than five of them were in the market on the same day. This suggests that a smaller number than eight individuals were, through heavy trading, able to influence prices. Third, that large traders were active on both sides of the market nearly every day, some sellers and other buyers, though not to an equal extent.

## the relative importance of various classes of traders

The difficulty involved in making a clear-cut classification of the traders into classes has already been presented. Also the fact has been sufficiently emphasized that within each class the operations of the individuals were not all in the same direction, some being buyers, while at the same time others were sellers. The distinctive character of each class, however, is not materially affected by the cases difficult of classification nor by the operations of those who, from time to time, do not conform strictly to the class with which they have been joined.

The combined net position, long or short, of each class has been derived in order to bring into clear relief the course of the net operations of each class day by day. By combining net position is meant the difference between the aggregate of the long commitments within the class and the aggregate of the short commitments within the class.

A summary of the aggregate long and of the aggregate short commitments of each class is shown in Table 8 and of the combined net position of each class in Table 9. This same information is shown in detail by days in Tables 23, 24, and 25 of the appendixes. A better understanding of the relationship between the various classes and the daily price changes can be secured from Figure 10.


FIg. 10.-The combined net position in the 1925 May wheat future of various classes of traders with the average closing price of the future, by days, from January 2 to April 18, 1925

For the period covered and for the future involved, Figure 10 presents in concise form information that is more fully representative of all of the trading than has been available in any previous study of transactions in futures. A larger proportion of the total trading has been traced to its origin with the individual trader, more traders are represented, more classes of traders, and more trading by each class.
l'able 8.- Average of the daily aggregate long and of the aggregate short accounts in the 1925 May wheat future of various classes of "traders," by months, during the period from January 2 to April 18, 1925, compared with the average daily open interest for all customers during the same periods
[In thousands of bushels, i. e., 000 omitted]

| Month, 1925 | Average daily open interest for all customers (one side only) | Average of the daily aggregate long and short accounts |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Long | Short | Percentage of total for all customers |  |
|  |  |  |  | Long | Short |
| Class A: |  |  |  |  |  |
| January | 95, 847 | 27,949 | 10, 142 | 29. 2 | 10.6 |
| February | 88, 329 | 28, 616 | 8,990 | 32.4 | 10.2 |
| March | 75, 424 | 26, 712 | 9, 057 | 35. 4 | 12.0 |
| April | 52, 135 | 22, 807 | 6,947 | 43.7 | 13.3 |
| Average, all months | 80,655 | 26, 886 | 9,002 | 33.3 | 11. 2 |
| Class B: |  |  |  |  |  |
| January | 95, 847 | 1,271 | 37, 167 | 1. 3 | 38.8 |
| February | 88, 329 | 2,678 | 33, 673 | 3. 0 | 38.1 |
| March | 75, 424 | 2,905 | 24, 167 | 3. 9 | 32.0 |
| April | 52, 135 | 2,556 | 12, 113 | 4.9 | 23.2 |
| A verage, all months. | 80,655 | 2,313 | 28, 283 | 2.9 | 35.1 |
| Class C: |  |  |  |  |  |
| January - | 95, 847 | 276 | 413 | . 3 | . 4 |
| February | 88, 329 | 332 | 436 | . 4 | . 5 |
| March. | 75, 424 | 373 | 404 | . 5 | . 4 |
| April | 52, 135 | 307 | 256 | . 6 | . 5 |
| A verage, all months | 80,655 | 323 | 361 | . 4 | . 5 |
| Class D: |  |  |  |  |  |
| January - | 95, 847 | 36, 206 | 10,496 | 37.8 | 11.0 |
| February | 88, 329 | 31, 524 | 10, 105 | 35.7 | 11.4 |
| March | 75, 424 | 22,316 | 9,967 | 29.6 | 13.1 |
| April | 52, 135 | 9,553 | 10,917 | 18.3 | 20.9 |
| A verage all months. | 80,655 | 26, 499 | 10,316 | 32.8 | 12.8 |
| Class E: |  |  |  |  |  |
| January | 95, 847 | 224 | 3,490 | . 2 | 3.6 |
| February | 88, 329 | 258 | 1,908 | . 3 | 2. 2 |
| March | 75, 424 | 120 | 1,912 | . 2 | 2.5 |
| April | 52, 135 | 117 | 1,084 | . 2 | 2.1 |
| A verage all months. | 80,655 | 184 | 2, 233 | . 2 | 2.8 |
| Class F: |  |  |  |  |  |
| January | 95, 847 | 1,880 | 1,096 | 2. 0 | 1.1 |
| February | 88, 329 | 2, 070 | 774 | 2.3 | . 9 |
| March | 75, 424 | 2, 933 | 975 | 3.9 | 1.3 |
| A pril | 52, 135 | 2, 785 | 814 | 5.3 | 1.6 |
| A verage all months. | 80,655 | 2, 387 | 934 | 3.0 | 1.2 |
| Class G: |  |  |  |  |  |
| January | 95, 847 | 28, 042 | 33, 043 | 29.3 | 34.5 |
| February | 88, 329 | 22, 850 | 32, 442 | 25.9 | 36.7 |
| March. | 75, 424 | 20, 065 | 29, 042 | 26.6 | 38.5 |
| April | 52,135 | 14,010 | 20, 006 | 26.9 | 38.4 |
| Average all months. | 80,655 | 21, 242 | 28,633 | 27.2 | 37.0 |

Table 9.-Average daily combined net position in the 1925 May wheat future of the various classes of traders, by months, from January 2 to A pril 18, 1925, compared with the average daily open interest for all customers for the same periods
[In thousands of bushels; i. e., 000 omitted]


## HEDGERS SHORT; SPECULATORS LONG

Consideration of the information classified in this way shows that the hedging class, B , was net short throughout the period; while classes $\mathrm{A}, \mathrm{D}$, and F , which are fundamentally speculative, were net long. This tends to confirm the accepted view, based on general knowledge of the market as a whole, that hedging trades open on the
long side, due to buying by millers, exporters, and others against sales of flour or grain, are more than offset by the hedges open on the short side, especially when stocks of grain are large. This net short interest must be and is held by speculative interests on the long side.

Aside from this general offsetting character of the speculative classes to that of the hedging class, an inspection of the curve for the hedging class, B, as shown in Figure 10, does not reveal any marked relationship, either in trend or movement of this curve, to the price curve or to the curves representing the various other classes of traders. The hedging class, therefore, does not need extended analysis from the standpoint of causing unusual and erratic changes in wheat prices. It is of interest to note that its net position from January 2 to March 30 was the largest of the seven classes of traders shown. On the latter date it was surpassed in net position by the commissionhouse class, A. It is also noteworthy that the hedging class was throughout the period net short, decreasing its position from a maximum of $39,677,000$ bushels on January 9 to a minimum of $5,572,000$ bushels on April 18. Between these two dates the hedging class thus bought net $34,105,000$ bushels of May wheat, or an average of 415,000 bushels per trading day. It can be seen also from an inspection of Figure 10 that the net purchases of this class were fairly uniform throughout the period, and that the trades which were executed in the pit in the removal of hedges exerted a general supporting influence on May wheat prices. Aside fom this general support, the trading of this class did not exert any pronounced influence on prices, since at no time did its combined net purchases or net sales for the class as a whole reach relatively large proportions. The maximum purchase on any one day of any individual hedger was less than 700,000 bushels. Compared with the figures in Table 12 for classes D, A, and G, this is a relatively small amount and suggests that the purely speculative trading is greater than need be to satisfy the legitimate hedging transactions.

The decrease in the net short position of the hedging class from January 9 to April 18 naturally suggests that this was due to the transferring of hedges from May to the more distant futures. However, when all wheat futures for this class are combined the general situation is not changed materially, as is shown in Figure 4 and in Table 31 of the appendixes. Considering all futures, the net short position at the beginning of the period was $38,115,000$ bushels and the net short position at the close on April 18 was 10,239,000 bushels in all futures, ag ainst $5,572,000$ bushels short May. In all futures combined the 62 "traders" of the hedging class, B, held 35.5 per cent of the total open interest on the short side on December 31, 1924, against only 16.6 per cent of the total on April 18.

## SCALPERS

Another fact of general significance that is made evident by Figure 10 is that for the period under study the trading of scalpers, class C , and the so-called speculative scalpers, class F , did not result in net positions that were of any considerable magnitude at any time. This is shown by the fact that the curve for class C , representing the net position of scalpers, scarcely over departs from the zero line far enough on either side to be noticeable, and that
the curve for class F, representing speculative scalpers (pit traders who at times were long or short 100,000 bushels or more at the close of the day), never indicates for this class as a whole a combined net position above $2,000,000$ bushels. It should be noted, however, that this result arises in part from the exclusion from class $F$ of a few large speculators who are pit traders but whose operations were of such character as to dictate their inclusion in the speculative class, D.

It need scarcely be stated that the relative unimportance of scalpers, when measured on a net position basis, indicates neither that their importance in the market is negligible, which is obviously not the case because they play a large part in making the market a continuous one, nor that the influence of their trading upon the course of prices either during the day or from day to day is negligible. The data here presented do not suffice to show either the manner in which scalpers influence prices or fluctuations in prices or the extent to which their influence, within its natural limits, is effective; but the data do indicate for the period under study that the extensive fluctuations pictured by the price curve are neither found in the curve for the scalping class, C , nor in that for the speculative-scalping class, F , either when considered from day to day or for the period as a whole, even though the combined operations of these two classes represent an average of 37.3 per cent of the total volume of trading for all customers.

## SPREADERS

Class E, spreaders, it will be observed, held a net short position throughout the period, varying somewhat in line with the relative changes in prices between Chicago and other markets. As has already been pointed out, the number of traders in class $E$ is not wholly complete because of the difficulty of determining spreading operations between markets, especially between Chicago and Winnipeg. The group shown, however, is believed to be representative of the position and course of spreading operations in general during this period. The net position of this class, as of classes C and F , does not include, when considered from day to day for the period as a whole, any large changes or movements suggesting a relation to the wide price changes which occurred during the period under study. The absence of any large changes in the net position of this class suggests only that spreading operations did not account for the major movements in wheat prices.
CLASSES D, A, AND G

There remain for consideration as possible market factors the speculative class, D, the commission-house class, A, and the "under 100,000 bushel" class, G. Each of these classes during the period under study includes large changes in its net position in the market from day to day. By referring to Figure 10, it can be seen that the curve of each class also shows certain fairly well-defined movements. Accordingly, the analysis of the trading of each class has been made, first, by considering the major movements in the net position of each class as they relate to price changes; and, second, by considering only the net purchases or sales on individual days as they relate to corresponding price changes.

MOVEMENTS IN THE NET POSITION OF CLASSES D, A, AND G
The whole period from January 2 to April 18 divides itself into four fairly well-defined movements, both with respect to the May future price and with respect to each of the three classes A, D, and G. The highs and lows of each of the four points are given in Table 10 .

Table 10.-The major movements in the net position of classes $D, A$, and $G$, and the major movements in the price of the 1925 May wheat future, from January 2 to A pril 18, 1925

| Class | Major movements |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | I |  | II |  | III |  | IV |  |
|  | High | Low | High | Low | High | Low | High | Low |
|  | Jan. 12 | Feb. 5 | Feb. 25 | Mar. 17 | Mar. 23 | Apr. 3 | Apr. 11 | Apr. 18 |
|  | Jan. 30 | Feb. 25 | Mar. 6 | Mar. 26 | Apr. 3 | Apr. 11 | Apr. 16 |  |
|  | Feb. 5 | Feb. 28 | Mar. 17 | Mar. 25 | Apr. 2 | Apr. 11 | Apr. 18 |  |
| Price of 1925 May wheat future. | $\left\{\begin{array}{c} \mathrm{Jan} . \\ \$ 2.057 / 8 \end{array}\right.$ | $\begin{aligned} & \text { Feb. } 11 \\ & \$ 1.771 / 2 \end{aligned}$ | $\begin{array}{r} \text { Mar. } 2 \\ \$ 2.02 \end{array}$ | $\begin{array}{r} \text { Mar. } 17 \\ \$ 1.51 \end{array}$ | $\begin{array}{r} \text { Mar. } 23 \\ \$ 1.71 \end{array}$ | $\begin{array}{l\|} \hline \text { Apr. } \\ \$ 1 . \\ \$ 6 \frac{1}{2} / 2 \end{array}$ | $\begin{aligned} & \text { Apr. } 1 \mathrm{i} \\ & \$ 1.641 / 4 \end{aligned}$ | $\begin{gathered} \text { Apr. } 16 \\ \$ 1.44 \end{gathered}$ |

Table 10 should be studied in conjunction with Figures 10, 11, and 12. Each of the four major movements comprehends an important price change. It will be observed from Figure 10 that the high point in the first price movement was January 28 ; that this high point follows the peak in the net position of the speculative class, D , by an interval of 14 trading days; that the net position of the commission house class A did not reach its highest point until January 30 , or two trading days after the peak in prices; and that class $G$, traders who bought or sold less than 100,000 bushels, did not reach its highest point until February 5, which was seven trading days after the top was reached in the May future price. The same sequence is revealed when the low points of the first movement are considered. The May price reached its low on February 11, whereas the low in the net position of class D was reached on February 5, followed by classes A and G on February 25 and 26, respectively.

In the second movement the peak in the price was reached on March 2, while the peak in the net position of class D was reached four days earlier, or on February 25, followed by class A on March 6 , and by class G on March 17. The low point in the price movement was on March 17, and this was also the low point in the net position for class D. The low points of classes A and G followed on March 26 and March 25, respectively.
The third movement covered the period from March 17 to April 3. The peak of the May price was on March 23, on which date also the net position of class D reached its highest point. Class A reached its highest point on April 3 and class G on April 2. The low point in price for this movement was on April 3, which was the date on which the net position of class $D$ reached its lowest point, while classes A and G followed on April 11.

The fourth movement covered the period from April 3 to the last date on which data were collected, April 18. Without the positions of each group beyond this date, it is difficult to determine whether
this last date marks the close of the movement. A study of the May price curve, as shown in Figure 3, indicates that the low point was probably on April 20, or April 27. The high point for the movement is clearly shown on April 11, which was also the day on which the net position of class D reached its peak. Classes A and G followed in reaching a, highpoint on Apri! 15 and April 18, respectively.


Fig. 11.-The major movements in the price of the 1925 May wheat future compared with those for the net position of class D from December 31, 1924, to April 16, 1925

Figure 10 shows both the minor and the major price fluctuations as well as the net position curves for the different classes of 'traders. Figure 11 shows the May price curve, and the net position curve for class D only with the minor changes eliminated, leaving only the principal high and low points connected to bring out the major movernents. The vertical dashed lines indicate the high and low points in the price movements. The vertical solid lines indicate the high end low points in the net position curve of class D. The three
heavy vertical lines between the curves indicate turning points in the operations of class D as a whole, as related to price changes. The unshaded section between the two curves represents periods when the changes in the net position of class D did not coincide with the price changes. The shaded areas include those periods in which the changes in the net position of class D , and the changes in the price of the May future, coincided. The coincidence of net position and price, as shown by the shaded portion, is due to the well-known fact that by March 17 the "public" had been forced out of the market. Thereafter, the market was largely a professional affair-the traders


Fig. 12.-The combined net position in the 1925 May wheat future of class D and of classes A and G combined, with the average closing price of the future, by days, from January 2 to A pril 18, 1925
of class D buying to the high price, and in turn selling to the low price.

This analysis covers a period of approximately four months, and includes 4 well defined price movements. For this period the facts strongly suggest that class D either had far greater insight into the future regarding the course of grain prices than classes A and G, or else the course of its trading from day to day directed, in no small measure, the course of grain prices. In either case classes A and G were largely followers in the market, changing the course of their net position after and not before the course of price changes. This latter fact is in line with the popular belief regarding the trading in general of non-professional small speculators who are included in these
two classes. When classes A and G are joined, and their combined net position determined day by day, the course of their net position is "long" throughout the period under study, and almost without exception moves inversely to that of class D. The combined net position of classes $A$ and $G$ is shown in comparison with that of class D in Figure 12.

Table 11.-The combined net position in the 1925 May wheat future of classes $A$ and $G$ compared with that of class $D$, by days, from December 31, 1924, to A pril 18, 1925
[In thousands of bushels]



## DAILY PRICE CHANGES COMPARED WITH THE DAILY TRADING OF

 CLASSES D, A, AND GIn the foregoing section comparisons were made between certain period price movements and related period changes in the net position of classes $\mathrm{D}, \mathrm{A}$, and G. In addition to this study of period price movements and related changes in net position, an analysis is made of relations existing between price changes and the daily net trading of the classes, i. e., their net purchases or sales by days regardless of net position in the market.

Figure 13 was prepared for the purpose of showing the net trading, by days, of the three classes, D, A, and G, in their relation to each other and to the net changes in the May future price. It shows the net purchases and the net sales of class D, and of classes A and G combined, for each of the 89 days under study. Thus, on a particular day, class D may have bought $12,000,000$ bushels and sold $7,000,000$; its net purchases that day would therefore be $5,000,000$ bushels. Obviously, this $5,000,000$-bushel net purchase, when combined with the net position of class D at the close of trading of the previous day, will give the net position of this class at the close of trading for the day being considered. If these net purchases or net sales are to be compared with the May future price, therefore, the price figure to be used should be the difference between the closing price of the day previous and of the day under consideration. This difference will be the net change in price covering the same period as that of the net purchases and sales. Classes A and G have been joined in Figure 13 for the reason that their net purchases or net sales usually were either similar in character or supplementary one to the other in their relations to class D .

Table 12.-The net purchases or sales in the 1925 May wheat future of three classes of traders, by days, from January 2 to A pril 18, 1925
[In thousands of bushels]


Table 12.-The net purchases or sales in the 1925 May wheat future of three classes of traders, by days, from January 2 to A pril 18, 1925-Continued
[In thousands of bushels]


From Figure 13 it will be seen that as a general rule the purchases or sales of class D occur on days on which opposite transactions were made by classes A and G combined. This is particularly true of days on which purchases or sales were of considerable size. An exact measure of the opposite character of these two series has been obtained by correlating them. They show an inverse correlation of $-0.88^{2}$ (with a probable error of 0.0029) in which perfect inverse correlation is represented by -1.00 and no correlation by 0.00 . Stated in a more direct manner, the results here show that on days during which class D was in the market as a buyer classes A and G were usually sellers, and on days during which classes A and G were buyers class D was usually selling. There are, of course, occasional exceptions, though these cases were largely days on which one or the other of the two groups were not buying or selling in large volume. On only two days throughout the 89-day period did class D and classes A and G combined sell net to the extent of $1,000,000$ bushels each, and at no time did they both buy net to this extent. On each of these two days the purchases of class B, the hedgers, largely offset the selling of class D and classes A and G.

The net trading of class D being usually opposite to that of classes $A$ and G combined, the question of which of the operations of these two groups correlate directly with the net changes in the price of the May wheat future may be considered. Referring again to Figure 13, a direct comparison may be made between net price changes and the net purchases or sales of class D and classes A and G combined.

A careful inspection will show that the net changes in the price are more often in line with the net trading of class D than of classes A and G. A statistical correlation of class D with the "May" price reveals a direct correlation of +0.55 (with a probable error of .05 ) in which perfect direct correlation is represented by +1.00 and no correlation by 0.00 . Similarly, correlating classes A and G combined with the May wheat price results in an inverse correlation of -0.54 (with a probable error of .05). While these two correlations are not high, a significant relationship exists. They are by no means high enough, however, to be used as a basis for predicting prices, having been given the net purchases and sales of either class D or classes A and G combined. The principal observation to be made from the two correlations is that class D is directly related to the price changes, while classes $A$ and $G$ are inversely related to the price changes.

During the three and one-half month period the May future price generally rose on days on which the speculative class, D, bought, and usually declined on days on which the speculative class, D, sold; and the May future price generally rose on days on which the commission house and small-trader classes, A and G, sold, and usually declined on days on which these two classes bought.
It will be seen in particular that on days on which a large change in price occurred the transactions of class D were generally in the same direction, while those of classes A and G were in the opposite direction. Thus during the period under study there were 20 days on which the net change in price was 5 cents or more. On 15 of these

[^4]days the operations of class D were in the same direction as the price, i. e., purchases on days on which the price advanced and sales on days on which the price declined. In contrast, the combined operations of classes A and G were in the same direction as the price on only 5 of these 20 days. When analyzed with respect to the size of the net trading of each of these groups there were during the period under study 41 days on which the net purchases or sales of either class D or classes A and G combined amounted to $2,000,000$ bushels or more. On 31 of these 41 days the net changes in price were in the same direction as the net changes in the trading of class D , while on 8 days the price moved in the same direction as the net trading of classes A and G. On two days the price moved in the opposite direction to the net trading of all three classes.

VARIOUS GROUPS IN CLASS D CONSIDERED IN RELATION TO THE COURSE OF WHEAT PRICES

In pointing out in the preceding section the direct relationship between the price of May wheat and the net trading of the speculative class, D , the trading of class D was treated as a single unit. The operations of the traders of this class, however, were not of the same size and the character and effect of their operations varied considerably.

There were in all 302 traders included in class D. Of these 302 traders, only 57 reached a net position of 500,000 bushels at any time during the period under investigation. Of the 57 "one-half million or over" traders only 20 reached a net long or net short position of $1,000,000$ bushels, and only 8 as much as $2,000,000$ bushels. The number in each group is as follows:

Various groups of speculative traders in class $D$
Group: Number
Under 500,000 but over 100,000 bushels, net position.-.-................. 245

$1,000,000$ to $2,000,000$ bushels, net position.............................................. 12


The net position of each of these groups of the speculative class, D, as calculated by days, is given in Table 13 and is presented in graphic form in Figures 14 and 15.

Figure 14 shows the net position curve of class D, together with the net position curves of the groups composing it; the "over 500,000 " and the "under 500,000 but over 100,000 " bushel groups. In Figure 15 the net position curve of class D is repeated with the four groups composing it; "under 500,000 but over 100,000 ," " 500,000 to $1,000,000$," " $1,000,000$ to $2,000,000$," and " $2,000,000$ or over" bushel groups.

Two points of particular significance will be noted in Figures 14 and 15. The first and most important is the similarity in the " $2,000,000$ or over" group to the "over 500,000 " group, and to class D as a whole. The major cycles are not only very similar but also the minor and less important day-to-day changes. The dominating factor for the period as a whole was the " $2,000,000$ or over" group. The second point to be observed is that the other groups, viz, the
"under 500,000 , but orer 100,000 ," the " 500,000 to $1,000,000$, " and the " $1,000,000$ to $2,000,000$ " do not reveal a similarity of movement to the D curve, nor in fact any significant movements except that the


Fig. 14.-The combined net position in the 1925 May wheat futures of class D compared with two groups within the class, by days, from January 2 to A pril 18, 1925
"under 500,000 " group shows a tendency to lag with respect to the operations of the " $2,000,000$ or over" group. The average net


Fig. 15.-The combined net position in the 1925 May wheat futures of class D and various groups within the class, by days, from January 2 to April 18, 1925
position for the period as a whole of the eight traders composing the "2,000,000 or over" group was larger than the average net position of the remaining 294 traders of class D.

Table 13.-The combined net position in the 1925 May wheat future of four groups of traders composing the speculative class D, by days, from December 31, 1924, to A pril 18, 1925
[In thousands of bushels; i. e., 000 omitted]


Table 13.-The combined net position in the 1925 May wheat future of four groups of traders composing the speculative class D, by days, from December 31, 1924, to A pril 18, 1925-Continued
[In thousands of bushels; i. e., 000 omitted]

| Date | Under 500,000 but over 100,000 bushels |  | 500,000 to $1,000,000$ bushels |  | $\begin{aligned} & 1,000,000 \text { to } 2,000,000 \\ & \text { bushels } \end{aligned}$ |  | $2,000,000$ bushels or over |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Long | Short | Long | Short | Long | Short | Long | Short |
| Mar. 27.1925 | 1,954 |  | 610 |  |  | 145 | 4,695 |  |
| Mar. 30 | 1,682 |  |  | 1,135 |  | 485 | 95 |  |
| Mar. 31 | 1,694 |  | 115 |  |  | 770 |  | 1,495 |
| Apr. 1. | 679 |  |  | 130 |  | 965 | 230 |  |
| A pr, 2 | 687 |  |  | 1,275 |  | 685 | 230 |  |
| Apr. 3 | 287 |  |  | 970 |  | 960 |  | 220 |
| A pr. 4 | 807 |  |  | 710 |  | 355 | 280 |  |
| Apr. 6 | 42 |  |  | 770 | 45 |  | 420 |  |
| A pr. 7 |  | 29 |  | 375 |  | 205 | 1,260 |  |
| Apr. 8 |  | 463 |  | 340 |  | 5 | 2, 715 |  |
| Apr. 9 |  | 52 |  | 380 |  | 75 | 3,015 |  |
| Apr. 11. | 382 |  | 650 |  |  | 625 | 2,165 |  |
| Apr. 13. | 142 |  | 720 |  |  | 750 |  | 760 |
| Apr. 14 | 1,577 |  |  | 500 |  | 350 |  | 1,460 |
| Apr. 15 | 527 |  |  | 1,510 |  | 825 |  | 2,860 |
| Apr. 16 |  | 23 |  | 1,580 |  | 1, 150 |  | 3, 195 |
| Apr. 17 |  | 524 |  | 1,450 |  | 790 |  | 3, 195 |
| A pr. 18 |  | 1,001 |  | 900 |  | 1,510 |  | 3,195 |

## TRANSAOTIONS OF INDIVIDUAL TRADERS

Emphasis thus far regarding the operations of traders in their effect on the price of wheat has related to classes and groups of traders rather than to individuals. The direct relationship which class D bears to the price of May wheat, and in particular that portion of the traders of class D who belong to the " $2,000,000$ or over" group, has already been presented. The analysis will now be carried further with particular consideration to the transactions of individual traders.

Table 14 shows the net of purchases and sales, by days, of those traders in the speculative class D who bought or sold net, as much as 500,000 bushels on any single day. Net daily purchases or sales by individual traders to this amount numbered 204, occurring on 69 days and participated in by 38 different traders.

