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INSPECTION OF UNITED STATES WHEAT EXPORTED THROUGH CANADIAN PORTS

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FOREWORD

The United States Grain Standards Act was passed by the Congress in 1916. Under this legislation the United States Department of Agriculture has promulgated grain standards and has developed an inspection service which have materially facilitated the domestic and foreign commerce in grain. The official grain standards and the inspection service of the United States have become widely known and understood in the export trade, and they have enjoyed a high degree of confidence among European importers and millers. In fact, the official grain standards and the Federal supervision of grain inspection have functioned in an important way since 1916 in upholding for the grain industry of the United States the desirable commercial practice of selling export wheat on the basis of "certificate final" at United States seaboard. The final inspection, however, of a material part of the grain exports of the United States which has moved to Europe through the seaports of eastern Canada during the past 17 years has not been under the jurisdiction of the United States Government and has been a source of dissatisfaction to the grain producers and merchants of the United States, to the grain producers of Canada, to the European grain distributors and millers, and to the Government

of the United States. This report is a condensed discussion of the phase of the grain-export business of the United States through Canadian ports. It is hoped that it may prove useful in a final solution of this important problem.

NILS A. OLSEN,
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UNITED STATES WHEAT EXPORTED THROUGH CANADIAN PORTS

The average annual exports of United States grain through eastern Canadian ports for the 5-year period 1919-20 to 1923-24 were approximately 45,000,000 bushels or 11 percent of the total average annual exports; for the 5-year period 1924-25 to 1928-29 they were approximately 73,000,000 bushels or 25 percent of the total average annual exports; and for the 3-year period 1929-30 to 1931-32 they were approximately 11,700,000 bushels or 7 percent of the total average annual exports.¹

Although the export movement of United States grain through eastern Canadian ports has been small since 1928-29, because of the small European demand for it, the movement as a whole, during the last 14 years, represents a material part of the total grain exports of the United States. The trade route through the Great Lakes and the St. Lawrence River is a natural route for an important segment of the export grain of the United States, especially for the durum wheat and barley of the North Central States.

Primarily this movement of United States grain through eastern Canadian ports during the last 14 years has been due to costs for transportation and handling that have been lower than the costs of shipment through the North Atlantic ports of the United States. The lowest transportation costs to tidewater from the head of the Great Lakes are those by the all-water routes through the Lakes, the Welland Canal, and the St. Lawrence River to Montreal, and the Lakes and the New York State Barge Canal to New York City. The rates along these all-water routes are practically the same, but the St. Lawrence route is favored because of its greater carrying capacity, the shorter time occupied in reaching tidewater, and the usually lower charges for handling, storage, and stevedoring.² The season of navigation is usually longer as well.

Other economic factors that have favored the movement of United States grain through eastern Canadian ports have been (1) a favorable combined rail-ocean carriage-and-transfer rate under the control of the Canadian Pacific Railway from Georgian Bay ports to St. John and Halifax, (2) the opportunities for mixing at Georgian Bay and Montreal elevators, and (3) the availability of cargo space for grain at eastern Canadian ports as the result of the Canadian Customs Tariff Act of 1923, which granted a preferential discount of 10 percent of customs duties on goods brought by ships direct to a Canadian port.

The decline in the exports of United States grain through the North Atlantic ports of the United States since the World War

¹ Annual reports of the Grain Trade of Canada, compilations from weekly Canadian Grain Statistics, and annual reports of the U.S. Department of Commerce.

² [UNITED STATES CONGRESS.] DIVERSION OF COMMERCE FROM UNITED STATES PORTS TO CANADIAN PORTS. . . . [U.S.] Cong. 70th, 2d sess., Senate Doc. 212, pp. 18-21. 1929.

period is of concern to those ports. This shrinkage is not due solely to the increased exports of United States grain through eastern Canadian ports. Another cause is the marked decline in our surplus of hard red spring wheat, which formerly moved to export through the North Atlantic ports. At present, practically all of this production of hard red spring wheat is consumed by domestic mills. Furthermore, the increase of wheat production in the United States since the World War has occurred chiefly in the hard red winter wheat areas of the Southwest and the white wheat area of the Pacific Coast States. During the period 1923-24 to 1928-29, 61.5 percent, and during the period 1929-30 to 1931-32, 84 percent, of our total exports of wheat consisted, therefore, of hard red winter and white wheats, which find their natural export outlet through the Gulf and Pacific coast ports, whereas during the period 1923-24 to 1928-29 but 29.1 percent, and during the period 1929-30 to 1931-32 but 13 percent, of the total exports of wheat consisted of durum and hard red spring wheats which find their natural export outlet through the North Atlantic and eastern Canadian ports. Although total United States wheat and flour exports have declined materially from the level of the World War period, the exports through the Gulf and Pacific coast ports have been maintained much better than at the North Atlantic ports, especially at those south and north of New York.

Should there be future European demands for durum wheat, rye, feed barley, oats, and corn, of United States production, they would draw a portion of such grains through the United States North Atlantic ports, but the Gulf and Pacific coast ports are strategically situated to handle the greater part of the future export trade in United States wheat.

During the last decade the decreased volume of United States wheat exported through the United States North Atlantic ports has been more than offset, however, by the increased volume of Canadian wheat handled through these ports. During the 5-year period 1923-24 to 1927-28, for example, the average annual export of United States grain through eastern Canadian ports was approximately 60,250,000 bushels, while during the same period the average annual export of Canadian grain through the United States North Atlantic ports was approximately 126,250,000 bushels. Also, during the 3-year period 1928-29 to 1930-31, when total exports were comparatively small, the average annual export of United States grain through eastern Canadian ports was approximately 39,250,000 bushels, while during the same period the average annual export of Canadian grain through the United States North Atlantic ports was approximately 82,725,000 bushels.

