


Canada. Parl. H.of C. Standing Comm. on Agriculture and
Colonization, 1936.

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SESSION 1936
HOUSE OF COMMONS

## STANDING COMMITTEE

ON

## AGRICULTURE AND COLONILATION

## MINUTES OF PROCEEDINGS AND EVIDENCE

## FARM IMPLEMENT PRICE INQUIRY

MARCH 12, 17, 1936
APRIL 2, MAY 7, 1936

No. 1

WITNESS:
Dr. J. F. Booth (Chief of the Economics Branch, Department of Agriculture)
$\qquad$

Appendices Nos. 1 and 2, Interim reports of Mr. R. T. Graham, K.C.,
Counsel to the Committee

## MEMBERS OF THE COMMITTEE

William G. Weir, Esq., Chairman

Beaubier
Bertrand (Prescott)
Black (Châteauguay(Huntingdon)
Bouchard
Boulanger
Casselman
Clark (Essex South)
Cleaver
Cochrane
Coldwell
Davidson
Donnelly
Douglas
Dubois
Dupuis
Evans
Fafard
Fontaine
Fraser
Furniss
Gardiner

Golding
Gosselin
Graydon
Hayhurst
Johnston (Lake Centre)
Lacombe
Lalonde
Leader
Leclere
Lennard
MacKinnon
(Edmonton West)
MacLean (Prince)
Macphail (Miss)
MacRae
McKenzie
(Lambton-Kent)
McLean (Melfort)
McNevin
(Victoria, Ont.)
Mitchell

Motherwell
Needham
Patterson
Perley (Qu'Appelle)
Reid
Rennie
Rhéaume
Roberge
Robichaud
Ross (Middlesex East)
Ross (Moose Jaw)
Senn
Spence
Stirling
Taylor (Norfolk)
Thompson
Thorson
Tomlinson
Turner
Ward
Weir

## ORDERS OF REFERENCE

## HOUSE OF COMMONS

Friday, February 21, 1936.
Resolved,-That the following Members do compose the Standing Committee on Agriculture and Colonization:-
Beaubien
Beaubier
Bertrand (Prescott)
Black (ChâteauguayHuntingdon)
Bouchard
Boulanger
Casselman
Clark (Essex South)
Cleagver
Cochrane
Coldwell
Davidson
Donnelly
Douglas
Dubois
Dupuis
Evans
Fafard
Fontaine
Fraser
Attest.

| Messieurs | Motherwell <br> Furniss |
| :--- | :--- |
| Needham |  |
| Gardiner | Patterson |
| Golding | Perley (Qu'Appelle) |
| Gosselin | Reid |
| Graydon | Rennie |
| Hayhurst | Rhéaume |
| Lacombe | Roberge |
| Lalonde | Robichaud |
| Leader | Ross (Middlesex East) |
| Lennard | Ross (Moose Jaw) |
| MacKinnon | Rowe (Dufferin-Simcoe) |
| (Edmonton West) | Senn |
| MacLean (Prince) | Spence |
| Macphail (Miss) | Stirling |
| Markae (Norfoll) |  |
| McKenzie | Thompson |
| (Lambton-Kent) | Tomlinson |
| McLean (Melfort) | Turner |
| McNevin (Victoria, Ont) | Ward |
| Mitchell |  |
|  |  |

ARTHUR BEAUCHESNE, Clerk of the House.
Ordered,-That the Standing Committee on Agriculture and Colonization be empowered to examine and inquire into all such matters and things as may be referred to them by the House; and to report from time to time their observations and opinions thereon, with power to send persons, papers and records. Attest.

> ARTHUR BEAUCHESNE, Clerk of the House.

Monday, March 2, 1936.
Ordered,- That an immediate inquiry should be made by the Standing Committee on Agriculture and Colonization into the causes underlying the high prices of farm implements, with particular reference to the advance in prices for the year, 1936.
Attest.

## ARTHUR BEAUCHESNE, Clerk of the House.

Wednesday, March 11, 1936.
Ordered,-That the name of Mr. Johnston (Lake Centre) should be substituted for that of Mr. Ross (Moose Jaw) on the said Committee.

Ordered,- That the name of Mr. Thorson be substituted for that of Mr. Beaubien on the said Committee. Attest.

ARTHUR BEAUCHESNE, Clerk of the House.

## REPORTS

Thursday, March 12, 1936.
The Standing Committee on Agriculture and Colonization begs leave to submit the following as a

First Report.

## Your Committee recommends:-

1. That 500 copies in English and 200 copies in French of the Minutes of the Proceedings and of the evidence before it, together with the papers, documents, and records to be incorporated with such evidence, be printed from day to day; and that Standing Order No. 64 be suspended in relation thereto.
2. That it be empowered to appoint and employ and pay counsel to assist in the investigation now before it, and also to employ and pay auditors and such experts as may be considered necessary.
3. That it be given leave to sit while the House is sitting.

All of which is respectfully submitted.

> W. G. WEIR,
> Chairman.

Thursday, March 12, 1936.
The Standing Committee on Agriculture and Colonization begs leave to submit the following as a

## Second Report.

Your Committee is of the opinion that no advance in the price of agricultural implements should be put into effect pending consideration of the subject matter of the Order of Reference, namely, the consideration of the High Prices of Agricultural Implements for 1936.

All of which is respectfully submitted.

W. G. WEIR,<br>Chairman.

## MINUTES OF PROCEEDINGS

Thursday, March 12, 1936.
The Standing Committee on Agriculture and Colonization met this day at 11 a.m.

The Chairman, Mr. W. G. Weir, presided.
Members present: Messrs. Beaubier, Bertrand (Prescott), Black (Chateau-guay-Huntingdon), Bouchard, Casselman, Clark (Essex South), Cleaver, Cochrane, Coldwell, Davidson, Donnelly, Dupuis, Evans, Golding, Graydon, Leader, Leclerc, Lennard, MacKinnon (Edmonton West), Macphail (Miss), MacRae, McKenzie (Lambton-Kent), McLean (Melfort), McNevin (Victoria, Ont.), Motherwell, Patterson, Perley (Qu'Appelle), Reid, Rennie, Ross (Middlesex), Rowe (Dufferin-Simcoe), Spence, Stirling, Taylor (Norfolk), Thompson, Tomlinson, Ward, Weir, and Johnston (Lake Centre) - 39.

The Chairman called the Committee to order and requested the Clerk of the Committee to read the Orders of Reference.

Order of Reference read by the Clerk.
The Chairman briefly outlined the subject-matter before the Committee, viz., the causes underlying the high prices of agricultural implements, and after discussion, the following resolutions were adopted:-

On motion of Mr. Bertrand,-
Resolved,-That a Sub-committee of seven be appointed by the Chairman to arrange for the calling of suitable witnesses to be heard on this question.

On motion of Mr. Thorson,-

- Resolved,-That the Committee ask the House to empower it to employ and pay counsel to assist the Committee in the investigation now being considered by it, and also to employ and to pay auditors, and such experts as may be considered necessary.

On motion of Mr. Donnelly,-
Resolved,-That the Committee do report to the House and ask for leave to print 500 copies in English and 200 copies in French of its day to day Minutes and the Evidence of the Proceedings, together with papers and documents to be incorporated with such evidence.

On motion of Mr. Tomlinson,-
Resolved,-That the Committee ask the House for leave to sit while the House is sitting.

On motion of Mr. Johnston (Lake Centre),-
Resolved,-That the Committee do report to the House as follows: Your Committee is of the opinion that no advance in agricultural implement prices for the year 1936 should be put into force pending consideration of the resolution referred to your Committee.
(This resolution was carried on division: Ayes 25, Nays 7.)
The Committee then adjourned to meet again at the call of the Chair.

WALTER HILL,<br>Clerk of the Committee.

The Standing Committee on Agriculture and Colonization met this day at 11 a.m.

The Chairman, Mr. W. G. Weir, presided.
Members present: Messrs. Beaubier, Black (Chateauguay-Huntingdon), Boulanger, Clark (Essex South), Cleaver, Coldwell, Davidson, Donnelly, Douglas, Evans, Fontaine, Gosselin, Johnston (Lake Centre), Lalonde, Leader, Leclere, Lennard, MacKinnon (Edmonton West), Macphail (Miss), MacRae, McKenzie (Lambton-Kent), McLean (Melfort), McNevin (Victoria, Ont.), Mitchell, Motherwell, Needham, Patterson, Perley (Qu'Appelle), Reid, Rennie, Rheaume, Roberge, Ross (Middlesex East), Senn, Spence, Stirling, Taylor (Norfolk), Thorson, Tomlinson, Turner, Ward, Weir.-(42).

Minutes of previous meeting held on Thursday, March 12, read by the Clerk and declared adopted, and signed by the Chairman.

Mr. Perley ( $\left.Q u^{\prime} A p p e l l e\right)$ addressed the Committee on a question of privilege in relation to a press report of the previous meeting, and the Chairman in reply said that nothing had been given to the press by the committee officially and therefore the committee could not be in any way responsible.

The following motions were then adopted by the committee.
On motion of Mr. J. F. Johnston (Lake Centre), -
Resolved,-That commencing on March 17, 1936, and terminating when the committee decides that his services are no longer required, Mr. R. D. Graham, K.C., be engaged as Counsel, and that, during that period, he be paid the sum of $\$ 50$ daily as fees, and, while employed in Ottawa or elsewhere, he be paid $\$ 10$ daily for expenses.

On motion of Mr. J. T. Thorson,-
Resolved,-That, commencing on March 17, 1936, and terminating when the committee decides that his services are no longer required, Mr. Walter Macdonald, C.A., be engaged as auditor, and that, during that period, he be paid the sum of $\$ 50$ daily as fees, and, while employed in Ottawa or elsewhere, he be paid $\$ 10$ daily for expenses.

On motion of Mr. Taylor,-
Resolved,-That representative witnesses of the Agricultural Implement firms doing business in Canada be summoned to appear before this committee to give evidence on the question now being considered by it when and as required.

The Chairman named the following members as a sub-committee to arrange for suitable witnesses to be heard by the committee in accordance with the resolution passed on March 12. Messrs. Bouchard, Johnston (Lake Centre), Needham, Perley (Qu'Appelle), Senn, Taylor (Norfolk), Thorson.-(7).

The committee then adjourned to meet again at the call of the Chair.

WALTER HILL, Clerk of the Committee.

The Standing Committee on Agriculture and Colonization met this day at 11 a.m.

The Chairman, Mr. W. G. Weir, presided.
Members present: Messrs. Beaubier, Bertrand (Prescott), Black (Chat-eauguay-Huntingdon), Casselman, Clark (Essex South), Cochrane, Coldwell, Davidson, Donnelly, Douglas, Dupuis, Evans, Fafard, Furniss, Gardiner, Golding, Graydon, Hayhurst, Johnston (Lake Centre), Lalonde, Leader, MacKinnon, (Edmonton West), Macphail (Miss), McLean (Melfort), McNevin, Mitchell, Motherwell, Needham, Patterson, Perley (Qu'Appelle), Rennie, Robichaud, Ross (Middlesex East), Rowe (Dufferin-Simcoe), Senn, Spence, Taylor (Norfolk), Thompson, Thorson, Tomlinson, Turner, Ward, Weir.-(43).

In attendance, Mr. R. T. Graham, K.C., Counsel, and Mr. Walter Macdonald, C.A., Auditor.

Minutes of previous meeting held March 17 read and approved.
The Chairman informed the committee that the meeting had been called for the purpose of presenting to it an Interim report of the Committee Counsel, Mr. R. T. Graham, K.C., and to outline the proposed procedure of Mr. Walter Macdonald, C.A., Auditor, in relation to the investigation. Mr. R. T. Graham then read the report to the committee.

Ordered: That the clerk do print same as Appendix No. 1 to the proceedings, and also to print 150 copies of report for the use of the committee as soon as possible.

The committee then adjourned to meet again at the call of the Chair.

> WALTER HILL, Clerk of the Committee.

## Thursday, May 7, 1936.

The Standing Committee on Agriculture and Colonization met this day at 11 a.m.

The Chairman, Mr. Weir, presided.
Members present: Messrs. Beaubier, Bertrand (Prescott), Black (Chateau-guay-Huntingdon), Bouchard, Clark, (Essex South), Cleaver, Coldwell, Donnelly, Douglas, Dupuis, Evans, Fafard, Fontaine, Fraser, Furniss, Gardiner, Golding, Graydon, Hayhurst, Johnston (Lake Centre), Leader, Lennard, MacKinnon (Edmonton West), Maclean (Prince), Macphail (Miss), McKenzie (Lambton West), McLean (Melfort), McNevin, Mitchell, Motherwell, Needham, Perley (Qu'Appelle), Reid, Robichaud, Ross (Moose Jaw), Senn, Spence, Stirling, Thorson, Taylor (Norfolk), Thompson, Tomlinson, Turner, Ward, Weir.

In attendance, Mr. R. T. Graham, K.C., Counsel, and Mr. Walter Macdonald, C.A., Auditor.

Minutes of meeting held April 2, read and approved.

Mr. R. T. Graham, K.C., presented a report on the work done by Mr. Macdonald and himself, in relation to the inquiry up to date.

On motion of Mr. Thorson.
Resolved,-That the report of the counsel to the committee be printed as Appendix No. 2.

Dr. J. F. Booth, Chief of the Economics Branch of the Department of Agriculture, was called, sworn and examined. Witness retired.

The committee then adjourned to meet to-morrow, Friday, May 8, at 11 a.m.
WALTER HILL, Clerk of the Committee.

## MINUTES OF EVIDENCE

> House of Commons, $$
\begin{array}{r}\text { Room } 231, \\ \text { May 7, } 1936 .\end{array}
$$

The Select Standing Committee on Agriculture and Colonization appointed to inquire into the prices of agricultural implements met at 11 o'clock, Mr. Weir, the chairman, presided.

The Chatrman: Gentlemen, I think we have a quorum here. I might say in passing that I have received on behalf of the committee an invitation from Dr. Archibald to visit the Experimental Farm, and the committee can decide when it will take advantage of the invitation.

You recall that at our last meeting Mr. Graham, our counsel, presented what was looked upon as an interim report and indicated the scope of the investigation. The committee desired that to be made part of the evidence. Since that time Mr. Graham and the auditor, Mr. Macdonald, have been following out these details and have been attempting to gather any information which they feel this committee will require. The departmental information is fairly well completed, and we are prepared to proceed with that. This morning we will have some of the departmental officials here to give us information which will be of value to this committee as we go along. There is one point in connection with the material supplied by the departmental officials which I should like to bring to your attention. Some of it is voluminous, part of it is taken from the official records of the government and is already in departmental records. My view is that it need not be printed in the evidence, but should be filed with the clerk of the committee. Probably we can deal with these things as we go along.

Now, I suppose you would like to have a further report from Mr. Graham, committee counsel, before we proceed further; but before Mr. Graham addresses you I would like to remind you that practically the same kind of inquiry as ours is being conducted to-day by a committee of the United States Congress, and from the evidence presented there it would seem that our problem is the same as theirs. The same statements are being made by farm organizations and farm people with regard to the price of implements. We are attempting to follow that inquiry closely and have got some information from it already. However, they think it will require one year to complete their inquiry, and they are using a staff of fifty people to do the job. We will not hear Mr. Graham's statement.
(Counsel's statement appears as appendix A to this day's evidence).
Discussion followed.
The Chairman: Now, gentlemen, Dr. Booth is here and he has made careful study of many matters which are of interest to this committee, and he is prepared to give us a complete statement of the farm implement industry. Personally I would like to see the committee get along and get some of this information on record so that we will be in a position to know what we are doing. We will call Dr. Booth.

Dr. J. F. Booth, sworn.
By Mr. Graham, K.C.:
Q. Dr. Booth, may I ask you what your position is?-A. I am chief of the economics branch of the Department of Agriculture.
Q. And am I correct in saying that the material which you propose to give to the committee this morning could be divided into three departments, or three divisions?-A. Yes, I think that might be so.
Q. The first division would be a brief summary of the development of Canadian agriculture, including reference to the contribution of machinery in the development of the west?-A. Yes.
Q. Secondly, an estimate of the requirements of agricultural implements? -A. That would probably be the third séction.
Q. And then the second section-what would you call that-the effect of farmers' incomes on the purchase of farm machinery?-A. Yes.
Q. Will you proceed?-A. In his preliminary report to you outlining the possible scope of the inquiry your counsel, Mr. R. T. Graham, K.C., included a section under the heading of "agriculture" in which the importance of farm machinery and its relation to the economic condition of agriculture is listed for discussion.

It was thought that such a discussion might well come early in the inquiry as it should provide a suitable foundation for much that will follow. The task of introducing this phase of the inquiry was assigned to me and I propose to deal with the matter under the heading " a brief summary of Canadian agricultural development with particular reference to the contribution of farm machinery."
(1) A more detailed discussion of this subject is contained in a paper "Some Economic Effects of Mechanization of Canadian Farms with particular reference to the Spring Wheat Area" by the writer, published in The Proceedings of the World's Grain Exhibition and Conference, 1933.

Included in this statement will be a section dealing with machinery purchases and the relationship existing between the prices of farm products and farm machinery. It is expected that others will deal more fully with several phases that can only be introduced at this time.

## Value of Farm Production.

For the purposes of this discussion and later reference by members of the committee certain tables dealing with farm production are here given. The first of these gives the value of all farm products for the census years 1900 to 1930 inclusive. In order to eliminate the effect of changing prices the values for each year, column 3, have been divided by the index of prices for that year in terms of 1926 prices. This, in effect gives us the value that would have obtained if the volume each year had been sold at prices prevailing in 1926. In other words it gives us a rough index of the volume of production.

Table 1.-Total Value of Agricultural Products


Value in terms of 1926 prices.
\$ $663,820,337$
$1,200,815,100$
933,119,200
1,533,471,000
1,487,509,000

In Table 2 the same information is given for field crops and in this instance the data carry us back to 1870 . In the next table the acreage and production of wheat are given.

[^0][Dr. J. F. Booth.]

## By Mr. Graham:

Q. I wonder if, before you leave table 1, you will tell us why you selected the year 1926 as the year which you use as the index year?-A. Well, Mr. Graham, a study of agricultural index numbers is usually based on 1926 or 1913, or the period of 1910 or 1914. It so happens that a good deal of our material was on a 1926 base, and in order to make use of it in the short time at our disposal we simply went ahead and built on the 1926 base. The comparison would be the same on the 1913 bases-the same relative basis.
Q. Now, doctor, before you leave that, I want to ask you something with regard to the values of agricultural products. Are these the wholesale values or the values to the farmer?-A. The values in table 1 are at farm prices but indexes of prices are for wholesale markets. The latter not farm prices. At the present time we have no index of the prices paid by farmers or received by farmers.

## By Mr. Malcolm McLean:

Q. They are not factory costs, are they?-A. No, they are not factory costs.
Q. What are they?-A. They are the prices at the wholesale market to which the product first goes-Winnipeg, for instance, in the case of grain and live stock, and Toronto in the case of live stock.

## By Mr. Thorson:

Q. Would it be Fort William in the case of wheat?-A. Fort William basis, Winnipeg quotations.

By Mr. Senn:
Q. Would these figures include the value of farm products which are consumed on the farm and never reach the market?-A. These are the total values, the gross agricultural revenue figures and census results. They include the portion of agricultural products that are consumed at home in the production of further agricultural products.
Q. There would be some duplication, would there?-A. Yes.
Q. The value of fodder crops would be included there and also the value of cattle?-A. Yes, that is so. We have no index of the net return prior to 1929 or 1930, and, consequently, we are obliged to use the gross revenue; but for index purposes there would be relatively little difference.

## By Mr. Thorson:

Q. You say that the total value would include, for instance, the value of fodder crops and also the value of cattle?-A. Yes.

## By Mr. Cleaver:

Q. Could you tell me the amount by which these figures are actually increased over what the farmer got?-A. The net figures in recent years have been about 60 per cent of the gross.

## By Mr. Thorson:

Q. Will you explain how these headings are arrived at?-A. This is very much the same as the previous table except that it is confined to field crops; and again these values have been adjusted to 1926 prices in order to give a fairer measure of comparison.
Q. Will you explain how that was done?-A. It is done by dividing the total value each year by the index of prices that year in terms of 1926.

## By Mr. Mitchell:

Q. Would it be fair to assume there is no duplication in this one dealing with field crops alone, such as there was in the other where all agricultural products were concerned? For instance, in the first table fodder crops and the animals to which they were fed were included?-A. Unless you include the element of seed. I am not sure whether the element of seed enters into it?seed used for the succeding crop.

> By Mr. Perley:
Q. That is the average per year for the ten year period, is it?-A. No. These are the results for the census years.
Q. It would cover the ten year period?-A. No.

## By Mr. Thorson:

Q. Are these figures taken from the census returns?-A. Yes; except in 1935 in which case it is the gross agricultural revenue computed by the Dominion Bureau of Statistics.
Q. Then, the first table gives the value in terms of dollars in that particular year, and the second table gives the value in terms of the index of 1926?A. Yes. It is what the product sold in this year would have brought at 1926 prices. The next table, table 3, shows the acreage in the production of wheat.
Q. Are these tables in the manuscript?-A. Yes, they are. I am going to show some charts later on which are not in the manuscript; but the tables on which the charts are based are in the manuscript.

The significant thing in each of these tables is the increase in output. Production, in terms of volume, (table 1, col. 3), more than doubled between 1900 and 1930. The output of all field crops (table 2, col. 3) between 1870 and 1930 increased nearly sixfold-the acreage of wheat (table 3) was fifteen times as great.

Canada Year Book, Dominion Bureau of Statistics, Ottawa, 1932, p. XXXIV, and Monthly Bulletin of Agricultural Statistics, June, 1936.

Table 2.-Value of Field Crops, 1870-1930

| Year |  |  |  |  |  |  |  |  |  |  |  | Total value. |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | | Values in terms |
| :---: |
| of 1926 prices. |

Data for years 1870-1920 from census reports, those for succeeding years from Canada Year. Book and Monthly Bulletin of Agricultural Statistics, January, 1936.

Table 3.-Total Amount of Wheat Produced in Canada, 1870-1930


## Factors Responsible for Increase.

Let us turn now to a consideration of the factors responsible for this increase in output. These include improvements in cultural practices, the development of new and improved varieties and strains of plants, reduction in loss attributable to
[Dr. J. F. Booth.]
insects and diseases, more and better live stock and greater efficiency in their care and feeding, and others. However, a considerable part of the increase, perhaps the major part, has resulted from increases in the number of farms and area of production.

In the accompanying table the numbers of farms, average size and acreage of improved land as reported for each of the census years since 1871 are given.

Table 4.-Size of farms and acteage of improved land per farm in Canada, 1871-1931. 1871-1921 number of farms and average size from "The Economy of Machine Production in Agriculture," Andrew Stewart, Essays on Canadian Economic Problems Vol. IV, Royal Bank of Canada. Average area improved land from census reports 1921; data for 1931 from preliminary census report on number of farms, etc.


The number of farms has increased approximately 100 per cent while the average size and area of improved land have both considerably more than doubled. The combination of these three factors is responsible for most of the sixfold increase in production already referred to.

The explanation for this increase is of course mainly to be found in the application of machine production to agriculture. The number of farms would, it is true, have increased without the introduction of improved machinery but the increase would not have been nearly as great as that shown. The increase in size and area of crop land is almost directly attributable to machine methods of production. Most of this increase has occurred since the turn of the century and the area most affected has been the prairie section of Western Canada, where topography and other factors provided conditions suitable for a mechanized agriculture. .In Saskatchewan, for example, where such conditions prevail, the area of "improved land" per farm increased from $83 \cdot 5$ acres in 1901 to 246 acres in 1931.

These changes have been effected with no appreciable increase in the number of workers on farms. The number of persons gainfully employed in agriculture was 1.45 per farm in 1881, 1.31 in 1901 and 1.55 in 1931. In 1881 there were $53 \cdot 07$ acres of improved land per worker while for 1931 the figure stood at $76 \cdot 01$ acres. The acreage per worker in the grain-producing regions of the west is even greater.

One of the economic effects of mechanization in agriculture as elsewhere has been the reduction of human labour required for production. A publication issued by the United States Department of Agriculture released in 1933 placed the approximate labour requirements for the major operations in the production of one acre of wheat ( 20 bushels) in 1930 at $57 \cdot 7$ hours, that for 1898 in the winter wheat belt at 8.8 hours, and for 1930 in the Great Plains area at 3.3 hours. The estimate for 1930 would apply to conditions of production at that time in eastern Canada, that for 1896 would fit Manitoba conditions of that time, fairly well, while the 1930 estimate would apply to production on the open plains of Saskatchewan and Alberta where tractors and combine-harvesters are in general use. Assuming that the calculation for 1930 is approximately the same for all cereal grains it would require the efforts of all of the farmers of Canada toiling at the rate of 10 hours per day for 150 days to produce the crop of these grains harvested in the province of Saskatchewan alone in 1935 if the methods prevailing a hundred years ago were still in vogue.

## Purchases of Machinery

To achieve the results thus briefly enumerated manufacturers have contributed and farmers have purchased many hundreds of millions of dollars worth of machinery. The value of such as reported by farmers for representative years since 1885 is shown in Table 5.

Data for 1885-1921 from "The Economic of Machine Production in Agriculture," Andrew' Stewart, Royal Bank of Canada Essay Competition. Data for 1931 from the census.


## By Mr. Graham:

Q. Those values would be census figures?-A. Yes, census values.
Q. And they would be the value placed at the time the census was taken?A. Yes.

By Mr. Mitchell:
Q. Would that be the value placed by the farmer himself?-A. Yes.

## By Mr. Graham:

Q. Whether it was old or new, or in whatever condition?-A. Yes.
Q. These are not the prices paid by farmers for the machines; it is the value placed by the farmer on the machines when the census was taken?A. Yes.

Mr. Donnelly: It would be based on the price paid by the farmer, would it not?

## By Mr. Thorson:

Q. In all likelihood, it would be less than the price the farmer had actually paid for the machine, would it not?-A. Yes. I would think it would be considerably less.