It will be seen from Table 14 that the 204 individual purchases or sales recorded were not uniformly distributed throughout the 89-day period. On some days there were no net purchases or sales to an amount of 500,000 bushels; on others, there was but one trade, while on others there were several. When these 204 net trades are considered by days, there were in all 61 days on which the net purchases or sales of such trades, taken as a group, for each day was 500,000 bushels or more. There were 41 days on which the net amounted to $1,000,000$ bushels or more. On 22 days the net was 2,000,000 bushels or over, on 13 days $3,000,000$ bushels or over, on 8 days $4,000,000$ bushels or over, and on 4 days $5,000,000$ bushels or over.

On 37 of the 61 days on which the net of all of these trades was 500,000 bushels or over, the prico moved in the same direction as the net of the day's purchases and sales. On 26 of the 41 days on which the net of the trades was $1,000,000$ bushels or more, the price moved
in the same direction. On 17 of the 22 days on which the net of the trades was $2,000,000$ bushels or over, the price moved in the same direction. On 11 of the 13 days on which the net of the trades was $3,000,000$ the price moved in the same direction. On 7 of the 8 days on which the net of the trades was $4,000,000$ or over the price moved in the same direction, and on all four of the $5,000,000$ or over net amounts the price moved in the same direction, i. e., advanced with purchases and declined with sales. These facts are summarized in Table 15.

Table 14.-The days on which speculative traders made purchases or sales to a net amount of one-half million bushels or more in the 1925 May wheat future, together with the net change in the May future price for the same dates
[In thousands of bushels; i. e., 000 omitted]


[^5]Table 14.-The days on which speculative traders made purchases or sales to a net amount of one-half million bushels or more in the 1925 May wheat future, together with the net change in the May future price for the same dates-Continued


1 Even.

Table 14.-The days on which speculative traders made purchases or sales to a net amount of one-half million bushels or more in the 1925 May wheat future, together with the net change in the May future price for the same dates-Continued


[^6]Table 14.-The days on which speculative traders made purchases or sales to a net amount of one-half million bushels or more in the 1925 May wheat future, together with the net change in the May future price for the same dates-Continued


[^7]Table 14.-The days on which speculative traders made purchases or sales to a net amount of one-half million bushels or more in the 1925 May wheat future, together with the net change in the May future price for the same dates-Continued

a Even.

Table 14.- The days on which speculative traders madt purchases or sales to a net amount of one-half million bushels or more in the 1925 May wheat future, together with the net charge in the May future price for the same dates-Continued


1 Even.
Table 15.-The number of days on which the net of individual purchases and sales of 500,000 bushels or over and the price of the 1925 May wheat future moved in the same direction

| Net of purchases and sales | Total number of days | Days on which price moved in same direction as net of purchases and sales |  | Days on which price moved in opposite direction to net of purchases and sales |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Number of days | Per cent | Number of days | Per cent |
| 500,000 bushels or over. | 61 | 37 | 61 | 24 | 39 |
| 1,000,000 bushels or over | 41 | 26 | 63 | 15 | 37 |
| $2,000,000$ bushels or over. | 22 | 17 | 77 | 5 | 23 |
| $3,000,000$ bushels or over | 13 | 11 | 85 | 2 | 15 |
| $4,000,000$ bushels or over | 8 | 7 | 87 | 1 | 13 |
| $5,000,000$ bushels or over. | 4 | 4 | 100 |  |  |

Table 15 shows that whenever speculative purchases or sales on individual days amount to a net of 500,000 bushels or more, the chances are that three times out of five the price will move in the same direction. When the limit is raised to $1,000,000$ bushels or over the probability of influencing price is still about the same. When the net of purchases and sales reached $2,000,000$ bushels or over the price moved in the same direction in three cases out of four. Raising the limit to $3,000,000$ bushles or more shows a correspondence in movement of 85 per cent; for $4,000,000$ bushels or over, 87 per cent; and for $5,000,000$ or over for the four days on which the net amount revealed this figure the price in each case moved in the same direction.

The facts just presented indicate that the large speculative trades which aggregated, net, less than $2,000,000$ bushels showed some influence on price though not a marked influence; that large specu-
lative trades aggregating, net, $2,000,000$ bushels or over show a pronounced influence on price.

To further test this conclusion, one may compare the purchases or sales of the individual traders shown in Table 14 with the corresponding net change in price regardless of whether each separate trade occurred on days on which other large purchases or sales were made or not. Of the 204 individual purchases or sales of 500,000 bushels or more 123 , or 60 per cent, moved in the same direction as the price. Of the 58 individual purchases or sales of $1,000,000$ bushels or more 43 , or 74 per cent, moved in the same direction as the price. Of the 17 individual trades of $2,000,000$ bushels or over 13 , or 76 per cent, moved in the same direction as the price. Of the nine individual trades of $3,000,000$ bushels or over seven, or 78 per cent, moved in the same direction. One trade was above the $4,000,000$ bushel level (5,700,000 bushel sale) and the price moved in the same direction as the trade. These facts are presented in Table 16.

Table 16. -The number of cases in which individual purchases or sales of 500,000 bushels or over and the price of the 1925 May wheat future moved in the same direction

| Net purchases or sales | Total number of trades | Number of times price moved in same direction as net purchases or sales |  | Number of times price moved in opposite direction to net purchases or sales |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Number of times | Per cent | Number of times | Per cent |
| 500,000 bushels or over. | 204 | 123 | 60 | 81 | 40 |
| $1,000,000$ bushels or over | 58 | 43 | 74 | 15 | 26 |
| 2,000,000 bushels or over | 17 | 13 | 76 | 4 | 24 |
| $3,000,000$ bushels or over | 9 | 7 | 78 | 2 | 22 |
| $4,000,000$ bushels or over | 1 | 1 | 100 | 0 | 0 |

The facts of this last analysis by individual trades indicate that whenever an individual buys or sells, net, on a single day to an amount of $1,000,000$ bushels or more the chances are three out of four that his action will cause the price to move in the same direction. When considered with the preceding analysis of net amounts by days, the conclusion seems warranted that net purchases or sales, whether by one individual or as a net of several large trades, to an amount of $2,000,000$ bushels on a single day will usually cause the price to move in the same direction, i. e., if a purchase, an advance in price; if a sale, a decline in price.

TRADING OPERATIONS OF THE " $2,000,000$ BUSHELS OR OVER" GROUP
The dominant influence on the Chicago wheat futures market during the period under investigation was apparently the operations of the large speculators, who frequently traded to the extent of $2,000,000$ bushels or more on a single day. There were eight speculators whose long or short position reached $2,000,000$ bushels or more during this period. Of these eight, however, only five bought or sold on any one day as much as $2,000,000$ bushels net. Table 17 presents the single-day transactions of $2,000,000$ bushels or over of these five
traders during the period under investigation, giving the dates, the amount of each day's trade, and the advance or decline in the price from the previous close.

Table 17.-Days on which five speculative traders bought or sold net 2,000,000 bushels or more of "May" wheat, with net change in price from the close of the previous day

| Date | $\begin{aligned} & \text { Trad } \\ & \text { er's } \\ & \text { No. } \end{aligned}$ | Change in net position (May future) | $\begin{aligned} & \text { Net } \\ & \text { change in } \\ & \text { price } \\ & \text { (May } \\ & \text { future) } \end{aligned}$ |
| :---: | :---: | :---: | :---: |
|  |  |  | Cents |
| Jan. 12 | 12 | Bought $3,750,000$ bushels | $\pm{ }_{-2}^{41 / 8}$ |
| Feb. ${ }^{21}$ | 12 | Sold 5,700,000 bushels--- |  |
|  | 12 | do | +41/2 |
| Mar. ${ }^{27}$ | 14 | Sold $3,200,000$ bushels.. | $\pm{ }_{-71 / 8}$ |
| Mar. $\begin{array}{r}5 \\ 6 \\ 6\end{array}$ | 12 | Bought 2,150,000 bushels. | +1/8 |
| ${ }^{6}$ | 9 | Sold 2,200,000 bushels_- | -111/4 |
| 12 | 14 | Sold $3,000,000$ bushels. <br> Bought $2,900,000$ bushels | -51/4 |
| 13 | 10 | Sold 3,000,000 bushels... | $-143 / 4$ |
| 17 | 10 | Sold 3,085,000 bushels. |  |
| 17 | 5 | Sold 2,240,000 bushels. |  |
| 17 | 12 | Bought 3,200,000 bushels. |  |
| 17 |  | Net sold 2,125,000 bushels. | -111/2 |
| 20 | 12 | Bought 2,000,000 bushels. | +41/4 |
| Apr. $\begin{array}{r}30 \\ 13\end{array}$ | 12 | Sold 3,000,000 bushels. | $-101 / 2$ $-51 / 2$ |
| Apr. 13 | 12 | Sold 2,900,000 bushels.. | -51/2 |

${ }^{1}$ Numbers were assigned to each trader to distinguish the different accounts without disclosing the identity of the individual. In all cases where the operations involved more than one account the transactions were combined and treated as a single unit.

There are in Table 17, 17 single-day transactions ${ }^{3}$ of over $2,000,000$ bushels each for 5 persons occurring on 15 different dates. The price moved in the same direction as the trading on 12 of the 15 days, and in the opposite direction on 3 days. Viewing these 17 transactions with respect to the 5 traders involved, it will be seen that 1 trader, No. 12, was responsible for 11 of the 17 transactions; 2 others, Nos. 14 and 10, account for 2 each; while traders Nos. 9 and 5 each account for 1 .

Trader No. 12. - The operations of trader No. 12 were the most spectacular during this period. This particular trader at the beginning of the period was long 250,000 bushels of May wheat, as shown in Figure 16. On January 12 purchases of May future to the extent of $3,750,000$ bushels were made and on that day the May price moved into new high ground with a net gain of $41 / 8$ cents. On January 21, this speculator sold $5,750,000$ bushels, changing from a long position of $4,500,000$ to a short position of $1,250,000$ bushels and the price declined 2 cents. Fourteen days ${ }^{4}$ later, he switched from a short position of $1,000,000$ on February 6 to a long position of $3,000,000$ bushels on February 7 by buying on each of these two days $2,000,000$ bushels of May wheat. Fifteen days later, or on February 27, a long position of $3,600,000$ bushels was liquidated. Again, through sales made on March 2, 3, and 4, a short position of over 2,500,000 bushels was assumed. This short position was largely covered on March 5

[^8]by purchases of $2,150,000$ bushels. Four days later, or on March 10 , he took a long position of $1,000,000$ bushels. On March 11 his position changed from $1,000,000$ bushels long to $2,000,000$ bushels short, which was increased to $3,000,000$ bushels short on the 12 th. Five days later, on March 17, this short line was covered. A long accumulation of $4,000,000$ bushels was made on March 18, 20, and 21, only to be largely liquidated on March 30 by a sale of $3,000,000$ bushels. This was followed on April 13, 14 , and 15 by sales aggregating $5,200,000$ bushels, resulting in a short position of $4,200,000$ bushels. This position was strengthened the following day by a sale of 200,000 bushels, bringing the total short position up to $4,400,000$ bushels, at which figure this trader stood at the close of the period under investigation.

The outstanding point of interest regarding the operations of this individual are the precipitous and frequent changes in his position in the market. Not only were this individual's operations on a very extensive scale, running repeatedly into the millions, but they were singularly uncertain and precipitous in changes in market position. On three separate occasions during the brief period covered by this study this trader built up a long position in the May future of $4,000,000$ bushels or more only to be thrown over in each instance completely and a short position of millions assumed. Disregarding the size and precipitous method of trading, it should be observed that this trader changed his position from long to short, or vice versa, eleven times during the period. In view of the manner in which one would expect a speculator to change his position in trying to forecast the trend in future prices, one is forced to conclude that this particular trader's operations were manipulative in effect, their effect being to direct wheat prices rather than to follow them.
It does not follow, of course, that because this trader's operations were sufficient to direct prices that he, in every instance, made thereby a profit. It is only when buying of this character induces others to buy and thus continue prices upward or a sudden and immense sale precipitates a selling stampede which extends a downward movement, that a profit results. This he apparently succeeded in doing when on January 12 a purchase of $3,750,000$ bushels was made and the price of May wheat was moved into new high ground to continue upward until the 28th of January. And again on February 27 and March 2 sales to a combined amount of $5,200,000$ bushels followed by other large sales and a decline in the May wheat price beginning March 2 continued irregularly throughout March. However, after March 17 the success of this individual, and of certain other large speculators in attracting the public into the market and thus continuing the price up or down, was very limited.

Trader No. 14.-The operations of trader No. 14, while showing fewer large purchases or sales on individual days than No. 12, revealed for the period several large movements in market position, as shown in Figure 17. He was during this period one of the outstanding speculators in the Chicago market. Entering the period with a short position of $2,845,000$ bushels, he had changed by January 27 to a long position of over $1,000,000$ bushels. On February 3 this trader sold $1,785,000$ bushels, of which 785,000 represented liquidation and $1,000,000$ short selling. This short position was increased
to $1,450,000$ bushels by the close of February 6 . Through irregular changes he shifted to a long position of $2,100,000$ bushels by the close of March 2. On March 3 and 4 he liquidated his long holdings and in addition sold short $1,700,000$ bushels, which was increased to $3,050,000$ on the following day. On March 6 he sold short an addi-


Fig. 16. -The net position in the 1925 May wheat future of trader No. 12, by days, from January 2 to A pril 18, 1925
tional 550,000 bushels, making a total short position of $3,600,000$ in three days. This short line was largely covered on March 12, and thereafter he did not have a long or short position to exceed 700,000 bushels. While this trader's operations were not in degree as spectacular as those of No. 12, they bear the same mark of sudden changes


Fig. 17.-The net position in the 1925 May wheat future of trader No. 14, by days, from January 2 to April 18, 1925
in market position. Like No. 12, this trader shifted his position from a short to a long and back again 11 times during the period.

Trader No. 10.-Trader No. 10 came into the period under investigation $6,540,000$ bushels long, mostly accumulated at mueh lower price levels than prevailed on January 2. This line was in-
creased 900,000 bushels by January 8, making a total of $7,440,000$ long, the maximum for the period. No purchases were made on the first major advance after this date. It declined to a little over $4,000,000$ bushels by February 4, increasing again to about $7,000,000$ by March 5. This position was held up to and including March 12. On March 13, 3,000,000 bushels were liquidated, on March 14, $1,500,000$ more, and on March 17, the remaining 2,500,000 were liquidated and a short position of 600,000 bushels taken. On March 27 this trader moved to the short side of the market again, selling over 1,000,000 bushels on March 30 and another 1,000,000 on March 31. While his interest in the market reached immense proportions, Figure 18 shows that he changed his position in the market less frequently than did either No. 12 or No. 14. Each of the latter two changed his position from long to short, or vice versa, eleven times during the period, while No. 10 changed only four times.


Fig. 18. -The net position in the 1925 May wheat future of trader No. 10 , by days, from January 2 to A pril 18, 1925

Traders Nos. 9 and 5.-The other two traders, Nos. 9 and 5, are of particular interest only because each includes in his operations an individual day's trading of over $2,000,000$ bushels net. The net position of each of these two traders was large (No. 9 amounting to $3,850,000$ bushels long on January 14, and No. 5 amounting to $2,340,000$ bushels long on March 12). It is especially noticeable, as shown in Figures 19 and 20, that they did not switch from "long" to "short" or from "short" to "long" as is so pronounced in the trading of Nos. 12 and 14 . The two outstanding days for these two traders were: For No. 9, March 6, when his long position of 2,355,000 bushels was liquidated to the extent of $2,200,000$ bushels; and for No. 5, March 17, when his long position of $2,290,000$ bushels was reduced by an amount of $2,240,000$ bushels. From Table 3 it will be observed that these were outstanding days in the net changes in
the price of May wheat, the decline on the former date being $111 / 4$ cents and on the latter $111 / 2$ cents. Taken as a whole, the character of the operations of these two traders, as indicated by the course of their net position in the market, was not of the strictly professional type although their influence on the market on the two days in which their position was largely closed out was pronounced.
However, as shedding light on this point, it should be observed that on the four days during March when the price broke to the greatest extent, not one but several large speculators sold. Thus, on March 6, six speculative traders sold net over 500,000 bushels


Fig. 19.-The net position in the 1925 May wheat future of trader No. 9, by days, from January 2 to A pril 18, 1925
each, with a combined total of $7,275,000$ bushels and the price declined $111 / 4$ cents. On March 13, eight traders sold net over 500,000 bushels each, with a combined total of $9,110,000$ bushels and the price declined $14 \frac{4}{4}$ cents. On March 17, five traders sold net over 500,000 bushels each, with a combined total of $7,450,000$ bushels,


Fig. 20.-The net position in the 1925 May wheat future of trader No. 5, by days, from January 2 to April 18, 1925
the price declining $111 / 2$ cents. On March 30 , six traders sold net over 500,000 bushels each, with a combined total of $6,575,000$ bushels, the price declining $101 / 2$ cents. On two of these dates, March 6 and 17, the influence of the heavy selling was softened somewhat through purchases by trader No. 12 of over 500,000 bushels; 550,000 bushels on the former and $3,200,000$ on the latter date.

It must not be concluded that the heavy selling on these dates was all for short account, for a considerable portion represents the liquidation of long holdings, partially at a profit and partially at a loss. The extent to which liquidation and short selling was carried on is
indicated in Tables 26,27, and 28 in the appendixes. It demonstrates, however, the grave danger to the market that is likely to result from the accumulation of excessive long lines.

## SOME OBSERVATIONS REGARDING INDIVIDUAL DAYS

January 12.-On that date the price of May wheat advanced to $\$ 1.85$, with a net gain of $41 / 8$ cents from the previous close. The market opened at $\$ 1.801 / 4$ to $\$ 1.807 / 8$ and closed at $\$ 1.843 / 4$ to $\$ 1.85$. Some news on the 12 th was of a very bullish character. It was reported that Russia was buying large quantities of flour from North America and rye from Germany. The supply of old wheat in Poland, Czechoslovakia, and Vienna, Austria, was said to have been nearly exhausted and with unfavorable prospects for the new crop. In addition, it was reported that the domestic milling demand had developed great strength with premiums steadily advancing. The chief bullish item was that the United States visible supply of wheat had decreased $4,659,000$ bushels which was much more than expected. On the other hand, there were some bearish items: The movement of wheat to primary markets was large; the quantity of wheat on "ocean passage" had increased during the previous week; and Australia's exportable surplus of wheat was reported as estimated at $115,000,000$ bushels, as against $80,000,000$ for the previous year.

The total volume of trading in the May wheat future on January 12 was over $70,000,000$ bushels, the largest since the first of the year. Classes C, E, F, and G sold more May wheat than they bought; class C, to the extent of 88,000 bushels; class E, 120,000 bushels; class F, 170,000 bushels; and class G, $3,607,000$ bushels. The speculative class D , was the heaviest buyer as it purchased over $3,310,000$ bushels more than it sold; class B, 200,000 bushels; and class A, 475,000 bushels. The large difference between the purchases and sales for the D class is accounted for by the fact that one trader increased his "long" holdings by $3,750,000$ bushels. This concentrated buying was the most important factor contributing to the rise in prices. In addition, 400,000 bushels were purchased by three other large traders. On the other hand, there were two individuals who liquidated their long holdings of May wheat to the combined extent of 800,000 bushels.

January 22.-This was another day on which the price of the May wheat future advanced between 4 and 5 cents. The issuance of a long bullish statement by a prominent exporter in New York was said to have had much to do with increasing bullish sentiment. Reports also indicated that the export demand for wheat had improved, as the Southwestern and Northwestern markets were advising that inquiries were being made. The Liverpool market was strong and ignored the decline in Chicago on the 21st, which was purely artificial, being due to the sale of $5,750,000$ bushels by one trader, of which amount $4,500,000$ was for long account and $1,250,000$ for short account. The prices at Buenos Aires advanced and a famine was reported as having engulfed $11,000,000$ people in the southern Ukraine, Volga, and other districts in Russia where a large percentage of the population was stated to have resorted to eating bark. France, it was advised, had removed the turnover tax of 1.3 per cent on soft wheat and rye and also required that all flour must contain imported
wheat to the extent of 20 per cent. The increased bullish sentiment resulted in the replacing of "lines" that had been sold out at an earlier date and induced considerable short covering. The records show that for class D) the liquidation of "long holdings" of the May future was $2,315,000$ bushels, and that the "shorts" corered to the amount of $2,515,000$ bushels. For class A the liquidation of the long interest totaled 319,000 bushels, while the "shorts" covered to the extent of 417,000 bushels. For class B the buying resulted in a net accumulation of "long lines" of 25,000 bushels and an increase of "short lines" of 176,000 bushels. Class F bought $1,860,000$ bushels more than it sold; class C, 246,000; class A, 98,000 ; and class D, 200,000 bushels. The sales for class $G$ exceeded the purchases by $1,753,000$ bushels and for class B, 151,000 bushels.

January 28.-The price of May wheat on January 28, 1925, reached $\$ 2.057 / 8$, which was the top figure for the season. The Liverpool market for May wheat on that day opened at $\$ 2.143 / 4$, or $31 / 8$ cents above the previous close. The Chicago market opened at $\$ 1.991 / 2$ to $\$ 2$. On gencral buying by commission houses which readily absorbed the immense profit-taking sales, with the sharp advance in Liverpool, and with the price at Winnipeg advancing faster than at Chicago, the price rose rapidly until it reached $\$ 2.057 / 8$ at about $12.40 \mathrm{p} . \mathrm{m}$. The day ended with a range of $63 / 8$ cents and a gain of $53 / 4$ cents over the close of the 27 th.

During the day it was reported that good export sales had been made at the seaboard overnight and that seaboard stocks of grain were clearing up rapidly. Large sales of flour and grain were said to have been made, presumably for shipment to Russia. Advices from Buenos Aires indicated that Argentine producers were holding their wheat for higher prices. It was also reported as probable that Rumania would need to import wheat. There were reports that the wheat crop in the near Northwest had been damaged by ice and would probably require reseeding. Stocks of grain at Liverpool were stated to be over $1,500,000$ bushels less than on January 27, 1924. In addition, information was received from Kansas City that a good demand existed for cash wheat and that local millers were the best buyers.

With 18 days out of 26 in January showing an advance in price over the previous close, and with many individuals on the bull side, buying increased considerably and the volume of trading in the May future on January 28 almost touched the $90,000,000$-bushel mark. The excess of purchases over sales for the A class was 810,000 bushels; the B class, 875,000 ; the E class, $1,142,000$; the F class, 393,000 ; and for the G class, $1,507,000$ bushels. Class C sold 122,000 bushels more than it bought, and Class D, 4,605,000 bushels, of which 3,535 ,000 bushels were for the accounts of five traders, each selling 500,000 or more. However, all large traders were not on the selling side as the combined net purchases of three traders amounted to 940,000 bushels.

February 6.-This was the first day during the 1924-25 season when the daily range in the price was as much as $93 / 4$ cents. With strong Liverpool cables and with the Buenos Aires market opening higher, the opening price for the May wheat future at Chicago was about 1 cent above that for the previous close. The market was
steady for awhile on reports of a liberal export business having been done overnight. Short covering and some reinstatement of long lines carried the market price rapidly upward. Heavy liquidation was, however, encountered about 10.55 a . m., which caused the price to decline from $\$ 1.93$ to $\$ 1.87$, or 6 cents, within a period of less than 10 minutes. This was followed by a reaction to $\$ 1.893 / 4$, only to drop again under further pressure to $\$ 1.85$. Succeeding struggles resulted in three different advances to about $\$ 1.88$, with a final break to $\$ 1.861 / 4$, the closing price for the day. The reason given for the decline in price was principally the "liquidation of a line of around $5,000,000$ bushels May wheat, which, trade gossip had it, was the holding of the late Julius Fleishmann, of Cincinnati and New York, who dropped dead in Florida on Thursday" (February 5). This was denied the following day by the acting president of the Fleishmann Co., and there is no evidence to indicate that Mr. Fleishmann was even in the wheat market. The fact remains, however, that it was primarily the miscellaneous traders of classes A and G who paid the penalty during this decline, as shown by the following analysis.

The figures for the day show that the sales of class $\AA$ were $1,673,000$ bushels more than the purchases; for class G, 2,540,000 bushels; and for class E, 278,000 bushels. In class A almost $2,000,000$ bushels of "long" May were liquidated and over 250,000 bushels bought for short account. All other classes bought more than they sold; the B class to the extent of 420,000 bushels; C, 11,000 bushels; F, 720,000 bushels; and D, 3,340,000 bushels, of which a total of $3,160,000$ bushels was for two persons. Of the latter amount, $2,160,000$ bushels represented short covering and $1,000,000$ purchases for long account. On the other side of the market one large trader sold $1,450,000$ bushels in partial liquidation of a long account.

March 4.-During the month of March wide fluctuations in the daily prices were numerous. The price of the May wheat future declined from $\$ 2.02$ to $\$ 1.401 / 2$, or $611 / 2$ cents per bushel. March 4 was the first day on which the daily range in that month was over 6 cents per bushel. The range in price was from $\$ 1.983 / 8$ to $\$ 1.911 / 2$, or $67 / 8$ cents. The May wheat future in the Liverpool market opened at 14 s .9 d ., or slightly under the closing price of the previous day, and closed at $11 / 4 \mathrm{~d}$. (about $11 / 2$ cents per bushel) under the opening. The decline in Liverpool, according to a commercial cable, was said to have been caused mainly by speculators taking profits. In Chicago the average closing price of the May future was $\$ 1.921 / 8$, or $71 / 8$ cents under the close for March 3. According to market reports there was no news which seemed to justify the break in price. It resulted primarily from the heavy selling by a few traders whose operations forced the uncovering of stop-loss orders.