The extensive shipments of Canadian grain through the North Atlantic ports of the United States have been caused by the fact that the high tide of the Canadian grain movement comes later in the autumn than that of United States grain, when the St. Lawrence River is closed to navigation. The United States ports are open all winter and are ports of call for many vessels that want to obtain cargoes of parcel lots of grain. Thus a considerable portion of the Canadian grain has been moved down the Great Lakes for storage or for export through United States ports via the lake and rail

channels instead of going through the all-water channels to Montreal. The movement of Canadian grain through United States ports has been especially heavy in the years of big crops in Canada and in years of strong European demand for wheat during the winter months.

Although economic factors appear to be the primary cause for the increase in exports of United States grain through eastern Canadian ports and the decline in the exports of United States grain through the North Atlantic ports, another important factor contributing to the increase of exports of United States grain through eastern Canadian ports has been the methods of inspecting United States grain used by the eastern Canadian grain-inspection service, which differ materially from the methods established under the United States Grain Standards Act.

COMPARISON OF UNITED STATES AND CANADIAN GRAIN STANDARDS AND INSPECTION

The standardization and inspection of grain in the United States are governed by the United States Grain Standards Act of 1916. Under this act the Secretary of Agriculture is authorized to fix and establish standards of quality and condition for grain which shall be known as the official grain standards of the United States, and to make such rules and regulations to govern the inspection of grain as may be necessary to carry out the provisions of the act. The official standards that have been established under this act provide classes, subclasses, and grades of grain that are based on definite specifications for the important factors of grain quality, such as percentage of other grains, percentage of hard or soft kernels, pounds test weight per bushel, percentage of moisture, percentage of damaged kernels, and percentage of foreign material. These standards are applicable to grain moving in both domestic and export commerce. They are applied as uniformly as possible under Federal supervision in all markets and seaports of the United States where grain is handled.

The Government of the United States has not established separate, official standards for use in the inspection and certification of Canadian grain while in transit through the United States. When United States inspectors are requested to inspect and certificate grain of Canadian origin the same official standards and regulations are used as are used for grain of United States origin. Furthermore, it has not been a practice of the Government of the United States to station its inspectors in Canada for the purpose of inspecting United States grain while in transit for export.

In Canada, the standardization and inspection of grain have been governed since 1912 by Acts of Parliament. The principles of these acts differ materially from the principles of the United States Grain Standards Act. The Canada Grain Acts of 1912, 1925, 1927, and 1930, embody a number of so-called "statutory grades" for grain, which are of a permanent character so long as any given act is in force. Each Canada Grain Act has provided authority, also, for the establishment of so-called "commercial grades" for grain that does not meet the requirements of any of the statutory grades. The commercial grades are established annually by district standards

boards or committees. The membership of these committees consists in part of Dominion Government representatives although the majority of the membership consists of representatives of the grain industry, who are given official appointments to act in the establishment of these grades.

The Canadian statutory grades are based to a larger extent on broadly defined specifications of quality and condition which are interpreted, for inspection purposes, by means of official type samples prepared annually from new-crop grain, than on such definite specifications for the individual factors of quality as are employed in the United States grain standards. The commercial grades are not based on any fixed definite grade specifications prescribed by the Canada Grain Act, and the qualities represented by them may vary from year to year according to the quality of the crops and according to the standard samples therefor prepared under the jurisdiction and at the discretion of the standards boards or committees.

The Canadian grain standards differ further from the United States standards in that they provide a standard of quality for western Canadian export spring wheat that is different from that required for western Canadian spring wheat in domestic commerce, whereas uniform standards of quality are employed in the official United States standards for grain moving in both export and domestic commerce. Under the Canada Grain Act of 1930, the official, standard samples for the statutory grades of spring wheat for the western division, except for export wheat, are prepared to represent, as far as possible, the minimum of the grade, whereas the standard export grade samples for both the first five statutory grades of spring wheat and all commercial grades of red spring wheat for the western division, are prepared—

by mixing three parts of grain equal to the general average of the grain assigned to such grade at the inspection point or points through which the grain delivered as aforesaid has passed, with one part of grain equal to the quality of the standard sample of such grade.³

In brief, the export standard of quality for both the first five statutory grades of Canadian spring wheat and the commercial grades of red spring wheat, for the western division, is fixed by law at a much higher level of quality (theoretically 37½ percent) than that required for the same grades when used in domestic commerce.

Canadian grain-inspection laws, also, since 1912, have made special provision for the establishment of Canadian standards for and inspection of United States grain while in transit through Canada and destined for export. The original Canada Grain Act of 1912, provided for the inspection of United States grain as follows:

Inspecting officers shall, when required, inspect grain of United States production passing through Canada in transit to the United Kingdom or to a foreign country, and shall grant certificates therefor based on standard sample of such grain established as hereinafter provided.

* * * * *

Standard samples for grain of United States production may be established yearly by the grain survey board of any division or district, and shall be known as the standards for United States grain of that division or district.

* * * * *

³ Canada Grain Act, 1930, secs. 27 and 31.

Every certificate issued for such grain shall state that it is of United States production and that the grade given thereon is that established by the grain survey board appointed by the Board for the division or district wherein the inspection takes place.⁴

With only a few minor changes, the provisions of the Canada Grain Act of 1912 pertaining to the inspection of United States grain were reenacted in the Canada Grain Acts of 1925 and 1927.