It will be noted that the increase has been rapid since the opening of the century, the total being $\$ 650,664,000$ in 1931 . You will notice that the real increase begins only about 1901.
Q. Does that coincide with the period of immigration?-A. I think it does pretty closely, yes.

The reduction in 1931 compared with the figure of a decade previous is difficult to account for inasmuch as the estimate in both cases reflect depression prices. However, the answer is probably to be found in the fact that in the latter case we were well advanced in the second year of declining prices whereas in 1921 less thar a year of depression conditions had been experienced at the time the census was taken. The lower values in 1931 were reported by the eastern provinces, the Prairie Provinces indicating a net gain of $\$ 13,320,367$ for the decade due to a larger number of farms.

In 1921 there were 47,455 tractors on farms and in 1931, 105,269. Along with this increase in use of tractors came increased dependence upon trucks and automobiles. In 1921 there were 157,022 such vehicles on the 711,090 farms or about one to every four farms. In 1931, with trucks recorded separately at 48,402 and automobiles numbering 321,276 there was a motor vehicle for every two farms. Actually 305,364 farms reported cars and 46,366 reported trucks.

Following the advent of the tractor came that of the modern combinethresher, an adaption of a machine in use elsewhere at an earlier period. The combine, although introduced to Western Canada as recently as 1922, was found on 8,759 farms to the number of 8,925 in 1931.

By Mr. Senn:
Q. Would you explain the value per acre?-A. I am sorry there has been an error made in preparing this portion of the chart; there should be a decimal point after the first figure. It should read $\$ 1.71$ for 1901.
Q. Are tractors and motor vehicles included in that chart as farm machin-ery?-A. Yes.

## Competition Determines Machinery Requirements

While the development of agriculture, particularly that of the west, has been greatly facilitated by the evolution of modern machinery and power equipment, it must be borne in mind that the purchase of such equipment has imposed a heavy burden upon farmers.

Farmers, those of the west in particular, are sometimes criticized for their expenditures on farm machinery. At the present time and for some years past they have been carrying rather heavy debts necessitated by such purchases. Some less conversant with the situation than the members of this committee may feel that this expenditure and resulting indebtedness was unnecessary. Some have said that the wheat farmer has been extravagant in this regard. The same might be said of farmers in any branch of the industry where the introduction of new machinery has made new methods of farming necessary but the magnitude of developments in the west has at times focused attention on activities there.

The expansion of grain production in Western Canada has, as intimated, been made possible in very large measure by the development and introduction of machinery suitable to large scale production. When new equipment or new methods are introduced farmers must of necessity purchase such equipment or cease farming. Competition makes this inevitable. Agriculture is no different in this respect to other industries.

## By Mr. Bouchard:

Q. Agriculture in the West is highly mechanized, but not generally?-A. I think the statement is true generally, but probably the effect of mechanization has been felt in western Canada more than elsewhere. Then:-

The introduction of new equipment or new processes is possible in an old established industry without too serious a burden of indebtedness but to an industry struggling to establish itself added expenditures for new equipment become particularly burdensome. The existence of indebtedness does not preclude the necessity of adding more debt in order to continue in business under such circumstances.

## An Hon. Member:

Q. Have you any figures as to the debt outstanding at the present time? -A. It is possible that something may be brought out on that point by another witness. I have not attempted to deal with it. Then:-

The heavy expenditures for new machinery during the period prior to and following the world war are yery largely the result of this development.

The experiences of Western Canada in this respect are similar to those obtaining elsewhere. At the present time much is being written
concerning the introduction of a machine for the picking of cotton. If this machine proves successful it will be adopted in the cotton area of Australia, and a rapid expansion is expected to take place. It will also make possible a more rapid development in the western section of the United States cotton belt where topography and other conditions make the use of such a machine possible. The farmers of Australia will go into debt for both land and equipment to undertake this new type of farming. The farmers of the Western portion of the United States cotton belt will of necessity increase their indebtedness in order to purchase the new machine. The cotton producers of the older section of the United States where topography and other factors prevent the adoption of such equipment will find themselves at a greater disadvantage and a shift in production will take place.

## By Hon. Mr. Gardiner:

Q. Who bears the expense of establishing whether a new machine introduced is efficient to perform the service it is expected to perform?-A. Who bears the cost of experimental activity?
Q. Yes. You conveyed the impression that the farmer cannot succeed unless he adopts new machinery. How is it determined whether that new machinery which comes on the market is going to assist the farmer or not going to assist him?-A. I understand that the various implement companies do a great deal of experimental work prior to the introduction of new machinery, but I am inclined to think that the farmer himself experiments a good deal.

Mr. Mitchell: The ultimate consumer pays the cost of the experimentation.

## By Mr. Thorson:

Q. The cost of experimentation eventually enters into the price the farmer must pay?-A. Yes, and also I would think that the machines as a rule are not perfect when introduced, and there is a considerable amount of experimenting done by farmers and the machinery companies benefit therefrom and alter the models in future accordingly.

## By Mr. Senn:

Q. Dr. Booth, in regard to the introduction of labour-saving machinery you made an estimate a short time ago of the number of men and the length of time it took to produce the 1930 crop if there had not been this modern machinery. From that estimate could you give us an estimate of how many dollars worth of machinery it took to replace a man?-A. No. I could not. Of course, it would be very interesting to follow that up and find out how many of the displaced workers were employed in the production of agricultural implements, and so on, but we have not done that.

## By Mr. McLean:

Q. On that point, Dr. Booth, how many men are working in agriculture to-day as compared with the seventies? I thought you said there were twice as many workers employed?-A. No; there is only a slight change.
Q. A slight change in the number of people working in agriculture?-A. Per farm, yes.
Q. But the total?-A. I cannot tell you as to the total, but in the earlier period, forty or fifty years ago, approximately 48 per cent to 50 per cent of all gainfully employed people were engaged in agriculture, and to-day only about 28 per cent are so employed.
Q. The statement has been made that machinery has displaced many men, and I want to know how many men are working in agriculture to-day as against
[Dr. J. F. Booth.]
the time when machinery was introduced in the seventies?-A. Approximately twice as many, because the number of workers per farm has not changed very much, and there are twice as many farms to-day.
Q. Then nobody has been displaced? (No response).

Mr. Mitchell: There are twice as many farms.
Mr. Thorson: It is a matter of economic inference.

## By Hon. Mr. Gardiner:

Q. Had it not been for the introduction of machinery you could not have extended agriculture into many of the areas in Canada?-A. That is true.
Q. Through the introduction of machinery we have been able to double the number of farms, and by doubling the number of farms the number of persons employed in agriculture was doubled? (No response).

## By Mr. Mitchell:

Q. Has there been any increase in production?-A. A six-fold increase in field crops since 1870.
Q. Do you attribute that increase largely to the introduction of machinery? -A. I think it is fair to attribute a large part of it to the introduction of machinery.

Hon. Mr. Gardiner: Leaving out of consideration the number of people employed in producing the machinery.

## By Mr. McLean:

Q. So that the people who are employed have six times as much wealth as they formerly had as the result of the introduction of machinery?-A. Yes, six times as much has been produced but this has not meant' six times as much wealth to the individual.

The Chairman: I think Dr. Booth should be allowed to conclude the reading of his statement before he is questioned further.

The Witness: Then:-
This has been the experience of agriculture for generations and will always continue to be so. What has been said of machinery applies, of course, to land as well. The introduction of new equipment makes possible the use of new land. Expenditures for equipment mean expenditures for more land. The Homestead Act provided for the granting of 160 acres of land to anyone who cared to settle in certain portions of the country and undertake certain minimum requirements. The acreage decided upon was in keeping with the agriculture of the time and probably was sufficient under existing conditions to provide a comfortable living for a farm family. Some years later it became evident that the acreage of the original homestead in Western Canada was not sufficient to meet the needs of a changing agriculture-a half section then became the standard for a family farm. Within the past two decades, with the introduction of the tractor and combine-harvester, and other machinery suitable for use with the tractor, acreage requirements have increased accordingly. The half section farm, although suitable in many areas where the type of agriculture is not so dependent upon the purchase of such equipment, is too small in those areas where the most advanced methods of grain production can be adopted.

The contribution to the development of the nation made possible by the evolution of machinery has come only with the acceptance of financial obligations on the part of farmers, which, though possible of settlement under price conditions prevailing at the time the purchases were made, could not be disposed of under price levels prevailing in recent years.

## Indexes of Farm Products, Farm Machinery, and Purchasing Power

The preceding sections have dealt with the development of Canadian agriculture and the contribution made thereto by farm machinery. It now seems pertinent to analyse in more detail the actual purchases of machinery by farmers and the conditions that contribute to the volume of such purchases. The first of the several tables dealing with this phase of the discussion presents the indexes of the prices of farm products and farm machinery in Canada from 1920 to 1935, together with an index indicating the "purchasing power" or relative quantities of farm products required from year to year to purchase the selected group of machines represented in the Dominion Bureau of Statistics index.


CHART No. 1
In case some members of the committee are not able to see this chart plainly may I state that the heavy black line represents the index of farm products prices. This broken line represents the index of farm machinery prices, and the red line represents the index of quantity of farm products required to purchase the selected group of farm machinery. Unfortunately it goes so high that it goes off our chart.

## By Mr. Thorson:

Q. Will these charts be printed?-A. The tables on which the charts are based are contained in the memorandum, but I have not had time to prepare the charts for printing. If it is the desire of the committee we can prepare charts.

## By Mr. McLean:

Q. Are these cross lines in figures of ten?-A. Yes, the index begins at 40 and is carried on up at intervals of 10 points.
[Dr. J. F. Booth.]

Mr. Thorson : I would think it would be very desirable to have these charts included in the record.

The Chairman: I suppose it can be done if that is the wish of the committee.
Table 6.-Index of Prices of Farm Products and Farm Machinery in Canada, 1920-1935


[^1]Witness: Then:
The first thing that strikes one in studying these series of data is the relative stability of the machinery price index and the extreme variations in the index of the prices of farm products. The latter, starting with a high of $161 \cdot 6$ in 1920 in terms of 1926 as 100 , dropped to a low of $79 \cdot 8$ in 1923.

## By Mr. Graham:

Q. Against those are the wholesale prices?-A. Yes, the farm price is actually lower. Then:-
....remained around the level of the base year from 1925 to 1929 , and then declined drastically to a low of 48.4 in 1932. From that point there has been a substantial recovery to date.

## By Mr. Donnelly:

Q. Is that what the farmer pays or what the factory charges?-A. This is the index of prices quoted by the Dominion Bureau of Statistics. I am told they represent retail prices.

Witness: Then:-
The index of machinery prices calculated on the same base has, on the contrary, shown relatively little variation. The high point was reached in 1921 and thereafter the index varied between extremics of 10 points above or below the level of 1926 .

## By Hon. Mr. Gardiner:

Q. Would it not be the price at Winnipeg, Regina or some other point?-A. I am told they are retail prices Regina territory; but so far as the index is concerned it would not make very much difference whether it were retail or otherwise.

## By Mr. McLean:

Q. It would make a difference in the height to which the red line would have to go up if you were speaking of the retail price?-A. No; it would not make any difference.
Q. Would it not make any more wheat?-(No response).

The Charman: We will get it corrected.
Witness: These are not actual prices.

## By Mr. McLean:

Q. They are indexes?-A. Yes, based on a percentage of a certain price, and I do not think it would make any difference in that respect.

By Mr. Graham:
Q. They are relative prices?-A. Yes. Then:-

From 1929 to 1932 the decline was from 99.8 or 2.1 points, while during the same period the index of the prices of farm products declined from $100 \cdot 8$ to 48.4 or 52.4 points. Since 1932 machinery prices have declined another 7.5 points while the prices of farm products have increased 15 points.

The 1926 increase in prices is not included in the chart.
The effect of the difference in sales policies pursued by farmers as compared with those of farm machinery manufacturers will be brought out in the next session. In the meantime attention is drawn to the fact that during ten out of the sixteen years represented in this chart farm prices were at a relative disadvantage in purchasing power. The extreme disparity was experienced in 1932 when it required slightly more than twice the quantity of farm products to purchase a stated group of farm machinery as was the case in 1926. If, instead of the index of total farm products, we consider the price of wheat for the same year, it will be found that approximately three bushels were required to purchase what one bushel would have purchased in 1926.

## Effect of Wheat Prices and Gross Revenue on Machinery Purchases

The Census of Industry division of the Dominion Bureau of Statistics published a report on farm implements and machinery in Canada, 1934, in which they present a table of the apparent consumption of farm implements and machinery in Canada from 1920 to 1934. This figure was arrived at by taking the production of farm machinery in Canada, adding to this the imports of farm machinery and deducting exports and re-exports of machinery. This final figure represents the apparent consumption of machinery in Canada, calculated at the selling value at the factory. It is used in this discussion with additions later referred to, as indicative of annual purchases by farmers although it is appreciated that actual sales by dealers may at times lag somewhat behond production.
I may say that this is the only figure we know of indicating the purchases by farmers, but we use it with reservations.

The relationship of farm revenue and wheat prices to purchases of farm machinery is shown in Table 7 for the period 1920 to 1934 inclusive.
[Dr. J. F. Booth.]


You will notice that rather marked increase in 1921.
Hon. Mr. Gardiner: It seems to me that the matter of sales tax comes into those prices. Price levels take a very marked rise there and again up in 1924. I think it will be found that entering into that price there is something which should be explained as you go along. I wonder if Mr. Graham has that in mind.

Mr. Graham: Yes.
Witness: As far as purchasers of machinery are concerned, however it is an increase in the price.

## By Hon. Mr. Gardiner:

Q. To be absolutely fair to the machine companies in connection with the price I think that point should be developed?-A. Yes, quite true.
Table 7.-Indexes of Gross Agricultural Revenue, Wheat Prices and Estimated Farm Machinery Purchases, 1920-1934.

| Year | Wheat | Gross Agricultural | Estimated Farm Machinery |
| :---: | :---: | :---: | :---: |
| 1920 | Prices (1) | $\begin{aligned} & \text { Revenue (2) }{ }^{(2)}{ }^{2} 20.6 \end{aligned}$ | $\begin{aligned} & \text { Purchases }{ }^{(3)} \end{aligned}$ |
|  | 144.3 | 82.9 | 104.1 |
| 1922. | 78.0 | 83.3 | 53.6 |
| 1923. | 6.15 | 80.9 |  |
| 1924. | 111.9 | 86.5 | 55.5 |
| 1925. | 112.8 | 101.3 | 60.7 |
| 1926. | 100.0 | 100.0 | 100.0 |
|  | 91.7 | 106.7 | 135.0 |
| 1928.. | 73.4 | 103.7 | 171.0 |
|  | 96.3 | 97.8 | 134.6 |
|  | 45.0 | 76.0 | 98.6 |
| 1931. | 35.0 | 50.1 | 31.0 |
| 1932 | 32.1 | 46.0 | 15.7 |
| 1933. | 45.0 | 48.1 | 15.5 |
| 1934.. | 54.1 | 55.8 | 21.1 |

7. Canada Year Book, 1934-35, Page 257, and Canada Year Book, 1930, Page 209. Individual years as per cent of 1926.
${ }^{2}$ Basic material from Monthly Bulletin of Agricultural Statistics, March issues, 1921-1935.
${ }^{3}$ Based on figures presented in Table 1.
15272-3

The index of agricultural revenue declined from $120 \cdot 6$ in terms of 1926 prices to 80.9 in 1923.

The decline in wheat prices was much more precipitous, namely, from $148 \cdot 6$ to $61 \cdot 5$.

As a result of decreased income, farm purchases of machinery declined from $157 \cdot 2$ in 1920 to $52 \cdot 6$ in 1922.

A substantial improvement in machinery purchases was shown in 1923 but this was followed by another decline in 1924. In 1925 there was an increase of $5 \cdot 2$ points in purchases of farm machinery as indicated by the index while the index of gross agricultural revenue increased 14.8 points.

The purchases of farm machinery appeared to lag somewhat behind the improvement in farm prices. Then:-

The decline in purchases of farm machinery during this period was considerably greater than the decline in either gross revenue or the price of wheat. Furthermore a considerable improvement was experienced in farm prices before there was any substantial increase in the purchases of machinery.

It is interesting to note that with gross revenue in 1923 standing slightly below that of 1922 there was an increase in purchases of machinery reflecting an increase of 23 points in the index whereas in 1924 with an increase of approximately 10 per cent in prices of farm machinery there was a decrease in the index of machinery sales of approximately 20 points. It is probable that the extremely low prices of wheat during the fall and winter of 1923 had an effect upon machinery purchases in 1924 but with the gross revenues for the Dominion in 1923 very little below that of 1922 and substantially higher in 1924 than in 1922 or 1923. There is a strong suggestion that a considerable portion of the decrease in machinery purchases in 1924 was due to the increase in machinery prices of that year. It is evident from the analysis of data representing the recovery period following the low point of 1923 that the sales of machinery lagged considerably behind the improvement in farm prices. It may be urged, and perhaps correctly so, that following a period of depression the first increase in revenue will be used for purposes considered more pressing than the purchase of new farm equipment but it must be obvious that the point when purchases of machinery will be resumed will be reached more quickly if machinery prices are kept stable or are reduced.

From 1925 to 1929 with gross agricultural revenue in terms of 1926 prices relatively favourable, despite a decline in wheat prices in 1927 and 1928, the purchases of machinery reached high levels and it was during this period, as already suggested, that most of the previous deficits in purchases were made up.

Following 1929 the decline in gross revenue and in prices, as already noted, was even greater than that experienced during the period from 1920 to 1923. Gross agricultural revenue touched a low point of 46 and wheat prices a low point of 32 in terms of 1926 prices. The decline in machinery purchases was considerably more drastic, the index of sales in 1932 and 1933 being but slightly over 15 per cent of the 1926 volume. Again as in the earlier period the first increase in purchases which occurred in 1934 came substantially after the low point in the prices of farm products had been reached, and in the light of the previous experience it would appear that any increase in machinery prices might be expected to have the effect of reducing or retarding purchases.

Estimate of Farmers' Machinery Requirements In Table 8 the " apparent consumption" calculations provided by the Dominion Bureau of Statistics are given.


CHART No. . 3
By Mr. Thorson:
Q. May we see Table 8?-A. Yes.

To obtain farm purchases it was assumed that factory sales average 74.5 per cent of the gross sales, the difference of $25 \cdot 5$ per cent according to information presented in the Price Spreads Report being the cost of freight and commissions. On this basis the average annual purchase for the 10 -year period 1921 to 1930 was $\$ 31 \cdot 7$ millions.
Table 8-Apparent Consumption of Farm Implements and Machinery in Canada, and Estimated Apparent Farm Purchases of Farm Implements and Machinery, 1920-1934.


1 Dominion Bureau of Statistics, Census of Industry, Farm Implements and Machinery in Canada, 1934, page 2.

2Calculated by making provision for freight and agents' commission, estimated in the Price Spreads Report at 25.5 per cent of the sale price of farm machinery. 15272-31

Census data for 1921 and 1931 shows the total valuation of farm machinery at $\$ 665,180,416$ in 1921 and $\$ 650,664,000$ in 1931 . On a per farm basis these valuations would be $\$ 935$ in 1921 and $\$ 893$ in 1931. During the ten-year period 1921 to 1931 the value of farm purchases of machinery, as indicated by the total of the annual apparent purchases, amounted to $\$ 517,167,918$.

In view of the fact that the valuation of farm machinery was $\$ 14,516,416$ less in 1931 than in 1921, it would appear that the average expenditure of $\$ 51,716,792$ per year was not quite sufficient to maintain the machinery on farms. This calculation assumes that the valuations placed on machinery on farms in 1921 and 1931 for census purposes were made on comparable bases.

During the agricultural depression of 1922 and 1923, and the early period of recovery in 1924, and 1925, the apparent consumption of new machinery in Canada was $\$ 78$ millions below the apparent requirements of 206.8 millions for the 4 years based upon the ten-year average of $\$ 51.7$ millions. For the period 1927 to 1929, inclusive, following a year of approximately normal purchases, the apparent annual consumption of farm machinery was $\$ 77 \cdot 3$ millions or $\$ 25 \cdot 6$ millions per year above the apparent annual requirements. This would indicate that 98.15 per cent of the apparent back backlog in purchases was made in the succeeding years when agricultural prices were more in line with prices of other commodities.

It must be obvious that any attempt to forecast the volume of farm machinery purchases in future years on the basis of past experience is subject to criticism on a number of points. We cannot say definitely that new equipment will create obsolescence and result in new purchases equivalent to those resulting from the development of the modern tractor and combine-harvester. It is of interest to note, however, that even with these additions during the decade 1920-1930 total purchases were hardly sufficient to maintain 1921 values.

We are unable to estimate the effect of future engineering improvements on machines which will prolong their life and reduce the replacement ratio. We do not know what development there may be in land settlement with resulting capital investment in machinery. These and other unknown factors make forecasting extremely hazardous and the best that can be done is to assume that new machines will continue to come along in about the same manner as heretofore and that variations or changes in other factors will be more or less constant.

Based upon these assumptions it may be said that in the years of depression since 1930 there has developed an apparent deficit in purchases of farm machinery which in 1934 totalled $\$ 162 \cdot 5$ millions at farm prices and which must now total close to $\$ 200$ millions. If this backlog of demand is to be filled in the near future, the annual purchases of farm machinery will have to be considerably in excess of $\$ 51 \cdot 7$ millions. It should perhaps be noted that somewhat more than half of the total machinery on farms is found west of the Great Lakes and in view of the fact that that area has experienced lower relative income in recent years, and by inference, a greater deficit in machinery inventories, it would appear probable that the purchases of machinery in the western provinces will be substantially greater than in other areas assuming approximately the same general improvement in the prices of farm products.

In conclusion the position in which the farmer finds himself to-day is one that admits of some moralizing if one is disposed to forget the purely economic aspects of the situation. It might be urged with considerable emphasis that the farmer is merely a partner in a program of
development in which others have shared in both accomplishments and rewards. If he is to liquidate his obligations and put the plant in running order again he must have the co-operation of his partners in the undertaking. Worn out and obsolete machinery must be replaced and the only way to accomplish this is to make it easier for him to purchase new equipment. In view of the very large accumulated deficit in purchases since 1929, the lag between receipt of increased income and the purchase of new machinery, and finally the effect of increased prices on sales experienced during a previous recovery period, one is disposed to suggest that every possible consideration that will enable farmers to purchase machinery should be given. It is believed that such a policy will react to the benefit of both farmer and manufacturer.
Mr. Graydon: Before Dr. Booth leaves the witness stand might I suggest that perhaps for the purposes of this inquiry an index of the prices of other classes of goods which the farmer also has to purchase might be of some benefit to the committee in arriving at its decisions under the reference. The farmer purchases a great amount of goods outside of farm machinery entirely and the chart shown by Dr. Booth gives us a very clear indication that the index of the prices of farm machinery is very much out of line with what the farmer received for his products. I would like to know, and I think members of the committee would like to know, whether or not farm machinery prices are also out of line with the other things which the farmer had to purchase. I was wondering if Dr. Booth could give us that information.

The Chairman: I think a chart showing that has been prepared.
Mr. Graham: If it has not already been prepared such a chart will be provided.

The Charman: We will meet again to-morrow at 11 o'clock in the morning.

Committee adjourned at 1.05 p.m. to meet again to-morrow, May 8, 1936, at 11 o'elock, a.m.

## APPENDIX No. 1

Interim Report of Mr. R. T. Graham, K.C.

## TO THE CHAIRMAN AND MEMBERS OF THE STANDING COMMITTEE ON AGRICULTURE AND COLONIZATION

PRELIMINARY REPORT BY R. T. GRAHAM, K.C., COUNSEL FOR THE COMMITTEE ON AGRICULTURE AND COLONIZATION IN ITS INQUIRY INTO THE CAUSES OF HIGH PRICES OF IMPLEMENTS AND PARTICULARLY THE INCREASE IN PRICE OF THESE IMPLEMENTS IN THE YEAR 1936.

Your Chairman, Mr. W. G. Weir has asked me to submit a preliminary report outlining the possible scope of your inquiry in order to assist your Committee in deciding the best methods to pursue in the conduct of the inquiry.

In making this preliminary report it should be kept in mind that Mr. Walter Macdonald, your Auditor and I have not as yet had access to all of the available sources of information and it is altogether probable that, when the different agencies being used for the gathering together of this information furnish this, other avenues of inquiry will be indicated.

We have, however, been able to consider the evidence taken in the year 1923 before a Select Committee of the House inquiring into Agricultural Conditions, but are unable to find that a report was submitted by the Committee on the evidence taken; and also the evidence submitted before the Price Spreads Commission in 1935 in so far as farm implements are concerned and the report of the Commission based thereon.

In addition numerous departmental officials have furnished us with considerable material bearing on the inquiry.

We have considered with some care the articles appearing in Farm Implement Journals and the daily press, giving the reasons advanced by the industry for the increase in price of certain implements in the present year.

The purpose of this report, as I have indicated, is to give a somewhat broad and general statement of the avenues of inquiry necessary to ascertain and verify such essential facts as will permit the Committee to properly discharge the duty cast upon it by the House.

May I venture the opinion that an inquiry into such a complex matter as the causes of high prices of farm implements must, if the inquiry is to be of any value either now or for the future, commence with the gathering together of all of the essential facts concerning the industry. It is my experience in like inquiries into other industries that there is really no half-way method of accomplishing the desired results. To illustrate this, we can profitably consider the inquiries before referred to in 1923 and 1935. In neither of these inquiries in so far as they relate to farm implements, were the essential facts collected, marshalled for and presented to the particular body holding the inquiry, in a manner that would permit of useful and constructive conclusions being drawn therefrom. The result is, that in neither case was any substantial contribution made to the solution of this particular problem with which we are concerned. In view of the importance of the farm implement industry to agriculture, it is rather remarkable that there does not appear to have been made at any time
a complete and thorough examination of the farm implement industry by a public body, so as to place on the public records the facts concerning the industry and particularly those affecting the price level of farm implements to the consumer.

Perhaps the need for such inquiry at the present time is emphasized by the admittedly heavy requirements of agriculture in farm implements and the widespread hope that Western Canada is entering a period of increased production as a result of more favourable moisture conditions, and the resulting importance of the prices of these implements to our farmers during the next few years.