In Chicago on that day classes A, B, E, and G purchased more May wheat futures than they sold: A, to the extent of $1,779,000$ bushels, of which more than $1,000,000$ bushels were short covering; B, 328,$000 ;$ E, 725,000 ; and G, 1,517,000 bushels. Classes C, D, and F , on the other hand, sold more than they bought. The excess for class C was 153,000 bushels; F, 866,000 ; and D, $3,330,000$ bushels, of which $3,200,000$ bushels were for the account of one large trader, who liquidated a "long line" of $1,500,000$ bushels and sold short $1,700,000$ bushels. Another 750,000 bushels was a reduction in the
long commitments of a second individual. Another trader bought 800,000 bushels, which aided in checking the decline

March 6.-Another interesting day was March 6, with a price range in May wheat of $101 / 2$ cents, or from $\$ 1.901 / 2$ to $\$ 1.80$, with a net loss of 11 cents from the previous close. On that day the Liverpool market for May wheat opened at $14 \mathrm{~s} .61 / 4 \mathrm{~d}$. and closed at 14 s . 2 d ., a decline of 4114 d . ( 5.4 cents per bushel) having taken place during the day. The decline in Liverpool was attributed to the heavy exportation of wheat from Argentine and Australia, and the receiving of reports that rains had relieved the dry condition in the Indian wheat belt. The decline in prices in Chicago, however, was not entirely due to the break in Liverpool, although it was a contributing factor. The most important factor was the heavy concentrated selling, assisted by the uncovering of "stop-loss" orders as the price declined.

Only class D sold more May wheat futures that day than it purchased. The excess sales of May wheat futures for that class amounted to more than $8,000,000$ bushels, about $7,500,000$ bushels of which were sales for long account and between 500,000 and 750,000 for short account. Of the $7,500,000$ bushels sold for long account approximately $2,250,000$ bushels were for one individual. The decline was also aided by selling to the total amount of over $5,000,000$ bushels by five other persons.

Class G was the heaviest buyer of the May wheat future during the day as its net purchases exceeded its sales by approximately $3,750,000$ bushels, primarily short covering. The amount of purchases over sales for class A was about $2,250,000$ bushels, most of which was for long account. For class B the purchases exceeded the sales by $1,500,000$ bushels, of which 72 per cent represented lifting of hedges, and the remainder for long accounts.

March 13.-The 13th of March was one of the oustanding days of the period from the standpoint of wide price fluctuation. On that day the price range of May wheat at Chicago was $131 / 2$ cents. The market opened on a 4 cent range, $\$ 1.791 / 2$ to $\$ 1.751 / 2$, as compared with a closing on the previous day of $\$ 1.811 / 4$ to $\$ 1.811 / 2$. The net declined for the day was $143 / 4$ cents. The decline at the opening of the market was attributed, in part, to the weak Liverpool cables which reported the opening price of Liverpool May wheat as 13 s . 8 d ., as compared with 13 s .9114 d . at the close on the 12 th (a loss of $11 / 2$ cents per bushel). Another reason was reports that good rains had fallen in the Southwestern grain belt of the United States, and especially over most of Kansas and a part of Missouri where rain was needed. General selling of wheat, however, started at the opening. The selling orders came through many commission houses and, according to "gossip," more especially through two prominent houses. The selling was so persistent that strong buying which appeared at times only checked the decline in price temporarily, and, with numerous "stop-loss" orders being uncovered, prices declined up to the end of the session, as is indicated in Figure 21.

The volume of trading in the May wheat future that day was unusually large, being more than $106,000,000$ bushels. The total volume of trading in all wheat futures was $149,581,000$ bushels, perhaps the largest single day's trading in the history of the Chicago Board of Trade. The figures show that as a result of the day's trans-
actions all classes, except the speculative class D, bought more May wheat than they sold. Much of the buying represented short covering. Class D, however, sold about $22,500,000$ bushels, which was nearly $11,500,000$ more than it purchased. Of the total, the sales for long account exceeded the sales for short account by more than $10,000,000$ bushels, with a reduction in the aggregate long commitments of $11,460,000$ bushels. Of this amount $3,000,000$ was accredited to the account of one trader who liquidated a portion of his "long line." Class A increased its long commitments by $2,250,000$ bushels, and the aggregate short interest in this class was reduced to the extent of nearly 250,000 bushels. For class B the short holdings in in the May future were decreased over $1,750,000$ bushels and the long lines by more than 250,000 bushels.

Several causes were given by members of the grain trade as occasioning the heavy liquidation of the day. They were: Foreign buying not coming up to expectations; lack of materialization of the world shortage of wheat; reports of rains having fallen in the Southwest, thereby relieving the dry condition; and larger export clearances. The most important factor, however, was the heavy selling on March 11 and 12-mostly for short account, which technically weakened the market.

March 17.-Another day with a wide range in the price of May wheat future was March 17. The range for the day was 10 cents, or from $\$ 1.51$ to $\$ 1.61$. The opening price of the day ranged from $\$ 1.61$ to $\$ 1.54$, very much lower than the closing price of the previous day, which was $\$ 1.651 / 2$ to $\$ 1.65$. The net decline for the day was $111 / 2$ cents. The principal reason given for the low opening prices in May wheat was the weak condition of the Liverpool market which opened $31 / 2 \mathrm{~d}$. (over 4 cents per bushel) under the close of the 16 th. Buenos Aires market also opened 5 cents lower. To what extent, if any, persons operating on the Chicago market were responsible for the decline in Liverpool and Buenos Aires is not known as the records are not available.

The opening range in Chicago was unusually wide on this date. The pit was flooded with selling orders and trading started before the gong sounded. "Stop-loss" orders were uncovered at the beginning of the session. Practically no support came until the price had fallen to $\$ 1.54$. From that point it rose above $\$ 1.57$ shortly after the opening when further liquidation set in, which caused the price to drop below $\$ 1.55$. Buying brought it back to over $\$ 1.56$, when further heavy liquidation and the uncovering of "stop-loss" orders caused the price to decline sharply to $\$ 1.51$. A rally caused the price to rise again to nearly $\$ 1.56$ when further pressure forced it to $\$ 1.52$. From there on the price climbed to above $\$ 1.57$ to encounter further selling which caused it to drop to $\$ 1.53$ to $\$ 1.531 / 2$, where the market closed.

Figure 21 shows the details of the price movement for each onefourth cent throughout the day.

This investigation revealed a large buying order in the market early during the session, the price indicated being $\$ 1.51$. The order was later filled at a higher level. Subsequently, the price declined sharply and, at about 10.45 a. m., May wheat sold at $\$ 1.51$, or $143 / 4$ cents below the average closing on the previous day. Whether
this was a mere coincidence, or in accordance with a predetermined plan, could not be ascertained.

In this connection a part of the evidence secured during this investigation by representatives of the Department of Justice reads as follows:

I went almost immediately to Miami, and while there went into Thompson \& McKinnon's brokerage house. Some of the boys at this office said wheat would break to $\$ 1.51$. This was just hearsay, just traders' market gossip.

The period referred to was prior to March 11 when prices were above $\$ 1.80$, and before the drastic decline.

The sales of the May wheat future for the day totaled over $95,000,000$ bushels. All classes of traders, except classes D and E, purchased more than they sold: A, to the extent of $1,926,000$ bushels; G, $1,733,000 ;$ B, 360,$000 ;$ C, 109,000 ; and F, 349,000 bushels. Class E


Fig. 21.-The quarter-cent fluctuations in the price of the 1925 May wheat future with the opening and closing range in prices on March 13 and 17, 1925
sold a little over 174,000 bushels more than it bought, and class D , $4,303,000$ bushels. Class A increased its long interest by nearly $3,000,000$ bushels, and its short interest by over $1,000,000$ bushels. Class B reduced its short interest by almost 500,000 bushels. The long interest in class D was reduced over $7,000,000$ bushels, and the short interest $2,750,000$ bushels. Of the total sales of $16,000,000$ bushels for class D, more than $6,250,000$ was for the accounts of three traders. There was also heavy buying by prominent traders whose operations aided in checking the decline, as $4,000,000$ bushels were bought for three persons, one of whom covered short sales to the extent of approximately $3,250,000$ bushels.

March 18. The daily range between the high and low price on March 18 was $51 / 2$ cents. The net advance in price for the day was $85 / 8$ cents. The average closing on the 17 th was $\$ 1.531 / 4$ and on the 18th, $\$ 1617 / 8$.

Trade gossip attributed this reaction to the strength in the Liverpool market, where the May wheat future closed $61 / 2 \mathrm{~d}$. to 8 d . higher ( 7.8 to 9.6 cents per bushel) than on the previous day, and to the marked improvement in foreign demand. Chicago opening prices were 7 to $91 / 2$ cents above those at the close of the preceding session. The records indicate that on the 18th only two classes, B and D, bought more wheat than they sold. The excess for class D was nearly $2,500,000$ bushels, of which nearly $2,000,000$ consisted, presumably, of the "buying-in" of hedges. Class D increased its long commitments nearly $2,000,000$ bushels, mostly for the long accounts of four large traders, one of whom bought $1,000,000$ bushels and another more than 500,000 . The short commitments of class D increased only 110,000 bushels. The other classes sold more than they purchased, class A , to the extent of $1,500,000$; class $\mathrm{C}, 35,000$; class E , 25,000 ; class F, 304,000 ; and class G, nearly $2,500,000$ bushels.

March 19. - The market at Chicago opened firm on March 19, stimulated by strong cables and by what appeared to be the development of a tighter cash situation. The opening range was from $\$ 1.62$ to $\$ 1.63$, or one-fourth cent to $11 / 4$ cents above the close of the day before. Liverpool May wheat opened $11 / 2 \mathrm{~d}$. above that of the previous close. The purchases of class D on the 19th exceeded its sales of May wheat futures by more than $2,750,000$ bushels. Of this amount over $2,500,000$ bushels were for five traders who were building up "long lines." In the case of classes A, B, C, E, and F the total sales were larger than the purchases, the A class to an amount over 1,500,000 bushels; the B class, 385,000 ; the C class, 151,000 ; class E, 45,000 ; and class F, 477,000 bushels. The transactions of class B were about equally divided between the liquidation of long accounts and hedge selling. The price range for the day was $31 / 2$ cents, or from $\$ 1.62$ to $\$ 1.651 / 2$, and the advance registered at the close of the day was $17 / 8$ cents above the close for March 18.

March 20.-The opening price of May wheat covered a range of $11 / 2$ cents, and an average of $41 / 4$ cents under the close of the 19th. However, the market closed $41 / 4$ cents higher than the previous day after working through a range of $93 / 4$ cents. The trade attributed the sharp decline at the opening to lower cables from Liverpool, which reported that the opening prices in that market were 12 s . $73 / 4 \mathrm{~d}$. to 12 s . 5 d . or under the previous close of $12 \mathrm{~s} .73 / 4 \mathrm{~d}$. At the close on the 20th, Liverpool was still lower, the price having dropped to $12 \mathrm{~s} .13 / 4 \mathrm{~d}$. The slump in Liverpool prices, according to Broomhall of England, was due to rumors that importers on the Continent, owning floating Australian cargoes, had encountered financial difficulties, and that large local millers and London merchants had become heavy sellers. One cable announced the failure of a concern in Germany. It was also stated that the extreme weakness in the Liverpool wheat market was, in part, due to the selling of holdings of a Canadian cooperative organization. These rumors, however, were later denied. One prominent "house" in Chicago expressed the view that "the Liverpool cables look to be manipulated."

During the day class A sold $1,322,000$ bushels more than it purchased; class B, 280,000; C, 14,000 ; and G, 116,000 bushels. Class E bought 53,000 bushels of May wheat futures more than it sold; class F, 244,000; and D, 1,435,000 bushels. In class D one trader
increased his long interest in the May wheat future during the day to the amount of $2,000,000$ bushels.

March 27 .-On this date there was a price range of $83 / 4$ cents, from a high of $\$ 1.66$ to a low of $\$ 1.571 / 4$, with a net decline of $71 / 4$ cents for the day.

The Chicago market opened $3 / 4$ to 1 cent higher than the previous close because of the firmness of the Liverpool market and on account of reports of dry weather prevailing in the southwestern grain belt. The cause of the day's decline was, however, attributed to the liquidation of long wheat futures for several large traders. There was only one class on the 27 th of March whose sales exceeded its purchases, and that was the speculative class D. The sales of this class in the May wheat future were $3,750,000$ bushels larger than the purchases, and of this amount over $3,500,000$ bushels represented the combined sales for the account of four individuals, two of whom sold over a million bushels. Of this latter amount over $2,750,000$ were sales for long account, the balance representing short selling.

Class G bought only 9,000 bushels more than it sold. The excess of purchases over sales for class A was $2,697,000$ bushels, of which over 2,000,000 represented short covering. Class B bought 670,000 bushels more than it sold, class C 140,000 , class E 15,000, and class F 251,000 bushels.

March 30.-Another day of interest is March 30, 1925. On this date the range in price was $131 / 2$ cents, or from $\$ 1.443 / 4$ to $\$ 1.581 / 4$. The average closing price was $\$ 1.463 / 4$, or $101 / 2$ cents under that of the 28th, when the market closed at $\$ 1.571 / 4$. The volume of trading in the May wheat future was nearly $64,000,000$ bushels, the largest since March 17, when the daily range was 10 cents.

Liverpool "May" opened a halfpenny higher and Chicago onehalf cent higher. Market news attributed the stronger opening to the unfavorable reports pertaining to the "winter killing" and dryweather damage to the wheat in the southwestern part of the United States. Later in the day there was a sharp break in wheat prices at Chicago. According to market reports this was due primarily, to the heavy selling brought about by the lack of an export demand, the forecast for rain in the southwestern grain belt, the fact that the visible supply of grain in the United States decreased but $2,000,000$ bushels during the previous week, and the failure of a world scarcity in wheat to materialize. The records reveai that during the day class A purchased approximately $2,250,000$ more than it sold, B almost $1,500,000, \mathrm{~F}$ over 500,000 , and G over $3,250,000$ bushels. The sales for class C exceeded the purchases by 107,000 bushels, E 130,000 , and D over $7,250,000$ bushels, of which nearly $5,000,000$ represented liquidation of long lines, $3,000,000$ bushels of which were for one trader. There was also short selling to the extent of $2,500,000$ bushels, of which more than $1,000,000$ bushels were for one trader. In brief, the decline of the day was due principally to the selling operations of four traders.

Figure 22 shows the one-fourth cent fluctuations in the price of May wheat on the 30th. With the exception of the rise that took place between 9.40 and $10.15 \mathrm{a} . \mathrm{m}$., and about 12.50 to $1.15 \mathrm{p} . \mathrm{m}$., the trend of the price was downward throughout the session. Sharp, declines will be found at a number of places where "stop-loss"
orders were uncovered, which forced prices to yield further under heavy selling pressure.

April 3.-This date marks the end of the drastic decline in May wheat from $\$ 2.02$ on March 2 to $\$ 1.361 / 2$, or $651 / 2$ cents, in 28 trading days.

At the close of the market on April 3 the price of May wheat was $41 / 2$ cents under the average closing of the previous day. The range during the day was $81 / 2$ cents, from $\$ 1.361 / 2$ to $\$ 1.45$.

The opening prices at Chicago were rather firm for both the May and the July futures, they being essentially the same as the previous close. During the early part of the session the "short covering" and commission house buying was good, but about $10.35 \mathrm{a} . \mathrm{m}$. a drastic break occurred in the price of corn and oat futures, which started selling in wheat and prices gradually declined until 12 o'clock,


FIg. 22.-The quarter-cent fluctuations in the price of the 1925 May wheat future with the opening and closing range in prices on March 30 and April 3, 1925
when the price of May wheat broke suddenly to $\$ 1.39$, uncovering "stop-loss" orders on the way down. Renewed liquidation in corn was given as the reason for the break at this point and, with practically no buying power in the market, little resistance was met and the price of the May wheat future declined. In commenting on the market it was stated by a prominent house that the break in corn was the penalty of a badly handled speculative move, as speculators insisted on bulling corn in the autumn of 1924. A severe decline in oats to new levels also took place and was said to have been due to heavy liquidation which met a very limited buying power. Figure 22 shows the detailed price movements on April 3 for each one-fourth cent change in price.

The excess of sales over purchases of May wheat for any one class was not very large as it did not total 750,000 bushels for any single class. By the end of the session the "longs" in class A had increased their commitments by $1,500,000$ bushels, and the "shorts" reduced
theirs by 636,000 bushels. Class D reduced its long accounts by about 250,000 bushels and added to its short lines over 500,000 bushels. The short interest of class B was reduced 750,000 bushels and its long interest increased by 105,000 bushels.

April 13.-While the market opened three-fourths cent higher, heavy selling was responsible for a net decline of $5 \frac{1}{2}$ cents. Scattered rains over the winter wheat belt, export business at a standstill because of the holidays abroad, the receiving of a report that Sir James Wilson estimated import requirements for the 1925-26 season to be $720,000,000$ bushels as compared with $760,000,000$ for $1924-25$, and a lack of outside buying, made possible the decline. The records show the most important factor to be the transactions of a single professional trader who sold $2,900,000$ May wheat, of which $1,900,000$ represented short selling.

Aprit 15.-There was a wide fluctuation in the price of May wheat on April 15, from $\$ 1.511 / 2$ to $\$ 1.611 / 2$, or 10 cents per bushel. Cables reported the Liverpool market $31 / 4 \mathrm{~d}$. higher at the opening. Buenos Aires opened $31 / 4$ cents higher. This gave Chicago prices a firm start, with the opening three-fourths cent up. When reports came in to the effect that damage was being done by cutworms in southern Kansas, much outside buying made its appearance, and with the "shorts" covering, the price of the May wheat future advanced rapidly, which in turn attracted selling orders. However, during the last 15 minutes of trading the price declined sharply on a rumor that liberal quantities of wheat and rye were being brought to Chicago for delivery on May contracts. As a result the market closed 9 cents lower for the May future, even in the face of bullish news regarding the crop prospects in the United States and India, the increasing foreign demand, the smaller arrivals of cargoes at British ports, and the strengthening of prices at which wheat from Argentina and Australia was being offered for export.

The volume of trading for the day was $46,000,000$ bushels, the largest since April 1, 1925. Classes A, B, and G were the heaviest buyers of May wheat, their purchases exceeding their sales; class A, over $1,000,000$ bushels; class $\mathrm{B}, 1,000,000$; and class $\mathrm{G}, 1,750,000$. On the other hand, class D sold nearly $4,000,000$ bushels more than it bought. Of the latter amount more than $1,500,000$ bushels represented short selling for one trader-perhaps the most important factor in the decline.

April 16. -The Liverpool wheat market on April 16 opened 51/2d. to 6 d . lower. Chicago's opening price ranged from $\$ 1.52$ to $\$ 1.51$, practically where it closed the previous day. After hovering around $\$ 1.50$ for 15 minutes, the price advanced to $\$ 1.52$, from which point it declined to $\$ 1.471 / 2$ at about 10.25 a. m. A rally shortly after 11.30 a. m . brought it back to $\$ 1.511 / 2$, only to succumb to further oressure during the last hours of trading, which caused it after several reactions to decline to $\$ 1.44$. The market closed at $\$ 1.443 / 4$ to $\$ 1.45$, with a net loss of $67 / 8$ cents for the day, after a struggle which carried prices over a range of 8 cents, that had but little, if any, relationship to supply and demand. Figure 23 shows the price movements for the day for each change of one-fourth cent.

Trade gossip must always find a reason for prime movements. On April 16, the decline was attributed to the weak cables, reports of rain
in the Southwest, and a poor export demand. The prime cause, however, was due to speculative activities which uncovered "stop-loss" orders of considerable extent. The buying support came primarily from Class B, which bought in hedges to the extent of nearly 2,500,000 bushels, a part of which represented the transfer of hedges from May to July.

April 17 . - The wheat market at Chicago on April 17 was a nervous affair. It opened strong, the opening prices of $\$ 1.46$ to $\$ 1.471 / 2$ being $11 / 2$ to $21 / 2$ cents above the close of the 16th. The advance was ascribed to: Liverpool's failure fully to reflect the decline at Chicago on the 16th; a higher opening at Buenos Aires; a fair export demand over night; reduced exports from the Southern Hempishere; and an improved demand in Kansas City from mills. The higher opening


Fig. 23. -The quarter-cent fluctuations in the price of the 1925 May wheat future with the opening and closing range in prices on April 16 and 17, 1925
prices attracted selling orders and after some short covering the price declined within 15 minutes after the opening to $\$ 1.45$. A reaction at 10 o'clock carried the price back to above $\$ 1.48$. Up to 12.20 p. m. traders were nervous and prices changed sharply on small offerings. A bullish report issued by a crop expert aided in checking somewhat the bearish activity, and, with strength shown at Winnipeg, the market advanced from $12.20 \mathrm{p} . \mathrm{m}$. to the close, as shown in Figure 23. With heavy short covering the price of the May wheat future rose from $\$ 1.47$ to $\$ 1.513 / 4$, or $43 / 4$ cents, during the last half hour of the session. The trading for the day resulted in a net gain of $63 / 4$ cents over the previous close. The range for the day was 7 cents, from $\$ 1.443 / 4$ to $\$ 1.513 / 4$.

The volume of trading in May wheat as compared with some of the other days was small, being only $36,000,000$ bushels.

## CORRELATION COEFFICIENTS

(A) THE RELATIONSIMP BETWEEN THE DAILY CHANGES IN THE NET POSITION OF VARIOUS CLASSES, THE FOUR GROUPS IN CLASS D, AND THE DAILY NET CHANGES IN THE PRICE OF MAY WHEAT

In previous sections of this report it has been pointed out that a close relationship exists between the daily changes in the net position of certain classes, groups, and individuals and the daily net changes in the price of the 1925 May wheat future. ${ }^{1}$ It was also found that this relationship varied greatly for different classes of traders. Consideration of these variations led to a more intensive study of the data by months. In order to express in numerical form for January, February, March, and April the degree of relationship between the daily changes in the net position of classes A, B, G, and four groups in class D , and the daily net changes in the price of the 1925 May wheat future, the simple correlation coefficients were calculated by months. Detailed information regarding the type of trader included in these different classes is found on pages 33 to 36 . In general, class B consists of the hedgers, class A the commission house accounts, class G the miscellaneous small traders, and class D the professional speculators. The last named class is, in turn, divided into four groups. Group 1 includes those traders whose net position in the 1925 May wheat future was at some time during the period of the investigation over 100,000 bushels long or short but always less than 500,000 bushels. Group 2 includes those from 500,000 to $1,000,000$ bushels, group 3 from 1,000,000 to $2,000,000$ bushels, and group 4 those who had a net position of $2,000,000$ bushels or over.

Table 18.-Coefficients of simple correlation between the daily net change in the price and the changes in net position of different classes and groups of "traders" in the 1925 May wheat future, by pairs and by months, from January 2 to April 18, $1925^{1}$


[^9]For January the coefficient expressing the relationship between the daily changes in the net position of class $G$ and the daily net changes in the price of the 1925 May wheat futures is -0.63 . As perfect inverse correlation is -1.00 , and as the probable error in this instance is but 0.07 , the relationship is significant. The relationship is inverse as indicated by the minus sign and shows that the tendency of class G's operations was to sell while the price advanced during January. The relationship for the same month between Group 1 of class D and the daily net changes in price is +0.41 . For Group 4 it is the same. Both coefficients show that some positive relationship exists between the daily changes in the net position and the daily net changes in the price of the May futures, but it is, however, not as strong as in the case of class G. The last two coefficients are positive and show that Groups 1 and 4 of class D generally added to their long lines of May wheat while the price advanced. The correlation coefficients for the remaining classes and groups of class D for January are so small that one can say that the relationship is practically negligible.

The correlation coefficients for February, taking the month as a whole, are so low as to indicate that almost no relationship exists between the daily changes in the net position and the daily changes in price except in the case of class A and Group 2 of class D.

The coefficients of correlation between the daily changes in the net position of class A and the price are +0.40 , and for Group 2 of class D , -0.44 . This suggests that the former was buying and the latter selling as the price advanced, and vice versa. During February 1 to 11, inclusive, the price of May wheat declined from $\$ 2.021 / 4$ to $\$ 1.771 / 2$ and from there advanced by the 28 th to $\$ 1.997 / 8$. It was for the former period that the relationships between the operations of class A and Group 2 of class D and the price changes were the closest. During the period from February 11 to 28, the relationship between the daily changes in the net position of class G and the changes in price was the greatest of any of the variables, the correlation coefficient being -0.56 with a probable error of 0.15 . A marked decline and advance within the same month accounts for the coefficients for the month as a whole, being somewhat smaller than would probably have been the case had the price moved mainly in one direction.

March, the month in which the daily net changes in the price of the May wheat futures were the greatest, was also the one for which the degree of correlation is the highest. Four figures given in Table 18 particularly attract one's attention: those for classes A, G, and Groups 3 and 4 of class D. For A the coefficient is -0.67 , for G -0.83 , for Group 3 of class $\mathrm{D}+0.62$, and for Group 4 of class $\mathrm{D}+0.78$. As the probable errors in these coefficients are 0.08 , or less, the figures reveal that the relationship was very marked. These coefficients do not show which is the cause and which the effect, but when considered in the light of the facts presented previously in this report they lend support to the point that the trading operations of certain groups exercised a strong influence in the market and determined the course of prices. Although the coefficients for Groups 1 and 2 of class D are somewhat lower, they are still of sufficient size, namely, +0.55 and +0.51 , to denote that a fair relationship exists. As all the coefficients for class D for March are positive and those for classes A, B, and G negative, it is revealed that, in general, as the price of May wheat
declined the various groups of class D reduced their long lines or increased their short lines, or both. Classes A, B, and $G$, on the other hand, usually did the opposite.

The two highest coefficients for April, -0.59 and -0.50 , are those for classes A and G. They suggest some relationship between the daily changes in their net position and the price of the May futures, although it is not as striking as for March. The remaining coefficients for April are such as to point out that the relationship, as far as the other classes are concerned, was small. The figure of -0.30 for class $B$, however, is the highest for this class for any of the four months, yet in no case is there any indication of a relationship existing between the changes in the net position of this class and the net shanges in price.
(b) the relationship between the daily changes in the net POSITION OF VARIOUS CLASSES AND FOR THE FOUR GROUPS OF CLASS D

Not only was there at times a high relationship between the daily shanges in the net position of the various classes and groups and the daily net changes in the price of the May wheat futures, but also close relationship between the daily changes "in the net position of the different classes and groups of "traders."