The Canada Grain Act of 1930 contains authority for the grading of United States grain by Canadian inspectors at Canadian inspection points by methods that are practically identical with those in use under the acts of 1925 and 1927, although the act of 1930 refers to "grain grown outside of Canada" instead of "United States grain" and vests the authority to prepare and establish annual standard samples for the grading of such grain in the committee on eastern grain standards instead of in the survey boards or grain standards boards for each of several inspection divisions and districts.

Thus, for a period of 20 years the Canadian Government has had in effect a definite policy for the grading of United States grain moving to export through Canada which varies materially from the standardization and inspection policies prevailing under the United States Grain Standards Act.

In all considerations of the Canada Grain Acts and the procedure thereunder in the inspection of United States grain moving through Canada for export, it should be kept in mind that (1) the Canadian standard samples for United States grain (and since the 1930 act for grain grown outside of Canada) which are established annually are in fact special Canadian grades for grain of United States origin, (2) no attempt is made by the Canadian Government to cooperate with the Government of the United States in establishing standard samples for United States grain which accurately represent the definite grade requirements of the United States standards, (3) the character of these standard samples is largely discretionary with the committee that establishes them, which committee comprises a majority membership of representatives of the grain industry, (4) the character of the standard samples for United States grain moving through Canada for export is not governed by the same rigid quality requirements that the recent Canada Grain Acts and the Canadian Board of Grain Commissioners demand for Canadian export grain, and that (5) the Canada Grain Acts from 1912 to 1930, inclusive, have required that every Canadian certificate issued for United States grain shall state that the grain covered by the certificate is of United States origin.

Finally, all the Canada Grain Acts, from that of 1912 to that of 1930, have given definite recognition to the movement of western Canadian grain for export through the United States and have designated Duluth accordingly as one of numerous terminal markets at which Canadian grain may be delivered to the Canadian holders of country-elevator warehouse receipts. For the purpose of providing Canadian inspection when required for western Canadian grain while in transit through the United States, the Canadian Government has stationed inspectors at various times at Duluth and

⁴ The Canada Grain Act of 1912, with Amendments to 1921, secs. 108, 110-111.

other points in the United States, to which procedure the Government of the United States has not objected.⁵

PROCEDURE AT EASTERN CANADIAN PORTS

At the request of the exporters of United States grain, a material part of the durum and hard red winter wheat of United States origin, which moves to export through eastern Canadian ports, is given its final certification for export at seaboard by Canadian inspectors, even though such grain has been inspected previously by United States inspectors at Great Lakes ports of loading. This procedure is quite different from that used in handling western Canadian grain passing through eastern Canadian ports, or the procedure in handling Canadian grain passing through United States ports. Canadian laws require that the identity and grade of grain inspected and certificated at western Canadian inspection points shall be maintained as it passes through eastern Canadian ports. Practically all of the Canadian grain passing through United States ports is shipped on Canadian western certificates. United States inspectors of grain receive very few requests from exporters to inspect Canadian grain passing through United States ports.

Certification of the grade of United States wheat, when inspected at the eastern Canadian ports, is made by Canadian certificates using such grade terms as No. 2 Amber Durum and No. 2 Hard Winter, which terms are not a part of either the statutory or the commercial Canadian standards for Canadian wheat but are identical with grade terms specified in the official grain standards of the United States. The official United States standards for wheat are not used. A statement is recorded on these Canadian certificates that the wheat is of United States origin. Canadian inspectors in the eastern division apply the special grades established by Canadian authorities for United States wheat largely in accordance with their own interpretations.

On the other hand, the inspections of Canadian grain made by United States inspectors at United States ports are based only on official United States grades, and no attempt is made either to appropriate Canadian grade terminology or to apply the official Canadian grades. In short, United States wheat moving through eastern Canadian ports is frequently certificated according to the special standards for United States wheat established and applied by Canadian authorities, whereas Canadian wheat moves through United States ports either on western Canadian certificates, or on United States certificates that employ the official United States standards that are applied to both United States and Canadian wheats.

USE OF UNITED STATES GRADE TERMS

The use of United States grade terms by eastern Canadian inspectors in connection with Canadian standard samples for United States grain, has caused confusion in foreign markets and threatens

⁵ The present procedure of the Canadian Government with respect to the inspection of western Canadian grain while moving to export through Canadian and United States ports is described in the Canada Grain Act of 1930, sec. 2, pars. (o) and (y), and secs. 32, 38, and 40 (3).

to impair the confidence of buyers in the quality of United States grain and in the United States grain standards. European importers of United States grain usually purchase such grain on the basis of some grade term specified in the United States grain standards. In many cases the European importer of grain from the United States does not specify the port from which the grain is to be shipped. Unless otherwise specified, the North American contract provides for delivery of grain of a specified grade for shipment from any Gulf or Atlantic port including the eastern Canadian ports.

It often happens, therefore, that the foreign importer does not know whether his grain will be delivered from a United States or a Canadian port. If it is shipped from a port in the United States it will be inspected by United States inspectors and graded according to the United States official standards. If it is shipped from a Canadian port, on the other hand, it may be inspected by Canadian inspectors and graded according to grades identical in name with those of the United States grain standards but different in their specifications and applications, with the result that the grain often does not meet the requirements of such grade terms as specified in the United States grain standards.

INSPECTION OF UNITED STATES DURUM WHEAT EXPORTED

The difference between the methods used by United States inspectors and those used by Canadian inspectors in grading grain of United States origin is particularly important in the case of durum wheat, which is the kind of United States wheat that is chiefly exported through eastern Canadian ports, as may be noted from the data in table 1.