Mr. Macdonald has given particular attention to the work of the Royal Commission on Price Spreads and Mass Buying in 1934-35 in so far as it related to the farm implement industry, and particularly to the report of the Auditors of the Commission, Messrs. Clarkson, Gordon, Dilworth, Guilfoyle and Nash, Chartered Accountants of Toronto.

From the printed evidence it appears that the scope of the inquiry by that Commission was limited to the consideration of that report, coupled with examination under oath of the auditors and of the representatives of one large manufacturer.

The Auditors' report indicates that their work was limited to a submission of a questionnaire to the implement companies and that their report was based on the replies received to the questionnaire without audit verification of the facts contained in these replies.

Excerpts from the Auditors' report are quoted hereunder for the information of the Committee to assist you in appraising the value of this report.

Page 1. "After discussion with the Chairman, it was decided that the investigation should be conducted by questionnaire and that a detailed examination of the books and accounts of the various companies comprising the industry would not be undertaken."
"We visited the larger companies and discussed with the officials their answers to the questionnaire and in some cases obtained additional information, but did not verify the returns submitted."
Page 5. "While for practical reasons the questionnaire could not be made broad enough to cover all the matters on which information might be useful for the purpose of the Commission, the information asked for and received is sufficiently complete to give a general indication of the condition of the industry at the present time, the results of its operations in the past few years and the methods of manufacturing, merchandizing, etc."
Page 8. "The foreign business of this Company (M.H.Co.) is so large that it overshadows the business done in Canada and an attempt has been made to include in the statement the Canadian business only. This has required an adjustment excluding from the operating results the foreign sales and expenses applicable thereto and while the results may not be entirely accurate they are sufficiently so for the purpose of the statement."
It is also noted that the data relating to export trade was specifically excluded from examination and that no complete investigation of production costs was undertaken, and Mr. Macdonald and I are both of the opinion that the Royal Commission of 1934-1935 approached the subject from a view-point essentially different from that indicated in the Resolution of the House under which your Committee is instructed to proceed, and that while certain of the material accumulated by the Commission will prove valuable to your Committee, the questionnaire will require to be enlarged in form and content, brought down to a more recent date and in our opinion verified, at least in part.

I come now to the more specific purpose of this report and it is necessary in this regard to examine the terms of reference by the House of Commons to your Committee.

As reported in "Hansard" the Resolution approved by the House is as follows: -

That in the opinion of this House an immediate inquiry should be made by the Standing Committee on Agriculture and Colonization into the causes underlying the high price of farm implements, with particular reference to the advance in prices for the year 1936.

It will be obvious to the members of this Committee that to ascertain the facts concerning either the factory cost or the retail prices of farm implements, all the essential items contributing to these must be ascertained and closely analysed.

Jn considering the purpose of the inquiry, the industry may be dealt with under three main headings,
(1) Raw and partly processed materials and the assembly thereof prior to manufacture.
(2) Manufacturing.
(3) Distribution.

## Raw Materials

In the industry there are three major companies manufacturing a complete line of farm implements. The Cockshutt Plow Company, Limited; The International Harvester Company of Canada, Limited and the Massey-Harris Company, Limited. The position of each of these major Companies should be examined to see to what extent each has become integrated, that is to say, having the ownership or control of the sources of raw or partly processed materials, as, of course, such a company might be in a very advantageous position due to the suggested substantial increases in prices on these materials in the period under review.

There is in the farm implement as well as in the automotive industry, what might be described as a subsidiary industry supplying the requirements of the main manufacturers of farm implements.

It will be well therefore to examine into the raw or partly processed materials used by the industry as to:-
(a) The country of origin and specific sources of supply of these materials.
(b) Price levels of these materials.
(c) Analysis of the cause of the increase in price.
(d) The comparative competitive position of the subsidiary industry in Canada and the load being borne by this branch of the industry in the matter of tariff, excise, sales tax and other Federal taxes.

It is suggested by the information so far available to us that the principal items of materials into which inquiry should be made are steel, lumber, pig iron, malleable castings, cotton duck, coal, coke, paints and oil. The manufacturers claim that the cost price of these materials have advanced very considerably since 1913 and I notice in the 1923 inquiry into agricultural conditions, conducted by a Special Committee of the House of Commons that the following increases have taken place in these years.
Steel from 88 per cent to ..... 112
Lumber ..... 134 on the average
Pig Iron ..... 122
Malleable Castings. ..... 124
Cotton Duck ..... 112
Coal ..... 95
Coke ..... 177
White Lead ..... 46
Red Colour ..... 126
Linseed Oil ..... 160

It will, of course, be necessary to check the correctness of these statements and to bring them up to date. They indicate, however, a fruitful field for examination and analysis as part of the general increase that has taken place in the price of farm implements during these years.

## Manufacture

The following are suggestions for avenues of inquiry in this branch of the industry:-

## I. Capital

A. The capital structure of the companies as to:
(1) Capital actually invested in cash on organization.
(2) Capital later introduced in cash.
(3) Capital introduced other than for cash but excluding

Earnings reinvested and represented by
(a) Reserves.
(b) Surplus and other undivided profits.
(c) Stock dividends and other similar distributions.
(4) Bonded, Mortgage and other indebtedness.
(5) Financial setup in Capital structure.
(6) Location of control.
B. Investments in, or other forms of control of subsidiary and allied firms
C. Financial history of the present and predecessor companies.
D. Nature of capital reorganization if any.

## II. Plant-Buildings and Real Estate

A. Location of plants and acreage.
B. Number in active use and number closed down.
C. Whether facilities are over-adequate to the needs of the industry.
(1) Present.
(2) Potential.
D. The overhead cost of carrying shut-down and partly used plants.
E. The capacity of the plants with if possible, a historical summary of the yearly percentage of maximum capacity used.
III. Plant-Equipment and Machinery
A. As to efficiency.
B. As to effect of the tariff on purchases necessary for replacement or improvement.
C. The effect on operating results of carrying obsolete or unused equipment

## IV. The Inter-relationship of the Companies

A. Financial.
B. As to experimental work.
C. As to joint use of new ideas and improvements.
D. As to patent rights.
V. Improvements in implements since 1913
A. Factory cost of making improvements claimed.
B. Poundage value.
C. Evaluation of improvements.
D. Examination of suggested failure of increased efficiency and economies in production to absorb cost of improvements.
E. Examination into the suggestion that Canada may be paying indirectly, the cost of experimental work in the United States industry, by being offered other than the most highly improved machines.

## VI. Factory cost of typical machines

A. Implements typical of Eastern Canada requirements.
B. Implements typical of Western Canada requirements.
C. Tractors and Combines.
D. Miscellaneous implements such as cream separators and small stationary engines.
D1. Comparative United States figures in above items.
E. Examination and close analysis of all items of cost.
(1) Domestic.
(2) Export.
F. Position of labour in industry.
G. Comparison of domestic and export cost of implements having regard to (1) Draw-back and other special privileges.
(2) Allocation of overhead cost to each.

## Distribution

I. A. Surevy and examination of the system of distribution in Canada.
B. Survey and examination of the system of distribution in the United States.
C. Analysis of all cost items including
(1) Commissions.
(2) Credit policy.
(3) Collection costs on term sales.
(4) Servicing.

## II. Interest rates charged on term payment sales

## III. Freight rates

A. Consideration of the benefits of the application prior to 1922 of the Crows Nest Pass Agreement rates on West bound freight.
B. Local freight rates from central distribution points.

## IV. Trade in problem

A. Small implements.
B. Tractors and Combines.

## V. Retail Prices

A. of implements.
B. of repairs.
C. Historical record of changes in price over the period under review.
VI. Comparison of all above items with conditions and practices in the United States and other countries

## Export

A. To what countries and in what volume.
B. Financial results of export trade.
C. How much of manufacturing or assembling process of implements is done in each export country.
D. Historical statement of export prices over period under review.
E. Relative importance of export business to each company throughout period under review.

There are two other important headings which the Committee could profitably inquire into, these are Agricultural conditions and the whole question of tariff, as they relate to the implement and allied industries. With regard to these the following suggestions are indicated:-

## Agriculture

I. Its importance to the farm implement industry
II. The economic condition of agriculture
A. Price level of agricultural products over period.
B. Price level of agricultural products over period in comparison with
(1) Farm implements.
(2) Other manufactured commodities.
C. Condition of agriculture with regard to present and estimated future requirements of farm implements.
D. Its financial ability to purchase required implements.
(1) Eastern Canada
(a) for cash.
(b) on terms.
(2) Western Canada
(a) for cash.
(b) on terms.

## III. Trend towards mechanization in methods of farming

A. Eastern Canada.
B. Western Canada.
IV. Foreign sources of supply of farm implements.
A. What countries.
B. Geographical location of specific points of supply to our consumer markets.

## TARIff

## I. History

A. Customs duties
(1) Farm implements.
(2) Raw materials.
(3) Plant equipment.
B. Examination of tariff changes and relationship to price changes since 1913.
II. Draw-back provisions of Customs Act as available to farm implement manufacturers
A. As to manufacture for domestic market.
B. As to manufacture for export market.
III. Dumping duties
IV. Other taxation
A. Excise.
B. Sales tax and other Federal Taxation.

## V. United States tariff during same period

## VI. Ottawa Agreement, particularly as to application of Article 9 fixing maintenance of differential

The above are suggestions that have occurred to Mr. Macdonald and myself in outlining to you the purpose of the inquiry, the essential facts to be ascertained and verified in order to establish the cause of the high prices of farm implements and the increase in price in the year 1936, with a view to determining what remedies or changes can be suggested that will result in lower prices for these important implements of production.

Mr. Macdonald and I have carefully considered the proper method of procedure for the Committee to pursue and we agree that the following preliminary method is preferable:-
(1) To prepare a questionnaire having in mind the above requirements and to submit these to the Companies in the industry for answer and reply.
(2) Coincidentally to gather together all necessary information from independent sources wherever available.
(3) Upon receipt of this information as aforesaid, to carefully consider all such information and where deemed necessary to verify this in audit or otherwise, preparatory to oral examination of witnesses.
(4) When the above work is completed, public sessions of the Committee could be proceeded with.

R. T. GRAHAM, Counsel

Ottawa, Ont., March 27, 1936.

## APPENDIX No. 2

SECOND INTERIM REPORT OF COUNSEL Mr. R. T. GRAHAM, K.C.

## Mr. Chairman, Miss McPhail and Gentlemen:

On April 2nd, I presented to your Committee a preliminary report outlining the work that was to be done in carrying out the instructions of the House of Commons to your committee to inquire into the cause underlying the price of farm implements and with particular reference to the advance in price in the year 1936. Since then we have been continuously engaged in attempting to gather the necessary information.

A number of questionnaires have been prepared for submission to the four major implement companies: Massey-Harris Company, Limited; International Harvester Company of Canada, Limited; Cockshutt Plow Company, Limited and Frost \& Wood Company, Limited. On Wednesday April 8, Mr. Walter Macdonald and myself met the representatives of the companies for the purpose of explaining the questionnaire to the comptrollers or cost accountants of each company in the hope that much time would be saved by setting up a uniform method in which each company would furnish the information requested. Unfortunately, since the information required covers a period from 1913 to the present, the companies were unable, without checking their records, to advise us just how much information could be given on certain questions asked and it was arranged that the companies be furnished with the questionnaire and that each advise Mr. Macdonald the method of their book-keeping and the length of time for which records had been kept in certain matters so that the information furnished would be as uniform as possible. It was also apparent that the gathering together of the information and replying to the questionnaire would take considerable time. Mr. Macdonald will give to you a brief report on just what progress has been made in the matter of securing the necessary information from the implement companies.

You will recall that it was suggested in my preliminary report, that in addition to the information to be furnished by the companies, that we secure from independent sources any information germane to the inquiry and we have attempted to do this. The preparation of even this material takes some time and the departmental officials from whom we have received every assistance are not in a position as yet to give some of the necessary information.

I thought it might be interesting to this committee to give the names of the departmental officials who are assisting in the collection of the required information, these are as follows:-

Mr. C. B. Rutherford, Agricultural Economist of the Bureau of Statistics has been kindly loaned to the committee by the Bureau to assist in all phases of the inquiry in which he would be required and has proved of very great value to me in the preparation of this material. Mr. Rutherford will be presenting to this committee considerable information during the course of the inquiry. In addition to Mr . Rutherford the following officials will be presenting material:-

Mr. L. R. Younger, Department of National Revenue
V. C. Nauman, Department of National Revenue
W. A. Warren, External Trade Branch, B. of S.

Dr. J. F. Booth, Economics Branch, Dept. of Agri.
J. Coke, Economics Branch, Dept. of Agri.

Dr. T. W. Grindlay, Agricultural Branch, B. of S.<br>W. H. Losee, Mining, Metallurgical and Chemical Branch, Bureau of Statistics<br>H. M. H. Greenway, Internal Trade Branch, B. of S.<br>R. G. Bangs, Transportation Branch, B. of S.<br>Wm. Gilchrist, External Trade Branch, Dept. of T. and C.<br>Dr. E. S. Hopkins, Experimental Station Branch, Dept. of Agriculture<br>F. R. Armstrong, Experimental Station Branch, Dept. of Agriculture<br>H. D. Cheney, Commercial Intelligence Branch, T. and C.

In addition to the above Mr. C. V. Parker and Mr. D. W. Thomson have been loaned to the committee by the Department of Agriculture to assist in this inquiry.

Each of the representatives of the different departments has been asked to prepare in written form certain information for submission to this committee. Some of the information might be described as voluminous and it may perhaps be difficult for the committee to follow it throughout. I had in mind however, after the submission of this statistical information, having Mr. Rutherford undertake the task of co-relating the information to the subject under inquiry, so that its bearing on the question will be more easily appreciated by the members of this committee.

We have invited each of the Provincial Departments of Agriculture to gather and present to the committee such information as they think proper and which is of particular interest to the Province involved, to illustrate, we have asked certain of the Provinces to secure the comparative price of selected farm implements on each side of the border of their Province as we were of the opinion that this information could best be secured by Provincial representatives familiar with the territory.

The collection of this information will not only involve the securing of actual price lists but will involve the necessity of passing judgment on the quality value of the farm implements being offered for sale and on other conditions and factors that have a bearing on the price structure in each country.

Incidentally, it may be of interest to the committee to know that coincidentally with your own inquiry, the Congress of the United States is carrying on an investigation in the same manner on farm implements and we are attempting to keep in touch with that inquiry so that any information of value may be made available to the committee.

Owing to the delay of which I have spoken in the securing of the information from the implement companies and the Provincial Departments, it was thought advisable by your Chairman and members of your sub-committee to proceed with the sittings and submit the information which has been gathered together by the various departmental officials. Roughly speaking therefore, the information that will be given to you in the early stages of the sittings will be under two broad headings:
A. Agriculture.
B. Tariff.

Unfortunately perhaps it is an indirect way of presenting the evidence which your committee will require, but no doubt your chairman will explain to you the reasonable necessity of proceeding in this manner. As a matter of fact too, some of the information required of departmental officials will take a little longer than expected to prepare for submission to the committee. I trust therefore the committee will keep this in mind in considering the manner in which the evidence is being laid before you.

## STANDING COMMITTEE

ON

# AGRICULTURE AND COLONIZATION 

# MINUTES OF PROCEEDINGS AND EVIDENCE <br> (Farm Implement Price Inquiry) 

## FRIDAY, MAY 8, 1936

No. 2

## WITNESSES:

Dr. J. F. Booth, Chief of the Economics Branch, Department of Agriculture, Ottawa, Ont.
Dr. E. S. Hopkins, Dominion Field Husbandman, Dominion Experimental Farms, Ottawa, Ont.
Mr. J. M. Armstrong, Field Husbandry Division, Dominion Experimental Farms, Ottawa, Ont.

## EXHIBITS FILED

No. 1--Department of Agricultural Bulletin No. 159: Cost of producing farm crops in the Prairie Provinces.

No. 2-Department of Agriculture Bulletin No. 168: Cost of producing farm crops in Eastern Canada.

## MINUTES OF PROCEEDINGS

Friday, May 8, 1936.

The Standing Committee on Agriculture and Colonization met at 11 a.m., the Chairman, Mr. Weir, presiding.

Members present: Messrs. Beaubier, Bertrand (Prescott), Boulanger, Clark (Essex South), Cleaver, Cochrane, Coldwell, Donnelly, Dubois, Evans, Fontaine, Furniss, Gardiner, Golding, Gosselin, Graydon, Johnston (Lake Centre), Leader, Leclerc, MacKinnon (Edmonton West), MacLean (Prince), McNevin (Victoria, Ont.), McKenzie (Lambton-Kent),McLean (Melfort), Mitchell, Motherwell, Patterson, Needham Perley ( $Q u$ 'Appelle), Roberge, Robichaud, Thorson, Senn, Spence, Stirling, Taylor (Norfolk), Thompson, Tomlinson, Turner, Ward, Weir.

Mr. R. T. Graham, K.C., Counsel to the Committee, and Mr. Walter Macdonald, C.A., Auditor, in attendance.

The Chairman announced that he had been in communication with the Director of Experimental Farms, Dr. Archibald, in view of setting a date for the Committee to visit the Ottawa Experimental Farm. He stated that Wednesday, May 13, had been suggested as a convenient date, the Committee to leave the House of Commons at 10.30 a.m.

The Committee agreed to said date and time.
Dr. J. F. Booth, Chief of the Economics Branch, Department of Agriculture, was recalled and further examined.

Witness retired.
Dr. E. S. Hopkins, Dominion Field Husbandman, Dominion Experimental Farms, was called and examined. He filed,-

Exhibit No. 1-Department of Agriculture Bulletin No. 159: Cost of producing farm crops in the Prairie Provinces.

Exhibit No. 2-Department of Agriculture Bulletin No. 168: Cost of producing farm crops in Eastern Canada.

Witness retired.
The Committee adjourned at 1 o'clock until 3.30 p.m.

## AFTERNOON SITTING

The Committee resumed at $3.30 \mathrm{p} . \mathrm{m}$.
Mr. J. M. Armstrong, Field Husbandry Division, Dominion Experimental Farms, was called and examined.

Witness retired.
The Committee adjourned at 4.40 p.m., to meet again at the call of the chair.

R. ARSENAULT, Acting Clerk of the Committee.

## MINUTES OF EVIDENCE

House of Commons,
Room 231,
May 8, 1936.
The Select Standing Committee on Agriculture and Colonization appointed to inquire into the price of agricultural implements met at 11 o'clock, Mr. Weir, the chairman, presiding.

The Chairman: We have a quorum now and shall proceed. Dr. Booth was asked two or three questions yesterday and I think he should like to answer them this morning, if it is the wish of the committee.

## Dr. J. F. Booth recalled.

Mr. Chairman and gentlemen, in my haste to conclude before one o'clock yesterday, I was unable to bring together the points that I had made in the form of a brief summary. I think if I may this morning, I should like to do that and also clear up several questions that were asked upon which I did not have the necessary information to make a satisfactory answer.

In the first place I attempted to outline the development of Canadian agriculture and to show the tremendous progress that had been made in the matter of production since 1870 and particularly since 1900 . In that connection I referred to the contribution of various factors, but particularly the contribution made by machinery and suggested that a good share of that increase should be attributable to machinery. The contribution of machinery was important in that development. I also made a point that competition, in my opinion, forced farmers to adopt new equipment and new methods whenever the new equipment and new methods were introduced; and that of necessity imposed a heavy burden upon agriculture. I also pointed out that burden was particularly heavy in the western provinces where topography and other conditions had made it possible to use modern machinery to advantage, and particularly heavy also, because of the fact that agriculture in these provinces had very recently been developed, and there were still heavy obligations in connection with the purchase of land and other expenses incidental to settlement.

Then I referred to the discrepancy in prices that has developed in the last five years particularly and the difficulty farmers experienced in purchasing machinery under those conditions. This has resulted in a large deficit on purchases, and if the deficit is to be made up in succeeding years the purchases would have to be quite heavy, and if they are to be made up quickly, considerably in excess of the 51.7 millions of dollars which represents the average purchases for the years 1921 to 1930 inclusive. Then I concluded with the statement that in my opinion at least this progress in agriculture had been shared by both the farmers and those responsible for this equipment that made the production possible. In other words, manufacturers of machinery had made a contribution to this development as had farmers and consequently they also should be interested in the progress made in the recovery, and to that extent should, in my opinion, be interested in facilitating in every way the purchasing of new equipment to re-establish the plant which has been so badly run down in recent years. In my opinion it would be in the interest of both parties if every possible effort were made to facilitate such purchases by farmers.

Now, with respect to two or three points raised upon which I was not able to give sufficient information, table 1 on values represents the census values from 1900 to 1930, and the figure for 1935 represents the gross agricultural revenue as computed by the agriculture branch of the Dominion Bureau of Statistics. In both cases the figure is a farm valuation. The index number used in several places represents wholesale prices. We have no farm price index. A question was asked with respect to the effect of sales tax on machinery prices in 1921 and 1924. I find that question was well advised; that there was an increase in sales tax from 1 to 6 per cent during the period from 1920 to 1924, which had the effect of increasing the price of farm machinery. As far as the effect on farmers is concerned, however, the price increase had the effect noticed, namely of reducing purchases, and to that extent it makes very little difference what the cause of the increase in prices was. But in fairness to the implement companies it should be stated that a basis for the increase is to be found in the increase in sales tax.

I referred to the net agricultural figure as being about 50 per cent of the gross; it should have been 60 per cent. With respect to the number of persons engaged in agriculture to-day I think I stated approximately double the number in 1871. The figure for 1871 is not available but in 1881662,266 persons were engaged in agriculture, and in $19311,128,188$. Another point was raised with respect to the valuation of farm machinery. I find that the valuation referred to in table 5 include tractors, trucks and automobiles on farms. I think these were the only points, Mr. Chairman.

The Chairman: Does anyone wish to ask Dr. Booth any further questions? He will be available throughout our sittings.

Witness retired.

## The Chatrman: May we proceed with our next witness, Dr. Hopkins?

Mr. Spence: Mr. Chairman, I should like to say just a word or two before you go on with the next witness. I have been thinking that judging from the manner in which we started this investigation it is going to be rather expensive. I think something should be done to eliminate the expenses that will occur in this investigation. I have been in this house for 15 years and in the city council in Toronto for five years, and I have opposed every investigation of every description, as I never saw one yet which did any good. We all appreciate the information which Dr. Booth sought to convey to us yesterday; but after all, does that help us very much? Should we not start in with a real investigation without trying to wield the white-wash brush in the end. If we go on the way we are going, it will taken months and months, and we all know what happened in regard to the price spreads investigation. It cost thousands and thousands of dollars and did no real good. I am saying that with all due respect to my friends who thought it was a wonderful thing. I could not see it, and I cannot see very much in this investigation. I listened to my friend Ward yesterday making some observations, and I concurred in what he said up to the time he suggested a committee be appointed to go and inspect the different plants in the different localities and municipalities. He mentioned the fact that certain buildings, because of overhead and high selling prices were only half used or not used at all. I was thinking that any party who had been guilty of not writing off high valuations on their buildings was very foolish, because it is a taxation burden. I do not think that would have any real effect. The auditor said he thought bad debts had something to do with the cost of farm implements. I agree with that because I have been in the wholesale business, and I know every manufacturer and wholesaler figures on a percentage of bad debts. It is no doubt that the manufacturers have lost a greater percentage of money than they figured they would lose in
their collections on farm implements. I was brought up in a different school from some of my Rhodes scholar friends around me. I was brought up in the hard knocks school where we called a spade a spade, and I do not think we should bring heads of the departments here and ask them questions. I have always been opposed to monopolies and I am opposed to this monopoly, and if they increase prices on farm implements unnecessarily I say something should be done. But we should get to the root of it and make a decision as to whether we are right or wrong. I think you all realize that what I am saying is probably more or less true. In fact I believe it is all true. I agreed with Mr. Coldwell yesterday, but after all why should we have somebody here from the statistical department to go back to the year 1870 and 1913 and so on? Are we not here to do something for the future? Let us forget the past. We are here to relieve the unfortunate position in which we find ourselves. The farmers are in no worse plight than the business men and the industrial workers. This investigation should not be confined entirely to farm implements in the west, but to every part of Canada and to every class of implement used in growing food and vegetables by truck farmers etc. I think we should bring these gentlemen here and try to shorten up this investigation, because judging by the views I have heard this investigation will not be over until the men that we are investigating are probably out of business; at least the greater part of them. I do not say all of them because the International Harvester can weather the storm better than some others can; but I doubt in the long run if' some of them will be able to weather the storm. I am making these observations not because of the change in the tariff, as the increase in the sales tax makes it about even. I hope you will not think I am introducing politics, because I am interested in the farmers. I have made my living out of the fruit grower all my life. I wish to say that they should get the same treatment as the western farmer. Why should this investigation be confined entirely to the implements that are used in the growing of wheat on the prairies? I do not know what other members of the committee think, but my views are that we should shorten this investigation, because I am highly opposed to wasting the country's money on investigations. No doubt it will deprive my friend the counsel and the auditor of probably staying on the investigation for four, five or six months. But we are here to legislate in the interest of the people and to save the country every possible dollar we can. I hope the committee will pardon me for making these suggestions. I think we should not go at this thing in a haphazard way; I think we should bring the men interested in this industry before the committee and have the questions put to them with the assistance of counsel, and in this way to shorten up this investigation and do it in a reasonable time. I do not know that I have anything to add, but I shall interject something as we go along. I really cannot see any necessity for bringing highly trained men from the statistical department or any other branch of the service to talk over our heads something we really do not understand. All we are interested in is to get a reduction of farm implements if it is possible, or otherwise say to the farmer, these people are playing a fair game and are giving those implements as cheap as they can, having regard to the cost.

Hon. Mr. Motherwell: I feel sure Mr. Spence will feel a lot better now; I am quite sure he will not feel any worse. It was evident from the beginning, Mr. Chairman, that Mr. Spence was not enthusiastic about this inquiry.

Mr. Spence: I hope you will take that back, because I have been as anxious about this inquiry as anyone else; but I want a real investigation with all the cards on the table, and no white-washing.