Table 19.-Coefficients of simple correlation between the daily changes in the net position in the 1925 May wheat future of classes $G, A$, and $B$ and various groups of class D, by pairs and by months, from January 2 to April 18, 1925


For probable error in coefficients, see footnote, p. 126.
From Table 19 it can be seen that the correlation coefficient between class $G$ and Group 1 of class D for January is -0.74 . This figure is exceeded by the one for March between class G and Group 4 of class D, which is -0.77 . From this one may conclude that the relationship between the net trades of Groups 1 and 4 of class D and those of class $G$ for March are very pronounced. The remaining coefficients between class $G$ and the various groups of class $D$ are considerably lower and the relationship is much less evident. In all eases, however, the coefficient is negative, thereby denoting that the relationship is inverse; i. $\Theta$., class G's net trades were in the opposite direction to that of class D. The coefficients expressing the degree of correlation between class A and the four groups of class D are the
highest for March. Between class A and Group 2 it is -0.71 . This is the highest for any group and class for any month. Between class A and Group 3 for March it is -0.63 , and for Group 4-0.65. The outstanding one for April between class A and any of the groups of class D is that for Group 4 with a coefficient of -0.64 . The probable error of these coefficients is less than 0.08 , and therefore they express a relationship which is evidently very close.

As for class G, the coefficients for class A are all negative, thereby pointing out that the relationships are inverse and that the changes in the net position of these two classes were, on the whole, opposite to those of class D.

From Table 20 it can be seen that the changes in the net position of class B in the May wheat future are for the most part independent of the changes for any of the groups of class D , with a possible exception of Group 2 for February, with a coefficient of +0.55 , and Group 1 for April with a coefficient of -0.49 .

## (c) THE RELATIONSHIP BETWEEN THE DAILY CHANGES IN THE NET POSITION OF DIFFERENT GROUPS IN CLASS D

Table 20.-Coefficients of simple correlation between the daily changes in net position in the 1925 May wheat future of the four groups of class D, by pairs and by months, from January 2 to A pril 18, 1925


For probable crror in the coefficients, see footnote, page 126.
The relationship between the changes in the net position in the May wheat future of the various groups in the speculative class, D, is not pronounced except between Groups 1 and 2 for January and 3 and 4 in March. Between the former the coefficient is +0.54 and between the latter +0.55 . Both coefficients being positive, indicate that in these two instances their net trading operations were in the same direction. In other words, when the one reduced its "line" the tendency was for the other to do likewise, and vice versa.
(D) The relation of the smultaneous daily changes in the NET POSITION OF VARIOUS CLASSES AND GROUPS TO THE NET CHANGES IN THE PRICE OF MAY WHEAT

In preceding sections are presented the relationships between the daily net changes in the price of the 1925 May wheat future, as expressed in the simple correlation coefficients. The relationship of the simultaneous daily changes in the net position of the various classes and groups to the daily net changes in price is expressed by
a multiple correlation coefficient. The different classes and groups are then considered as constituting a single independent series.
For January the multiple correlation coefficient is 0.79 , for February 0.61 , for March 0.92 , and for April 0.91 . The probable error in each of these coefficients is as follows: January, 0.05; February, 0.09 , March, 0.02 , and April, 0.03 . The coefficients for March and April are especially striking because of their size which indicates that the factors included accounted for nearly all the direct influences which brought about the daily net changes in the price of the 1925 May wheat future. As the multiple correlation coefficients for the various months are less than 1 , the presumption is that there are other factors in addition to the changes in nat position of the classes and groups considered which affected the daily net changes in price. One of them is the influence on prices caused by the purchases and sales of the various classes of traders during the trading session, and on which, up to the present time, no complete data have been collected. For example, scalpers may exercise an influence on the market within the trading day, but to what extent is not known, as figures are not available as to the number of bushels bought or sold at various times during the session so they can be compared with the fluctuations in the price for corresponding periods of the day. For the other classes and groups it is also impossible to state just what effect the sales and purchases of any of them had on the price of the future at different times during the trading session. Therafore, this comparison has been limited to the relationship between the daily price changes and those in the net position of the different classes. The changes in the net position represent an expression of the opinions of traders as to the probable trend in the future of grail prices. Market opinions only influence price as they result in trading, and trading leads to changes in net position.

The correlation coefficients add support to the conclusions previously stated regarding the influence of the trading operations of various classes and groups of "traders" on each other and on wheat prices in that they show that a significant relationship exists between the trading operations of some of them and price changes, while in the case of others the relationship is either very small or practically absent.

## APPENDIXES

## APPENDIX A

General Rules and Regulations for Carrying Out the Provisions of the Grain Futures Act of September 21, 1922, with Respect to Contract Markets, with Amendments of January 20,1926

1. These rules and regulations are made and prescribed with respect to contract markets under the grain futures act of September 21, 1922, a copy of which is hereto annexed. These rules and regulations shall apply and be enforced only in accordance with and subject to the provisions of said act, and shall not prevent the legitimate application or enforcement of any valid by-law, rule, regulation, or requirement of any contract market which is not inconsistent or in conflict with the act and these rules and regulations.
2. Each contract market shall make, or cause to be made by its clearing members, reports to the Grain Futures Administration showing the facts specified in this regulation upon forms prescribed for the purpose by the Grain Futures Administration. If such contract market has a clearing-house organization which obtains and keeps reliable reports and records, reports may be accepted from such clearing-house organization, and the members of such organization may be relieved from making individual reports, to the extent that the clearinghouse organization by authorization of such contract market supplies the facts called for by these regulations.

Except when otherwise specified in writing by the Grain Futures Administration upon good cause shown, the reports shall be made as soon as possible after the close of the market on each business day, and not later than 30 minutes before the official opening of the trading session on the next following business day. Each such report shall be prepared carefully, but in case any errors or omissions are discovered a memorandum thereof shall be furnished as soon as possible or with the next succeeding report. Each contract market shall deliver such reports or cause them to be delivered to the Grain Futures Administration in the city where such contract market is located. If there be no office of the administration in such city the contract market shall mail such reports or cause them to be mailed in accordance with the instructions of the officer in charge of the Grain Futures Administration.

There shall be a report by or for each clearing member, which shall include all contracts of sale of grain for future delivery, made on or subject to the rules of such contract market, to which he is a party either as seller or buyer. Such report shall show separately for each kind of grain and each delivery month the following facts:
(a) The net position at the beginning of the period covered by the report;
(b) The quantity of grain purchased and the quantity of grain sold on such contracts during the period covered by the report;
(c) The quantity of grain delivered and the quantity of grain received on such contracts during the period covered by the report;
(d) The net position at the end of the period covered by the report;
(e) The aggregate of all "long" and the aggregate of all "short" accounts carried at the end of the period covered by the report by the clearing member for whom the report is made;
$(f)$ The net position, at the end of the period covered by the report, of each separate account carried by such clearing member, when such net position equals or exceeds such amount as shall be specified in a written notice from time to time by the Grain Futures Administration to such contract market.

For the purposes of item ( $f$ ), a distinguishing designation shall be used instead of the name of any person, but the name and address of such person shall be given upon request to a representative of the Grain Futures Administration authorized for the purpose by the officer in charge thereof. Such designation
shall always be used for the same person and not for any other person and may be changed only by or with the approval of such representative.
3. Each member of a contract market shall, in accordance with the requirements of subdivision (b) of section 4 and subdivision (b) of section 5 of the act, keep the records required thereby with respect to transactions for future delivery and cash transactions, in chronological order in such manner as to be readily accessible. He shall exhibit the same for inspection, or shall furnish true information or reports as to the contents or the meaning thereof, when and as requested by a representative of the United States Department of Agriculture authorized for the purpose by the officer in charge of the Grain Futures Administration. Each member shall when and as requested by such representative of the Department of Agriculture make reports showing the identification, the kind, the grade, and the price of grain bought or sold by such momber in the cash grain market. The records as to transactions for future delivery shall be so kept as to show whether or n't the rersons for whem such transactions are executed by each member are engaged in the cash grain business.
4. No representative of the Department of Agriculture shall, without the consent of the member, divulge or make known in any manner, except in so far as such representative may be required in order to perform his official duties or by a court of competent jurisdiction, any facts or information regarding the business of a member of a contract market which may come to the knowledge of such representative through any inspection or examination of the reports or records of, or through any information given by, such member pursuant to the act and these rules and regulations.
5. Each contract market shall as soon as possible from time to time furnish to the office of the Grain Futures Administration to which other reports are made reports showing all changes proposed and/or approved in membership or by-laws, rules, or regulations, and any official orders or announcements of the board of trade, not previously reported.
6. Each member of a contract market shall furnish, or cause to be furnished or exhibited, to the governing board of such contract market when requested by it, and to the officer in charge of the Grain Futures Administration or his representative when requested by him, a true copy of any report, circular, letter, or telegram published or given general circulation by such member concerning crop or market information or conditions that affect or tend to affect the price of commodities, and the true source or authority of such member for the information therein contained.
7. Every member of a contract market shall promptly report to the governing board of such contract market and to the officer in charge of the Grain Futures Administration, or his representative, all information in the possession of such member relating to any attempted manipulation of prices or corner of any grain by any dealer or operator upon such board.
8. For the purposes of these rules and regulations, unless the context otherwise require
(a) Words in the singular form import the plural and vice versa, as the case may demand;
(b) "Person' includes individuals, associations, partnerships, corporations, and trusts;
(c) The act, omission, or failure of any official, agent, or other person acting for any individual, association, partnership, corporation, or trust, within the scope of his employment or office, shall be deemed the act, omission, or failure of such individual, association, partnership, corporation, or trust as well as of such official, agent, or other person;
(d) "Grain" means wheat, corn, oats, barley, rye, flax, and sorghum;
(e) "Future delivery" does not include any sale of cash grain for deferred shipment or delivery;
(f) "Board of trade" means any exchange or association, whether incorporated or unincorporated, of persons who shall be engaged in the business of buying or selling grain or receiving the same for sale on consignment;
(g) "Contract market" means a board of trade designated by the Secretary of Agriculture as a contract market under the grain futures act;
(h) "Contract of sale" includes sales, agreements of sale, and agreements to sell;
(i) "Delivery month" means the month of delivery specified in a contract of sale of grain for future delivery;
(j) "Clearing member" means a member of a contract market whose name appears as seller or as buyer of a contract of sale of grain for future delivery made on
or subject to the rules of such contract market, regardless of whether such contract be actually cleared or not; and
(k) "Grain Futures Administration" means the officer or officers designated by the Secretary of Agriculture to carry out the provisions of the grain futures act.

By virtue of the authority vested in the Secretary of Agriculture by the grain futures act approved September 21, 1922 (42 Stat. 998), I, William M. Jardine, Secretary of Agriculture, do hereby amend the "General Rules and Regulations for Carrying out the Provisions of the Grain Futures Act of September 21, 1922, with Respect to Contract Markets," as follows:

Add at the end of subdivision (f) of section 2-
"Whenever any member carries or has under his control more than one account with any clearing member of a contract market, and the total volume of such accounts is equal to or in excess of the amount fixed in accordance with subdivision (f) of section 2 of these rules and regulations, then the total long and the total short position of all such accounts shall be reported and the names of all persons interested in such accounts shall be furnished to the supervisor in charge.
"Whenever a member has under his control an amount of wheat, corn, oats, barley, rye, flax, or sorghum equaling or exceeding the amount fixed in accordance with subdivision ( $f$ ) of section 2 of these rules and regulations, and files for execution an order for the purchase or sale of any grain future, such individual shall report that day to the Grain Futures Administration his total long and/or total short positions in the several futures in that grain in the market.
"Each contract market shall make, or cause to be made, by its nonclearing members reports showing all or such part of the facts required to be shown by or for clearing members as the Grain Futures Administration shall from time to time specify.
"Whenever any nonmember of a contract market has under his control an amount of wheat, corn, oats, barley, rye, flax, or sorghum equaling or exceeding the amount fixed in accordance with subdivision (f) of section 2 of these rules and regulations, and files for execution an order for the purchase or sale of any grain future, such nonmember shall comply with all the requirements and regulations applicable under the rules and regulations to members of the contract markets."

Add at the end of section 2:
"In filing name and address of principals of accounts it is not sufficient simply to file the information as the account of John Doe Grain Co., Minneapolis office, New York office, or London office, but the names and addresses of actual individuals must be given."

In testimony whereof I have hereunto set my hand and caused the official seal of the Department of Agriculture to be affixed in the City of Washington this 20th day of January, 1926.
[seal.]
W. M. Jardine, Secretary of Agriculture.

## APPENDIX B

## Rule of Chicago Board of Trade Providing for a Business Conduct Committee

The president, with the approval of the board, shall appoint from the general membership three members of a business conduct committee, who are not serving as directors or officers of the association, one for a term expiring October 1, 1926, one for a term expiring October 1, 1927, and one for a term expiring October 1, 1928, and thereafter at the first meeting of the board in September of each year the president, with the approval of the board, shall appoint one member of such committee for a period of three years, dating from October 1 in such year. In case of a vacancy, the president, with the approval of the board, shall fill the vacancy for the unexpired term. The three members thus appointed, together with the president of the association and the president (or if there be no president, the treasurer) of the clearing house shall constitute the business conduct committee. Five members of the committee shall be required to constitute a quorum, but in the absence of one or more members from a particular meeting the members present may fill the committee by temporary appointments for that particular meeting. All regular members of the committee shall pledge themselves to the
association that they will not speculate for their personal account in any commodity which is traded in on the Chicago Board of Trade during the period of their service. The committee shall be charged with the duty and authority to prevent manipulation of prices as provided in section 5 (d) of the grain futures act and shall have general supervision over the business conduct of members, particularly in so far as conduct affects (1) npnmember customers, (2) the public at large, (3) the State government, (4) the Federal Government, (5) public opinion, and (6) the good name of the association.

The committee may investigate the dealings, transactions, and financial condition of members, and may examine their books and papers upon request. The committee may employ such auditors and other assistants as they may deem necessary, and all expenses incident thereto shall be payable from the funds of the association. Members under investigation shall be advised of the nature of the investigation, and may appear before the committee and offer such testimony, explanation, or justification as they may wish. If as the result of any investigation the committee finds that a particular course of conduct is, or thereafter would be, unfair or unjust, or in violation of the law or the rules of the association or calculated to impair the good name of the association, the committee shall notify the member in writing of its conclusions, and direct such member to desist from such past or proposed conduct. The findings and conclusions of the committee in the premises shall be final and without appeal. Any member who fails to appear before the committee pursuant to its request, or to submit his books and papers to the committee for their examination, or who conducts himself in violation of any order of the committee after having been duly notified thereof, shall be charged with an offence against the association, and if found guilty shall either be expelled or suspended for any specified period by the board.

## APPENDIX C

## Relationship Between Future Prices of Wheat and Cash Prices of Wheat and Flour

It is commonly understood that cash prices of wheat generally follow closely the price changes in the dominant future. Also that similar changes take place in the price of flour but with much greater irregularity.

During the period from January 2 to April 18, 1925, there was a marked relationship between the spot prices for wheat and the price changes in the 1925 May wheat future at Chicago. Likewise flour prices advanced or declined with wheat prices, but with considerable lag.

Table 39 shows the average closing price of May wheat at Chicago in comparison with the average weighted price of No. 2 hard winter wheat at Chicago and Kansas City and No. 1 northern spring wheat at Minneapolis. The table also shows flour prices per barrel in car lots at Chicago, Minneapolis, and Kansas City. The flour prices given in the table are asked prices and may or may not represent prices at which actual sales were made.

During January, 1925, when the price of cash wheat at Chicago, Minneapolis, and Kansas City, and the May future at the former market advanced to the $\$ 2$ mark, flour quotations in these markets were also increased sharply. When the decline in cash grain and the May future took place in the first two weeks in February, flour prices at Minneapolis and Kansas City did not follow promptly, whereas in Chicago the quotations were somewhat lowered. On the 16 th of February, after cash wheat and the future had already started a second major upward movement, the quotations for the grade of flour known as "best bakers" at Minneapolis were reduced as much as $\$ 1.75$ to $\$ 1.90$ per barrel from the figures asked during the two previous weeks. At Kansas City the prices quoted for "straight" flour were lowered $\$ 1$ to $\$ 1.25$ per barrel. On the 24 th, after the market had registered further advances in the price of cash and "May" wheat, flour prices were again raised $\$ 1.15$ to $\$ 1.25$ per barrel at Minneapolis and as much as 75 cents at Kansas City. From the 24th of February to April 11 flour quotations at Minneapolis and Kansas City did not decline as rapidly as did cash wheat and the May future. From the 16 th of March until April 11 they remained unchanged. Two days later they gave way and quotations were reduced 80 cents a barrel at Minneapolis and $\$ 1$ at Kansas City.

Of the three markets the flour prices at Chicago followed the decline between March 5 and April 4 in cash and "May" wheat much more closely than did the prices at the other two markets.

Taking the period as a whole, the average price for 95 per cent hard winter wheat flour (jute basis) in terms of wheat per bushel at Chicago was $\$ 1.83$ and of No. 2 hard winter wheat $\$ 1.82$. For Minneapolis the average for "standard patent" (98-pound cotton basis) or its equivalent, in terms of a bushel of wheat, was $\$ 2.09$ and No. 1 northern spring wheat $\$ 1.76$. At Kansas City for "straight" flour ( 98 -pound cotton basis) was $\$ 1.98$ per bushel of wheat and for No. 2 hard winter at $\$ 1.73$ per bushel.

In giving consideration to these comparisons it is essential to keep in mind that no account has been taken of the premiums paid for the better grades of wheat. This applies especially to the No. 1 hard spring and No. 1 dark northern spring at Minneapolis. Likewise information as to the quantity of flour sold at the various prices and the disposition made of the by-products is not available.

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Table 21.-The volume of trading in the 1925 May wheat future by various classes of traders, by days, from January 2 to A pril 18, 1925-
[In thousands of bushels; i. e., 000 omitted]

| Date | Total volume all customers | Bought by classes |  |  |  |  |  | Sold by classes |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | A | B | C | D | E | F | A | B | C | D | E | F |
| 1925 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Apr. 1 | 29, 947 | 4, 245 | 1,230 | 7,384 | 3,124 | 576 | 4,525 | 5, 068 | 848 | 7,397 | 2, 854 | 431 | 4, 535 |
| Apr. 2 | 37, 386 | 6, 978 | 1,467 | 9, 568 | 2,776 | 405 | 5,487 | 6, 106 | 1,405 | 9, 654 | 3,633 | 395 | 6,238 |
| Apr. 3 | 40,591 | 6,350 | 2,350 | 9,968 | 3,480 | 470 | 4,567 | 5, 447 | 1, 501 | 9,996 | 4,300 | 760 | 4,308 |
| Apr. 4 | 25,691 | 3,771 | 768 | 7,135 | 3, 200 | 360 | 2, 813 | 5, 303 | 730 | 7,122 | 1, 315 | 465 | 2, 886 |
| Apr. 6 | 29,891 | 4,169 | 1,405 | 9, 473 | 2, 870 | 190 | 3,553 | 4,816 | 485 | 9, 505 | 3, 155 | 120 | 3,893 |
| Apr. 7 | 33, 632 | 5,337 | 1,179 | 9, 737 | 3, 840 | 495 | 4,361 | 5, 890 | 514 | 9, 734 | 2,926 | 225 | 4, 044 |
| Apr. 8 | 35, 804 | 5,598 | 1, 400 | 9,436 | 4,776 | 295 | 4,689 | 5, 678 | 800 | 9,477 | 3, 520 | 555 | 5,196 |
| Apr. 9 | 26,340 | 2,793 | 538 | 7,618 | 3,501 | 415 | 3,643 | 3, 522 | 810 | 7,517 | 2,900 | 175 | 3,427 |
| Apr. 11 | 30,350 | 4,420 | 827 | 8,260 | 3,345 | 1,100 | 4,840 | 5, 834 | 275 | 8,197 | 3,281 | 50 | 5, 011 |
| Apr. 13 | 32,911 | 5,110 | 398 | 9,239 | 2,915 | 280 | 5,570 | 2, 509 | 661 | 9,371 | 6,135 | 580 | 5,440 |
| A pr. 14 | 37, 813 | 5, 542 | 600 | 10,925 | 3,940 | 645 | 6,450 | 5,206 | 765 | 10,796 | 4,025 | 265 | 6, 087 |
| Apr. 15 | 46, 073 | 7,749 | 1,349 | 10,898 | 4,263 | 765 | 6,966 | 6,639 | 348 | 11,090 | 8,198 | 500 | 7,010 |
| Apr. 16 | 48, 157 | 5,964 | 3, 187 | 11,055 | 4,620 | 515 | 8, 380 | 7,297 | 687 | 11,007 | 5,900 | 930 | 8,001 |
| Apr. 17 | 36,022 | 4,426 | 2,113 | 9,547 | 3,439 | 420 | 4,392 | 5, 058 | 1,775 | 9,470 | 3,650 | 280 | 4,568 |
| Apr. 18 | 21, 471 | 2,651 | 2, 566 | 5,464 | 1,570 | 205 | 4,114 | 3,440 | 1, 323 | 5,458 | 2,017 | 5 | 3,755 |
| Total | 512, 079 | 75, 103 | 19,377 | 135, 707 | 51,659 | 7,136 | 74,350 | 77, 813 | 11, 927 | 135, 791 | 57, 809 | 5,736 | 74,399 |

[^10]Table 22.-The total volume of trading in the 1925 May wheat future for six classes of traders, compared with the total volume of trading for all customers, by days, from January 2 to A pril 18, 1925
[In thousands of bushels; i. e., 000 omitted]

| Date | Bought |  |  | Sold |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | For all customers | For six classes | Difference, class G | For all customers | For six classes | Difference, class G |
| Jan. 2 | 57,946 | 37,568 | 20,378 | 57,946 | 38,264 | 19,682 |
| Jan. 3 | 31, 532 | 22, 130 | 9,402 | 31, 532 | 22,052 | 9,480 |
| Jan. 5 | 60, 177 | 39, 918 | 20. 259 | 60, 177 | 41, 937 | 18,240 |
| Jan. 6 | 49,965 | 36,468 | 13,497 | 49,965 | 33,482 | 16,483 |
|  | 55, 751 | 40,343 | 15,408 | 55, 751 | 39, 280 | 16,471 |
| Jan. 8 | 44, 120 | 30,688 | 13,432 | 44, 120 | 31, 533 | 12,587 |
| Jan. 9 | 35, 732 | 26, 201 | 9,531 | 35,732 | 24,558 | 11,174 |
| Jan. 10 | 32, 697 | 24, 293 | 8,404 | 32,697 | 22, 219 | 10,478 |
| Jan. 12 | 70, 130 | 46,305 | 23,825 | 70, 130 | 42,698 | 27,432 |
| Jan. 13 | 70, 032 | 48, 017 | 22, 015 | 70,032 | 47, 197 | 22, 835 |
| Jan. 14 | 56,340 | 36,354 | 19,986 | 56,340 | 38, 293 | 18,047 |
| Jan. 15 | 56, 187 | 39,925 | 16, 262 | 56, 187 | 40, 920 | 15, 267 |
| Jan. 16 | 61,646 | 42,981 | 18,665 | 61, 646 | 44,315 | 17,331 |
| Jan. 17 | 46,409 | 32,982 | 13, 427 | 46,409 | 30,981 | 15,428 |
| Jan. 19. | 52,358 | 37,344 | 15, 014 | 52,358 | 35, 853 | 16,505 |
| Jan. 20 | 51, 041 | 35, 199 | 15, 842 | 51, 041 | 35, 687 | 15, 354 |
| Jan. 21 | 58,461 | 41, 864 | 16,597 | 58,461 | 42,361 | 16,100 |
| Jan. 22 | 63, 578 | 45, 876 | 17,702 | 63,578 | 44, 123 | 19,455 |
| Jan. 23 | 70,871 | 48, 151 | 22,720 | 70,871 | 49,695 | 21,176 |
| Jan. 24 - | 40, 114 | 28,572 | 11,542 | 40, 114 | 27, 890 | 12,224 |
| Jan. 26 | 59, 998 | 41, 862 | 18, 136 | 59, 998 | 43, 001 | 16,997 |
| Jan. 27 | 63,393 | 45,597 | 17, 796 | 63,393 | 42,093 | 21,300 |
| Jan. 28 | 89,870 | 61,657 | 28, 213 | 89,870 | 63, 164 | 26,706 |
| Jan. 29. | 71,166 | 47, 840 | 23, 326 | 71, 166 | 49,837 | 21,329 |
| Jan. 30 | 48, 612 | 33,391 | 15,221 | 48,612 | 32,855 | 15,757 |
| Jan. 31 | 31, 184 | 20,691 | 10,493 | 31, 184 | 21,480 | 9,704 |
| Total | 1,429,310 | 992, 217 | 437, 093 | 1,429,310 | 985, 768 | 443, 542 |
| Feb. 2 | 56,98988,85456,82870,46896,26246,21168,89170,86986,91570,69138,57453,74654,81340,82345,27039,90430,66942,38140,13059,43454,89237,143 | 38,900 | 18,089 | 56,989 |  | 13,850 |
| Feb. 3 |  | 59,121 | 29,733 | $\begin{aligned} & 88,854 \\ & 56,428 \\ & 70,668 \end{aligned}$ | 93,139 <br> 60,951 | 13,803 <br> 15,510 <br> 21,265 |
| Feb. 4 |  | 41, 711 | 14, 717 |  | 60,951 40,918 |  |
| Feb. 5 |  | 47, 966 | 22,702 |  | 40,91849,40364,975 |  |
| Feb. 6 |  | 67, 515 | 28,747 | 96, 262 |  | $\begin{aligned} & 31,287 \\ & 13,780 \end{aligned}$ |
| Feb. 7 |  | 34, 276 | 11, 935 | 46, 211 | 64,975 32,431 |  |
| Feb. 9 |  | 46, 652 | 22, 239 | 68, 891 | 47,394 | $\begin{aligned} & 1,20 \\ & 13,780 \\ & 21,497 \end{aligned}$ |
| Feb. 10 |  | 48,536 | 22, 333 | 70, 869 | 46, 263 | 21, 49724,60631,765 |
| Feb. 11 |  | 59,735 | 27, 180 | 86, 915 | 55, 150 |  |
| Feb. 13 |  | 47, 390 | 23, 301 | 70,691 | 44, 742 | 31,765 25,949 |
| Feb. 14 |  | 26, 980 | 11,594 | 38, 574 | 26,76236,310 | 11,17,43617 |
| Feb. 16 |  | 36, 249 | 17, 497 | 53, 746 |  |  |
| Feb. 17. |  | 38, 265 | 16,548 | 54, 813 | 37,450 | 17,436 17,363 |
| Feb. 18 |  | 28,404 | 12,419 | 40,823 | 28, 383 | 17,3190 14,493 |
| Feb. 20 |  | 30, 674 | 14,596 | 45, 270 |  | 14,493 10,586 |
| Feb. 21 |  | 21, 819 | 8,850 | 30,669 | 29,318 21,817 | 18,85213,892 |
| Feb. 24 |  | 29,678 | 12, 703 | 42,381 | 28,48926,395 |  |
| Feb. 25. |  | 28, 078 | 12,052 | 40, 130 |  | 13,73518,042 |
| Feb. 26 |  | 42,155 | 17, 279 | 59, 434 | 41,392 |  |
| Feb. 27 |  | 38, 204 | 16,688 | 54, 892 | 39, 957 | $\begin{aligned} & 14,935 \\ & 12,348 \end{aligned}$ |
| Feb. 28 |  | 27, 404 | 9, 739 | 37, 143 | 24, 795 |  |
| Tot | 1, 250, 557 | 868, 875 | 381, 682 | 1, 250, 557 | 857, 461 | 393, 096 |
| Mar. 2 | 59, 893 <br> 38, 901 <br> 70, 205 <br> 94, 138 <br> 64, 166 <br> 42, 069 <br> 62, 575 <br> 48,545 <br> 106,876 51,87 <br> 56, 823 <br> 95, 128 <br> 40, 176 <br> 48, 161 <br> 38,852 45,889 <br> 35, 789 | 41,32429,11448,21843,43760,29845,84531,70046,52941,41935,99372,88536,41140,34064,86538,50726,63733,87824,88430,58224,929 | 18,5699,78721,98717,56233,84018,32110,36915,64222,15612,55233,41515,46516,48330,26314,24313,53914,28313,56114,27010,860 | 59,89338,90170,20560,99994,13864,16642,06962,17163,57548,545106,30051,87656,82395,12852,75040,17648,16138,44544,85235,789 | 42,36328,36329,73549,73543,08263,99546,81631,17645,44845,50335,31376,60735,79740,991$66,5 \div 8$36,06526,39433,76225,99129,69324,960 | 17,53010,48620,47017,91730,14317,35010,89316,72318,07213,23229,69316,07915,83228,53016,68513,78214,39913,35415,15910,829 |
| Mar. 3 |  |  |  |  |  |  |
| Mar. 4 |  |  |  |  |  |  |
| Mar. 5 |  |  |  |  |  |  |
| Mar. 6 |  |  |  |  |  |  |
| Mar. 7 |  |  |  |  |  |  |
| Mar. 9 |  |  |  |  |  |  |
| Mar. 10 |  |  |  |  |  |  |
| Mar. 11 |  |  |  |  |  |  |
| Mar. 12 |  |  |  |  |  |  |
| Mar. 13 |  |  |  |  |  |  |
| Mar. 14 |  |  |  |  |  |  |
| Mar. 16 |  |  |  |  |  |  |
| Mar. 18 |  |  |  |  |  |  |
| Mar. 19 |  |  |  |  |  |  |
| Mar. 20 |  |  |  |  |  |  |
| Mar. 21 |  |  |  |  |  |  |
| Mar. 23 |  |  |  |  |  |  |
| Mar. 24 |  |  |  |  |  |  |