As a rule the quality of United States durum wheat, graded as No. 2 Amber Durum at eastern Canadian ports, has been materially lower than that of durum wheat graded as No. 2 Amber Durum at United States ports. Such checks as have been made on eastern Canadian inspections indicate that durum wheat having only 40 to 60 percent of hard and vitreous kernels of amber color, has been often graded as No. 2 Amber Durum, although the grade specifications of the United States standards call for at least 75 percent of such kernels. Furthermore, the eastern Canadian inspection with respect to dockage (separable foreign material) also has been much more lenient than United States inspection. United States durum wheat with 2 to 3 percent of dockage according to United States standards has been passed commonly as of No. 2 grade by Canadian inspectors without any dockage notation,⁶ whereas a dockage content of 1 percent or more must be stated as a part of the grade designation on certificates issued by United States inspectors.

⁶ Such quantities of unassessed dockage in United States durum wheat are noticeably greater than those allowed by Canadian inspectors in Canadian wheat, although inspection and certification practice, in both cases, is subject to the provisions of section 41 of the Canada Grain Act of 1930, reading as follows: "The percentages of dirt and of domestic grain to be docked from the bulk of any grain in order that it shall be of the grade assigned shall be separately stated in every grain-inspection certificate issued in respect of such grain."

Cargo inspections of durum wheat shipped from Duluth-Superior, when compared with the eastern Canadian inspections of United States durum wheat for the 7-year period 1925-26 to 1931-32 (table 1), indicate material discrepancies between the grades assigned at United States Great Lakes ports and those assigned at eastern Canadian ports.

TABLE 1.—*Inspections of cargo shipments of durum wheat of United States origin at Duluth-Superior and at eastern Canadian ports*

Year	Duluth-Superior cargo shipments of durum wheat ¹			Eastern Canadian inspections of United States wheat ²				Duluth-Superior inspections	Percentage of eastern Canadian inspections of United States durum wheat grading No. 2 Amber Durum
	All grades of amber durum	All grades of sub-classes durum and Red Durum and of Mixed Durum	Total durum wheat	Durum wheat			Total wheat of all classes	Percentage of cargo shipments of durum graded as Amber Durum of all grades	
				Amber No. 2	All grades of other subclasses and Mixed Durum	Total durum wheat			
	<i>1,000 bushels</i>	<i>1,000 bushels</i>	<i>1,000 bushels</i>	<i>1,000 bushels</i>	<i>1,000 bushels</i>	<i>1,000 bushels</i>	<i>1,000 bushels</i>	<i>Percent</i>	<i>Percent</i>
1925-26-----	3,571	25,848	29,419	16,261	6,398	22,659	24,757	12	72
1926-27-----	1,535	17,110	18,645	21,422	3,507	24,929	33,815	8	86
1927-28-----	14,046	26,770	40,816	14,208	3,905	18,113	36,484	34	78
1928-29-----	3,187	47,978	51,165	14,617	6,255	20,872	28,897	6	70
1929-30-----	1,256	19,063	20,319	3,276	786	4,062	7,198	6	81
1930-31-----	9,726	21,210	30,935	1,247	97	1,344	2,186	31	93
1931-32-----	2,019	3,228	5,247	2,381	-----	2,381	4,588	38	100
Total-----	35,340	161,207	196,546	73,412	20,948	94,360	132,925	-----	-----
Average-----	5,049	23,030	28,078	10,487	2,993	13,480	18,989	19	83

¹ From inspection data reported by United States Federal grain supervision. Year beginning July 1.

² From Grain Trade of Canada and compilations from weekly Canadian Grain Statistics. Year beginning July 1.

Table 1 shows that, for the 7-year period 1925-26 to 1931-32, the total cargo shipments of durum wheat from Duluth-Superior were 196,546,000 bushels, and the total eastern Canadian inspections of United States durum wheat, according to official Canadian grain statistics, were 94,360,000 bushels or 48 percent of the Duluth-Superior shipments. The difference between the Duluth-Superior cargo shipments of durum wheat and the quantity of United States durum wheat inspected at eastern Canadian ports, is due to the fact that some of the Duluth-Superior shipments are diverted at lower Lake ports for domestic consumption or for export through United States ports and that a material volume of these shipments has been so handled and certificated at eastern Canadian ports as not to be included in the Canadian statistics of eastern Canadian inspections of United States wheat.

From all available information it appears that the statistics for eastern Canadian inspections of United States wheat in table 1 are for wheat that was certificated by Canadian inspectors as "wheat

of United States origin", and do not include a material volume of United States durum wheat that was mixed with Canadian durum wheat in eastern Canadian elevators and subsequently exported under so-called Canadian open certificates. The grade designations on these so-called open certificates have been similar to those used on the Canadian certificates for wheat of United States origin, and the grades were determined according to samples established by the Montreal Standards Board for wheat of United States origin, but instead of identifying the grain as wheat of United States origin a statement was made on these certificates that "this grain is inspected to standard samples selected by the Grain Standards Board for the Eastern Inspection Division." It is significant that these Canadian inspections of mixtures of Canadian and United States grain have been certificated in terms of United States grade names.

Although the official Canadian statistics for eastern Canadian inspections of United States durum wheat cover but 48 percent of the Duluth-Superior cargo shipments of durum wheat for the 7-year period 1925-26 to 1931-32, the inspections of No. 2 Amber Durum at eastern Canadian ports for this same period covered 73,412,000 bushels as compared with 35,340,000 bushels of all grades of amber durum shipped from Duluth-Superior, which was more than twofold increase in the durum wheat of this superior subclass (table 1). It is self-evident from these statistics that a twofold increase of United States amber durum wheat at the eastern Canadian ports arising from only 48 percent of the total quantity of durum wheat shipped from Duluth-Superior could have been accomplished only by including in the grade No. 2 Amber Durum a vast quantity of wheat that did not meet the requirements of the United States standards at Duluth-Superior for amber durum wheat of all grades.