Hon. Mr. Motherwell: What does Mr. Spence mean by "white-washing"? I am not going to enter into any altercation with my good friend. Who is to be white-washed? He is quite unwarranted in using that language, Mr. Chairman. I propose we go ahead with the witness.

The Chatrman: May I say that yesterday morning we had a general discussion and it was agreed that we should proceed along the lines which have been arranged for this morning. We might discuss these things back and forth for some time and still get nowhere. I am in your hands, but I should prefer to go on with the witness.

Mr. Ward: Mr. Chairman, just before we proceed, may I say a word? I did not intend to say anything at this time, but since my friend Mr. Spence has introduced the subject, I should like to make a remark. I should like to say he is not the only member of parliament that was raised in the school of hard knocks. Since the last session I obtained two or three copies of the Canada Year Book, and I have come to this conclusion: We will not get much information if we sit here all summer that is not contained in the Canada Year Book, I picked up practically all the information we obtained yesterday. I appreciate very much what Dr. Booth gave us, but after all, it is in the Canada Year Book. If we dig into that book we will get all the information. What we are interested in, Mr. Chairman, is to relieve the sorely distressed farmer. It does not matter very much whether he is a truck farmer or a grain farmer. What we are interested in is to see if it is possible to rehabilitate the farms, the foundation of the future success of this country. I go back to the position I took yesterday. I cannot see that by pursuing the course that we have pursued up to this moment in connection with this committee, it is going to take us anywhere. I am more convinced since yesterday's sitting than I was previously that some personal inspection of the plants in the manufacturing centres is perhaps the one possible course that will take us to the real source of our trouble. Since yesterday I have dug out the cost of the committee to date. This committee is going to cost something between $\$ 5,000$ to $\$ 6,000$ a month. Is it worth it? Is this information we have received up-to-date or likely to receive worth that much? You will find it all in the Canada Year Book. In the Canada Year Book I find a number of these drawings showing the trend of price levels both in respect of manufacturing cost as well as natural products. It is all there. I find statistics on capital, employees, sellers, wages and the various manufacturing interests that enter into it. Why should we be sitting here listening to a repetition of information that is available to us all. We are busy people. Personally I do not think we are fair to ourselves or to the country if we continue to spend $\$ 5,000$ a month listening to a rehearsal of the statistics that are available to us all.

Mr. Thompson: Mr. Chairman, I do not think this is the place for making speeches; I do not think we are here for that purpose. I am opposed to sending this committee to investigate the different agricultural implement plants. I was a member of a committee in the Ontario House in 1923, 1924, and 1925, and I in company with the committee appointed at that time to investigate agricultural conditions, visited every plant in the province of Ontario. Now, we were just ordinary men. We went in and looked around and when I was through I came to the conclusion that we had not gained anything by it. I do not think anything is to be gained by sending a committee or a sub-committee of this committee around to visit the different plants in this country. I think we would be very well advised to proceed with this investigation along the lines which the chairman has suggested.

Doctor Edward Stanley Hopkins called.
By the Chairman:
Q. Would you be good enough when you commence your remarks, to announce to the committee your full name and your position in the department? -A. I am Dominion Field Husbandman at the Experimental Farm here. Now, I have been asked to present some information before this committee in con[Dr. E. S. Hopkins.]
nection with the work we are doing which might have some influence or bearing on your inquiry into farm implements. The main aspect, I presume, of your inquiry is in regard to cost of implements and its affect on costs to the farmer. The Experimental farms are not undertaking investigations of that nature; we are undertaking investigations as to the use of farm machines and the amount or proportion of the total cost of production which the cost machinery might make a part. In as much as we have Experimental Farms throughout the whole Dominion, about 26 experimental farms, it might be interesting to study for a moment what proportion machinery bears to the total cost of production. A few years ago we issued two bulletins on this subject in which we outlined the cost, one bulletin being applicable to the prairie provinces, and the other to eastern Canada.

The cost of producing crops is reported for our experimental farms and for the illustration stations which we have in the different provinces and also on a few selected private farms. We have also made certain calculations as to the costs on different sizes of farms. Now, I think it might be not out of place to point out to you just what our results were and how much the cost of machinery would be in proportion the total cost of production. That would be one aspect of the work which I might present to you.

First, let us take the prairie provinces. In the prairie provinces, as those of you who are from that region know, grain growing is the essential crop. Ninetyfive per cent of the land is devoted to grain, summer fallow or new breaking. Any study of the cost of production which is based on grain strikes at the very heart of the business on the prairies. I should like to point out first the costs we secured on the Experimental Farms. The bulletins were published about 1932 and covered conditions from 1923 to 1930. That, you might say, is hardly applicable to present day conditions, but we have tried to present 1935 costs so that you would get a comparison with conditions from 1923 to 1930.

## Agriculture

I have presented this material in some charts here. I might read it off from my manuscript, but I think it would be a little easier for you to follow if I were to refer to some of the more important parts of it in the charts if that would be satisfactory to you.

We have here the cost of producing wheat after fallow on eight Dominion experimental farms in the prairie provinces.

COST OF PRODUCING WHEAT AFTER FALLOW ON EIGHT DOMINION EXPERIMENTAL FARMS IN PRAIRIE PROVINCES

| Item | 1923-30 | ${ }_{1935}^{\text {Estimated }^{2}}$ |
| :---: | :---: | :---: |
| Use of land <br> Seed <br> Machinery <br> Twine. <br> Manual labour <br> Horse labour. <br> Two-thirds of cost of summerfallow <br> Threshing. | \$ 3.35 <br> 1. 59 <br> 1.35 .40 <br> .93 .78 5.66 3.29 | $\begin{array}{r} \$ 2.10 \\ .78 \\ 1.35 \\ .30 \\ .74 \\ .59 \\ 4.35 \\ 2.19 \end{array}$ |
| Total cost per acre Yield per bushel. Cost per bushel. | $\$ 17 \cdot 35 \text { bush. }$ | $\begin{aligned} & \$ 12 \cdot 40 \\ & 27.4 \text { bush. } \\ & \$ \quad .45 \end{aligned}$ |
| Total machinery charge Per c nt of total cost. . | $\begin{aligned} & \$ 2.75 \\ & 15.8 \% \end{aligned}$ | $\begin{aligned} & \$ 2.75 \\ & 22 \cdot 2 \% \end{aligned}$ |
| Manual labour. Horse labour. Threshing wheat Twine | $\begin{gathered} 1923-30 \\ \text { Cts. } \\ 25 \\ 8 \\ 12 \\ 12 \end{gathered}$ | 1935 Cts. 20 6 8 9 |

The reason I am producing this is to show you what per cent of the total cost of production the cost of machinery makes. We are investigating machinery cost and we ought to consider what per cent of the total cost of production machinery would make. These charts cover information on the Dominion experimental farms. I have some other charts dealing with other costs on other forms. This chart is for the experimental farms covering the period from 1923 to 1930. These various items are listed: The use of land, seeding, machinery, etc. A charge of $\$ 1.35$ per acre is put in for machinery. That is for the main machines that are used on the farm but does not include a tractor or truck or threshing equipment. Manual labour, horse labour and two-thirds of the cost of summer fallow are also included for the cost of producing wheat after fallow. Those who are from Eastern Canada must realize that on the prairie it is necessary to have summer fallow, and we have counted two-thirds of the cost of summer fallow onto the cost of growing wheat after fallow. The total cost of production per acre was $\$ 17.35$. Our yield was 27.4 bushels. The cost per bushel was 64 cents. The total machinery charge was $\$ 2.75$ per acre to growing wheat on fallow. This first figure for machinery is general farm machinery, while the next one includes the cost of threshing and also two-thirds of the cost of the machinery used in the summer fallow. This makes a total cost for machinery of $\$ 2.75$ per acre; which represents $15 \cdot 8$ per cent of total cost of production.

## By Mr. Golding:

Q. Is that for a period of 7 years?-A. That is for the years 1923 to 1930.
Q. The average per year?-A. The average per year, per acre.
Q. And you say it is $\$ 17.35$ per acre?-A. Yes.

## By Mr. Donnelly:

Q. What is included in the item, use of land?-A. Interest and taxes.
Q. What rate of interest?-A. Seven per cent.
Q. What was the average price of farm land on which you figure that rate of interest?-A. In that case it was approximately $\$ 40$ an acre land.
Q. Is there anything taken into account for repairs to buildings and fences? -A . We thought 7 per cent on $\$ 40$ an acre land, and it is a little over $\$ 40$, which would amount to $\$ 2.80$, and if you added 40 cents per acre for taxes that would make it $\$ 3.20$. We have taken $\$ 3.25$. We thought that was not far out.

## By Mr. Senn:

Q. I would like to have you explain to me how you estimate the cost of machinery. Do you take depreciation into account?-A. If you don't mind, sir, we have a chart coming a little later which shows that.

Mr. Senn: As long as you bring it down, it will be all right.
Witness: It will be produced a little further on, if you don't mind.
Mr. Senn: All right.

## By Mr. Mitchell:

Q. I am not clear yet as to how you arrive at these figures; do you give taxes; you show $\$ 3.29$ a year for threshing in the years 1923 to 1930 , and $\$ 5.60$ an acre for two-thirds of the summer fallow?-A. Yes.
Q. Is that per acre per year?-A. That is per acre per year.
Q. You must have been pretty good farmers?

Mr. Perley: That would be a cost of $\$ 8.40$ for summer fallow.
Witness: These figures are on experimental farms. They are on conditions under which we did a rather considerable amount of work. They do not represent conditions in southern Alberta where you have probably two or three
[Dr. E. S. Hopkins.]
operations on summer fallow; once over with the one-way disc and twice with a cultivator. They do not represent that, but it would include conditions like those at Brandon and Morden where we have sow-thistle, and also where we operate under conditions with weeds and where it would be necessary to work the land a good many times. You will observe that we have a fair yield, $27 \cdot 4$ bushels per acre. This is better than we have done since 1930 .

## By Mr. Mitchell:

Q. But, at 50 cents a bushel you have been losing money if it is costing you that much to produce wheat?-A. It cost us 64 cents. We would have lost money for a subsequent period.

## By Mr. McLean:

Q. But you would have made money in those years from 1923 to 1930.A. We made money in those years.
Q. Certainly.-A. I am speaking from memory, I think the price of wheat averaged $\$ 1.05$, or $\$ 1.03$ during that period, so that really in spite of these high costs we actually made a considerable profit. I am not pointing that out as the best way of doing it. I am pointing this out as the way it was done, and so far as getting yields is concerned I think that is about as good as we do now.

## By Mr. Golding:

Q. Can you give the committee an idea as to what your average wage is; what you pay for labour on your experimental farms?-A. We reckon that at 25 cents an hour; that includes board, of course, and lodging as well as pay. We figure horse labour at 8 cents an hour. We lower that for these other figures in 1935.

I would not like to stand behind this next column for 1935 costs quite as well as I stand behind this one for the period from 1923-1930. In our hurry to get some material ready for this committee, and knowing that you would be certain to ask about 1935, we did the best we could to include these figures. The object is to bring to your attention the relation to the total cost of production which is attributable to farm machinery. In one case this is 22 per cent for 1935 ; while it is $15 \cdot 8$ per cent for the period from 1922 to 1930 .

## By Mr. Mitchell:

Q. What rate do you base your use of land figure on?-A. Use of land; I think we figured it at a little over $\$ 40$ or $\$ 42$ per acre at 7 per cent. That amount at $\$ 40$ an acre at 7 per cent is $\$ 2.80$, and if you added 40 cents an acre for taxes it would be $\$ 3.20$. We have used $\$ 3.25$, just a little over that.

## By Mr. Thorson:

Q. What was your basis for 1935 ?-A. I think it was somewhere around $\$ 25$ per acre. We dropped it down appreciably.

Mr. McLean: For the purpose of our record I do not think you have made the 1935 operations sufficiently clear.

Witness: I might say that I have material to leave for the record, rather than reading it, which makes rather tedious material to listen to.

Mr. McLean: I do not want you to read it. You dealt at length with the section relating to the period from 1923 to 1930 . To some of the members of the committee who could not see your chart from where they are sitting your 1935 figures might appear a little high, and I thought you might make it a little more clear for the record, particularly because 1935 represents present conditions.

## By Mr. Douglas:

Q. Will this table appear in the record?-A. Yes, I presume it will be in the record.

## By Hon. Mr. Gardiner:

Q. Before you leave that, I notice that every other cost there except the cost of machinery goes down while machinery costs for 1935 is kept the same. Can that be established?-A. Well, I would not say definitely that it could; but considering the point that there would not be a great deal of machinery purchased from 1930 to 1935, the farmers who would have machinery would have it at practically the same cost.
Q. You mean, the price is approximately the same?-A. The price is approximately the same. The people would have already bought their machinery.
Q. And, the depreciation would be the same?-A. Depreciation and housing would be the same.
Q. Then, the cost of your implements would be the same?-A. Yes.
Q. Can you establish the fact that every other factor is down?-A. Yes, every other cost. Land is down, although when we say land is down, it is down for some but not for others.
Q. Our capital cost is not down as a government?-A. No, that is true. One has to make these qualifications.
Q. The purchase price of implements is not down?-A. No.

## By Mr. Thorson:

Q. That chart will be on the record?-A. If you wish it, yes.

The Chatrman: Yes, it will be.
Witness: This chart gives the cost of producing wheat after wheat.
COST OF PRODUCING WHEAT (AFTER WHEAT) ON EIGHT DOMINION EXPERIMENTAL FARMS IN PRAIRIE PROVINCES

| Item | 1923-1930 | $\begin{gathered} \text { Estimated } \\ 1935 \end{gathered}$ |
| :---: | :---: | :---: |
| Use of land Seed <br> Machinery Twine. <br> Manual labour Horse labour One-third of S.F Threshing. | $\begin{array}{r} \$ 3.35 \\ 1.58 \\ 1.35 \\ .32 \\ 1.51 \\ 1.63 \\ 2.84 \\ 2.37 \end{array}$ | $\begin{array}{r} \$ 2.10 \\ .78 \\ 1.35 \\ .24 \\ 1.20 \\ 1.22 \\ 2.18 \\ 1.58 \end{array}$ |
| Total cost per acre Yield per acre, bushels Cost per bushel........ | $\$ 14 \cdot 95$ $19.8 \text { bush. }$ | $\begin{aligned} & \$ 10 \cdot 65 \\ & \$^{19 \cdot 8} .54 \\ & \text { bush. } \end{aligned}$ |
| Total machinery charge. Per cent of total cost... | $\begin{gathered} \$ 2.30 \\ 15.4 \% \end{gathered}$ | $\begin{aligned} & \$ 2.30 \\ & 21.6 \% \end{aligned}$ |

That is the next most important crop in the prairie; although in some sections the practice is changed to summer-fallow and wheat quite extensively. Summerfallow, wheat and grain is this rotation. Taking the same figures we get down to final costs-approximately the same, 15 per cent, which represents the cost of machinery to the total cost of production. That is the figure I wanted to bring to your attention- 15 per cent for 1923 to 1930 and 21 per cent for 1935.

## By Mr. Thorson:

Q. You say it was 21 per cent in 1935?-A. Yes, in 1935. The cost of production per acre is substantially less for wheat after wheat than for wheat [Dr. E. S. Hopkins.]
after fallow, but the yield is substantially less, so that the cost of production per bushel increases. There is a big dispute in many parts of the prairie country as to whether you should grow summer fallow and wheat, or summer fallow, wheat and wheat. Our conclusion is that in drought years, the rotation of summer fallow-wheat is much better than summer fallow-wheat-wheat; as a whole we find that summer fallow-wheat is much better than a three-year rotation.

By Mr. Mitchell:
Q. Are these all dry land experiments?-A. Yes, on our farms and stations in the three prairie provinces.

> By Mr. McLean:
Q. Did the crop average the same last year that it did during the 7-year 'period from 1923 to 1930 ?-A. That yield for 1935 is just inserted to get the cost for a comparison.

Now, in addition to taking costs on the experimental farms we also had costs at illustration stations, and on certain private farms; and we thought at the risk even of some criticism we might make some calculations of our own as to what costs might be on the different sizes of farm. For example, we wanted to know what the cost would be, say, on a quarter-section farm, on a half-section farm, on a one-section farm operated with different equipment, and also on a two-section farm operated with different equipment. In a bulletin which we prepared we outlined just what this would be.

## By Mr. Thorson:

Q. To what bulletin do you refer?-A. To a bulletin on the cost of producing farm crops in the prairie provinces. I will subsequently give you similar material for eastern Canada.
Q. What year was that published in?-A. 1932.

## By Mr. Mitchell:

Q. I would like to ask you whether your calculations are based on experimental farm plots, or on what basis?-A. They are on a field basis.

EFFECT OF SIZE OF FARM AND EQUIPMENT ON THE COST OF PRODUCING WHEAT, 1929

| Size of Farm | Equipment | Total Cost per Acre | Total Cost per Bushal | Per Cent of Total Cost |
| :---: | :---: | :---: | :---: | :---: |
| $\frac{1}{4} \mathrm{sec}$. | 1 M .5 H. | \$18.32 | \$1.02 | 16.6 |
| $\frac{1}{2} \mathrm{sec}$. | 1 M .7 H. | 14.30 | . 79 | 15.5 |
| 1 sec . | 2 M .14 H . | 13.93 | . 77 | 13.2 |
| 1 sec . | 1 M .1 T . combine. | 11.46 | . 64 | 18.4 |
| 2 sec. | 4 M .28 H. combine | 11.56 | . 64 | 14.4 |
| 2 sec. | 1 M. 1 T. combine.. | 9.97 | . 55 | 13.0 |

Average yield $=18$ bushels.
EFFECT OF SIZE OF FARM AND EQUIPMENT ON COST OF PRODUCING
WHEAT, 1935

| Size of Farm | Equipment | Total Cost per Acre | Total Cost Per bushel | Per Cent of Total Cost |
| :---: | :---: | :---: | :---: | :---: |
| $\frac{1}{4}$ sec | 1 M .5 H. | \$14.87 | \$ . 83 |  |
| $\frac{1}{4}$ see. | 1 M .7 H | 11.54 | . .84 | 19.2 |
| 1 sec. | $2 \mathrm{M} .14 \mathrm{H} . . . .$. | 11.17 | . 62 | 16.5 |
| 1 see. | ${ }_{4}^{1} \mathrm{M} .1$ T. combine.. | 9.66 9.60 | . 54 | 21.8 |
| 2 sec . | 1 M .1 T . combine. | 9.60 8.32 | . 54 | 17.3 15.5 |

[^2]Now, the main feature of this is to show that with different equipment on different sizes of farms there is a very marked difference in the cost of production. The total cost per acre was $\$ 18.32$ with a quarter-section farm operated with one man and five horses-that is about the normal outfit for a quartersection. The yield we reckoned at 18 bushels per acre. The total cost of production was $\$ 1.02$ per bushel. The proportion of the cost of machinery and equipment to the total cost of production in this case was $16 \cdot 6$ per cent.
Q. That includes horses?-A. That includes horses. On a half-section with one man and seven horses the cost of production was $\$ 14.30$ per acre, and the total cost per bushel dropped to 79 cents. The proportion of the cost of machinery and horses to total cost was $15 \cdot 5$ per cent.

Now, I do not wish to take each size of farm, but with a two-section farm the effect of a change in equipment becomes apparent. That farm is operated by one man and one tractor, one man plus hired extra help for seeding and harvesting. The cost of production per acre is $9 \cdot 97$, and the cost per bushel going to 55 cents. I wish to draw your attention to these facts because what we are interested in at the experimental farms is to learn what is possible in the future in the most economical production of wheat.

I am very much convinced that size of farm and equipment have a great part to play in reducing the cost of production. Modern labour-saving machinery has a very important part to play in reducing the cost, provided of course that the size of the farm is sufficient to warrant its use. We have outlined in our bulletins the details on what equipment is necessary. I am convinced from that that it is just about impossible for a person on a quarter-section farm or a halfsection farm to produce wheat as cheaply as a man with a one-section or a twosection farm. It is true a farmer on a smaller farm can go into other lines, but in so far as the production of wheat itself is concerned it just simply can't be produced cheaply; that is, if he is going to have the same return for his labour.

Hon. Mr. Gardiner: That is, if he is a purely grain farmer?
Witness: Yes.
Mr. Thorson: Might I suggest, Mr. Chairman, that this bulletin might be filed as an exhibit for reference.
,Mr. Leader: Actual experience of western Canada I think will prove that your chart is wrong; because, you go out west and you find that the smaller farmers are the ones who are solvent, if there are any, and the large farmers are the ones who have gone into liquidation or are carrying on under difficulties. That is the experience in western Canada, and I believe that the trend towards larger farms should be discouraged and that the time has come when we should encourage smaller holdings with more people on the land, rather than to advocate or encourage the plan which your chart implies. I think your chart is wrong in regard to the actual experience in western Canada.

Mr. Thorson: But you are speaking now of wheat farmers and not of those who carry on mixed farming.

Mr. Donnelly: My own experience concerning this relates principally to the southern part of Saskatchewan, and it is that a man can make a living on a section and get by while the man on a quarter or half section cannot do it.

Mr. Thorson: I think there should be a distinction made between wheat farming and mixed farming.

Mr. McLean: I think Mr. Leader and Mr. Hopkins are speaking about two different things.

Mr. Leader: The salvation of the wheat farmer is mixed farming.
Witness: Might I just read a point or so from my manuscript in order that we may get this thing clearly in our minds. In the Prairie Provinces, Manitoba, Saskatchewan and Alberta, grain and particularly wheat is the most
[Dr. E. S. Hopkins.]
important crop. Grain and summer fallow, adding to that new breaking, constitute approximately 95 per cent of the acreage under cultivation. Wheat, summer fallow and new breakage constitute approximately 68 per cent of the entire acreage under cultivation.

Therefore, I say, that when we consider the cost of producing wheat we are entitled to figure it out the most economical way possible. If anyone wishes to operate on a quarter section farm by all means let him do so, there is nothing to prevent him doing so ; he might add any other line he wishes to do; but so far as getting economy is concerned, and getting a low cost of production, it just simply can't be done. I do not wish to make it too dogmatic; but the reason why the man on the quarter section farm for instance has stuck better than the man on the two section farm is due I think in large measure to the fact that the man on the small farm receives proportionately greater assistance in a time of stress than a man on a large farm. The man on a large farm usually encounters considerable difficulty in his efforts to hold on. I think there are sufficient instances in some of the dried out parts of Saskatchewan and Alberta to show that there are numerous cases where those one section, two section and even larger farm operators have accomplished considerable economy in production.

Mr. Golding: I have here bulletin 74, issued by the Department of Agriculture of the University of Saskatchewan, based on actual experience, and it appears to bear out the statement in every particular.

## By Mr. Senn:

Q. As an easterner I would like to ask you a question just there: I suppose there would be some variation in the cost of cultivating and harvesting an acre of grain, as between wheat and coarse grains?-A. Not a great deal.
Q. Because, the cost being what you show, how is it economically possible to produce coarse grains in the west at all?-A. Well, there is a larger yield. Sixty-eight per cent of the acreage is wheat. The great bulk of the farmers stick to it. They use coarse grains as feed for their stock.

## By $M r$. Tomlinson:

Q. Would not the original cost of the land affect these different farms in the west?-A. Yes, it would. We have many times wondered what cost to put on land, and when times are good like from 1923 to 1930 we thought the figure $\$ 40$ was not enough; because, if you can produce wheat for say 60 cents a bushel and sell it for a dollar automatically the land increases in value. But when you get below your cost of production, as in 1932, its value diminishes.

Mr. Perley: I think Mr. Leader's statement is practically correct. From actual experience I think I could give statements that would verify it. I have six or seven tenants. I have one on a quarter section; two on half sections, and the rest on large farms; and in years when there is a total crop failure as there has been in the last five the big fellow gets such a crack that he gets set back, whereas the fellow on the quarter or half section has other things such as coarse grains and hogs. He has had no expense for labour and he keeps going. When the big fellow gets a 30 or 40 bushel crop and everything favourable he makes more money and better money than the small man for that period.

Mr. Leader: If I might be allowed a word or so: I am willing to admit that under certain conditions these figures would apply, but they do not apply under conditions as they exist to-day. A man comes along with $\$ 20,000$ to $\$ 30,000$ to invest in land and he sees figures like these and what it costs a man on a quarter section to grow wheat as compared with what it costs a man on a one section or two section farm, that it is only going to cost him $\$ 9.22$ an acre, and you know
what he is going to do. I want to say definitely from my experience, and I am not going to be led away from my position, that they cannot do that under existing conditions. And I think one of the reasons why they cannot do it is because they have got to buy too much high priced machinery. That is my point.

Witness: I think you are right in this part of it; in times of stress the large operator is hit hard. There is no question about that, and his only safeguard is to store his finances so that when one of these periods of hard times comes along he is able to weather it. I suppose we could argue here all day on this.

## Mr. McNevin: Let us get on with the evidence.

Witness: That is the situation as it applies in western Canada. I have somewhat similar information with respect to farms of other sizes and 1935 conditions. But we will pass over that and I now turn to eastern Canada because no doubt there are some members here from eastern Canada and they are naturally more interested in the five eastern provinces than they are in the prairie provinces.

Now, the cost of production in eastern Canada is a considerably different matter from that in the prairie provinces, and unlike the west where wheat and grain are the chief crops, oats and hay are the most important crops to consider. I have some figures here which show the cost of producing oats, and of producing timothy hay on our farms in eastern Canada.