Table 22.-The total volume of trading in the 1925 May wheat futures for six classes of traders, compared with the total volume of trading for all customers, by days, from January 2 to A pril 18, 1925-Continued
[In thousands of bushels; i. e., 000 omitted]

| Date | Bought |  |  | Sold |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | For all customers | For six classes | Difference, class G | For all customers | For six classes | $\begin{aligned} & \text { Difference, } \\ & \text { class } G \end{aligned}$ |
| Mar. 25 | 26, 844 | 17,899 | 8,945 | 26,844 | 17,842 | 9,002 |
| Mar. 26 | 35, 385 | 25, 019 | 10,366 | 35, 385 | 26,776 | 8, 609 |
| Mar. 27 | 56,360 | 39, 273 | 17, 087 | 56, 360 | 39, 282 | 17,078 |
| Mar. 28 | 34, 510 | 26, 174 | 8,336 | 34, 510 | 24,746 | 9,764 |
| Mar. 30 | 63, 937 | 44, 826 | 19, 111 | 63,937 | 48, 163 | 15,774 |
| Mar. 31 | 51, 627 | 37,670 | 13,957 | 51, 627 | 36,670 | 14,957 |
| Total | 1,443, 625 | 1,008, 656 | 434,969 | 1,443, 625 | 1,021,283 | 422,342 |
| Apr. 1 | 29,947 | 21,084 | 8, 863 | 29,947 | 21,133 | 8, 814 |
| Apr. 2 | 37, 386 | 26, 681 | 10,705 | 37, 386 | 27, 431 | 9,955 |
| Apr. 3 | 40,591 | 27, 185 | 13,406 | 40,591 | 26, 312 | 14, 279 |
| Apr. 4 | 25, 691 | 18, 047 | 7,644 | 25, 691 | 17, 821 | 7,870 |
| Apr. 6 | 29,891 | 21,660 | 8, 231 | 29, 891 | 21, 974 | 7,917 |
| Apr. 7 | 33, 632 | 24,949 | 8,683 | 33, 632 | 23, 333 | 10, 299 |
| Apr. 8 | 35, 804 | 26, 194 | 9,610 | 35, 804 | 25, 226 | 10,578 |
| Apr. 9 | 26,340 | 18. 508 | 7, 832 | 26, 340 | 18, 351 | 7, 9x9 |
| A pr. 11 | 30, 350 | 22, 792 | 7,558 | 30, 350 | 22, 648 | 7,702 |
| Apr. ${ }^{13}$ | 32,911 | 23,512 | 9,399 | 32,911 | 24, 696 | 8. 215 |
| Apr. 14 | 37, 813 | 28, 102 | 9, 711 | 37, 813 | 27, 144 | 10,669 |
| Apr. 15 | 46, 073 | 31, 990 | 14, 083 | 46, 073 | 33, 785 | 12, 288 |
| A pr. 16 | 48, 157 | 33, 721 | 14,436 | 48, 157 | 33,822 | 14,335 |
| Apr. 17 | 36, 022 | 24, 337 | 11, 685 | 36, 022 | 24, 801 | 11, 221 |
| Apr. 18 | 21,471 | 14, 570 | 6,901 | 21,471 | 14, 998 | 6,473 |
| Total | 512, 079 | 363, 332 | 148, 747 | 512, 079 | 363,475 | 148, 604 |
| Grand total | 4,635, 571 | 3,233, 080 | 1, 402, 491 | 4, 635, 571 | 3,227, 987 | 1,407,584 |

Table 23.-The aggregate of the long and of the short accounts in the 1925 May wheat future by various classes of traders, by days, from
[In thousands of bushels; i. e., 000 omitted]

| Date |  | Long accounts by classes |  |  |  |  |  | Short accounts by classes |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | A | B | C | D | E | F | A | B | C | D | E | F |
| Dec. 31..............- 192 | 101, 114 | 20,538 | 1,500 | 275 | 40,479 | 215 | 2,374 | 9,412 | 40,556 | 155 | 10,167 | 4,680 | 727 |
| Jan 2 1925 | 101, 119 |  |  |  |  |  |  |  |  |  |  |  |  |
| Jan. 3 | 100, 581 | 21,564 | 1,385 | 280 | 39,524 | 220 | 2,099 | 10,473 | 38,800 | 296 | 11, 187 | 4,290 4,400 | 1,413 |
| Jan. 5 | 99, 816 | 23, 740 | 1,250 | 188 | 37, 475 | 240 | 1,498 | 9,688 | 38, 857 | 391 | 12, 263 | 4,855 | 1,240 |
| Jan. 6 | 101, 350 | 25, 397 | 1,205 | 351 | 39,643 | 240 | 1,748 | 10, 182 | 39, 796 | 266 | 11,576 | 5,680 | 1,001 |
| Jan. 7 | 103, 765 | 26, 851 | 1,165 | 405 | 41, 278 | 215 | 1,458 | 11,987 | 40, 172 | 284 | 10,056 | 6,581 | 1,146 |
| Jan. 8 | 105, 251 | 26, 187 | 1,065 | 270 | 42, 748 | 215 | 1,073 | 11, 857 | 40, 582 | 401 | 10,491 | 6,800 | 1,126 |
| Jan. 9 | 105, 027 | 26, 475 | 1,065 | 350 | 43, 053 | 210 | 1,778 | 11,505 | 40, 742 | 280 | 10, 151 | 6,962 | 1,347 |
| Jan. 10 | 105, 293 | 26, 986 | 1,025 | 250 | 43, 579 | 195 | 2,113 | 12,014 | 40, 481 | 327 | 9, 002 | 7,109 | 1,197 |
| Jan. 12 | 104, 677 | 26, 808 | 1,025 | 220 | 46, 253 | 155 | 1,958 | 11, 361 | 40, 281 | 385 | 8, 366 | 7,189 | 1,212 |
| Jan. 13 | 101, 726 | 27, 658 | 1,070 | 170 | 44, 227 | 150 | 1,368 | 10,823 | . 39,764 | 426 | 9, 110 | 4,909 | 1,166 |
| Jan. 14 | 99, 546 | 26,891 | 1,195 | 225 | 42, 482 | 150 | 988 | 9,988 | 39, 468 | 460 | 9, 555 | 4,469 | 1,485 |
| Jan. 15 | 98,608 | 29, 855 | 1,180 | 190 | 39,132 | 155 | 783 | 9, 833 | 39, 282 | 664 | 9,815 | 4,013 | 2, 177 |
| Jan. 16 | 98, 193 | 29, 422 | 1,080 | 195 | 37,447 | 160 | 1,483 | 9,935 | 38,413 | 607 | 11,325 | 3,953 | 1,377 |
| Jan. 17 | 96, 438 | 27, 690 | ,990 | 374 | 38,092 | 160 | 1,987 | 10,786 | 37,650 | 269 | 10, 120 | 3,223 | 1,067 |
| Jan. 19 | 93, 191 | 26, 988 | 1,025 | 306 | 36,607 | 175 | 2, 873 | 10, 233 | 36, 908 | 266 | 10, 200 | 2,013 | k 685 |
| Jan. 20 | 91, 853 | 27,687 | 1,175 | 213 | 36, 229 | 185 | 2,221 | 10,429 | 36, 053 | 428 | 10, 537 | 1,797 | 1,285 |
| Jan. 21 | 95, 022 | 30,615 | 1,210 | 244 | 34, 667 | 185 | 2, 202 | 11, 155 | 35, 225 | 471 | 12, 655 | 1,709 | 1,224 |
| Jan. 22 | 93,753 | 30, 296 | 1,235 | 390 | 32, 352 | 185 | 3,128 | 10,738 | 35, 401 | 371 | 10, 140 | 2,179 | -320 |
| Jan. 23 | 90,386 | 29,679 | 1,260 | 320 | 30, 893 | 265 | 2, 202 | 10,311 | 34, 736 | 471 | 10,440 | 1,134 | 634 |
| Jan. 24 | 90, 869 | 31,595 | 1,345 | 293 | 29, 825 | 185 | 2,552 | 9, 848 | 34, 947 | 470 | 10, 482 | 1,889 | 584 |
| Jan. 26 | 90, 310 | 31,115 | 1,480 | 324 | 29,385 | 205 | 1,942 | 9, 265 | 34, 522 | 465 | 11,357 | 1,319 | 1087 |
| Jan. 27 | 89,391 | 28, 948 | 1,710 | 433 | 32, 302 | 160 | 1,897 | 9, 400 | 33,742 | 415 | 9,577 | 1,361 | 1,015 |
| Jan. 28 | 84,979 | 29, 001 | 1,635 | 328 | 28, 215 | 660 | 2,189 | 8,643 | 32, 792 | 432 | 10, 095 | 719 | 914 |
| Jan. 29 | 84, 201 | 30,748 | 1,570 | 235 | 25. 727 | 205 | 2,198 | 7,954 | 33, 060 | 497 | 11,107 | 802 | 827 |
| Jan. 30 | 82, 827 | 31,383 | 1,675 | 215 | 24,999 | 420 | 1,757 | 7,535 | 32, 769 | 496 | 11, 045 | 682 | 950 |
| Jan. 31 | 83,857 | 31, 102 | 1,625 | 255 | 25, 429 | 300 | 1,618 | 7,756 | 32, 793 | 585 | 11, 285 | 697 | 1,030 |
| A verage | 95, 847 | 27,949 | 1,271 | 276 | 36, 206 | 224 | 1,880 | 10, 142 | 37, 167 | 413 | 10,496 | 3,490 | 1,096 |

TABLe 23．－The aggregate of the long and of the short accounts in the 1925 May wheat future by various classes of traders，by days，from

|  | 医 |  | N |  <br> i $i$ rivirin |
| :---: | :---: | :---: | :---: | :---: |
|  | \％ |  <br>  | $\stackrel{\otimes}{\circ}$ |  |
|  | A |  <br>  | $\begin{aligned} & 0.8 \\ & 0 \\ & 0 \end{aligned}$ |  <br>  |
|  | 0 |  | $\stackrel{\square}{\circ}$ |  |
|  | $\square$ |  だ | ¢ |  <br>  |
|  | 4 | \＆ivithin <br>  | $\begin{aligned} & \mathbf{8} \\ & \mathbf{\infty} \\ & \infty \end{aligned}$ |  <br>  |
|  | 住 | Nabo <br>  | ¢ |  <br>  |
|  | 風 | N＂： | 冎 |  |
|  | ค |  <br>  | $\left\lvert\, \begin{aligned} & \text { In } \\ & 0 \\ & \text { m } \end{aligned}\right.$ |  <br>  |
|  | 0 | ¢ | \|e్m |  |
|  | $\square$ |  <br>  | $\begin{array}{\|c} \infty \\ \hat{6} \\ \text { ® } \end{array}$ |  <br>  |
|  | 4 | ஜ్రీが <br>  | $\left\|\begin{array}{l} 0 \\ 0 \\ \infty \\ \infty \end{array}\right\|$ |  <br>  |
|  |  |  <br>  | $\begin{array}{\|c} \infty \\ \hline \\ \hline \\ \infty \\ \infty \end{array}$ |  <br>  |
| $\begin{aligned} & \stackrel{\otimes}{\circ} \\ & \stackrel{\circ}{\circ} \end{aligned}$ |  | ® <br>  ㅂㅇㅇㅇㅇㅇㅇㅇㅇㅇㅇㅇㅇㅇㅇㅇㅇㅇㅇㅇㅇㅇㅇㅇㅇ <br>  |  |  <br>  さえざざざさえニざさ |


|  <br> $\boldsymbol{i}$－i $-\boldsymbol{r i}$ | $\stackrel{1}{6}$ |  <br>  | $\underset{\infty}{ \pm}$ |
| :---: | :---: | :---: | :---: |
|  <br>  | $\left\lvert\, \begin{aligned} & \underset{\sim}{2} \\ & \underset{\sim}{2} \end{aligned}\right.$ |  ーテーデーシーデーデー | － |
|  <br>  | $\begin{aligned} & \hat{\circ} \\ & 0 \\ & 0 \end{aligned}$ |  <br>  | N1 0 0 |
|  | 莒 | \％セ\％ | 号 |
|  <br>  | $\left\lvert\, \begin{aligned} & \stackrel{\rightharpoonup}{0} \\ & \text { ぶ } \end{aligned}\right.$ |  <br>  | п ¢ |
|  ががo ${ }^{\circ} 0^{\circ} 0^{\circ} 0^{\circ} 0^{\circ} 0^{\circ} 0^{\circ} 0^{\circ} 0^{\circ} 0^{\circ} 0^{\circ} 0^{\circ}$ | $\begin{aligned} & \hat{0} \\ & 0 \\ & \infty \end{aligned}$ |  <br>  | 交 |
|  <br>  | $\left\|\begin{array}{l} \check{\AA} \\ \text { in } \end{array}\right\|$ |  <br>  | － |
|  | \$్సి |  | 클 |
|  <br>  | $\left\|\begin{array}{c} 9 \\ \text { w } \\ \text { Nิ } \end{array}\right\|$ |  <br>  | \％ 0 0 a |
|  | $\underset{\infty}{\infty}$ |  | べo |
|  <br>  | $\left\|\begin{array}{l} 8 \\ 0 \\ \text { in } \end{array}\right\|$ |  <br>  | ¢ ¢ of |
|  <br>  | $\left.\begin{aligned} & \text { ते } \\ & \dot{\sim} \end{aligned} \right\rvert\,$ |  <br>  | No ¢ dิ |
|  <br>  | $\begin{gathered} \text { H } \\ \text { N } \\ \end{gathered}$ |  <br>  | ～\％ |
|  <br>  <br>  |  |  <br>  |  |

Table 24.-The aggregate of the long and of the short accounts in the 1925 May wheat future for six classes of traders combined, compared with the total open interests for all customers, showing the net differences or aggregates for class $G$ and its net position, by days, from December 31, 1924, to A pril 18, 1925
[In thousands of bushels; i. e., 000 omitted]

| Date | Aggregate long accounts |  |  | Aggregate short accounts |  |  | Net position, class G |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { For all } \\ & \text { customers } \end{aligned}$ | For six classes | Difference, class G | $\begin{aligned} & \text { For all } \\ & \text { customers } \end{aligned}$ | For six classes | Difference, class $G$ | Long | Short |
| 1924 | 101, 114 | 65, 431 | 35, 683 | 101, 114 | 65, 697 | 35,417 | 266 |  |
| Dec. 31. |  |  |  |  |  |  |  |  |
| 1925 |  |  |  |  |  |  |  |  |
| an. 2 | $\begin{array}{r} 101,119 \\ 100,581 \\ 99,816 \\ 101,350 \\ 10,765 \\ 105,251 \end{array}$ | 65, 326 | 35, 793 | 101, 119 | 66, 288 | 34, 831 | $\begin{array}{r} 962 \\ 884 \\ 2,803 \end{array}$ |  |
| Jan. 5 |  | 65, 691 | ${ }^{35}, 425$ | 109, 916 | 65, 694 | 34, 322 |  |  |
| Jan. 6 |  | 68,584 | 32, 766 | 101,350 | 68, 501 | 32, 849 |  | 83 |
| Jan. 7 |  | 71, 372 | 32, 393 | 103, 785 | 70, 226 | 33,539 |  | 1,146 |
| Jan. 8 |  | 71,558 | 33, 693 | 10, 251 | 71,257 | 33, 994 |  | 301 |
| Jan. 9 | $\begin{aligned} & 105,251 \\ & 105 \end{aligned}$ | 72,931 | 32, 096 | 105, 027 | 70,987 | 34, 040 |  | 1,944 |
| Jan. 10 |  | 74, 148 | 31, 145 | 105, 293 | 70,130 | 35, 163 |  | 4, 018 |
| Jan. 12 | 101, 726 | 74,643 | 27, 033 | 101, 726 | 66, 198 | 35, 528 |  | ,625 |
| Jan. 14 | 99, 546 | 71, 931 | 27,615 | 99, 946 | 65, 425 | 34, 121 |  | 6,506 |
| Jan. 15 | 98, 608 | 71,29569,787 | 27, 313 |  | 65, 625 | 32, 824 | --.... | 5, 5114,177 |
| Jan. 15 | 98, 9193 |  | 27, <br> 27, 145 <br> 145 | 98,19396,438 | 65,61063,115 | 32,58333,323 |  |  |
| Jan. 17 | 93, 191 | 69, 293 |  |  |  |  | .-.-.- | 6,178 |
| Jan. 19 |  | 67,97467,710 | 25,217 <br> 24,143 | ${ }_{9}^{93,191}$ | 60,30560,529 | 32,886 |  |  |
| Jan. 20 | 91, 853 |  |  |  |  | 31,324 32,583 |  | $\begin{aligned} & 7,181 \\ & 6,684 \end{aligned}$ |
| Jan. 21 | 95,022 93,753 | 69,123 67,586 | 25, 899 | 93,75390 | 59,5795726 | 31,60432,660 |  | $\begin{aligned} & 6,684 \\ & 8,437 \end{aligned}$ |
| Jan. 23. | 90,386 90,869 | 64, 619 | 25, 767 |  |  |  | ----- | 6, 8937,575 |
| Jan. 24. | 90, 310 | $\begin{array}{r}65,795 \\ 64,451 \\ \hline\end{array}$ | 25,25,859 | 90,86990,310 | 58,58,015 | 32,64932,295 |  |  |
| Jan. 26 |  |  |  |  |  |  | --------- | 6,436 |
| Jan. 27. | 89,39184,979 | 65, 450 | 23, 941 | 89,391 <br> 84,979 | 55,510 53,595 | 33,881 31,384 | -------- | 9,9408,433 |
| Jan. 28 |  | 62, 6883 | 23, 518 |  | 54,247 | 29,954 |  |  |
| Jan. 29 | 84,201 82,827 |  |  | 84, 201 |  |  |  | 6,436 |
| Jan. 30 | 82,827 83,857 | 60,449 60,329 | 22, 378 | 82,827 83,857 | 53,477 54,146 | 29,350 29,711 |  |  |
| Averag | 95, 847 | 67, 806 | 28, 042 | 95, 847 | 62, 805 | 33, 043 | .....- | 5,001 |
| Feb. 2 | 88,42989,14690,29192,82088,66986,83189,96487,84290,11187,35486,33987,11886,74688,33989,66689,80088,93888,86889,54388,52384,88683,025 | 60, 149 <br> 58, 059 <br> 60, 849 <br> 60, 816 <br> 62, 540 <br> 62, 660 <br> 65,516 65,934 <br> 67, 020 <br> 66, 986 <br> 67, 615 <br> 69, 300 <br> 69, 154 <br> 69, 579 <br> 70,280 70,209 <br> 67,730 67,629 | 28,28031,08730,33931,97127,85324,29126,32725,58224,59521,42019,31920,13220,1920,72420,76620,64620,32719,22919,26318,31417,15615,396 | 88,42989,14690,29192,82088,66986,83189,96487,84290,11187,35486,33987,11886,74688,33989,66689,80088,93888,86889,54388,52384,88683,025 | 58,20557,94559,04561,37958,80658,68560,52456,87455,54553,31554,18354,21053,13654,25356,04156,05055,50555,28454,30253,46852,74250,032 | 30,22431,20131,24631,44129,46328,14629,44030,96834,56634,03932,15632,90833,61034,08633,62533,75033,43333,58435,24135,05532,14432,993 |  | 1,944114907 |
| Feb. 3 |  |  |  |  |  |  |  |  |
| Feb. 4 |  |  |  |  |  |  |  |  |
| Feb. 5 |  |  |  |  |  |  |  |  |
| Feb. 6 |  |  |  |  |  |  | 530 | 2,010 |
|  |  |  |  |  |  |  |  |  |
| Feb. 9 |  |  |  |  |  |  |  | 3, 113 |
| Feb. 10 |  |  |  |  |  |  |  | 5,386 |
| Feb. 11 |  |  |  |  |  |  |  | 9, 971 |
| Feb. 13 |  |  |  |  |  |  |  | 12,619 |
| Feb. 14 |  |  |  |  |  |  |  | 12, $8: 37$ |
| eb. 16 |  |  |  |  |  |  |  | 12,776 |
| Feb. 17 |  |  |  |  |  |  |  | 13,591 |
| Feb. 18 |  |  |  |  |  |  |  | 13, 362 |
| Feb. 19 |  |  |  |  |  |  |  | 13, 259 |
| Feb. 20 |  |  |  |  |  |  |  | 13, 104 |
| Feb 21 |  |  |  |  |  |  |  | 13, 106 |
| Feb. 24 |  |  |  |  |  |  |  | 14, 295 |
| Feb. 25 |  |  |  |  |  |  |  | 15,978 |
| Feb. 26 |  |  |  |  |  |  |  | 16, 741 |
| Feb. 27 |  |  |  |  |  |  |  | 14,988 |
| F |  |  |  |  |  |  |  | 17,597 |
| A verage | 88,329 | 65, 480 | 22, 850 | 88, 329 | 55, 888 | 32, 442 |  | 9, 592 |
| Mar. 2 | 85,63286,65489,44690,11184,68885,71684,80084,48686,90586,55978,571 | 68,80969,86569,44569,63665,01065,07565,79066,47165,83665,39257,570 | 16,82316,78920,00120,47519,65820,64119,01018,01521,06921,16721,001 | 85,63285,63286,65489,44690,11184,68885,71684,80084,48686,90586,55978,571 | 52,25152,60853,70553,54152,61253,64853,83953,43956,88855,76451,664 | 33,38134,01635,74136,57032,05632,06830,96131,04730,01730,79526,907 |  | $\begin{aligned} & 16,558 \\ & 17,257 \\ & 15,740 \\ & 16,095 \\ & 112,398 \\ & 11,427 \\ & 11,951 \\ & 13,052 \\ & 8,918 \\ & 9,628 \\ & 5,906 \end{aligned}$ |
|  |  |  |  |  |  |  |  |  |
| Mar. 4 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Mar |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Mar. |  |  |  |  |  |  |  |  |
| Mar. |  |  |  |  |  |  |  |  |
| Mar. 1 |  |  |  |  |  |  |  |  |
| Mar. |  |  |  |  |  |  |  |  |
| Mar. |  |  |  |  |  |  |  |  |