Table 1 shows further that, of all cargo shipments of durum wheat from Duluth-Superior for the 7-year period 1925-26 to 1931-32, only 19 percent were classified as amber durum of all grades by United States inspectors, whereas for that part of these shipments which was exported through eastern Canadian ports under Canadian certificates identifying the wheat as being of United States origin, 83 percent of such wheat was graded as No. 2 Amber Durum.

All available evidence indicates that the raising of grades has been practiced commonly on United States wheat at eastern Canadian ports and that extensive mixing of United States durum wheat of the various subclasses has been practiced. From these mixtures a large volume of relatively inferior durum wheat was certificated into the export trade as No. 2 Amber Durum of United States origin.

The report of the Saskatchewan Royal Grain Inquiry Commission published in 1929 contains the following statements with reference to the mixing and inspection of grain at eastern Canadian ports.

Mixing and inspection

There is also a practice at this port, which has been carried on for some three years, whereby at the request of the owner, a limited amount of mixing of western Canadian and American grain is carried on in the elevators. This is done as the grain reaches the belt on its way to the vessel. Here follows an

analysis of the amount and varieties of Canadian and American grain so mixed in these elevators during the calendar year 1923, and further a detailed statement of the various grades of Western Canada grain going into the mix.

Analysis of grain mixed in Harbour Commissioners' elevators during 1928

Grain shipped under Board of Grain Commissioners' Open Seaboard Certificates.

Wheat:	Bushels	Percent
Canadian-----	2, 197, 031	15. 5
United States-----	11, 607, 480	84. 5
Total-----	13, 804, 511	100. 0
* * * * *		

Statements of all Canadian grain used for mixing purposes at Harbour Commissioners' elevators in 1928

Wheat:	Bushels
No. 3 C.W. Amber Durum wheat-----	331, 304
No. 4 C.W. Amber Durum wheat-----	516, 254
Tough No. 2, C.W. Amber Durum wheat-----	15, 056
Tough No. 3, C.W. Amber Durum wheat-----	891, 777
Tough No. 4 C.W. Amber Durum wheat-----	4, 000
Canadian Sample Durum wheat-----	420, 388
Sample wheat-----	18, 252
Total wheat-----	2, 197, 031
* * * * *	

The grain thus mixed is inspected on the samples and grades established by the Montreal standards board for the inspection of grain of American origin, and a certificate is issued therefor, which is described as the "Open" certificate. There is nothing in this certificate indicating that the grain, or any part of it so graded and referred to in the certificate, is of American origin. On this certificate there is a footnote, which reads as follows:

"This grain is inspected to Standard samples selected by the Grain Standards Board for the Eastern Inspection Division appointed by the Board of Grain Commissioners for Canada under the Canada Grain Act."

The statement that the standard samples are selected by the Standards Board for the Eastern Inspection Division, is not quite correct, as these standards are selected by the Standards Board for the Montreal Inspection District, and not by the Standards Board for the Eastern Inspection Division. There is not, and apparently never was any Standards Board for the Eastern Inspection Division.

A considerable quantity of western grain, both of Canadian and American origin passes through the ports of St. John, New Brunswick, and Halifax, Nova Scotia, on its way to the seaboard, and we understand from the evidence given before the Agricultural Committee of the House of Commons that a similar practice as to mixing and inspection of grain of Canadian and American origin, prevails at these ports also.

The practice referred to of mixing and inspecting grain so mixed, at the ports in question, is apparently well known; there is no secrecy about it: it has been known to the Board of Grain Commissioners, and apparently has had the approval of the board. The grain so mixed has, of course, been mixed at the request of the owners of the grain, and we find that these owners are apparently always grain merchants living in the city of New York. The practice is supported on the ground that it helps to provide a market for a certain quantity of low grade western Canadian grain which might otherwise be hard to dispose of, and that it brings business to the ports where the practice prevails, which business might otherwise go to the Atlantic ports of the United States.

* * * * *

We had experts in grading inspect and report upon the forty-seven samples so secured, and their unanimous opinion is expressed as follows:

AMERICAN SAMPLES—47

Showing in the Durums passing through Port of Montreal:

A high percentage of dockage.

A high percentage of Red Durum.

A high percentage of soft starchy kernels.

Altogether an inferior quality of semolina wheat.

* * * * *

The following are some samples of the contents of the mixed product as secured from the records of the Harbour Board:

May 16, 1929.—228,000 bushels, inspected and shipped as 2 Amber Durum wheat, delivered on board vessel *Valperga*.

	Bushels
4 C.W. Amber Durum wheat.....	13, 000
2 Durum wheat.....	40, 000
2 Durum wheat.....	175, 000

May 20, 1929.—56,000 bushels, inspected and shipped as 2 Amber Durum wheat, delivered on board the vessel *Valperga*.

	Bushels
2 Durum wheat.....	27, 000. 00
2 Mixed Durum wheat.....	5, 499. 20
2 Mixed Durum wheat.....	8, 500. 40
4 Durum wheat.....	14, 000. 00
Sample Mixed Durum wheat.....	1, 000. 00
	56, 000. 00

June 10, 1929.—50,049 bushels, inspected and shipped as 2 Amber Durum wheat, delivered on board the vessel *Ullapool*.