## By Mr. Thorson:

Q. Which chart are you now referring to?-A. This one, which shows costs of producing oats in eastern Canada.

## COST OF PRODUCING OATS ON SIX DOMINION EXPERIMENTAL FARMS IN EASTERN CANADA

| Item | 1923-30 | Estimated 1935 |
| :---: | :---: | :---: |
| Use of land. | \$ 4.86 | \$ 3.30 |
| Share of manure (applic.) | 2.15 | 2.15 |
| Seed. | 2,47 | 1.85 |
| Machinery | 2.85 | 2.85 |
| Twine | . 47 | . 35 |
| Manual labour | 4.93 | 2.68 |
| Horse labour. | 3.54 | 1.72 |
| Threshing. | 2.09 | 2.09 |
| Total cost per acre | \$23.36 | \$16.99 |
| Yield per bushel... | 52.0 bush. | 52.0 bush. |
| Cost per bushel. | \$ . 45 | \$ . 33 |
| Total machinery charge. | \$ 3.89 | \$3.89 |
| Percent of total cost..... | 16.6\% | 22.9\% |

In the same way, it shows the period from 1923 to 1930, and chen for 1935. If we take first the 1923 to 1930 period with regard to costs. Use of land; we have reckoned that here at $\$ 4.86$; because the cost is much more here than it was in the west. The percentage of tillable acreage in the east is less and the cost per acre naturally is increased. The taxes are higher, so that the total cost for land is more. Manure-there is the cost of the application of manure is considered here. In the western provinces manure is very rarely used; it is useful material but not very often applied. This figure in the chart shows the cost of application.
[Dr. E. S. Hopkins.]

## By Mr. Leader:

Q. The cost for manure is $\$ 2.15$ in 1923 and 1930 and also the same in 1935. Is it on account of their using the same machinery?-A. For the application of the manure. That application was put in just the same. The total cost of producing oats was $\$ 23.36$ per acre, the yield was 52 bushels; the cost per bushel 45 cents; the total charge for machinery $\$ 3.89$ and the ratio of this to the total cost $16 \cdot 6$ per cent. That is to say the per cent the machinery cost is to the total cost of production is $16 \cdot 6$ per cent.

## Bu Mr. McLean:

Q. How does the estimate for yield compare with the real yield?-A. Our yield of 52 is a little higher than what the average production is.
Q. That is the actual yield?-A. Yes, on eight farms, Charlottetown, P.E.I. Nappan and Kentville, Nova Scotia, Ste. Anne de la Pocatiere, Lennoxville and Ottawa. That is it covers from the east to Ontario. The per cent of the total cost of production represented by machinery for 1935 was $22 \cdot 9$.
Q. Is the cost of threshing included? What part of the threshing comes out of the $2 \cdot 09$ ?-A. $2 \cdot 09$ is the cost of the machinery.
Q. Cost of the machinery?-A. The total cost of the threshing.
Q. Machinery plus labour?-A. Yes.

## By Mr. Tomlinson:

Q. If the farmer owned the threshing machine?-A. It is more the prevailing rates, sir.

## By Mr. Mitchell:

Q. Do you base that threshing cost on the depreciation and interest on investment and so on?-A. Yes, depreciation, interest on investment and repairs and upkeep.
Q. And labour?-A. And labour. We will now come to timothy hay.

COST OF PRODUCING TIMOTHY HAY ON 6 DOMINION EXPERIMENTAL FARMS IN EASTERN CANADA

| Item |  |  |
| :--- | :--- | :--- | :--- | :--- |

I shall not go into it in detail. It is about the same as for oats. One might say why is timothy hay up so much? One would think it would be considerably less. Undoubtedly if timothy were down for any considerable number of years it would be less; but if timothy enters into an ordinary rotation like corn, oats, clover and timothy all the charges for machinery enter into it just the same as for oats; therefore it is approximately the same cost. Now, a gentleman asked me about what the annual operating cost of farm machinery would be, and I have a chart here to give some idea.

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By Mr. Thorson:
Q. Before you proceed with that, have you a bulletin in relation to costs in eastern Canada?-A. Yes.
Q. It is suggested that it should also be filed?-A. Bulletin No, 168 gives the cost of producing farm crops in eastern Canada.

## By Mr. Graham:

Q. Have you the bulletin there?-A. Yes.
Q. If you file it, file a chart for the east and west.

ANNUAL OPERATING COST OF FARM MACHINERY

| Item | Prairie Provinces | Eastern Canada |
| :---: | :---: | :---: |
| No. of farms........... Average inventory value... No. of acres cultivated.... No. of machinery per acre. | 678 $\$ 830.19$ 204 acres <br> $\$ 4.10$ | $\begin{aligned} & 1,300 \\ & \$ 871.04 \\ & 76 \text { acres } \\ & \$ 11.46 \end{aligned}$ |
| Annual Cost |  |  |
| Depreciation <br> Interest...... <br> Repairs. <br> Housing. | $\begin{array}{r} \$ 112.91 \\ 66.42 \\ 80.17 \\ 17.02 \end{array}$ | $\begin{array}{r} \$ 87.10 \\ 52.26 \\ 55.72 \\ 21.62 \end{array}$ |
| Total annual cost. Cost per acre cultivated | $\begin{array}{r} \$ 276.52 \\ \quad 1.35 \end{array}$ | $\begin{array}{r} \$ 216.70 \\ 2.85 \end{array}$ |

A. In order to get some idea of the cost of machinery especially on the average farm, taking first the prairie provinces and then eastern Canada, we made a study of 678 farms in the prairie provinces and found that the average inventory value was $\$ 830.19$. The number of acres cultivated was 204 . That is somewhere between a quarter and a half section farm. The value of the machinery per acre was $\$ 4.10$, and figuring the annual cost of depreciation at $\$ 112.91$, interest $\$ 66$-that is rather high, but at that time it was not out of line very much-repairs $\$ 80$, housing $\$ 17$, we find the annual total cost is $\$ 276$, and the cost per acre $\$ 1.35$. It does not include tractors or trucks or threshing. That was on a quarter to a half section farm, where the farmer might hire someone to do the threshing and may not have a tractor or truck.

## By Mr. Thorson:

Q. What year is this?-A. 1925, sir.

## By Mr. Cleaver:

Q. Why is there such a difference in the operating of machinery per acre on the prarie provinces as compared with eastern Canada?-A. The reason is found in these figures here, 76 acres under cultivation per farm in the east and 204 acres on the prairies.
Q. If you add to your western cost your tractors and threshing machines which a man would normally have on the large section farm, what does that do? -A. That raises it up.

## By Hon. Mr. Gardiner:

Q. Does that include milking machines?-A. No, not milking machines, only machinery required in the tillable operation of the land. We kept livestock out, Mr. Gardiner, and kept tractors and trucks out; just what a man might
[Dr. E. S. Hopkins.]
need as a minimum to operate. That inventory of $\$ 830$, I might say is roughly about one half of the initial cost new. If that were bought new it would be approximately double, on an approximate calculation.

Mr. McNiven: I think those figures are approximately correct. I think my machinery cost me $\$ 851$. I think 76 acres are about right, and in my experience those figures are approximately correct.

## By Mr. Johnston:

Q. The depreciation costs are considerably higher in the prairie provinces. Is that on account of housing conditions?-A. Shorter life for the machines. They do not last so long. There will be a witness here next week who will have some information on the life of the machinery.

## By Mr. Thorson:

Q. Did I understand you to say you are not including dairy farms?A. No. We are working on crops and trying to keep the livestock aspect separate. I must say it is a rather difficult thing to do, because we can hardly keep them separate.
Q. I do not see how you can.-A. We have kept it to the crops.

## By Mr. Mitchell:

Q. How do you estimate the housing cost?-A. We took a valuation of the buildings in which the machinery is stored, depreciation, interest, upkeep and so on. There is a great dispute, especially in the prairie provinces, as to whether a man should have storage for his machines or not.

## By Mr. McLean:

Q. Do you not think you are too high in your total costs when you take depreciation at 14 per cent, interest 8 per cent, repairs 10 per cent, housing 2 per cent, and total them up as the annual cost?-A. Well, they represent what we thought to be the fair amount. Remember this is the inventory value, not the initial cost. If it were the initial cost it would be half that again.
Q. That amount seems a pretty heavy annual cost?-A. Well it is what we have found from our study of the matter. It covers the aspect of our cost of production on experimental farms and on these special farms.

The next subject which was allotted to me to discuss was the trend in farm mechanization. I think it would not be out of place first to call attention to what our costs were at the experimental farm and on other farms that we investigated and then to figure what the per cent of the total cost would be for farm machinery. I have done that for both the east and the west: Now we should like to study for the moment the question of the trend of farm mechanization. I have here a few charts and I think it would not be out of place to call your attention to them. They may have been gone over already, but I shall try to draw your attention to certain points that have a bearing on this trend of mechanization and not unduly take up your time.

| Province | No. of Farms | Cultivated Acres per Farm | Total Value (Millions) | Value of Machinery (Millions) |
| :---: | :---: | :---: | :---: | :---: |
| Prince Edward Island | 12,865 | 39 | 58 | 8 |
| Nova Scotia.. | 39,444 | 14 | 106 | 11 |
| New Brunswick | 34,025 | 28 | 104 | 13 |
| Quebec. | 135, 957 | 42 | 877 | 97 |
| Ontario. | 192,174 | 50 | 1,398 | 151 |
| Manitoba. | 54,199 | 143 | 388 | 55 |
| Saskatchewan | 136,472 | 217 | 1,273 | 186 |
| Alberta.......... | 97,408 26,079 | 185 19 | 869 175 | 116 13 |
| Canada | 728,664 |  | 5,248 | 651 |



This chart gives you an idea of the number of farms and the cultivated acreage per farm. A gentleman asked me about the east. You will observe some of these provinces have a very small cultivated acreage per farm. For example Nova Scotia has only 14, Prince Edward Island 39, Ontario 50, and Saskatchewan, which has the most, 217 cultivated acreage per farm. The total value in dollars of the value of the farm property in Canada, is $\$ 5,248,000,000$. The investment in farm machinery in the country as estimated, by the 1931 census, is $\$ 651,000,000$. That would be the inventory value; the purchase price would be roughly double that. There is quite a substantial amount therefore, invested in the farms of this country and such provinces as Saskatchewan, Alberta, Ontario and Quebec take the major portion of it.

## By Mr. Thorson:

Q. These figures are taken from the 1931 census?-A. From the 1931 census. They relate to the points we wish to bring out.

Mr. Cleaver: Is the chart going into the evidence?

## By Mr. Mitchell.

Q. The total value in your third column does not include machinery. That is purely land value?-A. That includes everything.
Q. Live stock and buildings?-A. Land, live stock, buildings and machinery.

## By Mr. Thorson:

Q. Does it include all totals as well as the land?-A. Yes. Now, this is rather interesting. Sometimes you can get the wrong figures and unless you study them a little you will not see a great deal in them, but on study they do show considerable. It is rather interesting to observe that in Ontario and the provinces in the east the value of buildings looms up very high, while the value of machinery is relatively much less to the total, and the per cent of the total amount or the total value of property represented by farm machinery varies from $7 \cdot 4$ in British Columbia to 10 in Nova Scotia, to $16 \cdot 2$ in Manitoba. You will notice when travelling through the country that the houses on the prairie do not represent such a large investment as they do in Eastern Canada, while machinery represents relatively more. It is a very good thing from the point of view of making money, because buildings do not make much money, while the land, if things are going right and the crops are good, and good prices, does affect the revenue.
[Dr. E. S. Hopkins.]

## By Mr. Furniss:

Q. Taking the value of land to-day would not the percentage on machinery be much greater than it is in that chart?-A. Yes; the value of the land has shrunk but as we mentioned before, it is difficult to know what to do about the valuation of land. If the price of farm crops should rise, land value would become immediately higher. You will observe the figures at the bottom and particularly the per cent for the whole of Canada: Land 51 per cent, buildings 25 , machinery 12 , live stock 10 . I do not draw this to your attention in order to show that the investment represented by machinery is greater than that of live stock, but you will observe that machinery is at the inventory value, and is only about one-half of the total initial cost price.

## By Mr. Graham:

Q. I think it would only take a minute and it would be interesting if you would give the number of farms in the different provinces. I notice you have them on page 2, and it will show the trend in recent years. Just give the comparative figures in each province.-A. It is a very interesting point. In that connection I have divided the provinces of Canada from Ontario, Quebec, Nova Scotia, New Brunswick and Prince Edward Island and then the west. First of all let us take the five eastern provinces. You find a condition in which the number of farms is really less now than it was in 1881. If we take the province of Ontario as an example, we find that in 1881 there were 206,989 farms, while in 1931 there were 192,174 ; in other words, there was a very substantial reduction in the number of farms between those two dates. There is some reduction in Quebec, not so much, 137,863 in 1881, 135,957 in 1931. In New Brunswick there were 37,837 in 1881, and 34,025 in 1931. In Nova Scotia, there were 55,872 in 1881, and 39,000 odd in 1900. There is a substantial reduction from 55,873 to 39,444 in 1931. In Prince Edward Island there were 13,629 in 1881 and 12,875 in 1931. When you come to the prairie provinces, of course the situation changes. You have nothing in 1881, but there is very rapid rise especially up to 1921, and after 1921 the increase is less marked.

## By Mr. Mitchell:

Q. How do you explain the decrease in the east?-A. Well, I don't know definitely.

Mr. Thorson: Emigration to the west.
Witness: In the first place, there is not as much money, I do not think, to be made on the farms in the east, and in the second place, there is a number of farmers who went to work in the cities of Toronto, Montreal, Windsor and other cities. Farm boys could get work in those cities, and the prairie has taken quite a large number of people; they have gradually drifted to the prairie. If we overlook those terrible disastrous years we have had recently, I think the western farmers have done very well on the farm.

## By Mr. Mitchell:

Q. I wanted to know if there was an indication that farms were increasing in size in Eastern Canada, and thus reducing the number?-A. Yes, there is a slight increase in size. The cultivable acreage in Ontario has risen from 40.4 in 1881 to $50 \cdot 1$ in 1931.
Q. That accounts for part of it?-A. Yes.

Hon. Mr. Gardiner: The population of the agricultural counties in Ontario is lower to-day than it was in 1870. Take the Hurons and the Bruces; all these counties are lower. The population has moved to the cities of the west and the farms.

Witness: Farms have slightly increased.

## By Mr. McLean:

Q. Before you leave that I should like to point out you have the inventory value for machinery and equipment according to the 1931 census as at $\$ 651,000,000$, which you say is not the purchase value. The purchase value would probably be twice as much, but I have here the Bureau of Statistics figures which state that the apparent consumption of farm machinery from 1920 to 1936 inclusive was $\$ 880,000,000$ or nearly $\$ 32,000,000$ a year. That, of course, includes the machinery as priced for selling value at the works. I think it is rather interesting if in 15 years the consumption is only $\$ 480,000,000$, and if it could be taken for granted that the life of the machinery was not more than 15 years, and the value of the machinery at farm purchase prices was $\$ 1,300,000,000$, twice as much as you have there, it would indicate either a tremendous spread between selling value at the works and the price the farmer paid or one or the other set is away out.-A. Well, I have not just carried this figure in my head, but if you take the number of farms and multiplied them by the approximate investment that each farm would have, it would bring some kind of figure that would be reasonably close to that shown. In the figures I gave you, they represent certain farms of reasonable size.
Q. These are all farms of the Dominion?

## By Mr. Thorson:

Q. That figure of $\$ 651,000,000$ represents the value which the farmer himself placed on the machinery when he made the census return?-A. Yes.

Mr. Mitchell: It is likely to be high.

## By Mr. McLean:

Q. Dr. Hopkins took the original buying price of the machinery twice as much as that. That was the inventory value, so the initial value must be $\$ 1,300,000,000$; yet the bureau says the sale value was only $\$ 480,000,000$ at the works.-A. I have no means of knowing definitely, but those are from studies which were made by us on a hundred acre farm here in the east, and from certain sections in the west in which we got their investment. They reckoned their inventory at some $\$ 800$ odd, you will remember. Then we took what we thought to be the amount of machinery that was required on a hundred acre farm in the east and multiplied that by the new price in each case and approximately doubled that amount; that is how I got that figure.
Q. I should like to ask one other question to make it clear. What would you say would be the life, on the average, of all that machinery that is represented in the last column? Would it exceed 15 years on the average?-A. In eastern Canada it would exceed 15 years; in western Canada it would be slightly less, maybe, not counting the last few years.
Q. If it averaged 15 years across the Dominion you have a tremendous difference between the selling price of $\$ 480,000,000$ at the factory and the figure you show there.

Mr. Cleaver: We shall come to that later.
Mr. Mclean: This is the place to point it out when we are dealing with the cost of machinery.

Witness: I have no special information on that.

## By Mr. McLean:

Q. The figures I am using are taken from table No. 2 of the Farm Implements and Machinery bulletin No. 34 at page 2. Leaving out the odd hundred dollars, the average per annum is $\$ 480,000,000$ ?-A. The trend of mechanization is what I shall deal with next.
[Dr. E. S. Hopkins.]

TREND IN MECHANIZATION IN CANADA

| Census | Total value of farm machinery in millions ${ }^{(1)}$ | Value of machinery per farm dollars ( ${ }^{2}$ ) | Value of machinery per acre in dollars ( ${ }^{(3)}$ | Acres of improved land per worker ( ${ }^{4}$ ) |
| :---: | :---: | :---: | :---: | :---: |
| 1881. |  |  |  | 33 |
| 1891. |  |  |  | 39 |
| 1901. | 109 | 213 | 3.60 | 42 |
| 1911. | 257 | 377 | $5 \cdot 27$ | 52 |
| 1921. | 655 | 935 | 9.40 | 67 |
| 1931. |  |  |  |  |

(1) (2) and (3) from Mr, O. A. Lemieux; (4) from Dr. J. F. Booth.

Here are some figures which are taken from two sources, one from Mr . Lemieux and the other from Dr. Booth who spoke here yesterday and this morning. I shall not talk on these at any length, because Dr. Booth may have already discussed it. It gives the total value of farm machinery in millions, 109 up to 600 millions, 1931 a little more. The value of machinery per farm in dollars is $\$ 213$ up to $\$ 893$; the value of the machinery per acre in dollars $\$ 3.60$ to $\$ 7.59$, acres of improved land.

## By Mr. Graham:

Q. I asked for 1931, Dr. Hopkins. 1921 was a very high priced year for farm implements?-A. Yes, the price of machinery was higher in 1921.
Q. It was a war year?-A. Subsequent to the war year.
Q. That is probably one of the explanations?-

CROP ACRES HANDLED PER MAN AND MACHINERY INVESTMENT PER CROP ACRE

| Province | Size of farm (acres) | Acres in field crop | Crop acres per man | Investment in machinery per crop acre |
| :---: | :---: | :---: | :---: | :---: |
| Prince Edward Island. |  |  | 29 | \$12.11 |
| Nova Scotia........... | 109 | 19 | 14 | 13.79 |
| New Brunswick | 122 | 27 | 18 | 14.81 |
| Quebec......... | 131 | 54 | 31 | 15.26 |
| Ontario. | 114 | 52 | 33 | 16.98 |
| Manitoba. | 279 | 125 | 73 | 9.98 |
| Saskatchewan. | 408 | 167 | 113 | 7.73 |
| Alberta. | 400 | 129 | 89 | 7.87 |
| British Columbia | 129 | 18 | 12 | 19.87 |

By Prof. L. G.Heimpel from 1931 census.
A. Yes. Then I have another table taken from the work of Professor Heimpel in order to show crop acres handled per man and machinery and investment per crop acre. This chart will show you the acres in field crops. You will see a great difference here. On large farms a farmer has less invested in machinery per crop acre. That shows the utilization of the land and the condition of labour.

We now come to the number and value of horses and mules in Canada and the United States.
(000 omitted)

| Year | Number |  | Value |  |
| :---: | :---: | :---: | :---: | :---: |
|  | U.S. | Canada | U.S. | Canada |
|  |  |  | \$ | \$ |
| $1910-11$ 1920. | 24,043 25,323 | 2,598 | 2,728,481 | 381,916 |
| 1922. |  | 3,648 |  | 264,043 |
| $1930 .$. | $\begin{aligned} & 19,050 \\ & 16,873 \end{aligned}$ | 3,295 2,933 | $\begin{aligned} & 1,405,444 \\ & 1,195,355 \end{aligned}$ | $\begin{aligned} & 202,013 \\ & 168,132 \end{aligned}$ |

Number of Farms in 1930-31
U.S..............................................................................288, 648 farms

Inasmuch as we are dealing with mechanization it is interesting to study just what has happened to the horses and mules, how they have decreased in number. My manuscript contains a large group of years, but I have selected on the chart these representative ones. I have the number of horses and mules for 1910, 1920 and 1930 in the United States, and 1911, 1921 and 1931 in Canada. United States censuses are taken in 1910, 1920 and 1030 while Canada's censuses were taken in 1911, 1921, and 1931. In 1910 in Canada there were $2,598,000$ horses. In 1922 there were $3,648,000$ horses in Canada. That was the high production year. In 1930 there were $3,295,000$ and in 1934 there were $2,933,000$. There was a gradual drop in the number of horses. In the United States and I think it is useful to quote these figures for the United States because we live just across the border and many of the influences which have a bearing there are reflected here-in 1910 there were $24,043,000$ horses; in 1920, which was their high year, instead of 1922 with us, there were $25,323,000$ horses; in 1930, 19,050,000 and in $193416,873,000$. If you look at this table in regard to the United States, particularly, you will see the enormous drop from 25 millions to 16 millions in 14 years.

## By Mr. Cleaver:

Q. How do you account for the drop in the United States being so much more marked than the drop in Canada? Will you say something about that?A. Mr. Armstrong will touch on that.

## By Hon. Mr. Gardiner:

Q. The number of our farms would be increasing more rapidly?-A. Yes, that is another point.

## By Mr. Mitchell:

Q. Mechanization has something to do with that?-A. Yes; there is a slightly larger number of tractors per ratio to farms in the United States and gives you the trend. Now, irrespective of what a person thinks and whatever his predelictions may be in certain lines, it is just as well to bear in mind what is taking place as a guide to the future. It does look as if there is quite a substantial drop in the horses and a corresponding increase in the tractors. My friend Mr. Armstrong will deal with that. The value is listed here in the chart, but I will not go into that because it is hardly necessary for me to do so. You will observe in the United States there has been a very substantial drop from $\$ 2,700,000,000$ to $\$ 1,195,000,000$. It is a tremendous drop, but a truer picture of the situation is really the number of animals rather than the value, because the value ranges from year to year.
[Dr. E. S. Hopkins.]

## By Mr. McLean:

Q. The Canadian figures dropped off more than half, and yet the figure has increased by one-sixth, 16 per cent as against 10 in 1934?-A. The lowest value was really in 1932. I did not put that in.
Q. Yes, that would be the lowest value.-A. That gives you some idea of trends in mechanization. Obviously, a discussion of the tractor and the combine would be a useful thing to include in trends of mechanization, but as Mr. Armstrong is covering that phase of the subject he will deal with it. The tractor and combine situation is quite an important one in this country, and a growing one, and it is left for a special chapter. We have made inquiries from our various superintendents on the different farms throughout Canada as to what trends have taken place in mechanization from Prince Edward Island to British Columbia. It is rather tedious to give you detailed information in regard to that, but in the prairie provinces as you know, there has been quite a trend since 1920 , or 1918 maybe, up to the present, towards an increase in the number of tractors.

A change was made in the type of implements used, connected with the tractors, with the introduction of combines in 1922 and in the method of cultivating the land. Now, as you know, the ploughing of the land was originally thought to be the best method that there was, and anybody who did not plough land was thought to be a renegade of some description, that he was lazy or not up to the mark in some particular. Now, there is quite a change, and we are doing work along that field to see what is the best method.

In 1911 Dr. Grisdale, then director of experimental farms, laid out a system of experiments on the various experimental farms in the prairie provinces in which he compared the different méthods of cultivation and the different methods of ploughing; ploughing at three inches, ploughing at six inches, ploughing the summer fallow twice and three times; burning the stubble and not burning the stubble, disking the stubble. You appreciate what is involved in that, and it was a very excellent piece of work. Some of it is being continued now. We found that the yields where we cultivated the land were as good as where we ploughed the land. However, some of the men on the spot who come from eastern Canada could not credit these things, and thought surely there must be some mistake. Now of course we know, the practice has developed; but then it was not known, and even some of the officers on the farm thought that surely there must be something wrong; but further work has confirmed and convinced, that the cultivating, or disking, or one-way disking is giving fully as good results as ploughing. And furthermore, in so far as soil drifting is concerned it is more effective in that it leaves the stubble on the surface. I mentioned this point to show this trend and change in implements, and naturally new types of machinery have to be developed for that.

In eastern Canada there has not been so much change, and with respect to our machines in the east it is claimed that the improved models last longer than those bought in earlier times. There is a limited increase in tractors, but the difference is not nearly so great as was the case on the prairies.

And now, I have two further topics. I think possibly I can handle them together. One is the nature of the work with respect to farm machinery investigations by the Dominion Experimental Farms, the other is the standardization of farm machinery.

This question of the standardization of farm machinery is by no means a simple problem. Some people regard it essentially as a means of getting parts from different concerns that would be interchangeable. That is, their main thought, is the use, convenience and cheapness of getting parts that would be interchangeable on different machines. The producer of machines, and I am not speaking for his interests, but I would think that a man who makes farm machinery would consider standardization from its effect on reducing the cost
of production for him, because in fewer lines naturally there would be a less cost. And the distributor is anxious to get fewer parts and smaller inventories to carry so that he would not have such a large investment in it.

I do not want to dwell on this other than to show the points of view relating to standardization as they exist. I just want to make some reference to another matter which might not be out of place. It is this: For example, in the British Empire and in the United States we use a system of weights and measures which is about as inconvenient to use as could well be imagined. Probably that is putting it a little strong; but at any rate inches, feet, rods, and miles; weights, in pounds, troy, and apothecaries' weight. If we were put to a test right here in this room to write down what we knew about troy weight and apothacaries' weight, and write out a conversion of weights and measures using our system in Canada and Great Britain into metric measure it would not be very easy going. But, if you were a Frenchman or a German and were asked anything in connection with that, the metric system is incalculably superior, but yet we haven't got that. And one of the reasons why we have not got it is because of the difficulty and the inconvenience and loss that might take place in the change. Another thing is the matter of the 13 month year. There is no question about it that the 13 month year is better than the 12 month. So that when we come to the farm machinery aspect of standardization I merely point out these are other instances where standardization would be desirable. I might also mention language throughout the world. If we had the one language think what a great advantage that would give.