Table 24.- The aggregate of the long and of the short accounts in the 1925 May wheat future for six classes of traders combined, compared with the total open interests for all customers, showing the net differences or aggregates for class $G$ and its net position, by days, from December 31, 1924, to A pril 18, 1925-Contd.
[In thousands of bushels; i. e., 000 omitted]

| Date | Aggregate long accounts |  |  | Aggregate short accounts |  |  | Net position, class G |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | For all customers | For six classes | Difference, class G | For all customers | For six classes | Difference, class G | Long | Short |
| 1925 |  |  |  |  |  |  |  |  |
| Mar. 14 | 74, 582 | 53, 579 | 21,003 | 74, 582 | 47,059 | 27, 523 |  | 6,520 |
| Mar. 16 | 74, 496 | 52, 657 | 21,839 | 74,496 | 46,788 | 27,708 |  | 5, 869 |
| Mar. 17 | 72, 180 | 48, 681 | 23, 499 | 72, 180 | 44, 545 | 27,635 |  | 4, 136 |
| Mar. 18 | 67,976 | 47,076 | 20,900 | 67, 976 | 40,498 | 27, 478 |  | 6,578 |
| Mar. 19 | 70,672 | 48, 166 | 22, 506 | 70,672 | 41,345 | 29, 327 |  | 6, 821 |
| Mar. 20 | 71,396 | 49, 718 | 21, 678 | 71,396 | 42, 781 | 28, 615 |  | 6,937 |
| Mar. 21 | 71,541 | 50, 340 | 21, 201 | 71,541 | 43, 610 | 27, 931 |  | 6,730 |
| Mar. 23 | 68, 696 | 49, 410 | 20, 286 | 69, 696 | 41, 791 | 27,905 |  | 7,619 |
| Mar. 24 | 68,961 | 48,511 | 20,450 | 68, 961 | 40, 923 | 28, 038 |  | 7,588 |
| Mar. 25 | 68, 189 | 48, 872 | 19,317 | 68, 189 | 41, 227 | 26, 962 |  | 7,645 |
| Mar. 26 | 67, 443 | 46, 603 | 20, 840 | 67, 443 | 40, 715 | 26, 728 |  | 5,888 |
| Mar. 27 | 63, 599 | 43, 269 | 20,330 | 63, 599 | 37,390 | 26, 209 |  | 5, 879 |
| Mar. 28 | 60, 549 | 43, 202 | 17,347 | 60, 549 | 35, 895 | 24, 654 |  | 7,307 |
| Mar. 30 | 58, 234 | 39,699 | 18,535 | 58, 234 | 35, 729 | 22, 505 |  | 3, 970 |
| Mar. 31 | 57, 963 | 40,646 | 17,317 | 57,963 | 35,676 | 22, 287 |  | 4.970 |
| Average | 75,424 | 55, 359 | 20,065 | 75,424 | 46,382 | 29, 042 |  | 8,977 |
| Apr. 1 | 56, 217 | 39, 664 | 16,553 | 56,217 | 34,743 | 21, 474 |  | 4,921 |
| Apr. 2 | 58, 598 | 40,313 | 18, 285 | 58, 598 | 36, 142 | 22, 456 |  | 4,171 |
| Apr. 3 | 57, 223 | 41,450 | 15, 773 | 57, 223 | 36,406 | 20,817 |  | 5, 044 |
| Apr. 4 | 55, 070 | 39,879 | 15, 191 | 55, 070 | 34, 609 | 20, 461 |  | 5, 270 |
| Apr. 6 | 55, 713 | 40, 270 | 15,443 | 55, 713 | 35, 314 | 20, 399 |  | 4,956 |
| Apr. 7 | 53, 588 | 39, 544 | 14, 044 | 53, 588 | 32, 972 | 20, 616 |  | 6,572 |
| Apr 8 | 52,306 | 39, 161 | 13, 145 | 52, 306 | 31, 621 | 20, 685 |  | 7,540 |
| Apr. 9 | 51,942 | 39, 011 | 12,931 | 51,942 | 31, 314 | 20,628 |  | 7,697 |
| Apr. 11 | 49,609 | 36, 582 | 13, 027 | 49, 609 | 28,741 | 20,868 |  | 7,841 |
| Apr. 13 | 51, 190 | 38, 028 | 13, 162. | 51, 190 | 31, 371 | 19, 819 |  | 6,657 |
| Apr. 14 | 51, 148 | 38, 675 | 12, 473 | 51, 148 | 31, 060 | 20, 088 |  | 7,615 |
| Apr. 15 | 49, 909 | 37, 098 | 12, 811 | 49,909 | 31, 278 | 18, 631 |  | 5, 820 |
| Apr. 16 | 47,334 | 34, 784 | 12, 550 | 47, 334 | 29, 065 | 18, 269 |  | 5, 719 |
| Apr. 17 | 46, 127 | 33, 787 | 12, 340 | 46, 127 | 28,502 | 17,625 |  | 5,285 |
| Apr. 18 | 46, 049 | 33, 630 | 12, 419 | 46, 049 | 28, 803 | 17, 246 |  | 4,827 |
| Average $\qquad$ <br> Grand average $\qquad$ | 52, 135 | 38, 125 | 14, 010 | 52, 135 | 32, 129 | 20,006 |  | 5,996 |
|  | 80,655 | 58, 592 | 22, 063 | 80,655 | 51, 127 | 29,528 |  | 7,465 |

TABLe 25.-The combined net position in the 1925 May wheat of various classes of traders, by days, from December 31, 1924, to April 18, 1925


|  |  |  | （1：1：1．｜l｜l｜l｜l｜l｜l｜l｜l｜l｜l｜l｜l｜ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  タN్గసio \％8 जीजिनi <br> riテiテiriテiテiテiririri | $\begin{aligned} & \text { to } \\ & \text { en } \\ & \text { co } \\ & \text { en } \end{aligned}$ | $\begin{aligned} & 0 \\ & 0 \\ & 0 \\ & 7 \end{aligned}$ |  －0ッのルनー <br>  | $\begin{aligned} & \text { H } \\ & \text { 10 } \\ & \text { of } \end{aligned}$ | － |
|  |  |  | $\square$ | 4 |  |
|  | $\begin{aligned} & 20 \\ & 0 \\ & 0 \\ & \text { on } \end{aligned}$ | Ó |  | is |  |
|  <br>  | $\begin{aligned} & \infty \\ & \infty \\ & -7 \\ & 80 \end{aligned}$ | $\begin{aligned} & 20 \\ & 8 \\ & \text { \&i } \\ & \text { en } \end{aligned}$ |  <br>  | $\begin{aligned} & \infty \\ & 0 \\ & 0 \\ & 0 \\ & \text { in } \end{aligned}$ | $\begin{aligned} & \text { N } \\ & \text { N } \\ & \text { त } \end{aligned}$ |
|  |  |  |  |  |  |
|  <br>  －i जiテini rinin rinirinio | $\begin{aligned} & \stackrel{10}{20} \\ & \infty \\ & \underset{\sim}{2} \end{aligned}$ | $\begin{aligned} & \text { o } \\ & \text { N } \\ & -1 \end{aligned}$ |  on $1 \infty$ on | $\begin{aligned} & \text { N్ } \\ & \text { B } \\ & \text { B } \end{aligned}$ | $\infty$ 0 0 $\cdots$ |
|  |  |  |  |  |  |
|  <br>  | $\begin{aligned} & \text { N } \\ & \text { İ } \end{aligned}$ | $\begin{aligned} & \text { Og } \\ & \overrightarrow{7} \\ & \overrightarrow{\mathrm{~N}} \end{aligned}$ | サ్రా 융 <br>  | $\begin{aligned} & \text { గ్ } \\ & \text { స్ } \\ & \text { స్ } \end{aligned}$ | ¢ ¢ aj $\sim$ |
| （年 | $0$ |  |  | $\begin{aligned} & \text { R } \\ & \text { ヘn } \\ & \text { बil } \end{aligned}$ | 8 |
|  |  |  |  |  |  |
|  <br>  <br>  | $\begin{aligned} & \infty \\ & \substack{\infty \\ \hdashline-7} \end{aligned}$ | $\begin{aligned} & 9 \\ & \hline 0 \\ & 9 \\ & 9 \end{aligned}$ |  － | － | 20 |

Table 25.-The combined net position in the 1925 May wheat of various classes of traders, by days, from December 31, 1924, to A pril 18,

| Date | Long interests by classes |  |  |  |  |  | Short interests by classes |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | A | B | c | D | E | F | A | B | C | D | E | F |
| 1925 | 16,384 <br> 17,256 <br> 18,159 <br> 16,627 <br> 15,980 <br> 15,427 <br> 15,347 <br> 14.618 <br> 13,204 <br> 15,804 <br> 16,141 <br> 17,141 <br> 15,918 <br> 15,286 <br> 14,287 |  | $\begin{aligned} & 149 \\ & 63 \\ & 35 \\ & 48 \\ & 16 \\ & 19 \end{aligned}$ |  |  |  |  |  |  | $\begin{array}{r} 186 \\ 1,043 \\ 1,863 \end{array}$ | $\begin{aligned} & 1,361 \\ & 1,31 \\ & 1,641 \\ & 1,417 \\ & 1,766 \\ & 1,676 \end{aligned}$ |  |
| A pr. 4 - |  | - |  | 22 |  |  |  |  |  |  |  |  |
| Apr. 7 |  |  |  | 651 |  |  |  |  |  |  | 1,406 |  |
| ${ }_{\text {A }}$ A pr.9.- 11. |  |  | 142 | 2, 508 2,572 |  |  |  |  |  |  | 1, 376 |  |
|  |  |  |  |  |  |  |  |  |  |  | ${ }^{676}$ |  |
|  |  |  |  |  |  |  |  |  | 55 | 4,668 | 31 |  |
| ${ }_{\text {A pro }}{ }_{\text {Apr }} 18$. |  |  | 72 78 |  |  |  |  |  |  | 3, ${ }^{6,48}$ 6, 159 6,606 | $\begin{aligned} & 466 \\ & 306 \\ & 1 \end{aligned}$ |  |
| Total. |  |  | 850 | 7,660 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Average. | 15,800 |  | 51 |  |  | 1,971 |  | 9,557 |  | 1,364 | 967 |  |

Table 26. -The volume of trading, the aggregate of the excess purchases and sales for long and short account, and the net position in the 1925 May wheat future by days from January 2 to A pril 18, 1925, for those traders in class D whose open interest in the future was $1,000,000$ bushels or over on any one day during the period
[In thousands of bushels; i. e., 000 omitted]

| Date | Daily trades |  | Net position |  | Bought for- |  | Sold for- |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Bought | Sold | Long | Short | Long account | Short account | Long account | Short account |
| Dec. 31 |  |  | 17, 785 |  |  |  |  |  |
| Jan. 2 | 2, 625 | 3,220 | 17,190 |  | 650 | 5 | 720 | 530 |
| Jan. 3 | 1,110 | 1,205 | 17, 095 |  | 5 | 425 | 725 | 190 |
| Jan. 5 | 3, 855 | 5, 10E | 15, 845 |  | 1,575 |  | 1,980 | 455 |
| Jan. 6 | 2, 000 | 905 | 16, 940 |  | 1,015 | 640 | 410 | 150 |
| Jan. 7 | 2, 125 | 550 | 18,515 |  | 620 | 1,155 |  | 200 |
| Jan. 8 | 1,075 | 1,135 | 18, 455 |  | 525 |  | 100 | 485 |
| Jan. 9 | 1, 235 | - 595 | 19, 095 |  | 450 | 610 | 420 |  |
| Jan. 10 | 460 | 310 | 19, 245 |  | 215 | 135 | 200 |  |
| Jan. 12 | 4,840 | 1,620 | 22, 465 |  | 4,175 | 175 | 915 | 215 |
| Jan. 13 | 1,920 | 4, 035 | 20, 350 |  | , 500 | 600 | 1,730 | 1,485 |
| Jan. 14 | 2,585 | 2,880 | 20, 055 |  | 1,515 |  | 1,495 | 315 |
| Jan. 15 | ], 030 | 4,665 | 16, 420 |  | 210 | 420 | 4, 085 | 180 |
| Jan. 16 | 2, 725 | 5, 430 | 13, 715 |  | 795 | 125 | 2, 045 | 1,580 |
| Jan. 17 | 3,110 | 3, 375 | 13, 450 |  | 580 | 1,385 | 1, 080 | 1,150 |
| Jan. 19 | 1,850 | 2, 255 | 13, 045 |  | 515 | . 935 | 1,320 | 535 |
| Jan. 20 | 2,255 | 2,010 | 13, 290 |  | 830 | 335 | 625 | 395 |
| Jan. 21 | 4,660 | 8,350 | 9,600 |  | 2,755 | 460 | 4,565 | 2, 240 |
| Jan. 22 | 2,550 | 4,180 | 7,970 |  | 250 | 1,580 | 2, 790 | 670 |
| Jan. 23 | 1,550 | 2, 030 | 7,490 |  | 730 | 565 | 1, 470 | 305 |
| Jan. 24 | , 650 | 445 | 7,695 |  | 245 | 235 | 1, 200 | 75 |
| Jan. 26 | 2,935 | 3,660 | 6,970 |  | 1,390 | 145 | 1,660 | 600 |
| Jan. 27 | 3, 655 | 1, 175 | 9, 450 |  | 1,725 | 1, 480 | 325 | 400 |
| Jan. 28 | 3,555 | 4,910 | 8,095 |  | 990 | 725 | 2,125 | 945 |
| Jan. 29 | 2,640 | 4,590 | 6,145 |  | 580 | 655 | 1,845 | 1,340 |
| Jan. 30 | 1,195 | 3,110 | 4,230 |  | 200 | 400 | 1,680 | 835 |
| Jan. 31 | 1,765 | 510 | 5,485 |  | 710 | 680 |  | 135 |
| Total, January. | 59, 955 | 72, 255 | 5,485 |  | 23, 750 | 13,870 | 34, 510 | 15,410 |
| Feb. 2 | 2, 090 | 1,760 | 5, 815 |  | 925 | 365 | 50 | 910 |
| Feb. 3 | 5, 410 | 4,295 | 6, 930 |  | 1,475 | 2, 275 | 2,050 | 585 |
| Feb. 4 | 2, 050 | 3,645 | 5,335 |  | 1, 180 |  | 1,265 | 1,510 |
| Feb. | 2, 520 | 3, 600 | 4, 255 |  | 1900 | 150 | 1,005 | 1, 125 |
| Feb. 6 | 5, 600 | 3, 340 | 6,515 |  | 1,660 | 2, 350 | 1,550 | 200 |
| Feb. 7 | 4,465 | 620 | 10, 360 |  | 3, 235 | 810 |  | 200 |
| Feb. 9 | 2,330 | 2, 490 | 10, 200 |  | - 900 | 250 | 565 | 745 |
| Feb. 10 | 2,615 | 1,315 | 11, 500 |  | 900 | 490 | 90 |  |
| Feb. 11 | 3, 225 | 1,195 | 13, 530 |  | 2,330 | 550 | 850 |  |
| Feb. 13 | 2, 120 | 1, 405 | 14, 245 |  | 1,275 |  | 250 | 310 |
| Feb. 14 | 1,605 | 515 | 15, 335 |  | 1,140 | 295 | 195 | 150 |
| Feb. 16 | 1,515 | 605 | 16,245 |  | 1,150 | 170 | 400 | 10 |
| Feb. 17. | , 885 | 1,980 | 15, 150 |  |  | 160 | 475 | 780 |
| Feb. 18 | 1,155 | 1, 160 | 15, 145 |  | 100 | 560 | 565 | 100 |
| Feb. 19 | 1,625 | 1,200 | 15,570 |  | 1,175 | 100 | 70 | 780 |
| Feb. 20 | 2, 095 | 1,795 | 16,870 |  | 1,005 | 700 | 50 | 355 |
| Feb. 21 | 600 | 1,540 | 15,930 |  |  | 260 | 795 | 405 |
| Feb. 24. | 1,485 | 395 | 17, 020 |  | 925 | 190 | 25 |  |
| Feb. 25 | 1,245 | 845 | 17, 320 |  | . 390 | 160 | 105 | 145 |
| Feb. 26 | 1,990 | 3,475 | 15, 835 |  | 1, 100 | 150 | 2, 365 | 370 |
| Feb. 27 | 2, 850 | 4,980 | 13,705 |  | 1, 045 | -675 | 3, 850 |  |
| Feb. 28 | 2,415 | 1,055 | 15, 065 |  | 900 | 1,060 | 500 | 100 |
| Total February...- | 51,890 | 42, 210 | 15, 065 |  | 23, 710 | 11,720 | 17,070 | 8,780 |

Table 26.-The volume of trading, the aggregate of the excess purchases and sales for long and short account, and the net position in the 1925 May wheat future by days from January 2 to A pril 18, 1925, for those traders in class $D$ whose open interest in the future was $1,000,000$ bushels or over on any one day during the period-Continued
[In thousands of bushels; i. e., 000 omitted]


Table 27.-The volume of trading, the aggregate of the excess purchases and sales for long and short account, and the net position in the 1925 May wheat future, by days, from January 2 to A pril 18, 1925, for those traders in class D whose open interest in the future was $1,500,000$ bushels or over on any one day during the period
[In thousands of bushels; i. e., 000 omitted]

| Date | Daily trades |  | Net position |  | Bought for- |  | Sold for- |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Bought | Sold | Long | Short | Long account | Short account | Long account | Short account |
| Dec. 31 |  |  | 17,790 |  |  |  |  |  |
| Jan. 2 | 1, 315 | 1,355 | 17,750 |  | 325 |  | 365 |  |
| Jan. 3 | 60 | 585 | 17, 225 |  |  |  | 525 |  |
| Jan. 5 | 2,150 | 2,855 | 16, 520 |  | 1,275 |  | 1,980 |  |
| Jan. 6 | 475 | 660 | 16, 335 |  | 375 |  | , 410 | 150 |
| Jan. 7 | 1,605 | 85 | 17, 855 |  | 520 | 1,000 |  |  |
| Jan. 8 | 390 | 165 | 18, 080 |  | 325 |  | 100 |  |
| Jan. 9 | 275 | 225 | 18, 130 |  | 250 |  | 200 |  |
| Jan. 10 | 200 |  | 18, 330 |  | 200 |  |  |  |
| Jan. 12 | 4,350 | 1,000 | 21, 680 |  | 3,975 | 175 | 800 |  |
| Jan. 13 | 1, 200 | 1,275 | 21, 605 |  | 450 | 600 | 1,125 |  |
| Jan. 14 | 1,480 | 1,625 | 21,460 |  | 1,305 |  | 1,250 | 200 |
| Jan. 15 | 510 | 3, 685 | 18, 285 |  | 210 |  | 3,205 | 180 |
| Jan. 16 | 2,160 | 3, 845 | 16, 600 |  | 795 | 25 | 1,995 | 510 |
| Jan. 17 | 1,550 | 2,215 | 15, 935 |  | 60 | 655 | 1,080 | 300 |
| Jan. 19 | 1,450 | 1, 100 | 16, 285 |  | 365 | 935 | 770 | 180 |
| Jan. 20 | 1,375 | 890 | 16, 770 |  | 830 |  | 325 | 20 |
| Jan. 21 | 2,570 | 7,010 | 12, 330 |  | 2, 275 |  | 4,565 | 2,150 |
| Jan. 22 | 1, 450 | 3, 410 | 10, 370 |  |  | 950 | 2, 790 | 120 |
| Jan. 23 | 400 | 930 | 9,840 |  | 330 |  | 720 | 140 |
| Jan. 24 | 420 | 170 | 10,090 |  | 245 | 5 |  |  |
| Jan. 26 | 2, 235 | 2, 870 | 9,455 |  | 1,090 | 145 | 1,560 | 310 |
| Jan. 27 | 3, 010 | 425 | 12, 040 |  | 1,625 | 1,235 | , 275 |  |
| Jan. 28 | 1,850 | 3, 830 | 10, 060 |  | 690 | 250 | 2, 125 | 795 |
| Jan. 29 | 1, 185 | 2,900 | 8,345 |  | 580 | 325 | 1,280 | 1,340 |
| Jan. 30 | 210 | 1,275 | 7, 280 |  | 200 |  | 1,175 | 90 |
| Jan. 31. | 945 | 245 | 7,980 |  | 610 | 225 |  | 135 |
| Total, January- | 34, 820 | 44, 630 | 7,980 |  | 18,905 | 6, 525 | 28,620 | 6,620 |
| Feb. 2 | 1,090 | 400 | 8,670 |  | 825 | 265 |  | 400 |
| Feb. 3 | 3,130 | 3, 165 | 8,635 |  | 1, 100 | 1,500 | 2, 050 | 585 |
| Feb | 800 | 2,285 | 7,150 |  | 750 |  | 960 | 1,275 |
| Feb. | 1,400 | 1,400 | 7,150 |  | 900 | 50 | 455 | 495 |
| Feb. | 3,265 | 1,675 | 8,740 |  | 1,260 | 1,980 | 1,450 | 200 |
| Feb. 7 | 3,400 | - 210 | 11, 930 |  | 2,875 | 315 |  |  |
| Feb. 9 | 1,375 | 875 | 12, 430 |  | 900 | 250 | 150 | 500 |
| Feb. 10 | 1,245 | 565 | 13, 110 |  | 300 | 430 | 50 |  |
| Feb. 11 | 2, 380 | 1,050 | 14,440 |  | 1,820 | 360 | 850 |  |
| Feb. 13 | 915 | 265 | 15, 090 |  | 900 |  | 250 |  |
| Feb. 14 | 775 | 195 | 15, 670 |  | 775 |  | 195 |  |
| Feb. 16 | 800 | 400 | 16, 070 |  | 750 | 50 | 400 |  |
| Feb. 17 |  | 750 | 15, 320 |  |  |  | 250 | 500 |
| Feb. 18 |  | 200 | 15, 720 |  |  | 500 | 50 | 50 |
| Feb. 19 | 1,125 | 100 | 16,745 |  | 1, 025 |  |  |  |
| Feb. 20 | 450 | 200 | 16,995 |  | 200 | 50 |  |  |
| Feb. 21 |  | 755 | 16,240 |  |  |  | 350 | 405 |
| Feb. 24 | 850 | 25 | 17, 065 |  | 850 |  | 25 |  |
| Feb. 25 | 355 | 80 | 17, 240 |  | 275 |  | 100 |  |
| Feb. 26 | 1,075 | 2, 005 | 16,310 |  | 900 |  | 1,830 |  |
| Feb. 27 | 920 | 3,950 | 13,280 |  | 620 | 200 | 3,850 |  |
| Feb. 28 | 1,150 | 550 | 13,880 |  | 900 | 200 | 500 |  |
| ary | 27, 100 | 21, 100 | 13,880 |  | 17, 925 | 6,150 | 13,765 | 4,410 |

Table 27.-The volume of trading, the aggregate of the excess purchases and sales for long and short account, and the net position in the 1925 May wheat future, by days, from January 2 to April 18, 1925, for those traders in class D whose open interest in the future was $1,500,000$ bushels or over on any one day during the period-Continued
[In thousands of bushels; i. e., 000 omitted]

| Date | Daily trades |  | Net position |  | Bought for- |  | Sold for- |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Bought | Sold | Long | Short | $\underset{\text { account }}{\text { Long }}$ | Short account | $\begin{aligned} & \text { Long } \\ & \text { account } \end{aligned}$ | Short account |
|  |  |  |  | 1,495 |  | $\begin{array}{r} 2,150 \\ 500 \\ 50 \\ 51,250 \\ 1,250 \\ 2,900 \\ 2,900 \\ 1,200 \\ 3,300 \\ 3,310 \\ \hdashline 100 \\ \hline 100 \\ \hline 120 \\ \hline 275 \\ \hline 270 \\ \hline 80 \\ \hline 150 \end{array}$ |  |  |
| Total | 40,375 | 55,750 | .-. | 1,495 | 20,355 | 12, 835 | 33, 115 | 15,450 |
|  | $\begin{array}{r} 1,725 \\ 100 \\ 50 \\ 500 \\ 190 \\ 990 \\ 1,780 \\ 1850 \\ 350 \\ 200 \\ 550 \end{array}$ | $\begin{array}{r} 10 . \\ 500 \\ \hline \end{array}$ | ${ }_{230}^{230}$ | 220 |  | 1,090 | .- | $\ldots$ |
|  |  |  |  |  |  |  |  |  |
|  |  | 50 | ${ }_{420}^{280}$ |  |  | 190 |  | 50 |
|  |  | 25 | $\underset{\substack{1,215 \\ \hline, 715}}{1,260}$ |  |  |  | 75 |  |
|  |  | 1,050 |  |  | 200 |  |  |  |
|  | $\begin{gathered} 3500 \\ 6600 \\ 60 \\ 50 \end{gathered}$ | $\begin{array}{r} 1,750 \\ 935 \\ 535 \end{array}$ |  | $\begin{aligned} & 1,460 \\ & 2,860 \\ & 3,8190 \\ & 3,195 \\ & 3,195 \\ & 3,195 \end{aligned}$ | 200 |  |  | 700 |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Total A pril | 7,385 | 8,385 |  |  | 2,395 | 3. 150 | 2, 125 | 5,110 |
| Grand total. | 109, 680 | 129, 865 | 881, 255 | 16,380 | 59,570 | 28,660 | 77, 625 | 31,590 |