	Bushels
Sample Durum Wheat.....	4, 000. 00
4 C.W. Amber Durum Wheat.....	2, 549. 00
3 Durum Wheat.....	16, 000. 00
2 Durum Wheat.....	26, 310. 00
2 Durum Wheat.....	275. 20
2 Durum Wheat.....	914. 30
	50, 049. 00

May 7, 1929.—36,167.40 bushels, inspected and shipped as 2 Amber Durum wheat, delivered on board the vessel *Valsarvia*.

	Bushels
Sample Durum Wheat No. 1.....	12, 000. 00
New Durum Wheat.....	1, 179. 50
3 C.W. Amber Durum Wheat.....	5, 000. 00
New Durum Wheat.....	17, 987. 50
	36, 167. 40

* * * * *

To have the above quality of Durum, go out as 2 Amber Durum under a Canadian Certificate, without indicating the origin of the grain, is apt to confuse, and is not likely to enhance the value of 2 Canada Western Amber Durum, and it may also be said that the mixture going out as 2 Rye Western, is not likely to help the marketing of 2 Canada Western Rye in the markets of the world. On the whole we fail to see, therefore, how the practice referred to can be beneficial to the Canadian producer, or in any way enhance the reputation of Canadian grain, whether we view it as of eastern or western origin. Especially is this so in the light of the fact that the inspection certificate issued, does not state the origin of the grain. We think that if the practice is to be continued, it should be done only after Parliament has authorised it, and after all persons interested, both producer and grain merchant, east and west, have had full opportunity of expressing themselves on its necessity and advisability.¹

¹ BROWN, J. T., chairman. FINAL REPORT. Saskatchewan Roy. Grain Inquiry Comm. Rpt. 1928: 138-139, 140, 143-144. 1929.

EFFECT OF INSPECTION SYSTEM ON THE EXPORTATION OF UNITED STATES
WHEAT

Exporters of wheat often prefer to ship United States wheat through Canadian ports rather than through ports in the United States because the low standards applied to such wheat at eastern Canadian ports permit the assigning of high grades to wheat of relatively low quality. These low standards reduce the commercial hazard from a possible change in the grade or dockage assessment at seaboard as compared with that established at the interior shipping point in the United States. Most of the United States grain intended for export is purchased by exporters on the basis of interior-shipping-point inspection. It is handled on a narrow margin of profit. A change in grade or dockage assessment at seaboard may cause a financial loss, especially if the steamer space has been chartered and if other grain of the desired contract grade is not readily available. As a direct result of the low Canadian standards for inspection of United States grain, the exporter of United States grain assumes less risk of change in grade when his grain is sent through eastern Canadian ports than when it is shipped through ports in the United States. Undoubtedly this has been a factor in the increase of shipments of United States grain through Canadian ports during the last decade.

It appears, however, that any advantages attributable to inspection procedure which the United States exporters may have had in delivering grain through eastern Canadian ports have been reduced because the foreign importers discovered that there was a significant difference in the average quality of United States grain of certain grades such as No. 2 Hard Winter and No. 2 Amber Durum, as exported from Canadian and from United States ports.

Although it is impossible to present complete statistical proof that foreign buyers have paid less in recent years for United States grain shipped through Canadian ports than for United States grain shipped through United States ports, it has been observed by both United States and Canadian grain specialists in Europe that there is an unmistakable preference in European markets for United States grain shipped through ports in the United States. For example, a representative of the Bureau of Agricultural Economics, in a report on the European demand for United States wheat and flour, makes the following statement: "The reputation of the United States wheats shipped from Montreal is the poorest, and some buyers will not accept United States wheat from that port."⁸ A report prepared for the Canadian National Research Council contains the following comment:

Constancy of grade qualities seems to be the outstanding requirement of the European trade. The chief complaints encountered had reference to shipments which dropped close to the minimum of the grades, particularly with reference to weight per bushel and percentage of hard, red kernels. * * * The "Eastern Certificate" was another common subject of complaint. It appeared to have caused particular dissatisfaction in Italy, where it was stated to be totally unreliable in regard to American Amber Durum. One miller asked especially to have this matter brought to the attention of the Canadian Govern-

⁸ SWANSON, C. O. EUROPEAN MILLING AND BAKING PRACTICES AND THE DEMAND FOR AMERICAN WHEAT AND FLOUR. U.S.Dept.Agr., Bur. Agr. Econ. Spec. Rpt., p. 3. December 1930. [Mimeographed.]

ment. All European millers were emphatic that American wheat should not be allowed to move under Canadian grades.⁹

Foreign market quotations are not usually published in enough detail to make possible a definite comparison of prices paid for United States wheat shipped through United States and Canadian ports. But there are some indications that quotations on United States wheat receiving United States inspection are commonly higher than quotations of United States wheat inspected in eastern Canada. Many letters on file in the United States Department of Agriculture from foreign representatives of the Government of the United States and from grain dealers indicate that European buyers of United States durum wheat have bid, in recent years from $\frac{1}{2}$ to $2\frac{3}{4}$ cents a bushel more for No. 2 Amber Durum under United States inspection than for wheat of the same grade designation under eastern Canadian inspection. Recognition of the fact that the inspection of United States wheat is more lenient at eastern Canadian ports than at United States North Atlantic ports has caused many European buyers to specify United States Atlantic delivery in their contracts.