Some Hon: Member: Or social credit.
Witness: Well, we won't enter into that. So far as standardization goes you will readily see that there are phases in which marked progress could be made if it were rightly applied. Now, so far as farm machinery is concerned I want to say in the first place that there has been among the companies themselves quite a little standardization undertaken. The Journal of Agricultural Engineering in its various issues has dealt with this question of the standardization of farm implements. In some cases these articles are by members of firms and sometimes they are by agricultural engineers associated with agricultural colleges or experiment stations in the United States, and considerable information is presented. I have in my hand here the issue for November, 1923, in which the Deere Company show how they have standardized their wrenches from 24 to 4. I have another issue here, that of December, 1923-these things come in waves and in certain issues you will find a great deal about standardization, while in other issues it may be something else. Considerable discussion about the subject was taking place at this particular time. In this issue, officials of the International Harvester Company refer to the decrease in the number of lines of different types that they had made. I will not read it all but some of them may be of interest. Disk harrows, from 286 types of disk harrows, and you would almost think this impossible, to 68 ; engines, from 130 to 4 ; ploughs, from 398 to 271 ; spreaders, from 442 to 2 ; gears, from 2,102 to 164 . That is what I am quoting from this paper.

Mr. Leader: Just along the line of standardization: While they may reduce the number of types is it not true that they change their models every few years. Now, I have not read so much about the standardization of machinery but I have had some practical experience, and when I required a repair for my binder and I went to one that I had just discarded for some reason to see if there was a part on that which would fit; it was not a different make, it was made by the same company, say the Massey-Harris Company, and owing to the change of model which took place maybe the year before that the repair part of the old binder while it might be good for many years of service would not fit the new model. Now, it seems to me that it would be all to the advantage of the man who uses
[Dr. E. S. Hopkins.]
machinery to have these parts interchangeable, but I can see where it would not be to the advantage of the machine man; they would not be able to sell so many repairs.

Mr. McLean: I wonder if that is correct? I do not mean the statement my hon. friend has just made; but I wonder if it would not be better for the repair business if there were standardization. I think motor companies show a different experience.

Mr. Mitchell: But they change models every year.
Mr . Leader: Following that up, Mr. Chairman, might I say that it has been stated in the House and I think it-will be defended here by the manufacturers, that they have so improved their machinery that as a consequence they have had to raise the price, and that they have improved it at the instigation or request of the farmer. I doubt very much if that is true. I think much of the change in farm machinery is not an improvement. They may say so, but as an actual user of farm machinery for the last 30 years my view is that they have changed the models of their machines, not at the request of the farmer but for the simple reason that the old model has repair parts which might be used on the later models if no change was made. A lot of the older models are doing just as good work as any of the new machinery.

Witness: I think there is a special topic coming on this question on the change in the quality of machinery.

Mr. Leader: We will hear something about it. I am sure of that.

## By Mr. Tomlinson:

Q. You mentioned that the machinery made today lasts longer than the old machinery. I was just wondering what you meant by that statement?-A. I meant that is eastern Canada, and I did mention the fact that new machines are lasting much longer than the older ones on the average. The reason for that, I think-and I do not wish completely to contradict the member who has just spoken-but I think the reason for that is to be found in improvement in design and in the quality of metals used.

Now, in the prairie country a little different situation has developed. A much larger number of tractors are operating on the prairies and I think perhaps when machine companies put out machines for tractor use they were not always quite as strong as they should have been. The tractors themselves have also undergone an enormous change, as Mr. Armstrong will mention when he comes on. The type of tractor has changed, so that if any person had standardized the type of the implement necessary for use in the tractor 15 years ago with the present day tractor he would have standardized the wrong thing. He has got to make it so flexible that changing conditions will make it possible for him to have the machine that he wants. Naturally, they have got to keep in mind what people want.

Now, I think one reason why there has been a certain amount of delay in the standardization of machines is that there has been, as I have pointed out to you, a trend in the changing from horse-power to more mechanical power, in the United States, a very substantial one; and, of course, a considerable amount of the farm machinery is made in the United States. Therefore, in standardization it would be not wise to get standardization before the equipment that was going to draw the implement was somewhat standardized as to power and speed.

There have been some instances of standardization taking place. Not very many, but some. The power take-off has been standardized so as to be utilized with different machines, but on the whole there has not been a great deal of standardization as between one company and another. There has been a great deal of standardization, I think, within the companies themselves. I feel confident of that.

Some think of standardization from the point of view of parts. I rather think that there is something in addition this thing, and that is the standardization of types of equipment. I am not saying that the question of the standardization of parts is not important, but the standardization of types of implements might be it seems to me a matter that could be investigated and studied. Take, for example, plows. There are over a dozen different types of walking plows used in eastern Canada. It is claimed that these types are made to suit different soil conditions and the personal preferences of ploughmen. If any of you gentlemen have ever been at ploughing matches you know pretty well what preferences and predilections people have for different ploughs. These types have different shares and mould boards, different curvature of beam, length of handles, holders, wheels, skimmers, shares and so on. There are also several different types of riding ploughs. In addition to these different types there are also many different widths. These widths vary from 7 inches to 14 inches.

In western Canada there is not such a wide variation of types; the 14 -inch gang is most commonly used; and recently the cultivator, the one-way disc, is quite extensively used to replace the plough. So there we have with the ploughs quite a large number of different styles and different widths. Are they all necessary? They are being manufactured, there is no question about that, and the making of so many different types means additional cost for the manufacturer, but do they make for any greater economy for the farmer?

Let me turn next to the seed drills. There are many types of seed drills. In eastern Canada the drill row spouts are spaced 7 inches apart while in western Canada the standard spacing is 6 inches apart. Now, why is it 6 inches on spouts in western Canada and 7 inches apart in eastern Canada? We were very greatly interested in that at one time and arranged an experiment in which we tried having the drill row spouts, or the rows of grain, at different distances apart. We used the eastern Canadian conditions, the 7 -inch spacing, which is normal here in one case, and we split it in half to $3 \frac{1}{2}$ inches, and then we doubled it making it 14 inches wide. We did that on a very small piece of land mixing the soil so that we would get it as uniform as we could, and then replicated it in plots. We found the 14 -inch spacing a little too wide, but it was surprising to find what crops you could get out of your 14-inch spacing just the same. But, so far as the results from the 7 -inch spacing, the $3 \frac{1}{2}$-inch spacing and the $10 \frac{1}{2}$-inch spacing was concerned there was simply no significant difference whatever. While the normal type of drill sold in eastern Canada has 7 -inch spacing, the normal spacing on the prairies is 6 inches; and in some places in the States I believe it is 8 inches. There is a considerable difference in that and so far as I know there have been no real experiments to suggest or prove whether it should be the one or the other.

## By Mr. Johnston:

Q. Could not the wider spacing be conducive to more weeds in the prairies? -A. Wider spacing means a little more chance for weeds to get in. I do not think there would be very much difference between the 7 -inch and the 6 -inch spacing.

By Mr. Golding:
Q. The more your ground is shaded the sooner your Russian thistle chokes out?-A. Russian thistle comes on mostly in the fall of the year. Under normal conditions, if you have a good year, you do not have Russian thistles.

Mr. Johnston: You would not have weeds on experimental farms.
Mr. Golding: The reason you do not have Russian thistle in good years is that the wheat chokes it out.

Witness: That is the reason.

[^3]Mr. Golding: In a dry year you get a greater advantage with respect to weed control through the closer drilling which tends to choke it out.

Witness: There is no question that where the spacing is wider weeds will come in. But my point is that there is very little difference between a spacing of 6 inches and a spacing of 7 inches. I would like to see some proof established before I would accept the fact that there is a real difference.

Mr. Leader: What you could do is to take a western drill spaced at 6 inches and bring it down here to Ontario, and you could take one of your Ontario drills spaced at 7 inches out to some place in the west and use them for a period of years. You could establish your point in that way. You say they are changing the models. That would provide a practical demonstration.

Witness: Yes. I am drawing your attention to these things for the reason that I believe that a study of the adaptation of different types of machines for the different types of work which they are supposed to do would warrant more study than is now being made. Then, there are many cultural implements; ploughs, harrows, dises, cultivators, one-way dises, combined one-way dise with seeder attachment, harvesting machinery and other machinery, that might be investigated as well. No one knows, in the different sections of Canada what types will give the best results from the point of view of yield, and naturally that is what you want-yield, together with convenience in operation, economy of operation and control of weeds; ability to operate in sandy land, loamy soil or clay soil; ability to control certain weeds. The experiemental farms are not, as an hon. member suggested, free from weeds by any means. We run into the question of all types of weeds in all parts of Canada. One section is interested in Russian thistle, another in sow-thistle, still others in stink weed. In each case they would not be interested in any other weed; so that we need to have implements that will handle these different weeds efficiently. My thought is that investigational work is quite an important part in any program of standardization; because if one knew just the best type of implement to use that could be published the farmers, if they wished, could buy it.

I do not think there is very much further for me to present. In our work at the Dominion Experimental Farms I may say that we do some of these things but not very extensively, not sufficiently exhaustively to enable us to make definite suggestions to implement concerns to any great extent as to what should be done, although we have studied quite a few implements. In the prairie provinces we have looked into quite a number. We introduced the combine at Swift Current in 1922. It was the first combine that was introduced. We tried out drying equipment with it to see what we could do about harvesting a little earlier with the combine. We did not get anywhere with that and we had to wait for the grain to dry. We did work with the swather, pick-up and the header barge. I might give you a long list of different implements that we have worked with. They need to be studied under different soil conditions, because it is not enough to say that it worked on one farm. Supposing we had a clay-loam farm and we were able to get certain results, if a man had a heavy clay soil he would not necessarily get the same results at all.

I have taken up a lot of your time and perhaps I should discontinue my remarks. I want to thank you for your attention in this matter, and if we can be of any assistance at the experimental farms in connection with any of your work we will be very glad to have you call on us.

Mr . Armstrong is going to discuss other aspects of the work, such as the tractor, the combine and the quality value of machinery.

The Chairman: Thank you. We will meet this afternoon at 3.30 .
The committee adjourned at 1.50 o'clock p.m. to meet again this day at 3.30 o'clock p.m.

## AFTERNOON SESSION

## The committee resumed at $3.30 \mathrm{p} . \mathrm{m}$.

The Chatrman: Gentlemen, I think we have a quorum and I shall now call on Mr. Armstrong.

## J. M. Armstrong called.

Mr. Graham: May I draw to the attention of the committee two items that give significance to the material that will be given this afternoon? With regard to tractors and combines, we have received from the United States Department of Agriculture a compilation made by that department of the wholesale prices of American wheat machinery in certain foreign countries, and in the United States in 1935. In the case of tractors, although it is a smaller tractor, all tractors are on the same basis, it would appear that Canada is paying a high price for its tractors. Later in the inquiry tractors will be one of the important items to be inquired into. Secondly, you will perhaps always notice that the implement companies will give a great deal of significance to the report on an inquiry into changes and quality values of farm machines made by three American agricultural engineers and professors in agricultural colleges, Professor J. Brownless Davidson, Iowa State College, was head of the committee. They took certain implements and by a process of enumeration listed and evaluated the improvements made between 1910-1914 and 1932. They placed an index card of the improvement in each of these machines, and it is the basis on which Mr. Armstrong will speak. I want to read that basis, because we asked Mr. Armstrong of the Experimental Farm Branch to prepare a comparative statement with regard to the improvement that has taken place in Canada. Starting with the basis of 100 , the list is as follows:-

|  | Percent |
| :---: | :---: |
| Grain binder | 170 |
| Cultivator | 165 |
| Grain drill | 140 |
| Farm engine (3 horsepower) | 200 |
| Disk harrow. | 190 |
| Peg-tooth harrow | 130 |
| Spring-tooth harrow | 140 |
| Hay loader | 155 |
| Mower | 170 |
| Corn picker | 210 |
| Corn planter | 155 |
| Tractor plough | 190 |
| Gang plough | 150 |
| Walking plough-one horse | 140 |
| Walking plough-two horse. | 140 |
| Sulky rake | 135 |
| Side-delivery rake and tedder. | 140 |
| Cream separator | 145 |
| Corn sheller (power | 190 |
| Corn sheller (hand) | 170 |
| Manure spreader | 180 |
| Grain thresher | 185 |
| Feed grinder | 175 |
| Ensilage cutter (16 inch blade) | 215 |
| Spraying machine (two nozzle) | 175 |

Mr. Armstrong will have this particular report in mind and will give you a comparison of the report found by themselves.

The Chairman: That will help.
Mr. Graham: Between 1910-1914 and 1932.
[Mr. J. M. Armstrong.]

By the Chairman:
Q. Will you kindly announce to the committee your official position?-A. Mr. Chairman and gentlemen, my name is J. M. Armstrong and I am connected with the field husbandry division, experimental farm, Ottawa. In regard to this question the Dominion experimental farms have been asked to prepare a statement on the changes and quality value of farm machines. It may be said that many marked changes have taken place in farm equipment in the last 25 years. In many instances the utility value of the equipment has been increased. It will be appreciated that the problem of valuating these changes is an extremely difficult one, and that any estimate is largely a matter of opinion. In addition the question may be approached from different angles. One method of approach is to regard the increase in quality value on the basis of longer life and increased capacity, also taking into account reduction in maintenance, and cost of repairs, reduction in power required and greater safety and convenience in operation. This is largely the viewpoint of the user of farm machinery. For the viewpoint of the engineer, however, in addition to a consideration of the points referred to, particular stress would be placed on engineering features such as improvement in design, materials of construction and operating precision.

The Dominion experimental farms have endeavoured to approach the problem from the viewpoint of the user of farm machinery, and accordingly have made a survey of their farms in the prairie provinces, and eastern Canada and British Columbia to learn the consensus of opinion as to the quality value of farm machinery.

Information is presented showing the major improvements in each machine and the Dominion experimental farms estimate of quality value basis 1913 and 1936 on a specific list of farm machines. In summarizing the survey the estimates given by the Dominion Experimental farms have been compared with those given in a "Report of an Enquiry into Changes in Quality Values of Farm Machines Between 1910-14 and 1932," by J. B. Davidson, G. W. MeCuen, and R. U. Blasingame, published by the American Society of Agricultural Engineers.

The first implement which we will consider is the ten-inch walking plough. The experimental farm's estimate of increase of the comparative quality value, basis 1913 , is 100 per cent, and the present day quality value is also considered as 100 per cent. That is, it is considered that there has been no major change in walking ploughs used in Canada. By comparison the Davidson report places the value of the walking plough at 140 , their basis being 1910 to 1914, 100 per cent. The second item refers to 4 sections iron diamond harrow as used in Eastern Canada and British Columbia. The experimental farm quality value is 110 , an increase of 10 per cent. The harrow referred to in the Davidson report is not comparable to the harrow which has been considered by the experimental farms. The third item is a 6 foot single disc, on which the experimental farms have given an estimated quality of 125 compared with the Davidson report of 190 . In that connection these two figures probably are not strictly comparable. The Davidson basic machine of the period 1910 to 1914 represents an older style of dise than that taken as a basis for the estimate by the Experimental farms. The next item is 2 sections spring-tooth harrow on which the Experimental farm's estimate is placed at 100, so that there is no increase in quality value. The Davidson report on a similar implement is not strictly comparable. In the Davidson report the comparison is a lever type harrow. The next item is a 6-7 foot spring-tooth cultivator, which the Experimental farms have credited with a quality value of 110 . That machine is not reported in the Davidson report. The next item is a 13 run drill. The Experimental farms have given the drill a quality valuation of 130 as compared with a valuation of 140 in the Davidson report.

## By Mr. Cleaver:

Q. Without interrupting the continuity of your evidence, will you explain what the Davidson report is?-A. I thought the previous explanation covered that. The report in question-

Mr. Spence: It would be much easier for us sitting back here, if the witness would speak a little louder.

Witness: The report in question is the "Report of an inquiry into changes in quality values of farm machines between 1910-14 and 1932," prepared by J. B. Davidson, G. W. McCuen, and R. U. Blasingame.

## By Mr Needham:

Q. Where did you say the improvement was, in the disc or drill?-A. In the drill.
Q. In the quality of the bearings of the disc, the material or what?-A. Which implement do you refer to?
Q. The drill.-A. The major improvements have been the change from wood to steel wheels, the use of a steel box, pressure lubrication and more accurate feed. The next item is a five foot binder for use in eastern Canada to which the experimental farms have attached a quality value of 130 , compared with the Davidson report of 170 . The next item is an ensilage cutter for which the experimental farm figure is 175 compared with 215 in the Davidson report. The next item is manure spreader which has been given a quality valuation of 140 compared with 180 in the Davidson report. The next few items are machines used in the prairie provinces and cover first, the 2 furrow 14 inch gang plough. The experimental farm's figure for quality value is 120 , compared with 150 in the Davidson report. The next item is 6 sections iron diamond harrow for which the experimental farm figure is 90 , that is, of a lower quality value than the older machine. The harrow reported in the Davidson report is not strictly comparable. The next item is a 14 foot single disc to which the experimental farm has given a valuation of 125 compared with 190 in the Davidson report. Again, those two figures are not strictly comparable. The 14 foot single disc was not in use in 1913. The quality value of this implement has been estimated on the dise that came into use shortly after 1913 ; therefore the experimental farm figure is not strictly comparable on the basis of 1913. The Davidson estimate is based, as I said before, on a dise which is probably of a little older period than the basis taken for the experimental farm estimate. The next item is a 9 foot stiff-tooth cultivator, duck foot. The experimental farm estimate is 125 . This implement is not reported on in the Davidson report. The next item is a 20 run drill. The experimental farm figure is 120 , the Davidson report it 140 . The next item is an eight foot binder. The experimental farm estimate is 130 , Davidson report 170. The last six items referred to machines used in the prairie provinces. The items which follow refer to machines common to eastern Canada, British Columbia and the prairie provinces. The first item considered is a six foot mower. The experimental farm's estimate for this machine is 140 compared with the Davidson estimate of 170 . The next item is a 10 and 12 foot dump rake. The experimental farm estimate is 115 , compared with the Davidson report of 135 . The next item is a 28 inch thresher, which has been given a quality valuation of 130 by the Experimental Farms compared with 195 in the Davidson report. The final item is a cream separator which has been given a valuation of 150 by the experimental farms, as compared with 145 in the Davidson report.

## By Mr. Graham:

Q. Would there be a difference in the quality of a cream-separator since the period mentioned in the Davidson report and your own?-A. Yes. Since the period covered by the Davidson report, stainless steel dises have been developed for use in the cream-separator.
[Mr. J. M. Armstrong.]
Q. So that that comparison is not quite as unfavourable as it would appear because of new developments?-A. No. There has been a further improvement since the Davidson estimate was made.

## By Mr. Mitchell:

Q. In making these estimates just what has been taken into consideration; has it been just mechanical improvement, or does it include increased user value, say such as increased yield?-A. The basis taken for the experimental farm's estimate has been, as I have said, longer life, increased capacity, reduction of maintenance and repair cost, amount of power required, and greater safety and convenience in operation. Under each implement we have listed the specific items of improvement. It is contained in the report. Under convenience of operation, for example, consideration has been given to lifting device on the cultivator. Under improvements in the quality of the work done by the machines may be cited, closer skimming in a cream-separator, and more accurate seeding in the case of seed drills.

## By Mr. Thorson:

Q. Are the same bases used for the purpose of the Davidson report?-A. The Davidson report was based on the years 1910 to 1914 as compared to 1932. In making their inquiry they limited their study to 25 typical farm implements in use in the pre-war period.
Q. What factors did they take into consideration in arriving at their estimate of improvement?-A. They took some 12 different points into consideration. They are listed in the report. Would you care to have them enumerated?

The Chairman: Yes.-A. The factors considered in the Davidson report were as follows: one, greater durability and productive usefulness; two, reduction in the replacement of wearing parts; three, reduction in loss of time due to failure of machines to function continuously; four, less breakage of machine parts; five, increased efficiency in the use of energy; six, increased capacity of machine; seven, improved operating efficiency; eight, improvement in operating precision; nine, reduction in time required to care for machine; ten, reduction in lost time and expense due to accidents; eleven, greater economy through improved operating devices; and twelve, increased efficiency through lessening operator's fatigue.

In making their comparisons the authors of this report, according to their own statement, made " a detailed examination of twenty-five machines of 1932 in comparison with similar machines of 1910-14 at the plants of three prominent farm machinery manufacturers where machines of both periods were made available, together with the engineering records and data relating thereto."
Q. Were any facts taken into consideration by the experimental farms that were not taken into consideration by the Davidson report, and vice versa?A. I believe there is a difference in that regard, in that the experimental farms have attempted to approach the matter largely from the point of view of the user; whereas, it might be said that the Davidson report approaches the problem possibly more nearly from the engineering standpoint, giving possibly greater consideration to engineering detail.
Q. There might be an increase in value from the engineering viewpoint and yet not be an increase in value to the user?-A. Yes; that is, the utility value might not be considered to have increased correspondingly to the engineering value.

## By Mr. Golding:

Q. What about durability?-A. That has been considered in the experimental farms' estimate.

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## By Mr. McLean:

Q. The statement you made would appear to be self-contradictory; how could you improve a machine from the engineering standpoint and not from the standpoint of the users?-A. I did not wish to imply that. What I meant to imply was that more stress might have been laid on the engineering features by the engineer inspecting the improvements than would be the case with the user of the improved machines.
Q. It could only be as to their value to the producer that the engineer could rate them higher. The engineer must rate them in relation to their value to the producer?-A. Yes, that is true.

Mr. Mitchell: The engineer's rating would be an estimated rating, whereas the user rating would be actual.

Mr. McLean: Not necessarily.

## By Hon. Mr. Motherwell:

Q. Does that term "quality value" mean price?-A. No, it is distinct from price.
Q. What is the difference between quality value and utility value?-A. They are largely one and the same thing.
Q. How can you make a comparison between the two?-A. The comparison in this instance has been made on the basis of the improvement in the machine, not on the price basis.

## By Hon. Mr. Gardiner:

Q. Would the increase in quality value necessarily raise the cost of producing the implement?-A. We have no information on that point. The experimental farms have not secured any information in regard to factory methods.

## By Hon. Mr. Motherwell:

Q. Take a binder: Does such an implement made in these days stand up as long as, or any longer than, one made 15 years ago. A good many farmers think that there is one weak link in any binder, or any other implement. Is that the case now? Is there anything in that?-A. I would judge that on the whole the quality value in that regard has been improved. In the Davidson report they have listed approximately 50 instances from the period 1910-14 to 1932, in which minor improvements have been made; and some more or less major improvements in individual parts, as regards strengthening that particular part.

## By Mr. Spence:

Q. Could you say definitely with respect to all farm implements, as an engineering theory, that they are better to-day than they were ten years ago? I mean all classes of automobiles have increased in value. I was just wondering if farm implements would not be very much the same?-A. I think that the estimate given of improvement in quality value of farm machinery will answer that point.
Q. Engineers do not work for nothing, and I imagine they improve things as they go along.

The Chairman: Are there any other questions anybody wishes to ask Mr. Armstrong on this particular section of his presentation?

Mr. Graham: It might be interesting to know that the American Statistical Association in 1933 tackled the task of correlating these two prices. That relates to the point you raised, Mr. Gardiner. We are attempting to get that information when they have it completed, but so far we have not been able
[Mr. J. M. Armstrong.]
to get it. Mr. Gardiner points out in connection with automobiles, for instance, as you all know, as these improvements have come about the cost of cars per pound has gone down. What it is in connection with farm implements we are not yet able to say. We hope to be able to get it so that you may have the benefit of it.

Mr. Ward: What do you refer to in the matter of correlation, what are they trying to correlate?

Mr. Graham: They take the actual improvements that have taken place in a binder and they find out what that means in respect to the actual cost of producing that implement with these improvements; for instance, some alloy may have been discovered which provides greater durability with less cost. As a matter of fact, that is an actual occurrence.

Mr. Ward: There I think is the whole crux of the situation before us. The reason, of course, that I brought it up is that the implement companies have given some importance to this Davidson report as more or less justifying the increase in price.

Hon. Mr. Gardiner: You take the assembly line system of production in automobile factories, that has lessened the cost as well as improved the output. The same thing would be true in the factory of an implement company. They probably might improve their machinery, and its system of production, just as they have done with automobiles, and in that way lessen their cost of production.

Mr. Graham: One would anticipate that.
The Chatrman: I guess, Mr. Armstrong, you may proceed if you like.
Witness: The next phase of the development of farm mechanization on which I have been asked to touch deals with the development of the farm tractor. The early tractors in use were merely self-propelled steam engines, and it is probably not well known that some of the earlier steam tractors were made by farmers in an effort to increase their available power for field use. The fact that steam ploughing proved practical may be gauged from the number of large steam-ploughing outfits that characterized the early days of our Canadian west. These cumbersome steam tractors were impractical, however, for field operations other than ploughing; and these gave way to the internal combustion tractor which followed them. The earlier internal combustion tractors were also cumbersome, comporatively crude and often short-lived in the hands of inexperienced operators. They in turn were used largely for ploughing and farm belt work. The modern lightweight tractor has been developed within the last twenty or twenty-five years. Among the chief improvements may be considered the reduction in weight and the enclosing of final drive gears so as to be protected from the wearing action of the soil. These improvements greatly increased the usefulness of the tractor, making it available for cultivation and the preparation of land, even the seeding of crops.

Improvement has been made in tractors also by way of improved materials and lighter construction together with multiple cylinders and closer governing which has resulted in more uniform delivery of power and greater flexibility of motor. Improvements in transmission have resulted in a greater range of operating speeds and an increase in the proportion of motor power delivered to the draw-bar. Reports of the Nebraska tractor tests show an increase in the ratio between maximum draw-bar and maximum belt horsepower developed from approximately 66 per cent in 1920 to 76 per cent in 1930. There have been other numerous refinements which have added to the quality of the present day tractor. High tension magnetos with impulse starters have made starting easier and eliminated kick-back in cranking with the attendant risk. Improved systems of oiling now ensure thorough lubrication of all bearings, while dust seals and air cleaners have effectively reduced wear, thus improving the quality value of the tractor.
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The next development in tractor usage occurred in 1922, when the power take-off was introduced. The power take-off was not popularized, however, until 1925. The advantage of this improvement in the tractor is the power may be applied by this means at 80 per cent or higher efficiency, as compared to 50 per cent efficiency by using ground-drive wheels.