Table 28. - The volume of trading, the aggregate of the excess purchases and sales for long and short account, and the net position in the 1925 May wheat future, by days, from January 2 to A pril 18, 1925, for those traders in class D whose open interest in the future was 2,000,000 bushels or over on any one day during the period
[In thousands of bushels; i. e., 000 omitted]

| Date | Daily trades |  | Net position |  | Bought for- |  | Sold for- |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Bought | Sold | Long | Short | Long account | Short account | Long account | Short account |
| Dec. 31 |  |  | 15,365 |  |  |  |  |  |
| Jan. 2 | 1,015 | 965 | 15, 415 |  | 50 |  |  |  |
| Jan. 3 | 60 | 400 | 15, 075 |  |  |  | 340 |  |
| Jan. 5 | 1,950 | 2, 855 | 14, 170 |  | 1,075 |  | 1,980 |  |
| Jan. 6 | 475 | 650 | 13, 995 |  | 375 |  | 400 | 150 |
| Jan. 7 | 1,380 | 45 | 15, 330 |  | 335 | 1,000 |  |  |
| Jan. 8 | 140 | 140 | 15,330 |  | 100 |  | 100 | - |
| Jan. 9 | 275 | 25 | 15, 580 |  | 250 |  |  |  |
| Jan. 10 | 200 |  | 15, 780 |  | 200 |  |  |  |
| Jan. 12 | 4,350 | 1,000 | 19,130 |  | 3, 975 | 175 | 800 | - |
| Jan, 13 | 1,200 | 600 | 19, 730 |  | 450 | 600 | 450 |  |
| Jan. 14 | 1,375 | 1,625 | 19, 480 |  | 1,200 |  | 1,250 | 200 |
| Jan. 15 | 300 | 3, 685 | 16,095 |  |  |  | 3, 205 | 180 |
| Jan. 16 | 2,100 | 2,970 | 15, 225 |  | 735 | 25 | 1,120 | 510 |
| Jan. 17 | 1,490 | 2,215 | 14, 500 |  |  | 655 | 1, 080 | 300 |
| Jan. 19 | 1,235 | 1,100 | 14, 635 |  | 150 | 935 | 770 | 180 |
| Jan. 20 | 1,975 | 7440 | 15, 170 |  | 730 |  | 175 | 20 |
| Jan. 21 | 1,270 | 7,010 | 9, 430 |  | 975 |  | 4,565 | 2,150 |
| Jan. 22 | 1,450 | 1,910 | 8,970 |  |  | 950 | 1,290 | 120 |
| Jan. 23 | 200 | 930 | 8,240 |  | 130 |  | 720 | 140 |
| Jan. 24 | 410 | 170 | 8, 480 |  | 235 | 5 |  |  |
| Jan. 26 | 1,465 | 2, 500 | 7,445 |  | 680 | 145 | 1,550 | 310 |
| Jan. 27 | 2, 380 | 175 | 9, 650 |  | 1,045 | 1,235 | , 75 |  |
| Jan. 28 | 1,850 | 2, 480 | 9, 020 |  | 690 | 250 | 1,025 | 545 |
| Jan. 29 | 550 | 2, 870 | 6, 700 |  |  | 300 | 1,280 | 1,340 |
| Jan. 30 | 210 | 425 | 6, 485 |  | 200 |  | 325 | 90 |
| Jan. 31 | 520 | 245 | 6,760 |  | 410 |  |  | 135 |
| Total January - | 28,825 | 37, 430 | 12,916 |  | 13,990 | 6, 275 | 22, 500 | 6,370 |
| Feb. 2 | 840 | 400 | 7, 200 |  | 575 | 265 |  | 400 |
| Feb. 3 | 2,980 | 3, 165 | 7,015 |  | 950 | 1,500 |  | 585 |
| Feb. 4 | , 750 | 2,285 | 5, 480 |  | 700 |  | -960 | 1,275 |
| Feb. 5 | 1,100 | 1,200 | 5, 380 |  | 600 | 50 | 25.5 | 495 |
| Feb. 6 | 3,210 | 1, 675 | 6, 915 |  | 1,205 | 1,980 | 1,450 | 200 |
| Feb. 7 | 3,250 | 210 | 9,955 |  | 2, 725 | 315 |  |  |
| Feb. 9 | 1,375 | 875 | 10,455 | --- | 900 | 250 | 150 | 500 |
| Feb. 10 | 1, 045 | , 365 | 11, 135 |  | 300 | 430 | 50 |  |
| Feb. 11 | 2,155 | 1, 000 | 12, 290 |  | 1, 645 | 360 | 850 | --------- |
| Feb. 13 | 915 | 265 | 12,940 |  | 900 | -----. | 250 | ---------- |
| Feb. 14 | 700 | 195 | 13,445 | - | 700 |  | 195 | ---------- |
| Feb. 16 | 725 | 250 | 13, 920 |  | 675 | 50 | 250 |  |
| Feb. 17 |  | 750 | 13, 170 |  |  |  | 250 | 500 |
| Feb. 18 | 600 | 200 | 13, 570 |  |  | 500 | 50 | 50 |
| Feb. 19 | 1, 125 | 100 | 14,595 |  | 1,025 |  |  |  |
| Feb. 20 | 450 | 200 | 14, 845 |  | 200 | 50 |  |  |
| Feb. 21 |  | 755 | 14,090 |  |  |  | 350 | 405 |
| Feb. 24 | 850 | 25 | 14, 915 |  | 850 |  | 25 | ---...---- |
| Feb. 25 | 355 | 80 | 15, 190 |  | 275 |  |  |  |
| Feb. 26 | 1,025 | 1,255 | 14,960 |  | 900 |  | 1,130 |  |
| Feb. 27 | 820 | 3, 600 | 12, 180 |  | 620 | 200 | 3, 600 |  |
| Feb. 28 | 550 | 550 | 12, 180 |  | 300 | 200 | 500 |  |
| Total February.- | 24, 820 | 19,400 | 11,628 |  | 16,045 | 6,150 | 12, 365 | 4,410 |

Table 28. - The volume of trading, the aggregate of the excess purchases and sales for long and short account, and the net position in the 1925 May wheat future, by days, from January 2 to A pril 18, 1925, for those traders in class $D$ whoseo pen interest in the future was $2,000,000$ bushels or over on any one day during the period-Continued
[In thousands of bushels; i. e., 000 omitted]


Table 29.-The volume of trading in the 1925 May wheat future and the combined volume in the 1925 July and September wheat futures by various classes of "traders" by months, from January 2 to April 18, 1925
[In thousands of bushels; i. e., 000 omitted]
BOUGHT BY CLASSES

| Month | Futures | Volume for all customers ${ }^{1}$ | A | B | C | D | E | F | G |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| January..- | All futures. | 1,700, 817 | 261,684 | 34,794 | 400, 875 | 223, 555 | 21,503 | 232, 288 | 526, 118 |
|  | May future | 1, 429, 310 | 209, 439 | 30,743 | 344, 637 | 193, 733 | 18, 923 | 194, 742 | 437, 093 |
|  | July and September futures. | 271,507 | 52, 245 | 4, 051 | 56, 238 | 29, 822 | 2,580 | 37, 546 | 89, 025 |
| February -- | All futures.---------- | 1, 581, 584 | 252, 266 | 43, 550 | 358, 589 | 210, 196 | 13, 155 | 220,629 | 483, 199 |
|  | May future | 1, 250, 557 | 183, 160 | 35, 640 | 280, 004 | 177, 554 | 11, 495 | 181, 022 | 381, 682 |
|  | July and September futures. | 331, 027 | 69, 106 | 7,910 | 78, 585 | 32, 642 | 1,660 | 39,607 | 101, 517 |
| March | All futures...--.-. -- | 2, 051, 895 | 351, 273 | 67, 852 | 418,768 | 282, 315 | 26,708 | 289, 228 | 615, 751 |
|  | May future | 1, 443, 625 | 225, 965 | 51, 515 | 300, 612 | 192, 141 | 20, 847 | 217, 576 | 434, 969 |
|  | July and September futures. | 608, 270 | 125, 308 | 16,337 | 118, 156 | 90, 174 | 5,861 | 71, 652 | 180, 782 |
| April.-.--- | All futures. | 848, 923 | 128, 082 | 27, 621 | 203, 463 | 110,631 | 12, 231 | 107, 739 | 259, 156 |
|  | May future .-.-.-....- | 512, 079 | 75, 103 | 19, 377 | 135, 707 | 51,659 | 7, 136 | 74,350 | $148,747$ |
|  | July and September futures. | 336, 844 | 52, 979 | 8,244 | 67, 756 | 58, 972 | 5,095 | 33,389 | 110, 409 |

SOLD BY CLASSES

| January--- | All future | 1, 700, 817 | 252, 380 | 27, 076 | 401, 389 | 239, 228 | 17,595 | 234, 531 | 528, 618 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | May future | 1, 429, 310 | 197, 269 | 22, 855 | 345, 087 | 209, 901 | 14, 855 | 195, 801 | 443, 542 |
|  | July and September futures. | 271, 507 | 55, 111 | 4,221 | 56,302 | 29,327 | 2, 740 | 38,730 | 85, 076 |
| February -- | All futures | 1,581, 584 | 256, 376 | 39, 162 | 357, 835 | 196, 258 | 13, 290 | 218,599 | 500, 064 |
|  | May futur | 1,250,557 | 188, 108 | 32, 349 | 279, 529 | 166, 009 | 12, 100 | 179, 366 | 393, 096 |
| March. | July and September futures. | 331, 027 | 68, 268 | 6,813 | 78, 306 | 30, 249 | 1,190 | 39, 233 | 106,968 |
|  | All futures | 2, 051,895 | 350, 001 | 57, 030 | 418, 820 | 310, 303 | 28, 159 | 289, 948 | 597, 634 |
|  | May future | 1, 443, 625 | 277, 156 | 36, 660 | 300, 595 | 218, 286 | 21, 351 | 217, 235 | 422, 342 |
| April.----- | July and September futures. | 608, 270 | 122, 845 | 20,370 | 118, 225 | 92, 017 | 6,808 | 72, 713 | 175, 292 |
|  | All futures | 848, 923 | 137, 948 | 22, 528 | 203, 691 | 108, 574 | 11, 406 | 108, 068 | $256,708$ |
|  | May future _-.........- | 512, 079 | 77, 813 | 11, 927 | 135, 791 | 57, 809 | 5, 736 | 74,399 | 148, 604 |
|  | July and September futures | 336, 844 | 60, 135 | 10,601 | 67, 900 | 50,765 | 5,670 | 33, 669 | 108, 104 |

${ }^{1}$ One side only; bought and sold sides the same.

Table 30.-The net purchases or sales in the 1925 May wheat future and in the 1925 July and September futures combined, of various classes of "traders," by months, from January 2 to A pril 18, 1925
[In thousands of bushels; i. e., 000 omitted]


Table 31.-Aggregate open interest in wheat futures by futures on December 31, 1924, and for A pril 18, 1925, for the various classes of "traders" and the open interest for each class compared with the open interest for all customers
[In thousands of bushels; i. e., 000 omitted]
DECEMBER 31, 1924

| Class | Future |  |  |  |  |  | Total open interest, all futures |  | Per cent open interest, all customers |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | May |  | July |  | September |  |  |  |  |  |
|  | Long | Short | Long | Short | Long | Short | Long | Short | Long | Short |
| A | 20,588 | 9, 412 | 6,289 | 5,033 |  |  | 26,877 | 14, 445 | 23.2 | 12.4 |
| C |  |  | 305 | 32.5 |  |  | , 305 | -11, 325 | . 3 | 35. 3 |
| D | 40.479 | 10,167 | 2, 344 | 4,470 |  |  | 42, 823 | 14,637 | 36.9 | 12.7 |
| E | 215 | 4, 680 | 105 | 230 |  |  | 320 | 4,910 | . 3 | 4.3 |
| F | 2, 374 | . 727 | 575 | 179 |  |  | 2,949 | 897 | 2.6 | . 8 |
| G | 35,958 | 35,572 | 3,486 | 3,817 |  |  | 39, 444 | 39,389 | 34.1 | 34.0 |
| All customers. | ${ }^{1} 101,114$ |  | 1 14,635 |  |  |  | 12115,784 |  | 100.0 | 100.0 |

APRIL 18, 1925


TABI, 32 .-The average closing price per bushel, the daily range, and net change in the price of the 1925 May wheat future at Chicago, Winnipeg, and Liverpool, by days, from November 12, 1924, to May 29, 1925
[Cents per bushel. Figure after the decimal indicates eighths of a cent; i. e., 1.5 is $15 / 8$ cents]

| Date | Chicago |  |  | Winnipeg |  |  | Liverpool 1 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Average close | Range for the day | Net change from close of previous day | A verage close | Range for the day | Net change from close of previous day | Average close | Range for the day | Net change from close of previous day |
| $\begin{gathered} 1924 \\ \text { Nov. } 12 \end{gathered}$ | 159.3 | 2.3 | -0.7 | 163.0 | 4.0 |  |  |  |  |
| -13 | 162.1 | 2.5 | +2.6 | 166.6 | 3. 2 | +3.6 | 180.4 | 0.1 |  |
| 14 | 158.6 | 4. 2 | -3.3 | 162.7 | 4.3 | $-3.7$ | 180.7 | 1. 6 | $+0.3$ |
| 15 | 161.2 | 2.6 | +2.4 | 165. 6 | . 2 | +2.7 | 178.4 | . 2 | -2.3 |
| 17 | 160.4 | 2. 6 | $-6$ | 165. 1 | 3.2 | $-.5$ | 182.1 | 3.2 | +3.5 |
| 18 | 160.5 | 2.2 | +. 1 | 165.7 | 3.0 | +. 6 | 180.3 | 1.6 | -1.6 |
| 19 | 159.2 | 2. 3 | $-1.3$ | 164.0 | 2.6 | -1.7 | 179.4 | 2. 2 | $-.7$ |
| 20 | 157.3 | 2.1 | -1.7 | 161. 6 | 2.2 | -2.2 | 175.4 | 2.5 | -4.0 |
| 21 | 157.5 | 1. 6 | +. 2 | 162.2 | 1.3 | +. 4 | 176.6 | 2. 0 | +1.2 |
| 32 | 161. 6 | 3. 6 | +4.1 | 165.6 | 3.2 | +3.4 | 176.4 | 3.1 | -. 2 |
| 24 | 163.4 | 2. 3 | +1.6 | 167.7 | 2. 1 | +2.1 | 179.7 | . 7 | +3.3 |
| 25 | 160.6 | 2. 7 | $-2.6$ | 165. 1 | 2.7 | $-2.6$ | 178.7 | 1.3 | -1.0 |
| 26 | 162.4 | 2.6 | $+1.6$ | 167.3 | 2.6 | +2.2 | 177.6 | 1. 3 | -1.1 |
| 28 | 162. 6 | 2. 0 | +.2 | 167.0 | 2.1 | --. 3 | 176. 7 | 2. 2 | -2.3 |
| 29 | 162.3 | 1.5 | -. 3 | 166.5 | 1.3 | -. 3 | 177.6 | 3.4 | +.7 |
| Dec. 1 | 160.7 | 3.4 | -1.4 | 164.4 | 3. 6 | -2.1 | 178.6 | . 4 | $+1.0$ |
|  | 159.6 | 2.5 | -1.1 | 163.5 | 2.4 | -. 7 | 175. 6 | 1.1 | -3.0 |
| 3 | 161.0 | 3. 0 | +1.2 | 165. 0 | 3.1 | +1.3 | 175.5 | 1.0 | -. 1 |
| 4 | 160.1 | 2. 0 | -. 7 | 164.5 | 1.2 | -. 3 | 174.7 | 1.7 | -. 6 |
| 5 | 161.1 | 2. 0 | +1.0 | 165. 6 | 1.4 | +1.1 | 176. 4 | 3.4 | +1.5 |
| 6 | 162. 3 | 1.6 | +1.2 | 167.2 | 1. 6 | +1.4 | 177.2 | . 4 | $+.6$ |
| 8 | 164.0 | 1. 6 | +1.5 | 168.4 | 1.7 | +1.2 | 180.6 | 1.2 | +3.4 |
| 9 | 165. 3 | 2. 1 | +1.3 | 169.6 | 1.6 | +1.2 | 180. 2 | 1. 1 | -. 4 |
| 10 | 166. 2 | 1.6 | +. 7 | 170.7 | 1.7 | +1.1 | 183.1 | 1.5 | +2.7 |
| 11 | 164.6 | 1.6 | $-1.4$ | 169.2 | 1.5 | -1.5 | 181.2 | 1.3 | $-1.7$ |
| 12 | 168.0 | 3. 6 | +3.2 | 172.6 | 3. 7 | +3.4 | 181. 0 | . 2 | -. 2 |
| 13 | 167.6 | 2. 1 | $-.2$ | 171.3 | 2.2 | $-1.3$ | 183.1 | . 5 | +2.1 |
| 15 | 168.3 | 1. 6 | +. 5 | 172.2 | 1. 7 | $+7$ | 182.5 | . 4 | -. 4 |
| 16 | 170.5 | 2.5 | +2.2 | 174.4 | 2. 0 | +2.2 -3 | 183.5 185.5 | .7 | +1.0 |
| 17 | 170.0 173.1 | 2. 5 | +. 5 | 174.1 177.5 | 3. 1 | -.3 +3.4 | 185.5 | 1.6 | +2.0 +1.1 |
| 18 | 173. 176 | 3. 31 | +3.1 +3.2 | 177.5 | 2. 6 | +3.4 -3.4 | 189.0 | 1.6 1.2 | +1.1 +2.2 |
| 20 | 175.7 | 1. 5 | $-.4$ | 181.5 | 3. 7 | +7.4 | 190.2 | . 6 | +1.2 |
| 22 | 172.0 | 4.6 | $-3.7$ | 178. 0 | 5. 2 | $-3.5$ | 189.7 | 1.1 | -. 3 |
| 23 | 173.3 | 1.7 | +1.3 | 180. 1 | 2. 1 | +2.1 | 187.7 | 1.6 | -2.0 |
| 24 | 176.4 | 4. 0 | +3. 1 | 183. 4 | 3. 5 | +3.3 | 189.4 | 1.0 | +1.5 |
| 26 | 181.0 | 5. 7 | +4.4 | 188.4 | 5. 7 | +5.0 |  |  |  |
| 27 | 180.4 | 4. 0 | -. 4 | 188.0 | 3.7 | -. 4 | 193.6 | 1.1 | +4.2 |
| 29 | 178.7 | 3. 4 | -1.5 | 186. 7 | 4. 4 | -1. 1 | 194. 0 | 1.6 | +.2 |
| 30 | 174.5 | 4. 6 | -4. 2 | 182.0 | 5. 6 | -4. 7 | 192.2 | 1.4 | -1.6 |
| 31 | 178.7 | 4.2 | +4.2 | 187.4 | 4. 4 | +5.4 | 193. 1 | 2.5 | $+.7$ |
| Jan. $^{1925}$ | 176. 3 | 4.7 | -2. 4 | - 185.4 | 4. 7 | -2. 0 | 195.6 | . 6 | +2.5 |
| JaL. 3 | 177. 2 | 2. 4 | +. 7 | 187.5 | 2.7 | +2.1 | 194. 4 | . 7 | -1.2 |
| 5 | 174.0 | 3.4 | -3.2 | 184.1 | 3. 2 | -3.4 | 194.1 | 1.7 | -. 3 |
| 6 | 177.7 | 4. 4 | $+3.7$ | 187.1 | 2. 2 | +3.0 | 191.6 | . 7 | $-2.3$ |
| 7 | 179.5 | 2. 5 | $+1.6$ | 188.1 | 2. 3 | +1.0 | 194. 0 | 1.1 | +2.2 |
| 8 | 177. 5 | 2.1 | -2.0 | 186.7 | 2. 0 | $-1.2$ | 192.3 | 1.6 | -1.5 |
| 9 | 179.3 | 1.5 | +1.6 | 188.6 | 1.4 | +1.7 | 193.0 | . 7 | +. 5 |
| 10 | 180.6 | 2.2 | +1.3 | 189. 0 | 1. 7 | +. 2 | 193. 0 | 1.0 |  |
| 12 | 184. 7 | 4. 6 | +4.1 | 192.1 | 4. 0 | +3. 1 | 193.7 | . 7 | $+7$ |
| 13 | 185. 7 | 3. 4 | +1.0 | 194. 4 | 3. 4 | +2.3 | 195.5 | 1.3 | +1.6 |
| 14 | 184. 4 | 2. 6 | $-1.3$ | 192.6 | 2. 5 | -1.6 | 195. 4 | 1.1 | -. 1 |
| 15 | 184.0 | 3.3 | -. 4 | 192.1 | 3. 0 | -. 5 | 197.0 | 2.1 | +1.4 |
| 16 | 185. 1 | 3.2 | +1.1 | 192.6 | 3.0 | $+.5$ | 194.6 | 1.6 | $-2.2$ |
| - 17 | 188. 3 | 2.4 | +3.2 | 194. 7 | 1. 4 | +2.1 | 196.2 | . 5 | +1.4 |
| 19 | 190.1 | 2.2 | +1.6 | 196.4 | 2.0 | +1.5 | 199.2 | 1.0 | +3.0 |
| 20 | 190. 3 | 3. 0 | $+.2$ | 197. 2 | 2.2 | $+.6$ | 200.4 | . 6 | $+1.2$ |
| 21 | 188. 3 | 3. 3 | $-2.0$ | 195.7 | 2.3 | $-1.3$ | 202.6 | 3.4 | $+2.2$ |
| 22 | 193.1 | 4.7 | +4.6 | 198.5 | 2.6 | $+2.6$ | 202. 7 | 1. 0 | +0.1 |
| 23 | 193. 7 | 2.5 | $+6$ | 200.1 | 3. 0 | +1.4 | 205.3 | 1.3 | +2.4 |
| 24 | 195. 4 | 3. 2 | $+1.5$ | 202.5 | 3.1 | $+2.4$ | 205. 1 | . 6 | $-0.2$ |
| 26 | 196. 3 | 2.5 | $+7$ | 205.4 | 2. 4 | +2.7 +6.2 | 207.6 | 2. 4 | +2.5 +3.6 |
| 27 | 199.1 | 3. 6 | +2.6 | 211.6 | 5.5 | +6.2 +8.1 | 211.4 | 3.4 3.0 | +3.6 +4.6 |
| 28 | 204.7 | 6.3 | +5.6 | 219.7 | 7.7 | +8.1 | 216.2 | 3.0 | +4.6 |

${ }^{1}$ Trading in 1925 May wheat did not begin in Liverpool until Nov. 13, 1924.

Table 32.-The average closing price per bushel, the daily range, and net change in the price of the 1925 May wheat future at Chicago, Winnipeg, and Liverpool, by days, from November 12, 1924, to May 29, 1925-Continued
[Cents per bushel. Figure after the decimal indicates eighths of a cent; i. e., 1.5 is $15 / 8$ cents]


Thble 32.-The average closing price per bushel, the daily range, and net change in the price of the 1925 May wheat future at Chicago, Winnipeg, and Liverpool, by days, from November 12, 1924, to May 29, 1925-Continued
[Cents per bushel. Figure after the decimal indicates eighths of a cent; i. e., 1.5 is $15 / 8$ cents]

| Date | Chicago |  |  | Winnipeg |  |  | Liverpool |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | A verage close | Range for the day | Net change from close of previous day | A verage close | Range for the day | Net change from close of previous day | Average close | Range for the day | Net change from close of previous day |
| $1925$ |  |  |  |  |  |  |  |  |  |
| April 20 | 150.4 150.0 | 8.6 4.2 | +3.1 -.4 | 156. 6 | 7. 3 | +2.7 +.7 | 163.5 169.2 | 1.7 | -4.6 +5.5 |
| 22 | 155. 5 | 7. 2 | $+5.5$ | 162.0 | 5. 3 | +6. 1 | 171. 3 | 3.0 | + +2.1 |
| 23 | 153.3 | 5. 0 | -2.2 | 159.5 | 4.0 | $-2.3$ | 172.4 | 1.7 | +1.1 |
| 24 | 152.5 | 3.6 | -. 6 | 159.1 | 3.7 | -. 4 | 171.0 | 1.4 | -1.4 |
| 25 | 148.3 | 3. 2 | -4.2 | 156. 2 | 2. 3 | $-2.7$ | 170.1 | 1. 2 | $-.7$ |
| 27 | 144.5 | 4.0 | $-3.6$ | 152.1 | 3. 2 | -4.1 | 166. 2 | 1. 6 | $-3.7$ |
| 28 | 149.5 | 5.2 | $+5.0$ | 157.4 | 4.7 | $+5.3$ | 166. 6 | 3.0 | +. 4 |
| 29 | 152. 1 | 5. 0 | +2.4 | 159.3 | 4. 6 | +1.7 | 165. 7 | 3. 5 | -. 7 |
| 30 | 153.3 | 5. 0 | +1.2 | 161.6 | 5. 2 | +2. 3 | 167. 3 | 1. 4 | +1.4 |
| May 1 | 159.5 | 7. 0 | +6.2 | 168.2 | 6.4 | +6.4 | 173.6 | 5.6 | +6.3 |
| 2 | 159.2 | 3. 2 | -. 3 | 170.1 | 3.6 | +1.7 | 174.3 | 1.1 | +. 5 |
| 4 | 161.6 | 3. 6 | +2.4 |  |  |  | 177. 0 | . 7 | +2.5 |
| 5 | 160.7 | 2.2 | $-7$ | 172.5 | 2. 7 | +2.4 | 176. 3 | 2. 6 | -. 5 |
| 6 | 165.7 | 6.4 | $+5.0$ | 179. 4 | 8.6 | $+6.7$ | 177.1 | 2.4 | $+.6$ |
| 7 | 164.4 | 4. 2 | -1.3 | 177.7 | 6. 2 | $-1.5$ | 178.5 | . 5 | +1.4 |
| 8 | 168.6 | 3.2 | +4.2 | 179.7 | 4.3 | +2.0 | 181. 2 | . 7 | +2.5 |
| 9 | 162.2 | 4.0 | -6. 4 | 171.7 | 7.0 | -8.0 | 180.0 | 1.4 | -1.2 |
| 11 | 159.5 | 6. 0 | $-2.5$ | 170.3 | 5. 6 | -1.4 | 176.3 | . 3 | -3. 5 |
| 12 | 162.5 | 6. 2 | $+3.0$ | 174.6 | 5. 6 | +4.3 | 174. 4 | . 7 | -1.7 |
| 13 | 161. 0 | 3. 6 | -1.5 | 174.6 | 4. 3 |  | 178.6 | 1.4 | +4.2 |
| 14 | 167.7 | 6. 0 | +6.7 | 180.4 | 5. 6 | +5.6 | 179. 1 |  | +. 3 |
| 15 | 168.4 | 3.0 | +. 5 | 182. 2 | 2. 4 | +1.6 | 180.6 | 5 | +1.5 |
| 16 | 170.6 | 4. 6 | +2.2 | 185. 2 | 3.6 | $+3.0$ | 180.1 | . 2 | $-.5$ |
| 18 | 169.3 | 5. 2 | -1.3 | 189.0 | 7.1 | +3.6 | 183.0 | . 1 | +2.7 |
| 19 | 166.7 | 7. 4 | -2. 4 | 180.7 | 8.3 | -8. 1 | 181.7 | . 7 | -1.1 |
| 20 | 169.5 | 2.2 | +2.6 | 189.0 | 2.7 | +8.1 | 184.4 | . 5 | +2.5 |
| 21 | 167.6 | 2. 2 | $-1.7$ | 185. 6 | 5.4 | -3.2 |  |  |  |
| 22 | 168.6 | 2.4 | $+1.0$ | 187.0 | 2.7 | +1.2 |  |  |  |
| 23 | 169.7 | 3.3 | +1.1 | 187.6 | 2.1 | +. 6 |  |  |  |
| 25 | 171.7 | 4. 0 | $+2.0$ |  |  |  |  |  |  |
| 26 | 172.1 | 3. 0 | +. 2 | 194. 6 | 10.4 | $+7.0$ |  |  |  |
| 27 | 171.1 | 2.4 | -1.0 | 192.7 | 4.0 | $-1.7$ |  |  |  |
| 28 | 170.2 | 2. 0 | -. 7 | 198.0 | 7.3 | $+5.1$ |  |  |  |
| 29 | 165.5 | 6. 0 | -4.5 | 192.1 | 8.4 | -5.7 |  |  |  |