SUGGESTED MEASURES FOR IMPROVING STANDARDS OF INSPECTION

The situation described above has been unsatisfactory to both the United States grain industry and the European importers. It has resulted in a great deal of confusion in the export-grain commerce. Although there is considerable evidence to show that many foreign buyers are well aware of the differences in Canadian and United States standards of inspection for wheat of United States production, there will always be confusion among some of the buyers as long as the same grade terms are used to describe one quality of wheat in eastern Canadian ports and a different quality of wheat at ports in the United States.

Several suggestions have been made for improving this situation. The more important suggestions have been: (1) the formulation and adoption by the United States of special export grade specifications somewhat similar to those now being used at eastern Canadian ports, (2) the organization of a special Atlantic seaboard board of review which would establish special type sample standards for export grain and supervise the grading of all United States export grain at United States Atlantic ports according to such standards, and (3) a reciprocal inspection agreement with Canada allowing each country to inspect its own grain at ports in the other country.

EXPORT AND DOMESTIC STANDARDS FOR UNITED STATES GRAIN

Those who suggest the adoption of special export grades believe that the demand for high-grade grain in Europe is not great enough to warrant the strict grading required in the domestic grain commerce of the United States. They claim that if grain will meet the specific tests for moisture content and test weight required by the foreign trade, no other specific tests are necessary provided the grain

⁹ NEWTON, R. REPORT ON INQUIRY IN EUROPE REGARDING THE FEASIBILITY OF USING PROTEIN CONTENT AS A FACTOR IN GRADING AND MARKETING CANADIAN WHEAT. pp. 20-21. Ottawa, Canada, 1930. ([Canada] Natl. Research Council.)

is reasonably sound and clean. It has been suggested, therefore, that the United States adopt two sets of grades, one for domestic commerce and the other for export commerce. Buyers at seaboard markets in the United States would then continue to purchase grain from interior points in the United States on domestic standards but would sell to foreign buyers on the basis of export standards that would not be so strict in their grade requirements as are the domestic standards. This policy, it has been contended, would materially reduce the commercial risks involved in a possible change of grade or dockage notation at the seaboard.

CONTROL OF UNITED STATES EXPORT INSPECTION BY A SEABOARD BOARD OF REVIEW

The proposal for a seaboard board of review has somewhat the same objectives as the proposal for special export grades. The advocates of this plan have suggested that a seaboard board of review be established and given authority to prepare type samples of the contract grades used in the export trade, which type samples would make use of two fixed factors—test weight and moisture—but would be based otherwise on the board's judgment of general quality. Under this plan the type samples would be distributed to licensed inspectors at ports in the United States and would serve as the basis for export inspection at seaboard.

LOWERING UNITED STATES STANDARDS WOULD NOT SOLVE EXPORT-INSPECTION PROBLEMS

It is not believed that either of these two proposals involving a lowering of the standards for United States grain in the export trade would be the best solution of these export inspection problems. In many cases European buyers have objected to the quality of United States grain inspected under the relatively low standards for such grain employed at eastern Canadian ports. For the Government of the United States to lower its present standards in order to compete with the standards established for United States grain at the eastern Canadian ports would tend to result in a further loss in the reputation of United States grain and the reputation of United States standards in foreign markets. Such a policy would also bring lower prices eventually to the farmers in the United States. If standards were lowered materially or were applied in an indefinite way, the use of the "certificate final" system in the exporting of North American grain might be impaired. The use of the certificate final has greatly facilitated trade between North American and foreign markets, and possesses generally recognized advantages over the method of selling against samples or on the basis of "fair average quality", subject to arbitration in Europe.

In connection with all proposals to lower the standards of inspection on United States export grain for the purpose of facilitating export trade, it should be kept in mind that, during the last decade, the European demand for North American wheat has become increasingly insistent for high-grade wheats of "strong" baking quality for the purpose of blending with the relatively "softer" wheats of European and South American production. Thus a policy

of lowering the standards of inspection of United States export grain would be more likely to retard the grain export business of the future than to facilitate it.

It is well to note, also, that the Canadian Government is making every attempt possible to maintain high standards of inspection covering western Canadian wheat in order to strengthen the confidence of importers in Canadian hard red spring wheat. The Canada Grain Act of 1930, for example, specifies a standard of quality for western Canadian hard red spring wheat for export that is intended to raise the quality of such wheat $37\frac{1}{2}$ percent above the minimum quality established for the first five statutory grades and for all commercial grades thereof.¹⁰

A further difficulty regarding the lowering of United States standards to meet the low standards of the eastern Canadian ports for grain of United States origin, is that there would be no assurance that the Canadian interpretation of the eastern Canadian standards for United States wheat might not be lowered still further in an attempt to attract exporters to ship United States grain through the ports of eastern Canada. Competition between the United States and Canada to lower the quality of grain represented by the grade terms of the United States standards would certainly be disastrous to the grain producers and the grain trade of the United States.

RECIPROCAL INSPECTION AGREEMENT WITH CANADA

It is believed that the most effective way of correcting the present unsatisfactory situation is by means of a reciprocal inspection agreement between Canada and the United States. Such an agreement should be based upon the fundamentally desirable and equitable principle of allowing the grain of each country to move through the ports of the other country under the standards and certification of the country in which the grain originated.

This agreement should provide that (1) the special standards be eliminated that have been established by the Canadian authorities for grain of United States origin passing through Canadian ports so as to make the Canadian inspection policy for United States grain comparable with the policy now followed by the United States in the inspection of Canadian grain passing through United States ports; (2) grade names adopted by the respective Governments to describe grain of their own production in the markets of the world should not be used by either country in certificating the grain of the other country; (3) the United States should be authorized to station properly authorized representatives at Canadian ports for the purposes of inspecting United States grain moving in bond through Canada according to the United States grain standards, and for auditing the identity records of such grain; and (4) Canada should be authorized to station its representatives at United States ports to inspect and audit the identity records of Canadian grain moving in bond through the United States under Canadian standards.