The next important development was the row crop tractor. The conventional character is applicable to general field crop use. The row crop tractor. however, has permitted an extension of tractor use to row crop cultivation.

The next development of importance was the introduction of the pneumatic tire. This occurred in 1932. Tractor tires were tested out in 1933 by various government and private agencies, both in Canada and the United States. Tractor tires were first widely advertised to the farming public in 1934. At present some five or six companies are engaged in their manufacture. Rubber tires have enabled certain field operations to be done at higher rates of speed than formerly, due largely to the lower rolling resistance of a tractor equipped with tires. In addition for certain classes of work some economy of fuel has been made possible.

The next development in connection with the tractor relates to the introduction of the diesel engine. At the present time there are several makes of diesel trractors available. The general advantage of the diesel is in the lowering of fuel consumption, and the fact that they can be operated on comparatively cheap fuel.

Another development, that is somewhat apart from the development in the tractors available. The general advantage of the diesel is in the lowering of few of the implement companies added the farm tractor to their line of products shortly after the internal combustion engine made its appearance. These firms had, of course, been in the implement business for years. Some implement concerns have acquired tractor manufacturing plants only in recent years, while others have undertaken the distribution of tractors made by companies specializing in tractor manufacture. No doubt the farm demand for mechanical power was largely responsible for these developments, together with the desire on the part of the implement companies for a source of power suitable to the size and type of farm implements made. To-day the major farm implement companies in Canada have over seven thousand implement dealers handling tractors and farm implements.

The next item which I wish to mention is the sale of tractors, or the increase in the number of tractors in Canada. I can probably present that better with this chart which I have here.

## TRACTOR SALES IN WESTERN CANADA

(From Canadian Farm Implements)

| Year | Number | Year | Number |
| :---: | :---: | :---: | :---: |
| 1919. | 8,844 | 1929. | 14,557 |
| 1920. | 10,279 | 1930. | 9,108 |
| 1921. | 3,428 | 1931. | 842 |
| 1922 | 4,222 | 1932. | 892 |
| 1923. | 4,166 | 1933. | 777 |
| 1924. | 2,112 | 1934. | 1,518 |
| 1925. | 4,053 | 1935 | 2,175 |
| 1926. | 6,513 10,026 | Total. | 100,655 |
| 1928. | 17,143 |  |  |

1931 Census showed 105,360 tractors in Canada.
83,061 were in West and 22,299 in East.
This material shows tractor sales in Western Canada from 1919 to 1935. It will be observed that in 1920, 10,279 tractors were reported sold in Western [Mr. J. M. Armstrong.]

Canada. In the following year the sale of tractors dropped off materially, to 3,428 , and remained at approximately that level until 1926. There was a considerable increase in the number of tractors sold in 1926, amounting to 6,513 In 1927 there was an increase to 10,026 ; in 1928, it jumped to 17,143 ; in 1929 it was 14,557 . In 1930 there was a drop in the sale of tractors in the Prairie Provinces to 9,108 . From 1931 to 1934 the sale of farm tractors was very greatly reduced in the Prairie Provinces. There has been a considerable increase in 1935 as compared with 1934; there were 1,518 sold in 1934, and 2,175 in 1935. For the whole period of 17 years there have been 105,360 tractors sold in the territory.

In all Canada, according to the census figures of 1931, which of course would not take into account sales subsequent to that date, there were 105,360 tractors on farms in this country. Of this number 83,061 were located in the Prairie Provinces.

## By Hon. Mr. Gardiner:

Q. Were those operating this last crop?-A. That is a point on which it is very difficult to obtain any information. We have made several attempts.
Q. The figures there bear out something which I think experience has taught every farmer in Western Canada, that every time we have had hard timestake 1921, 1922 and 1923-the use of tractors has gone down materially. Down lower again you find the same thing. Now, the statements made to us this morning was that it cost less to operate a farm with power than with horses; but my own experience is that every time a farmer gets hard up he goes back to horses. Why do they do it?

Mr. McLean: Even if it costs them more they will go back to horses.
Hon. Mr. Gardiner: They go back. That chart bears that out.
Witness: I will touch on that point in discussing the effects of farm mechanization, showing the effect of hard times on tractors.

## By Mr. Cleaver:

Q. Do I read that chart correctly; that 90 per cent of the tractors in the West, going back to 1919, are still in use? If you deduct the total of your census figures it means that 90 per cent of the total sold are still in use.-A. No. Those figures are for all Canada. This figure is for the West.
Q. Yes, 83,061; that is 90 per cent of the total sales down to 1931.A. That would be the implication.
Q. What is the life-time of a tractor?-A. From a questionnaire submitted to large groups of farmers, and from our own experience, we place it at ten years. There are tractors which have been in use for more than that number of years naturally, but that is taken as the average figure.
Q. Then it is nather obvious that your list of 83,061 tractors in use in the West does not indicate that all of these are now in use?-A. We are unable to give any information on that point. We have attempted to get information on that point and have been unable to secure any satisfactory data.

Mr. Ward: I am not sure that this is very relevant to the issue before us, but it may be of interest to the committee to know that, carrying out what Mr. Gardiner has just said, and I hope you will pardon me for a personal reference, but for the past fifteen years I have been operating a three-quarter section farm where an inventory is taken once a year; and in 1931 I said to myself, we will put the tractors up this year and we will try horses. I have proven by my own experience that I can operate my farm about 15 per cent cheaper with horses than I can with tractors. We were not buying any tractors. We had our tractors on the farm, paid for. It was just a case of the actual cost of operating tractors.

By Mr. Shaver:
Q. What did you say is the life of a tractor?-A. We estimate 10 years as the average.

Witness: The next point I wish to touch on is the effect of the tractor. It is difficult to estimate the extent to which farm mechanization has affected the agriculture of the country. Certain changes are, however, becoming apparent. For example, at the time of the 1921 census there were $14 \cdot 89$ farms for each tractor in all Canada. In 1931 there were 6.91 farms for each tractor in all Canada. In the Prairie Provinces in 1921 there were $6 \cdot 64$ farms for every tractor. In 1926 this figure had been reduced to 4.95 farms per tractor, and to 3.52 farms per tractor in 1931. In addition to the increase in the number of tractors there has been a change in the size of farms to the extent that each farm had on the average 13 acres more crop in 1931 than in 1921. This movement has been due, largely, to the fact that the individual farmer has been able to handle a larger acreage with the aid of the tractor. Other effects of the tractor have been to lessen the number of horses required on many farms, and to make possible some reduction in hired labour. As has been mentioned, the cost of operating a farm has in some cases been increased by the use of the tractor; however, the tractor has undoubtedly made possible the conduct of farm operations in good season, and the industry as a whole has benefited through the use of the tractor.

Another effect of the tractor has been greatly to increase farm purchases in the form of fuel and oil. The expenditure for tractor fuel in the Prairie Provinces is estimated at approximately twenty million dollars per year. The expenditure for fuel has undoubtedly acted as a serious check in the trend of mechanization in the Prairie Provinces during the last few years of low farm prices.

The next point I want to touch on is in connection with the introduction of the combine.

## By Mr. Leader:

Q. Before you touch on that: Tractors have been improved in quality in recent years?-A. Yes.
Q. And the price of tractors has gone down. You can buy a tractor cheaper now, notwithstanding the fact that they have been much improved during recent years?-A. I believe that is true.

Q, While the reverse is true in regard to other agricultural implements. One of the reasons the manufacturer of farm implements gives as to why the prices have gone up is because of the extra quality that has been put into the machinery. Well, you can say the same in regard to tractors, and yet the price has decreased.-A. I believe that the explanation offered by the implement trade in that regard is that tractor production has been subject to what is termed mass production.

Mr. McLean:: In Canada, within the last few years.
Mr. Leader: Have you an index figure on tractors, similar to the index figure on farm implements which you gave us?

Witness: No. We have not attempted to make an estimate of a similar character. I have pointed out some of the improvements that have taken place in the tractor. We have not undertaken, however, to make a direct comparison between the 1913 machine and the present day tractor.

## By Mr. McLean:

Q. Before you leave tractors, would you tell us something about the Diesel tractiors; how widely they are used; why they are not more widely used; and
[Mr. J. M. Armstrong.]
any other information you can give us?-A. The Diesel tractor has come into the picture only in the last three or four years, and then only to a limited extent. The first thing that militates against the Diesel tractor is its initial cost. They are relatively much more expensive than the gas tractor.
Q. Because of the motor?-A. Because of the necessity for building a machine capable of withstanding much higher operating pressures in the cylinder.
Q. And for that reason they would have to be built heavier?-A. Yes.

Mr. Ward: I think therein lies one of the reasons why the cost of the tractor has gone down. Take a tractor that delivers perhaps say 15 horsepower at the draw bar and 30 horsepower at the belt, it is only half the weight today that it was twelve or fifteen years ago.

Mr. McLean: Yes, with twice the strength.
By Hon. Mr. Gardiner:
Q. Are diesel engines made in Canada now?--A. Not agricultural tractors, not to my knowledge.
Q. Where are they ., made?-A. In the United States, Great Britain and Germany.
Q. They are all imported?-A. Yes.

By Mr. Golding:
Q. There is no tractor motor made in Canada?-A. Not so far as I am aware.

Mr. Golding: No, I do not think there is.

## By Mr. Donnelly:

Q. Does Ford make their tractor motor in this country?-A. I believe they are all made in England today.

Hon. Mr. Gardiner: Is there any duty on them coming into Canada today?
Mr. McLean: They are duty free.-A. Not so far as I am aware.
Mr. Golding: No. I do not think there is.

## By Hon. Mr. Gardiner:

Q. Is there any duty on them now when they are coming in, or do you know? -A. There is none, I believe.

## By Mr. Golding:

Q. You gave the approximate cost of gasoline used. Was that for a year?A. Yes.
Q. Or what figures did you give?-A. That was based on the annnal usage.
Q. $\$ 20,000,000$ ?-A. That is an estimate.
Q. Have you any figures as to the actual purchases made of machinery; take the average say for any number of years?-A. I believe that was brought out by Dr. Booth, if I am not mistaken.
Q. The actual purchases for any given number of years?-A. No, the apparent consumption, I think it was-if I am not mistaken-of machinery as calculated from the production less export. I think that was presented previously.
Q. We would be able to get that from his report?-A. Yes. Am I right?

Hon. Mr. Gardiner: Yes.
The Chatrnan : I think that information was in Dr. Booth's statement.
Mr. Gölding: Thank you.

## By Mr. McLean:

Q. Perhaps you would tell us a little more about Diesels, just what it would take to make them available in this country in regard to cost or to operating. There is a good deal of interest being taken at the present time by farmers in the Diesel, men who think that it is going to be the solution to their power problem. I would like to be able to tell them, when they ask me why the Diesels are not coming in, just what must be done or to what level they must drop in price before they can be profitably used in this country?-A. I do not think we have any specific information on that point. I may say, however, that the increased cost of the Diesel has reacted against its introduction; that is, the higher initial cost. As against that must be placed the considerably reduced cost for fuel in its operation, which should, over the life of the tractor, more than offset the higher initial cost.
Q. There comes a place where the two meet, where the overhead is overcome by the lower operating cost?-A. That is correct.
Q. That place meets at a certain place for a certain acreage, doing certain work. I am not going to ask you where that meets, but I know there is some place where it does meet?-A. That is true.
Q. I was wondering if you had looked into the matter and could tell us, without prophesying, about the likelihood of them being made available for a price where that point could meet on a fair-size farm, or a reasonable-size farm? -A. I may mention in that connection, as possibly indicative of the trend, that the size of Diesel tractor available has been considerably reduced since the first models were put out. So that the Diesel is getting down to a size which the ordinary farmer can better utilize. That appears to be the trend.
Q. I suppose it is possible that that trend will continue so that Diesels may be used on medium-size farms?-A. That would appear to be the tendency.
Q. Is there much difference in size between the American Diesel and the British or German Diesel? Would that hold out any hope?-A. I believe in Europe and England somewhat smaller Diesels have been developed than has been the case as yet in the United States.
Q. Eight or ten years ago there was an English tractor advertised. I think it was called the Marshall?-A. That is right.
Q. Do you remember if that is right?-A. Marshall was the name.
Q. It was a Diesel?-A. It was a single-cylinder machine, hardly comparable with the present day Diesel.
Q. Of that type?-A. It is a slightly different type.
Q. You think European, British and German Diesels have already reached a smaller size than the American?-A. I am acquainted with one British tractor which is rated at 25 draw-bar horse-power.
Q. About what would it cost compared with a gas tractor?-A. I cannot give you any figures as to that.

Mr. McLean: Again I am asking too many questions.

## By Mr. Mitchell:

Q. Trucks are just very recently using Diesels. Are there many using them in farm tractors?-A. There are several makes of Diesel farm tractors available.

Mr. McLean: Are they using them in trucks?
Mr. Mitchell: Yes. They are using them now in trucks. I saw one in Toronto yast week.

Mr. McLean: A fair size?
Mr. Mitchell: About the size of a farm tractor.
[Mr. J. M. Armstrong.]

By Hon. Mr. Gardiner:
Q. We have some of them on the farms, have we not?-A. We have one Diesel.
Q. There is one Diesel on the farm here?-A. Yes.
Q. Is it a new one?-A. Yes.
Q. What did it cost? Have you any idea?-A. I cannot tell you the trade price.
Q. I remember seeing it.-A. I can get that information for you.
Q. I was just wondering how it compared with the other tractors you are buying in price?-A. Roughly it would be-
Q. $\$ 2,100$ ?-A. That would not be the trade price, the difference in cost between the gas and Diesel tractor of the same size would be roughly $\$ 900$.
Q. Has there been a very considerable reduction during the last two years? - A. Yes, the size of Diesel tractor available has been reduced, thus permitting it to be sold at a more reasonable price.

The only other point which I had intended to touch on was in connection with the introduction of the combine. The combine was introduced into western Canada in 1922 on the Dominion Experimental Farm at Swift Current. The effect of the combine has been to give impetus to the spread of farm mechanization. Indeed in many instances tractors were purchased for the primary purpose of pulling the combine. Further, the introduction of the combine appears to have been largely responsible for the recent purchases of motor trucks primarily for grain hauling purposes. Other effects of the use of the combine and truck have been to lessen the dependence of the grain grower on transient labour for harvest operations and to quicken the rate of harvesting and grain delivery.

The increase in the number of combines is shown by this chart.

## COMBINE SALES IN WESTERN CANADA

(From Canadian Farm Implements)

|  | Number | Year | Number |
| :---: | :---: | :---: | :---: |
| 1926. |  |  | 172 |
| 1927. | 598 | $1933 .$ | 77 |
| 1928. | 3,657 | $1934 .$ | 68 |
| 1929. | 3,500 | 1935 | 496 |
| 1931. | 1,614 179 | Tot | 10,537 |

In 1922: the first combine introduced on Dominion Experimental Farm, Swift Current.
The combine was introduced - the first successfully operated one - in 1922 in Swift Current. Information as to sales is not available until 1926 when there were 176 combines sold in the three prairie provinces. In 1927 there were 598 ; in 1928, there were 3,657 ; in 1929, 3,500 ; in 1930, 1,614. Between 1931 and 1934 there was a tremendous drop in the number of combines sold, a very similar condition to that which obtained with regard to tractor sales. However, in 1935 there was a slight increase in the number of combines sold. All told, there have been 10,537 combines sold in the prairie provinces up until 1935. The extent to which the combine is being used may be estimated on the basis of the seasonal use of the combine on approximately 600 acres. On this basis it is estimated that approximately 11.8 per cent of the total acreage in grain crops in the prairie provinces in 1935, was harvested by the combine.

## By Mr. McLean:

Q. What percentage?-A. 11.8 per cent. I think that is all the information that we have in that connection.

Mr. McLean: That is plenty. I just meant that was plenty on the combine, not plenty from you.

The Chairman: Are there any other questions any of the committee would like to ask?

Mr . McLean: I would move that we adjourn.
The Chatrman: We have not another witness quite ready. Will someone move that we adjourn?

Mr. McLean: I will.
The Chatrman: When shall we meet again?
Hon. Mr. Gardiner: At the call of the Chair.
The committee adjourned at 4.45 p.m., to meet again at the call of the Chair.

## STANDING COMMITTEE

ON

# AGRICULTURE AND COLONIZATION 

## MINUTES OF PROCEEDINGS AND EVIDENCE (Farm Implement Price Inquiry)

TUESDAY, MAY 12, 1936
No. 3

WITNESSES:
Mr. J. B. Rutherford, Agriculture Statistician, Dominion Bureau of Statistics.

Mr. W. H. Losee, Mining and Metallurgical Branch, Dominion Bureau of Statistics.
Mr. Raymond G. Bangs, Public Utilities Branch, Dominion Bureau of Statistics.


## MINUTES OF PROCEEDINGS

Tuesday, May 12, 1936.
The Standing Committee on Agriculture and Colonization met this day at 11 o'elock a.m.

The Chairman, Mr. W. G. Weir, presided.
Members present:-Messrs. Beaubier, Bertrand (Prescott), Black (Chateau-guay-Huntingdon), Bouchard, Boulanger, Cleaver, Coldwell, Davidson, Donnelly, Douglas, Dubois, Dupuis, Evans, Fafard, Fontaine, Furniss, Gardiner, Golding, Graydon, Hayhurst, Johnson (Lake Centre), Lacombe, Leader, MacKinnon (Edmonton West), Macphail (Miss), MacRae, McKenzie (LambtonKent), McLean (Melfort), McNevin (Victoria, Ont.), Mitchell, Motherwell, Needham, Patterson, Perley (Qu’appelle), Rennie Ross (Moose Jaw), Senn, Spence, Taylor (Norfolk), Thompson, Thorson, Tomlinson, Turner, Ward, Weir.

In attendance: Mr. R. T. Graham, K.C., Counsel for the Committee.
Mr. J. B. Rutherford, Agricultural Statistician, Dominion Bureau of Statistics and Mr. W. H. Losee, Mining and Metallurgical Branch, Dominion Bureau of Statistics presented briefs before the Committee on the subject matter of the Order of Reference.

The Chairman tendered thanks to both these officials on behalf of the Committee.

The Committee then adjourned to meet again at 4 o'clock p.m. this day.

## AFTERNOON SESSION

The Committee resumed at 4 o'clock, the Chairman presiding.
Members present: Messrs. Bertrand (Prescott), Boulanger, Cleaver, Coldwell, Davidson, Donnelly, Douglas, Evans, Fafard, Fontaine, Furniss, Gardiner, Golding, Graydon, Hayhurst, MacRae, McLean (Melfort), Mitchell Patterson, Perley (Qu'Appelle), Spence, Taylor (Norfolk), Thorson, Tomlinson, Turner, Weir.

Mr. Raymond G. Banks, Public Utilities Branch, Dominion Bureau of Statistics presented a brief in relation to transportation costs of farm implements and raw material.

The Chairman thanked Mr. Bangs for his presentation of the brief.
The Committee adjourned to meet again on Thursday at 11 o'clock a.m.

> WALTER HILL, Clerk of the Committee.

## MINUTES OF EVIDENCE

House of Commons, Room 231,

$$
\text { May 12, } 1936 .
$$

The Select Standing Committee on Agriculture and Colonization appointed to inquire into the prices of agricultural implements met at 11 o'clock, Mr. Weir, the chairman, presided.

Consel for the Committee, Mr. R. J. Graham.
The Chatrman: Gentlemen, if you will kindly come to order we shall continue the session of the committee. The witness this morning is Mr. Rutherford of the Agricultural Branch of the Dominion Bureau of Statistics. Before we call Mr. Rutherford I think that Mr. Graham has a statement to make.

Mr. Graham: I simply wanted to put on record information supplied by the Field Husbandry Division of the Experimental Farms Branch, on the average life of certain farm machines which we are examining. One list is applicable to eastern Canada, and one applicable to western Canada. I do not think it is necessary for me to read it; it is simply a background of information that we shall need. I should like to file it. If any member wants it read or should like to peruse it, it can be done.

The Chatrman: This statement is in answer to two questions that have been raised in certain sections as to length of life of farm implements. It has been carefully prepared, and I would suggest that we ask to have it included in the record.

Some hon. Members: Carried.
The statement follows:-

## LENGTH OF LIFE OF MACHINES

The only material on this subject readily available has been provided by the Field Husbandry Division of the Experimental Farms Branch. Two tables have been submitted, one gives a list of machinery found on farms in Western Canada and one presents similar data for Eastern Canada. These data were secured in 1925 . The average size of the farms in Eastern Canada whose operators made returns had 76 acres of land under cultivation. Those in the West averaged 338 acres under cultivation. The authors point out that there are limitations to the data. The chief limitation would be that there has been considerable development in heavy machinery since 1925 particularly in Western Canada where a large number of replies have been received. There is likely to be considerable variation from the average but the average should be fairly representative.

## AVERAGE LENGTH OF LIFE OF FARM MACHINES ${ }^{1}$

Length
Kind of machine
of life years
Automobile. ..... 9.5
Buggy ..... 14.4
Corn-binder ..... 13.2
Corn-cultivator ..... 17.1
Corn-planter ..... 14.7
Cultivator ..... 15.3
Cutter ..... 12.9
Disc-harrow ..... 15.6
Fanning-mill ..... 16.6
Gasoline engine. ..... 12.0
Grain-binder ..... 12.7
Grain-drill ..... 15.1
Harness ..... 13.5
Hay-fork ..... 17.4
Hay-loader ..... 12.9
Hay-rake. ..... 17.2
Hay-rack ..... 7.3
Manure-spreader ..... 13.1
Motor truck ..... 8.9
Mower ..... 14.3
Other machinery ..... 13.1
Packer or roller ..... 20.0
Plough-gang ..... 15.6
Plough-sulky ..... 15.5
Plough-walking ..... 19.4
Potato-digger ..... 17.3
Potato-planter ..... 14.1
Potato-sprayer ..... 12.5
Silage-cutter ..... 16.1
Sleigh. ..... 18.5
Spike-tooth harrow ..... 18.0
Sweep rake ..... 11.8
Tedder ..... 18.1
Threshing machine ..... 12.9
Tractor ..... 11.4
Wagon. ..... 20.1
Average life ..... 14.7
Rate of depreciation (per cent) ..... 6.8

[^4]
## AVERAGE LENGTH OF LIF'E OF FARM MACHINES ${ }^{1}$


${ }^{1}$ Cost of producing farm crops in Eastern Canada, by E. S. Hopkins, A. Gosselin and J. M. Armstrong, Bulletin No. 115-New Series, Department of Agriculture.

## John D. Rutherford called.

## By the Chairman:

Q. Will you kindly give to the committee your official position in the department?-A. I am the agricultural statistician in the Dominion Bureau of Statistics, Agricultural branch.

Mr. Graham: I am sure the members from the west will be interested in knowing the witness is a son of Dean Rutherford who played such a large part in the Saskatchewan agricultural history.

Witness: This brief is intended to indicate first the economic condition of agriculture from 1913 to 1936. I have indicated some data on the census material regarding farm machinery; relative prices of farm implements; agriculture and the farm machine industry.

## THE ECONOMIC CONDITION OF AGRICULTURE

In the interim report of Mr. R. T. Graham, K.C., it was indicated that attention was to be given to the economic condition of agriculture in the evidence submitted. Since the inquiry covers the period 1913 to 1936, Mr. Graham asked that all data be related to the year 1913, considered to be a normal period in the sense of being the last full year before war conditions disrupted "normal" economic life.

The series of charts and tables which have been passed around contain the statistical evidence upon which this paper has been prepared It would be both desirable and more correct to base a study of agricultural conditions upon a statement of farm income Because of the lack of such a statement, the procedure will be to show first the relationship of agricultural prices to the general level of all prices, and secondly to show the changes in some of the costs that are not fully taken account of in the general level of all prices.

It is necessary first of all to clearly state the meaning of certain statistical and economic terms which appears in the charts and tables. It will be noticed upon reference to Chart 1, that the title reads as follows: "Wholesale Prices of Canadian Farm Products (Adjusted for changes in the general price level)."
INDEXES

This adjustment is made by dividing the index of the prices of farm products by the index of all wholesale prices, and multiplying the result by 100 to reconvert to an index form. The result, which is merely a percentage ration, is variably termed, "An index adjusted for changes in the price level," "An Index of Purchasing Power," or "An Index of the Ratio of Certain Prices to All Wholesale Prices." Whatever the name, such a device serves to indicate in the case of chart 1 , the rise and fall in the prices of farm products in relation to the rise and fall of the prices of all commodities. In other words, a farmer selling a ton of hay plus a bushel of wheat plus a pound of butterfat, etc., in 1915, would have received sufficient returns to purchase 13 per cent more of all commodities than he would have been able to purchase in 1913 from the sale of a like amount of farm produce. In 1923, his sale would have only brought him sufficient to buy 83 per cent of the 1913 amount, in 1929, $6 \cdot 4$ per cent more than the pre-war amount, but in 1932 only 72 per cent.

Qualifications necessary regarding the use of wholesale prices of farm products as an indicator of the farmer's position, may be stated as follows:-

1. These are not farm prices and therefore do not reflect the true extent of fluctuations in price at the point of production. The rigidity of certain charges such as freight, storage, commission, etc., cause a much greater drop in the index prices received by farmers.
2. The volume of production is not taken into account.
3. The index of wholesale prices does not include many charges which enter into farm expense, viz., interest payable and taxes.
The second chart in the series brings into the picture some indication of the volume of production.


The important point in connection with this chart is that it is merely gross value of production per acre of all field crops. Many of these products are marketed through live stock, so that the income also would depend upon prices for live stock and livestock products. It will be noted that the 1935 position is below that of 1934. Although yields were higher, in 1935 farm prices and quality were much lower than in the preceding year.

Chart No. 3 follows:-
Chart No. 3, showing an index of the value of wheat production per acre in the prairie provinces, merits the following remarks:-

1. That the prosperity of the war period for the wheat producers was shortlived. In 1918, 1919 and 1920, when the price of wheat, Fort William basis, was over $\$ 2$ a bushel, the average yields of wheat per acre were $10 \cdot 2,9 \cdot 3$ and $13 \cdot 9$ bushels, respectively. During the same period, prices of goods purchased by farmers were at a very high level. Agriculture in the west was not as prosperous during these years as generally considered, and was in a poor condition to face the severe drop in prices from 1921 to 1923.
2. The exchange value of wheat production per acre dropped to a low of 29 per cent of the 1913 level in 1931, and has only recovered to $43 \cdot 8$ per cent of that level in 1935. To return to a 1913 relationship with the general price level, both the farm price of wheat and the yield must show considerable improvement.