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TABLE 33.-Approximate number of bushels of wheat sold for export from the United States and the quantity exported, by weeks, from July 5, 1924, to June 27, 1925
[In thousands of bushels; 1. e., 000 omitted]

| Week ending | Sold for export ${ }^{1}$ | Exported ${ }^{2}$ | Week ending | Sold for export ${ }^{1}$ | Exported ${ }^{3}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1924 |  |  | 1925 |  |  |
| July 5. | 3 750 |  | Jan. 3 | 3,600 | 1,656 |
| July 19 | 3,000 2,625 | 241 | Jan. 17 | 3, 100 | 1,089 |
| July 26 | 1,500 | 1,049 | Jan. 24 | 2,600 | , 487 |
| Aug. 2. | 3,300 | 1,326 | Jan. 31 | 3, 050 | 2, 026 |
| Aug. 9 | 4,900 | 1,062 | Feb. 7 | 2,900 | 2, 130 |
| Aug. 16. | 2,800 | 5,765 | Feb. 14 | 3,850 | 1,314 |
| Aug. 23. | 6, 050 | 4,508 | Feb. 21 | 3,250 | 1,526 |
| Aug. 30 | 9, 200 | 3, 084 | Feb. 28 | 2,150 | 2,219 |
| Sept. 6 | 3, 750 | 4,516 | Mar. 7 | 3,650 | 2,289 |
| Sept. 13 | 9, 100 | 4,867 | Mar. 14 | 4,450 | 2,679 |
| Sept. 20 | 3,950 | 7,116 | Mar. 21 | 3,750 | 2,049 |
| Sept. 2 | 8,000 | 5, 388 | Mar. 28 | 2,450 | 859 |
| Oct. 4 | 12,750 | 8,722 | Apr. 4 | 2,050 | 1,383 |
| Oct. 11 | 10, 300 | 9,018 | Apr. 11 | 1,100 | 1,359 |
| Oct. 18 | 12,500 | 7,345 | Apr. 18 | 1,100 | 2,523 |
| Oct. 25 | 7,500 | 9,440 | Apr. 25 | 1,000 | 1,909 |
| Nov. 1 | 6, 700 | 5,362 | May 2. | , 700 | 1,818 |
| Nov. 8 | 4,650 | 8,404 | May 9. | 1,350 | 1,563 |
| Nov. 15 | 3, 700 | 5,750 | May 16 | 2,050 | 2,318 |
| Nov. 22 | 6,450 | j, 491 | May 23. | 2,350 | 1,526 |
| Nov. 29 | 2,150 | 3,146 | May 30. | 400 | 2,559 |
| Dec. 6 | 2, 450 | 5,690 | June 6 | 1,150 | 1,837 |
| Dec. 13 | 1,360 | 3, 681 | June 13 | 1,550 | 1,226 |
| Dec. 20 | 3,950 | 3,370 | June 20 | 1,200 | 1,506 |
| Dec. 27 | 1,050 | 1,271 | June 27. | 2,400 | 775 |
|  |  |  | Total | 194,535 | 161,818 |

${ }^{1}$ Figures compiled from the Daily Trade Bulletin (Chicago).
${ }^{2}$ Figures from the weekly reports of United States Department of Commerce. The figures do not include exports from the Pacific coast ports of Canadian wheat in bond shipped from United States ports.

Table 34.-Approximate number of bushels of wheat sold for export from the United States, with the quantity exported by months from July, 1924, to June, 1925
[In thousands of bushels; i. e., 000 omitted]

| Month | Sold for export ${ }^{1}$ | Exported ${ }^{2}$ | Month | Sold for export | Exported |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1924 |  |  | 1925 |  |  |
| July .-. | 9,875 | 3,225 | January - | 13, 650 | 7,939 |
| August | 24, 250 | 15,951 | February | 12, 150 | 7,273 |
| September | 28, 550 | 29, 872 | March | 15,000 | 9, 912 |
| October.- | 45, 500 | 40, 171 | April | 4,950 | 8,404 |
| November | 17, 4.50 | 23, 506 | May | 6,450 | 9,598 |
| December | 10,410 | 15, 549 | June | 6,850 | 6,736 |
|  |  |  | Total. | 195, 085 | 178, 136 |

[^11]Table 35.-Quantity of wheat on ocean passage by weeks for January 3, to June 27, 1925, and for the same period in $1924^{1}$
[000 omitted]

| Week ending | 1925 | 1924 | Week ending | 1925 | 1924 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Jan. 3 | 38,720 | 32, 664 | Apr. 4 | 84, 096 | 64,768 |
| Jan. 10 | 40,640 | 33, 448 | Apr. 11 | 85, 392 | 68, 888 |
| Jan. 17 | 46, 024 | 35, 736 | Apr. 18 | 78, 624 | 71,456 |
| Jan. 24 | 48, 960 | 41,408 | Apr. 25 | 77, 936 | 67, 840 |
| Jan. 31 | 55, 008 | 43, 448 | May 2 | 71, 080 | 71, 872 |
| Feb. 7 | 64, 632 | 50, 928 | May 9 | 67, 072 | 73, 408 |
| Feb. 14 | 71, 328 | 55, 752 | May 16 | 63, 624 | 72, 704 |
| Feb. 21 | 82, 336 | 59, 264 | May 23 | 59, 008 | 64, 824 |
| Fob. 28 | 85, 956 | 65, 656 | May 30 | 55, 552 | 64, 312 |
| Mar. 7 | 90, 768 | 68,352 | June 6 | 53, 032 | 65, 016 |
| Mar. 14 | 90, 824 | 65, 880 | June 13 | 50, 208 | 63, 560 |
| Mar. 21 | 87,048 | 69, 056 | June 20 | 47, 976 | 50, 520 |
| Mar. 28. | 85, 984 | 65, 856 | June 27. | 44,912 | 56,536 |

${ }^{i}$ Figures compiled from the Daily Trade Bulletin.
Table 36.-Weekly world's shipment of wheat from various countries for the period of May 3, 1924, to April 25, $1925^{1}$
[In thousands of bushels; i. e., 000 omitted]

| Week ending- | North America | Argentina | Australia | India | Russia | Other countries | Total number of : bushels |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1924 |  |  |  |  |  |  |  |
| May 3 | 8,825 | 6, 868 | 2,984 | 8 | 216 | 256 | 19, 157 |
| May 10 | 9, 456 | 3,528 2,923 | 4, 152 | 24 120 | 112 24 | 64 80 | 17, 336 |
| May 17 | 9,536 | 2,923 | 2,776 | 120 40 | 24 40 | 80 328 | 15, 459 |
| May ${ }^{24}$ | 8, 030 | 4,214 | 1,272 | 40 136 | 40 | 328 | 13, 924 |
| May 31 | 12, 183 | 4,358 | 1, 104 | 136 | 480 | 176 | 18,437 |
| June 7 | 9, 401 | 5, 081 | 1,576 | 1,040 | 208 | 160 | 17, 466 |
| June 14 | 10,070 | 4,081 | 1, 088 | 1,008 | 144 | 88 | 16, 479 |
| June 21 | 6,776 | 4, 500 | 1, 328 | 848 | 440 | 192 | 14, 084 |
| June 28 | 7,460 | 5, 028 | 1,184 | 1,616 | 168 | 144 | 15, 600 |
| July 5 | 6, 690 | 4,951 | 1,352 | 1, 160 | 224 | 80 | 14, 457 |
| July 12 | 6,736 | 2, 500 | 1, 216 | 888 | 96 | 128 | 11, 564 |
| July 19 | 5,334 | 2, 754 | 600 | 1,632 |  | 24 | 10,344 |
| July 26 | 5, 383 | 2,023 | 512 | 1,768 |  | 104 | 9, 790 |
| Aug. 2 | 4,687 | 2,349 | 1,096 | 1,744 |  | 288 | 10,164 |
| Aug. 9 | 4, 619 | 1,536 | ,696 | 2,304 | 16 | 304 | 9,475 |
| Aug. 16 | 6, 568 | 1,943 | 1,648 | 680 |  | 320 | 11, 159 |
| Aug. 23 | 6, 299 | 1,626 | 1, 168 | 120 |  | 248 | 9,461 |
| Aug. 30 | 7,331 | 2,453 | 976 | 96 |  | 440 | 11, 296 |
| Sept. 6 | 9, 334 | 1,243 | 1,624 | 8 | 32 | 160 | 12, 401 |
| Sept. 13 | 9, 488 | 1,570 | 1,480 | 184 | 184 | 8 | 12, 914 |
| Sept. 20 | 13,296 | 621 | 448 | 208 |  | 16 | 14,589 |
| Sept. 27 | 11, 425 | 1,212 | 336 | 48 | 96 | 120 | 13,237 |
| Oct. 4 | 9, 526 | 1,780 | 824 | 656 |  | 112 | 12, 898 |
| Oct. 11 | 18,439 | 1,865 | 504 | 488 |  | 104 | 21,400 |
| Oct. 18 | 15, 282 | 1,817 | 656 | 752 |  | 32 | 18,539 |
| Oct. 25 | 16, 421 | 973 | 328 | 1,128 |  | 24 | 18,874 |
| Nov. 1 | 14, 275 | 1,835 | 488 | 2, 064 |  | 64 | 18, 726 |
| Nov. 8 | 18, 570 | 1,110 | 528 | 768 |  | 32 | 21, 008 |
| Nov. 15 | 17, 386 | 677 | 968 | 1,352 |  | 48 | 20,431 |
| Nov. 22 | 10,325 | 1,084 | 400 | 1,064 |  |  | 12, 873 |
| Nov. 29 | 11,092 | 1, 080 | 264 | 864 |  | 56 | 13, 356 |
| Dec 6 | 11, 014 | 1,197 | 616 | 1,312 |  |  | 14, 139 |
| Dee. 13 | 8, 952 | 1,447 | 28 | 376 |  |  | 11, 023 |
| Dec. 20 | 7,330 | 1,136 | 456 | 256 |  |  | 9, 178 |
| Dec. 27 | 6,535 | 1,790 | 288 | 712 |  | 128 | 9,453 |
| 1925 |  |  |  |  |  |  |  |
| Jan. 3 | 5,775 7,032 | 2, 706 | 944 3,552 | 680 |  |  | 10,105 13,645 |
| Jan. 17 | 6,882 | 4,199 | 2, 784 | 880 |  |  | 14, 745 |
| Jan. 24 | 4,234 | 4, 074 | 2,944 | 976 |  | 40 | 12, 268 |
| Jan. 31 | 6,068 | 6, 849 | 5,400 | 904 |  |  | 19, 221 |
| Feb. 7 | 5, 849 | 6,479 | 5, 474 | 960 | ------ |  | 18, 760 |
| Feb. 14 | 5,790 | 6,347 | 4, 800 | 1,792 |  |  | 18, 729 |
| Feb. 21 | 7, 576 | 5, 842 | 4, 000 | 1,584 |  |  | 19, 002 |
| Feb. 28 | 6,713 | 5, 145 | 5, 576 | 1, 400 |  |  | 18, 834 |
| Mar. 7. | 5,616 | 4,902 | 6, 016 | 800 |  |  | 17, 334 |
| Mar. 14 | 7,641 | 4,522 | 5,792 | 1, 080 |  |  | 19, 038 |
| Mar. 21 | 6,371 | 4,902 | 6, 080 | 280 |  |  | 17, 633 |
| Mar. 27 | 6,775 | 2,457 | 5,368 | 224 |  | 192 | 15, 016 |
| Apr. 4 | 6, 094 | 2, 893 | 4,616 |  |  |  | 13, 603 |
| Apr. 11 | 6,789 | 3, 162 | 4, 032 | 16 |  |  | 13, 999 |
| A pr. 18. | 6,716 | 1, 871 | 3, 360 | 32 |  |  | 11,979 |
| A pr. 25. | 6,218 | 2, 449 | 4,672 | 24 |  |  | 13,363 |

${ }^{1}$ Includes wheat ground into flour. Figures from Price Current Grain Reporter, 1925 Yearbook, p. 9.

Table 37.-The visible supply of wheat in the United States and Canada, by weeks, from May 3, 1924, to May 23, $1925{ }^{1}$
[In thousands of bushels; i. e., 000 omitted]

| Date | United States | Canada ${ }^{2}$ | Date | United States | Canada ${ }^{\text {a }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1924 |  |  | 1924 |  |  |
| May 3 | 51, 461 | 33, 344 | Nov. 22....- | 96, 926 | 33, 215 |
| May 17 | 46, 741 | 24, 069 | Dec. 6 | 99, 461 | 30, 593 |
| May 24 | 44, 666 | 20,898 | Dec. 13 | 98, 079 | 26,557 |
| May 31 | 43, 111 | 20,646 | Dee. 20 | 96, 823 | 35,946 |
| June 7 | 39,915 | 20, 445 | Dec. 27 | 94, 491 | 37, 853 |
| June 14 | 38, 788 | 18,505 |  |  |  |
| June 21 | 37,336 | 21, 800 | 1925 |  |  |
| June 28 | 34,901 | 21,608 | Jan. 3 | 91, 492 | 40,645 |
| July 5 | 34, 519 | 20, 815 | Jan. 10 | 86, 833 | 40,136 |
| July 12 | 34, 338 | 24, 175 | Jan. 17 | 83, 161 | 39, 036 |
| July 19 | 34, 175 | 22, 443 | Jan. 24 | 80, 572 | 38,859 |
| July 26 | 36,436 | 21, 843 | Jan. 31 | 77, 510 | 38,656 |
| Aug. 2 | 41,734 | 20, 802 | Feb. 7 | 75, 709 | 38, 060 |
| Aug. 9 | 49, 460 | 17,723 | Feb. 14 | 75, 768 | 38, 249 |
| Aug. 16 | 58, 106 | 18,324 | Feb. 21 | 72, 592 | 37, 212 |
| A11g. 23 | 65,766 | 16,894 | Feb. 28 | 70,677 | 37, 165 |
| Allg. 30 | 69, 119 | 14, 171 | Mar. 7 | 69,605 | 37, 962 |
| Sept. 6 | 73, 278 | 11,559 | Mar. 14 | 66, 083 | 39, 466 |
| Sept. 13 | 76,939 | 8,572 | Mar. 21 | 62, 076 | 40, 496 |
| Sept. 20 | 80, 819 | 6, 404 | Mar. 28 | 60, 007 | 42, 192 |
| Supt. 27 | 81, 559 | 6, 118 | A pr. 4 | 57, 434 | 41,878 |
| Oct. 4 | 81, 897 | 8, 722 | A pr. 11 | 55, 244 | 42, 608 |
| Oct. 11 | 83, 571 | 14,775 | Apr. 18 | 53, 203 | 40, 489 |
| Oct. 18 | 85,358 | 16,973 | Apr. 25 | 49, 089 | 36, 245 |
| Oet. 25 | 87, 767 | 17, 147 | May 2 | 45, 681 | 34, 413 |
| Nov. 1 | 89, 902 | 19, 947 | May 9 | 43, 464 | 36, 110 |
| Nov. 8 | 94, 707 | 26, 157 | May 16 | 40, 604 | 35, 019 |
| Nor. 15 | 98, 160 | 31, 543 | May 23 | 37, 173 | 31,453 |

${ }^{1}$ Figures taken from the Daily Trade Bulletin.
${ }^{2}$ As reported by the Winnipeg Grain Exchange.
Table 38.-Primary receipts and shipments of wheat at 13 markets, by weeks, from May 3, 1923, to April 25, 1925
[In thousands of bushels; i. e., 000 omitted]

| Week ending- | Receipts |  | Shipments |  | Week ending- | Receipts |  | Shipments |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1924 | 1923 | 1924 | 1923 |  | 1924 | 1923 | 1924 | 1923 |
| May 3. <br> May 10 <br> May 17 <br> May 24 <br> May 31 <br> June 7 <br> June 14 <br> June 21 <br> June 28 <br> July 5 <br> July 12 <br> July 19 <br> July 26 <br> Aug. 2 <br> Aug. 9 <br> Aug. 16 <br> Aug. 23 <br> Atig. 30 <br> Sept. 6 <br> Sept. 13 <br> Sept. 20 <br> Scpt. 27 <br> Oet. 4 <br> Oct. 11 <br> Oct. 18 <br> Oct. 25 <br> Nov. 1 <br> Nov. 8. <br> Nov. 1.5 | $\begin{array}{r} 2,921 \\ 3,763 \\ 3,529 \\ 3,665 \\ 2,951 \\ 4,493 \\ 3,954 \\ 4,034 \\ 4,105 \\ 1,341 \\ 6,925 \\ 8,568 \\ 10,048 \\ 17,522 \\ 22,861 \\ 22,319 \\ 21,889 \\ 20,078 \\ 19,450 \\ 20,371 \\ 18,880 \\ 17,536 \\ 17,515 \\ 20,475 \\ 20,109 \\ 19,851 \\ 19,092 \\ 17,052 \\ 13,612 \end{array}$ | $\begin{array}{r} 4,389 \\ 3,613 \\ 3,638 \\ 3,730 \\ 4,822 \\ 4,577 \\ 3,726 \\ 3,851 \\ 4,459 \\ 3,801 \\ 4,305 \\ 6,714 \\ 13,669 \\ 15,946 \\ 15,970 \\ 14,327 \\ 13,159 \\ 13,474 \\ 10,649 \\ 11,571 \\ 11,410 \\ 9,438 \\ 9,373 \\ 7,697 \\ 9,772 \\ 7,473 \\ 8,346 \\ 9,322 \\ 9,833 \end{array}$ | $\begin{array}{r} 3,955 \\ 4,421 \\ 4,405 \\ 3,413 \\ 2,829 \\ 3,835 \\ 3,349 \\ 2,873 \\ 3,433 \\ 1,344 \\ 3,659 \\ 3,220 \\ 4,351 \\ 5,959 \\ 10,682 \\ 13,628 \\ 12,397 \\ 14,132 \\ 12,462 \\ 13,560 \\ 14,332 \\ 13,398 \\ 14,190 \\ 16,542 \\ 15,978 \\ 17,296 \\ 14,149 \\ 13,506 \\ 12,355 \end{array}$ | 4, 849 <br> 3, 113 <br> 6, 695 <br> 6, 173 <br> 3, 254 <br> 4,383 <br> 3, 124 <br> 4, 107 <br> 3,296 4,050 <br> 3, 926 <br> 4, 752 <br> 4, 684 <br> 5, 867 <br> 6, 198 <br> 5, 755 <br> 6, 749 <br> 6, 352 <br> 6, 109 <br> 6, 525 <br> 5, 726 4,509 <br> 3,960 <br> 5, 126 <br> 3, 719 <br> 3, 290 <br> 2,945 3,428 | Nov. 22 <br> Nov. 29 <br> Dec. 6 <br> Dee. 13 <br> Dec. 20 <br> Dec. 27 | $\begin{array}{r} 13,366 \\ 13,291 \\ 14,180 \\ 9,277 \\ 6,766 \\ 4,789 \end{array}$ | 8,0596,9657,1846,7328,0215,306 | $\begin{array}{r} 12,106 \\ 9,826 \\ 15,160 \\ 7,337 \\ 5,561 \\ 3,463 \end{array}$ | $\begin{aligned} & 5,653 \\ & 4,727 \\ & 6,761 \\ & 2,993 \\ & 3,297 \\ & 2,676 \end{aligned}$ |
|  |  |  |  |  |  |  |  |  |  |
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|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | 1925 | 1924 | 1925 | 1924 |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | Jan. 3- | 4,084 | 3, 188 | 3, 405 | 1,803 |
|  |  |  |  |  | Jan. 10 | 4,097 | 3,271 | 4,408 | 2,196 |
|  |  |  |  |  | Jan. 17 | 5,288 | 3,491 | 4,382 | 2,944 |
|  |  |  |  |  | Jan. 24 | 6,305 | 3,705 | 4,345 | 2,779 |
|  |  |  |  |  | Jan. 31 | 6, 321 | 4,126 | 4,459 | 2, 676 |
|  |  |  |  |  | Feb | 6,774 | 3,838 | 4,601 | 2, 213 |
|  |  |  |  |  | Feb. 14 | 5,085 | 5,887 | 3,871 | 2, 813 |
|  |  |  |  |  | Feb. 21 | 4,281 | 4,436 | 4,005 | 2,531 |
|  |  |  |  |  | Feb. | 3,783 | 5,121 | 3, 691 | 2,600 |
|  |  |  |  |  | Mar. | 4,704 | 4,723 | 3,854 | 3, 145 |
|  |  |  |  |  | Mar | 4,521 | 4,673 | 3,788 | 2,939 |
|  |  |  |  |  | Mar. | 3, 860 | 4,031 | 4,732 | 2,569 |
|  |  |  |  |  | Mar. 28 | 3,205 | 3,336 | 4,768 | 2,575 |
|  |  |  |  |  | Apr. 4 | 2,902 | 2,276 | 3,674 | 2, 151 |
|  |  |  |  |  | A pr. 11 | 1, 797 | 2, 123 | 1,984 | 2,013 |
|  |  |  |  |  | Apr. 18 | 2, 839 | 1,892 | 3,381 | 2,184 |
|  |  |  |  |  | Apr. 25 | 1,952 | 2,751 | 3, 667 | 4, 051 |

Table 39.-Comparison of the closing price of 1925 May wheat at Chicago with the average weighted cash price per bushel of wheat at Chicago, Minneapolis, and Kansas City, together with flour prices per barrel at the same markets


[^12]3 Best baker's patent.
4 Best baker's.
${ }^{6}$ No quotations.

Table 39.-Comparison of the closing price of 1925 May wheat at Chicago with the average weighted cash price per bushel of wheat at Chicago, Minneapolis, and Kansas City, together with flour prices per barrel at the same markets-Continued


[^13]


[^0]:    104370-S. Doc. 135, 69-1-2

[^1]:    On 61 days ${ }^{1}$ when the net of purchases or sales for the group as a whole amounted to one-half million bushels or more, the price moved in the same direction as the trading 37 times, or 61 per cent of the time.

    On 41 days, when a $1,000,000$-bushel or over net change was involved, the price moved in the same direction twenty-six times, or 63 per cent of the time.

    On 22 days, when a $2,000,000$-bushel or over net change was involved, the price moved in the same direction seventeen times, or 77 per cent of the time.

[^2]:    1 Of the 69 days whon trading by individuals amounted to one-half million bushels or more for single Individuals, there were 8 days when the net of the purchases and sales of the group, taken as a whole, was less than one-half million bushels, thus giving 61 days as a basis for this treatment of their combined operations.

[^3]:    1 To meet situations of this character the rules and regulations for carrying out the provisions of the grain futures act were amended January 20, 1926, as follows:
    "Add at the end of subdivision ( I ) of section 2-
    "Whenever any member carries or has under his control more than one account with any clearing member of a contract market, and the total volume of such accounts is equal to or in excess of the amount fixed in accordance with subdivision ( $f$ ) of section 2 of these rules and regulations, then the total long and the total short position of all such accounts shall be reported and the names of all persons interested in such accounts shall be furnished to the supervisor in charge.
    "Whenever a member has under his control an amount of wheat, corn, oats, barley, rye, flax, or sorghum equaling or exceeding the amount fixed in accordance with subdivision ( $f$ ) of section 2 of these rules and regulations, and flles for execution an order for the purchase or sale of any grain future, such individual shall report that day to the Grain Futures Administration his total long and/or total short positions in the several futures in that grain in the market."

[^4]:    ${ }^{2}$ A similar Pearsonian correlation of class $D$ with class A alone gives an inverse correlation of -0.72 (with a probable error of 0.0054 ), and of class $D$ with class $G$ alone an inverse correlation of - 0.72 (with a probable error of 0.0054 ).

[^5]:    1 The plus sign $(+)$ is used to indicate a purchase and the minus sign $(-)$ a sale.
    The plus sign ( + ) indicates an increase and the minus sign ( - ) a decrease in the May future price from the close of the day previous to the close of the date shown.
    3 Even.
    104370-S. Doc. 135, 69-1 - 6

[^6]:    ${ }^{3}$ Even.

[^7]:    Even.

[^8]:    ${ }^{1}$ These are the net of the trades for the day for various individuals; i. $e$., if a particular trader bought during the day $4,000,000$ bushels and sold $1,000,000$ bushels, his net would be $3,000,000$ bushels bought. This, of course, should not be thought of as one single purchase but as an aggregate of net purchases for the day.
    ${ }^{1}$ Computation relers to trading days, not calendar days.

[^9]:    ${ }^{1}$ The daily net changes in the price of the May future are given in Table 2 and the net position, by days, of the various classes and groups in Tables 13 and 25.

[^10]:    ${ }^{1}$ Bought and sold side the same

[^11]:    1 Figures compiled from the Daily Trade Bulletin (Chicago).
    ${ }^{2}$ Figures obtained from the U. S. Department of Commerce. The figures do not include exports from the Pacific coast or Canadian wheat in bond shipped from United States ports.

[^12]:    ${ }_{1}$ Figures taken from the United States Department of Agriculture, Crops and Markets.
    ${ }_{2}$ Prices obtained from the Chicago Journal of Commerce and La Salle Street Journal.

[^13]:    - Standard patent.