Regardless of the volume of future North American grain-export commerce, the Great Lakes-St. Lawrence River trade route through the territory of both the United States and Canada is a natural, low-

¹⁰ Canada Grain Act, 1930, sec. 31.

cost route for the late-summer and early-autumn movement to tide-water of United States grain produced in areas tributary to United States Great Lakes ports, which grain normally is in demand when European grain stocks are depleted. Likewise, the Great Lakes and railway trade route to the Atlantic tidewater ports of the United States, through the territory of both Canada and the United States, is a natural trade route for that important part of the Canadian wheat crop which is produced in areas tributary to Canadian Great Lakes ports and goes into export during the late autumn and winter months when the St. Lawrence waterway and the port of Montreal are icebound.

This latter trade route is a natural one for an important part of the Canadian export wheat movement because European countries do not have extensive storage facilities for grain and because European imports are made largely on a month-to-month basis; thus, during the winter months in North America when the St. Lawrence waterway is icebound, and prior to the wheat-export movement from South America, the natural and low-cost trade route for a material part of the Canadian wheat crop is the Great Lakes and railway route to the ice-free Atlantic ports of the United States, along which the water haul may be completed and the grain stored at lake-to-rail transfer points prior to the closing of navigation on the Great Lakes.

Because extensive grain-producing areas in both the United States and Canada are tributary to Great Lakes ports, and because the natural, low-cost trade routes for the export grain of these areas are through the territories of both countries during certain seasons of the year, it follows that both Canada and the United States have a common interest in the grain standards and the inspection services that are maintained for the inspection and certification of the export grain which moves along these trade routes. This common interest expresses itself in three ways.

In the first place, the economic interest of each country is best served when the certification made by each country follows its own grain, whether it passes through Canadian or United States ports. Any disparity in the certification of the grain of one country, as between its own ports and the ports of the other country, can serve only to impair the integrity of the entire inspection service maintained by that country and create distrust in the minds of foreign buyers.

In the second place, both Canada and the United States are vitally interested in the maintenance of the "certificate final" system for grain exported under the North American contract. The certificate final, it is generally admitted, has facilitated trade between North American and foreign markets and possesses recognized advantages for both countries over the method of selling against samples or on the basis of "fair average quality", subject to arbitration in Europe. Any impairment of the certificate final clause in export contracts would harm seriously the interests of both Canada and the United States.

In the third place, Canada and the United States have assumed a position of world leadership in developing effective programs of standardization and certification for agricultural products. It would

be regrettable if a lack of cooperation on the part of either Canada or the United States should prevent the most effective development of such services in the respective countries.

It is evident that United States grain passing through Canadian ports under Canadian inspection is not given inspection and certification on a basis that is comparable with that given such grain inspected in the United States. This state of affairs, of course, is unsatisfactory. It tends to impair the service which the United States is developing in the field of grain standardization and inspection for the benefit of its citizens. It tends to discredit grain of United States production shipped through Canadian ports in the minds of foreign buyers, and tends to undermine the certificate final system which has been so helpful in facilitating foreign trade in grain.

The procedure employed in Canada in the grading of Canadian grain passing through Canadian ports is in marked contrast to that applied to United States grain passing through Canadian ports, in that the Canada Grain Act requires the certification given Canadian grain at western Canadian points to be carried through and carefully maintained without change in eastern Canadian ports, whereas the same act provides special grades and an inspection service for grain of United States origin which gives the exporters who export United States grain through eastern Canadian ports an opportunity to avoid the use of United States inspection. Furthermore, the procedure employed by Canadian authorities in grading United States grain passing through Canadian ports is in marked contrast to the procedure employed by United States authorities in the grading of Canadian grain passing through United States ports. The vast bulk of Canadian grain that is exported through United States ports passes through these ports on Canadian certificates. There is a relatively limited amount of inspection of Canadian grain at United States ports, and when Canadian grain is inspected on request by United States inspectors it is on the basis of the United States grain standards.

The Government of the United States has neither established special standards for the inspection of Canadian grain moving through United States ports nor appropriated for inspection purposes any of the grade designations for Canadian grain which the Canada Grain Acts have established and intended for the exclusive use of the Dominion Government. The Dominion Government, on the other hand, has established and maintains special standards and an inspection service for United States grain moving through Canadian ports, in which certain grade designations are employed that are duplicates of United States grade designations that the Government of the United States established and intended for exclusive use under the provisions of the United States Grain Standards Act.

CANADA AND THE UNITED STATES HAVE A COMMON INTEREST IN GRAIN INSPECTION

In summarizing, it should be stated that Canada and the United States have a mutual interest in the inspection of export grain. Although the export movement of United States grain through eastern Canadian ports and the export movement of Canadian grain

through United States North Atlantic ports have been at low ebb since 1929 because of the abnormal conditions prevailing in world wheat commerce and because of the various artificial barriers that have been set up in this commerce, it should not be taken for granted that the grain commerce along these natural trade routes has been permanently destroyed. The grain-producing areas of North America are fertile, well tilled, and favored by climatic conditions conducive to the production of wheat of "strong" baking quality and to the production of other grains possessing relatively high quality. Irrespective of whether or not the future world commerce in grain is such as to reestablish a volume of North American exports equal to the volume of such exports in the period following the World War, it is probable that in future years there will be more important movements of North American grain to tidewater ports than those of the years 1930, 1931, and 1932.

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