[Mr. J. B. Rutherford.]

In the Maritime Próvinces, Quebec and Ontario, potatoes occupy an important place in the production program. The exchange value per acre of potatoes in 1935 was 23 per cent below the 1913 level.

In Tables 1 and 2, information respecting live stock is given.
TABLE 1-AVERAGE YEARLY PRICES OF TOP GRADE STEERS AT TORONTO, 1913 TO 1935


TABLE 2-AVERAGE YEARLY PRICES OF BACON HOGS AT TORONTO, 1913 TO 1935

|  |  |
| :--- | :--- |

Beef cattle and hogs are subject to wide fluctúations in exchange value or purchasing power, and producers aften find themselves in as critical economic conditions as those who are producing grain crops.

Certain component groups of the "Index of Retail Prices and Costs of Services" computed by the Internal Trade Branch of the Dominion. Bureau of Statistics, furnish a reliable indication of the costs of goods purchased by farmers.

Table 3 includes the clothing group, food group, sundries group, and a total index of the three groups combined.

TABLE 3.-RETAIL PRICES OF FOOD, CLOTHING AND SUNDRIES ${ }^{1}$, 1913 AND 1935
Index Numbers $1913=100$

${ }_{2}^{1}$ Data from the Internal Trade Branch, Dominion Bureau of Statistics.
${ }^{2}$ Subject to revision.
It will be noted that the clothing group reached its lowest point in 1933, $7 \cdot 3$ per cent above pre-war, while food declined in the same year to an index of $96 \cdot 2$ or just below the 1913 level. On the other hand, the sundries index, containing items such as medicines, household furnishing, hardware, etc., reached a low point of only $139 \cdot 1$ in 1934 . The relative inflexibility of prices in this group is apparent.

Attention was drawn to the fact that certain costs were not included in the wholesale price index, and that these costs were relatively very high.

Chart 5, portraying the trends in taxation per acre in two of the provinces, bears out this statement.

In 1929, the index of taxes in Ontario was 272 and in Saskatchewan 252, as compared with 100 in 1913. Appreciable reduction has taken place since then, but the indexes in 1933 stood at 212 and 155 for Ontario and Saskatchewan, respectively. Even when farm prices return to their pre-war relationship with the general price level, agriculture will have a heavy burden of taxation to carry.

Another burden of considerable magnitude but difficult of measurement on a comparative basis with 1913, is the interest charge on farm debt. Table 4 is appended, showing the average value per acre of occupied farm lands.
[Mr. J. B. Rutherford.]


TABLE 4.-AVERAGE VALUE PER ACRE OF OCCUPIED FARM LANDS, 1914 AND 1935

|  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

The bulk of land sales take place when prices are high. Unfortunately the loaning of funds is also most active at such a time. Consequently many farmers are now carrying obligations contracted when their land sold at values 40 to 50 per cent higher than they are to-day.

Freight rates on agricultural products have shown a downward tendency during the period 1921 to 1933. In the latter year they were still 34 per cent above the pre-war level. Table No. 5 follows:-

Table 5-Railway freight index numbers for agricultural products,* 1913 to 1933. $1913=100$

*From "Index Numbers of Railway Freight Rates," Transportation and Public Utilities Branch, Dominion Bureau of Statistics. Converted to 1913 base from 1926 base.
The data thus far has been presented to bring out the following facts:-

1. That in the 24 year period, 1913 to 1936, agriculture has experienced two periods of serious economic difficulty, namely, 1921 to 1925 and 1930 to the present time.
2. That while agriculture experienced a relatively profitable period during the war, the second period of prosperity from 1926 to 1929 was apparent rather than real. During these latter years agriculture was still on the shaky foundations of over-capitalization and high fixed charges, a carry-over from the war-time inflation.
3. That agricultural prices must rise considerably over the 1913 relationship to the general price level to overtake certain components in its cost structure which are still quite high.

The recovery of agricultural prices commenced early in 1933 and each succeeding year has witnessed some progress. But farmers still face a lengthy period of readjustment of land values, building values, debts, taxes and other costs. The amount of readjustment necessary depends upon the relationship of the prices of goods sold by farmers to the prices of goods they must buy. Any gain in agricultural prices over other prices will not only minimize the amount of readjustment, but will hasten the advent of a scale of living satisfactory to this class of primary producers.

## 2. CENSUS DATA

Tables 6 to 11 inclusive, present data from the 1931 Census.
TABLE 6.-NUMBER OF FARMS, AVERAGE AREA PER FARM AND AVERAGE IMPROVED AREA PER FARM, 1931 CENSUS


[Mr. J. B. Rutherford.]

TABLE 7.-NUMBER OF GAINFULLY EMPLOYED IN AGRICULTURE, AVERAGE NUMBER PER FARM AND TOTAL AND IMPROVED ACREAGE PER PERSON GAINFULLY EMPLOYED IN AGRICULTURE, 1931 CENSUS.

|  | Total Number | Average Number per Farm | Total Acres per Gainfully Employed | Improved Acres per Gainfully Employed |
| :---: | :---: | :---: | :---: | :---: |
| Prince Edward Island. | 18,353 | 1.4 | 65 | 42 |
| Nova Scotia.......... | 44,033 | $1 \cdot 1$ | 98 | 19 |
| New Brunswick | 46,340 | 1.4 | 90 | 29 |
| Quebec......... | 230,547 | 1.7 | 75 | 39 |
| Ontario. | 305,287 | $1 \cdot 6$ | 75 | 43 |
| Manitoba | 93,429 | 1.7 | 162 | 91 |
| Saskatchewan | 204,472 | 1.5 | 272 | 164 |
| Alberta. | 145,746 | 1.5 | 267 | 122 |
| British Columbia | 43,638 | 1.7 | 81 | 16 |
| Total-Canada. | 1,131,945 | $1 \cdot 6$ | 144 | 76 |

TABLE 8.-AVERAGE VALUE PER FARM AND AVERAGE VALUE PER ACRE OF FARM CAPITAL BY PROVINCES, 1931 CENSUS

|  | Land |  | Buildings |  | Machinery |  | Livestock |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Per Farm | Per <br> Acre | Per Farm | Per | Per <br> Farm | Per <br> Acre | Per Farm | Per <br> Acre | $\underset{\text { Farm }}{\text { Per }}$ | Per Acre |
| Prince Ed | \$ | \$ cts. | \$ | \$ cts. | \$ | \$ cts. | S | S cts. | \$ | \$ cts. |
| Island........ | 1,806 | 1950 | 1,530 | 1653 | 631 | 681 | 567 | 612 | 4,534 | 4896 |
| Nova Scotia. | 1. 979 | 898 | 1,113 | 1020 | 268 | 245 | 325 | 298 | 2,685 | 2461 |
| New Brunswick. | 1,128 | 924 | 1,137 | 932 | 389 | 319 | 388 | 318 | 3,042 | 2493 |
| Quebec.......... | 3,136 | 2463 | 1,897 | 1490 | 715 | 562 | 705 | 554 | 6,453 | 5069 |
| Ontario | 3,048 | 2565 | 2,534 | 2132 | 791 | 665 | 900 | 757 | 7,273 | 6119 |
| Manitoba | 3,695 | 1324 | 1,631 | 584 | 1,012 | 362 | 824 | 295 | 7,162 | 2565 |
| Saskatchewan... | 5,608 | 1375 | 1,640 | 402 | 1,359 | 333 | 718 | 176 | 9,325 | 2286 |
| Alberta.......... | 5,483 | 1370 | 1,410 | ${ }^{3} 52$ | 1,194 | 298 | 839 | 210 | 8,926 | 2230 |
| British Columbia | 3,771 | 2777 | 1,772 | 1305 | 494 | 364 | 666 | 490 | 6,703 | 4936 |
| Total-Canada | 3,720 | 1662 | 1,843 | 823 | 893 | 399 | 746 | 333 | 7,202 | 3217 |

TABLE 9.-PER CENT OF FARM CAPITAL IN MACHINERY BY PROVINCES, 1931 CENSUS


TABLE 10.-TOTAL VALUE OF MACHINERY, BY PROVINCES, 1931 CENSUS


TABLE 11.-NUMBERS OF SPECIFIED KINDS OF MACHINERY ON FARMS BY PROVINCES, 1931 CENSUS


These data are included to illustrate the relative importance of machinery in the capital organization of the farm in the various provinces. The tables also indicate the varying degrees of the intensity of the application of labour and capital in the process of agricultural production throughout Canada.

## 3. RELATIVE PRICES OF FARM IMPLEMENTS

The comparison of changes in prices over a period of years is not a simple matter. Because of a general tendency to increased efficiency, both in the volume of output and in the quality of output, it is difficult to compare the price of an article in 1913 and the price of an article of the same kind in 1936. This is especially true in the case of farm implements. Some of the difficulties encountered are as follows:-

1. Changes in the quality values of the materials used may have resulted in greater cost of manufacture.
2. There may have been a considerable change in the design of the machine.
3. The type of machine may have been entirely changed, for example, the substitution of the one-way dise for the plough in some areas.
4. Changes may have occurred in the method of distribution, so that comparable prices cannot be quoted.
However, it is important to indicate the change in prices because a farmer must purchase implements in order to carry on production. When he requires a new drill, his only alternative is to purchase those being offered at the time.

When the farmer requires machinery after four or five years of relatively low prices during which he has hardly purchased any machinery at all, we are interested in learning what he has to pay to get a machine. An index has been constructed showing the retail prices of farm implements in Ontario, and at Regina, Saskatchewan. The machines included in each index are shown in Table 13. At present information is not available to complete the Ontario index for the years 1914 to 1922, inclusive.

Table 12-RETAIL PRICES OF FARM IMPLEMENTS1-Index Numbers $1913=100$.

${ }^{1}$ Internal Trade Branch, Dominion Bureau of Statistics.
${ }^{2}$ Comparable information not available for these years for Ontario.
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Table 13-RETAIL PRICES OF SPECIFIED FARM IMPLEMENTS EXPRESSED AS PERCENTAGES OF THE 1913 PRICE

|  | 1913 | Per cent of 1913 Price |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 1923 | 1933 | 1936 |
| Ontario- Walking Plough |  |  |  |  |
| Walking Plough, Single Disc Drill | $100 \cdot 0$ $100 \cdot 0$ | $154 \cdot 6$ 168.4 | $137 \cdot 3$ $171 \cdot 8$ | 137.3 185.3 |
| Hay Rake.. | $100 \cdot 0$ | 154.0 | $158 \cdot 9$ | 168.5 |
| 6 ft . Binder. | $100 \cdot 0$ | 153.0 | 147.1 | 159.0 |
| Mraw Harrow | $100 \cdot 0$ | 161.6 | $163 \cdot 2$ 158.6 | 173.1 |
| Dise Harrow. | $100 \cdot 0$ | 185.2 | 191.3 | 197.1 |
| Wagon. | $100 \cdot 0$ | ¢04.8 | 189.2 | 189.8 |
| Geometric average | $100 \cdot 0$ | $168 \cdot 1$ | 163.7 | $169 \cdot 6$ |
| Regina- |  |  |  |  |
| Walking Plough. | $100 \cdot 0$ | 147.8 | 132.8 | $132 \cdot 8$ |
| Double Disc Drill | 100.0 100.0 | $169 \cdot 3$ $159 \cdot 2$ | 167.2 | 168.6 |
| 8 ft . Binder. | $100 \cdot 0$ | 148.5 | $162 \cdot 0$ | $169 \cdot 7$ |
| Mower. | $100 \cdot 0$ | 166.9 | $160 \cdot 7$ | $169 \cdot 0$ |
| Drag Harrow | $100 \cdot 0$ | 161.5 | 158.8 | $164 \cdot 3$ |
| Disc Harrow. | $100 \cdot 0$ | 177.4 | 154.7 | $154 \cdot 7$ |
| Wagon....... | $100 \cdot 0$ | $186 \cdot 1$ | 169.9 | 169.9 |
| Geometric average | $100 \cdot 0$ | $164 \cdot 1$ | 154.5 | 158.5 |

By Mr. Senn:
Q. Do you say that the 1913 prices in Ontario were higher or lower than the 1913 prices in Regina?-A. I cannot tell which were higher and which were lower, but I imagine the Ontario prices were lower because you do not have the factor of freight. You will notice, however, that the machines are not the same. The Regina machines quoted are, for example, a double disc drill as compared with a single dise drill for Ontario.
Q. But the percentage of increase is higher in Ontario than in Regina, and I thought that might be accounted for by the fact that Ontario prices were lower than Regina prices in 1913?-A. It would be hard to make the comparison unless you took similar implements, which I have not done. This list of eight implements for Ontario is not the same as the list of eight implements for Regina.
Q. I understand that?-A. It indicates that those eight Ontario implements are relatively higher than the Saskatchewan price as compared with 1913.

A comparison of the purchasing power of individual products in terms of the quantities of them required to buy typical machines shows the wide fluctuations experienced from 1913 to 1936.

Using the average price of wheat to producers in the Prairie Provinces we find that it took 297 bushels in 1913 to buy a binder. (Chart 6.)

In 1932, it took 815 bushels, and in 1935, 438 bushels. It will be noticed that two scales are shown on the chart, the other scale being the number of acres of wheat required to make the purchase. The smallest number of acres required was in 1917, about $6 \frac{1}{2}$ acres producing enough to purchase a binder. In 1931, it took 64 acres and in 1935, 39 acres, as compared with about $14 \frac{1}{4}$ acres in 1913.
You can see the difficulty experienced by the farmer in making purchases.

## By Mr. Graham:

Q. That last portion takes into consideration the average yield of those years?-A. Yes.
[Mr. J. B. Rutherford.]

In Table 19, comparisons of the amount of butter required to buy a cream separator, the amount of hay required to buy a mower and the bushels of potatoes required to buy a walking plough are shown in index form.


TABLE 19-AMOUNTS OF SPECIFIED FARM PRODUCTS REQUIRED TO PURCHASE CERTAIN FARM IMPLEMENTS, 1913 TO 1935. INDEX NUMBERS $1913=100$.


In 1913, if we assume the relationship was normal, the index of tons of hay to buy a mower was $100 \cdot 0$; the index of bushels of potatoes to buy a plough was $100 \cdot 0$; the index of pounds of butter to buy a cream separator was $100 \cdot 0$. 18723-2年

Then, glancing down the list, the fluctuations are shown. For example, in the case of hay in 1932 it took an index of $254 \cdot 5$; in 1931 in the case of potatoes it took an index of $333 \cdot 4$, three and three-quarter times the amount required in 1913. In the case of butter in 1932 it took an index of $171 \cdot 0$ as compared with $100 \cdot 0$ in 1913.

## By Mr. McLean:

Q. What kind of butter would that be?-A. The wholesale price of butter. The farm price of butter would show even greater fluctuation.

## By Mr. Graham:

Q. I notice in the case of hay that between 1932 it is 254.5 and in 1935 it is $261 \cdot 3$. Why is there that difference?-A. Hay prices are lower now; there was a very abundant crop of hay.
By Mr. Mitchell:
Q. Are these hay prices for a special district?-A. The hay price is an Ontario price. The butter is a Montreal price or Quebec price.
Q. And as to potatoes it is a Maritime price?-A. Yes, the Maritime price. The point there is the extreme variation in the kind of products required to purchase these different implements, indicating that all sections of the country, no matter what they are producing or where they are, are experiencing this great difficulty in replacing their farm machinery.

## By Mr. Patterson:

Q. In 1914 potatoes show $109 \cdot 3$ and in $1935 \quad 119 \cdot 1$. I remember very distinctly that in 1914 the price of potatoes was 40 cents a bushel, while in 1936 -A. This is only to 1935.
Q. Oh, I was referring to 1936 instead of 1935.-A. Yes, the 1935 prices may be subject to some revision yet.

Now, the last section of this brief is entitled:-

## 4. AGRICULTURE AND THE FARM IMPLEMENT AND MACHINERY INDUSTRY

The depression has focussed public attention on the disparity of price declines in various commodities and services. The information in this section is intended to show the reactions of the farm machinery industry and agriculture to economic influence. Because of the purpose of this inquiry, the farm machinery industry is selected for comparative purposes. There are a great number of other industries which would equally well illustrate the principles involved.

It is characteristic of some industries, particularly those in which there are a great number of producers, to maintain production in the face of reduced markets and falling prices. This has been true in the case of agriculture, and an examination of the causes of this reaction reveal among others, the follow-ing:-

1. The farmer as an individual recognizes that his action alone in maintaining or even increasing production will have a negligible effect upon price. Therefore with price unaffected, his income may be maintained or even increased as a result of his independent action.
2. Many of the farm cash costs may be reduced. This is done in part by the farmer utilizing a larger portion of his own and his family labour at a very small return or at no return at all. He may also, by increased yields, diminish the per unit of product outlay.
[Mr. J. B. Rutherford.]
3. For those farmers who own or who have a substantial equity in their own business, returns in the form of interest on the investment may be relinquished for a considerable period.
4. The farmer may produce for some time without having to meet depreciation by the expenditure of cash. Eventually, however, this situation must be rectified by much larger than usual expenditures or else the business will be forced to close down.
5. Various plans and devices are put forward to assist agriculture through difficult periods. This is in recognition of the economic importance of the industry and for the social welfare of the large number of people dependent upon it.
On the other hand, many secondary industries have a much more rigid cost structure than agriculture. Wage rates are sometimes highly inflexible, interest charges on bonds are not easily reduced, and even depreciation cannot continue for long without expenditure for replacement in order to keep the business operating.

The usual reaction in such industries facing a reduced demand is to curtail production, cutting the wage and salary expense and the expense for materials. This action is taken in the interest of the business, for by so doing, the individuals seek to minimize the losses in each concern.

The point under discussion is ably covered in a recent publication, "Industrial Prices and Their Relative Inflexibility," by Dr. Gardiner C. Means, economic adviser on finance to the Secretary of Agriculture in the United States.

## By Mr. McLean:

Q. Who is your authority?-A. Dr. Gardiner C. Means.
Q. Dr. Gaston C. Means?-A. No, not Gaston; Gardiner C. Means. Then: To quote Dr. Means:-

The distinction drawn here between industrial policy and business policy is of the greatest importance.

According to laissez faire principles, industrial policy was supposed to result from the interaction in the market of the business policies of a large number of independent units, no one of which had any significant power. In the truly atomistic economy to which the principles of laissez faire applied, no individual buyer or seller alone had any significant power over either price or total volume of production for the industry. Prior to A.A.A., agricultural products, such as wheat and cotton, were produced and marketed under these conditions.

Where the number of competing units in a particular industry have been reduced to a relatively small handful, industrial policy is no longer made wholly by the market but in part by individuals. Industrial policy becomes subject to administrative control even though there is no monopoly or collusion between the separate enterprises.

But when the business man has the power to affect industrial policy, he almost necessarily makes wrong industrial decisions. The very position, experience and training of the business man which lead him to make the correct decisions on business policy tend to force him to make the wrong decisions on industrial policy in spite of the utmost public spirit which he, as an individual, may seek to exercise. The fact that his decisions are wrong from the point of view of the public interest is no necessary reflection on either his character or his intelligence, but arises from the nature of the situation within which he operates and the functions which he performs.

The business man is expected to make business policy in a way to maximize the profits of his own enterprise. When he has the power to choose between lowering price and lowering production, good business policy frequently requires him in the presence of falling demand to hold
price and curtail his production even though this means idle men and idle machines. The amount by which he can count on increasing his sales by lowering price is usually so small that the whole balance of his interest as a business man points toward a restriction of production. The fact that he can lay off his workers enables him to cut production without having to carry the burden of idle workers as he does that of idle machines. His interest dictates lowering price only when he is able to squeeze his costs, particularly his labour costs. At best, it is an even choice whether he will choose to maintain profits or minimize losses by seeking a relatively large profit margin on a reduced volume or a small margin on a maintained volume of sales, and in such a situation the easier device, and the one involving the lesser risk, is the device of holding price and accepting curtailed volume. It is only because this holding of prices has become widespread and customary that the term "price chiseler" could be a term of approbrium in an economy supposed to be co-ordinated through flexible prices.

The net effect of business control over industrial policy is, therefore, to aggravate any fluctuations in economic activity and prevent any necessary readjustments. An initial drop in demand would result, not in price readjustment, but in maintained prices and curtailment of production, thus throwing workers and machines out of employment, reducing money income and spending power, and further reducing demand. The inflexible administered prices resulting from the shift from market to administration thus act as a disrupting factor in the economy and could cause an initial small drop in demand to become a national disaster.


Only as the business man was willing to go directly counter to the interest of his enterprise as a profit-making concern and against business tradition would he make the kind of decisions which, if made throughout industry, would keep the economy functioning and would serve the fundamental interests of business itself. If during the depression individual business men throughout the economy had been persuaded to lower their prices, thus making decisions which appeared by all the standards available to them to be adverse to their interests, the result would actually have been in their interest since it would have reduced the severity of the breakdown.
[Mr. J. B. Rutherford.]

A contrast of the volume of output in agriculture and the farm implement industry appears in Chart 7:-

It will be noted that the volume of production in agriculture was maintained through the price decline of the period 1921 to 1923, and again during the price

decline of the period 1930 to 1932. Fluctuations in the volume of agricultural production during these years have resulted chiefly from unfavourable weather, insect pests or disease-factors beyond the control of the farmer.

On the other hand, the output of farm machinery dropped from an index $132 \cdot 4$ in 1920 to $48 \cdot 0$ in 1923, and for the year 1933 implement production was only 15 per cent of the average production from 1926 to 1930. Thus, the decline

in agricultural production was 28 per cent as compared with a decline in the production of farm implements of 85 per cent.

If the title was omitted from Chart 8 , it could almost be interchanged with Chart 7. In other words, the physical volume of agricultural production could be substituted for the price of farm machinery and the output of farm machinery for the prices of agricultural products. In 1932 agricultural prices had declined 50 per cent from the 1926-30 level, while machinery prices in the same year were 2 per cent below this level. By 1935, machinery prices had dropped to about 10 per cent below the 1926-30 level.


Chart 9 bears out the statements made with regard to the struggle by business to minimize losses. When output fell during the years 1920 to 1922, the number of wage earners declined from an index of 130 to about 57 in the same
[Mr. J. B. Rutherford.]
period. Earnings per worker declined from 107 to 85. In 1932, the number employed was 25 per cent of the average number employed during the years 1926 to 1930. Earnings per worker declined to 70 per cent of the base period. It must be pointed out that these are not wage rates, but approximately the average amounts earned per year by a man working 12 months: A similar situation prevailed with regard to salary earners and salaries as indicated by charts 10 and 11:

The yearly wages of farm help had fallen in 1933 to 44 per cent of the 1926 to 1930 level. Wages of special agricultural labour, as for example harvest labour were probably reduced considerably more than year help. The decline in number employed in agriculture was relatively small as compared with many other industries. In other words, agriculture was able to maintain its labour force by means of greatly reduced wages. The factor of technological unemployment does not appear to have been present in the case of the agricultural implement industry. In 1932, for example, the production of implements had fallen to $14 \cdot 5$ per cent of the average of the 1926 to 1930 period, but the number of wage earners had declined to only $24 \cdot 2$ per cent. In 1934, production recovered to an index of $23 \cdot 2$ but the index number of wage earners had risen to $36 \cdot 6$.


While the discussion in the foregoing paragraphs has indicated great differences in certain economic reactions of the farm machinery industry and agriculture, it is well to draw attention to the inter-relationship of the two industries. Chart 12 is a correlation diagram, demonstrating the relationship between the purchasing power of farm products and the apparent annual sale of farm implements over the period 1920 to 1935. Each dot on the chart represents the condition obtaining for one of the years. The broken line represents the average relationship found during this period. If there had been a perfect relationship between the purchasing power of farm products and the sales of machinery, every dot would fall on the line. The failure of the dots to fall on the line indicates the disturbing effects of other factors (for example, yields) which should be included to fully explain the variations. However, from the relationship which is indicated, it may be said, that a change of 10 points in the index of purchasing power of farm products has brought about a change of 30 points in the index of farm machinery sales.

The important points brought out in this section may be set forth below:-

1. There have been two serious declines in the general price level since 1920.
2. In the face of falling demand, agricultural production is maintained, and this results in a precipitous drop in agricultural prices.
3. Many industries maintain their prices, curtailing production, and reducing employment.
4. Much of the distress of depression could have been averted by a policy of price reduction and an enlargement of the volume of goods produced. Some industries initiated such a policy with beneficial results. By the Chairman:
Q. Is that your complete statement?-A. Yes.

The Chairman: Do any members of the committee desire to ask Mr. Rutherford any questions?

> By Mr. Mitchell:
Q. Why was the scale changed in the first chart between the years 1933 and 1936 ?-A. That is to indicate the condition by months and to bring it up to the latest available data, which is as of March, 1936.
Q. Then these are monthly fluctuations from 1933 on?-A. Yes.

## By Mr. Coldwell:

Q. While this is a very clever analysis of the situation, I wondered whether the Department had worked out anything on a chart basis suggesting what might be done to meet conditions of this sort several years in the future? This is an analysis of the trend in the past. What about the future?-A. I do not think we have worked out anything along the line you suggest.

The Chatrman: I suppose we can judge our future actions to some extent by the history of the past.

We have another witness here. If no one has any further question to ask Mr. Rutherford he may retire. I am sure the committee is very grateful to you, Mr. Rutherford, and I desire to extend on behalf of the members of the committee our thanks for your contribution.

The Chatrman: The next witness will be Mr. William H. Losee.
Mr. William H. Losee, called.

## By the Chairman:

Q. Would you be good enough to advise the members of the committee as to your name and official position?-A. William H. Losee, Chief of the Mining, Metallurgical and Chemical Branch of the Bureau of Statistics. I might say that the Mining, Metallurgical and Chemical Branch prepares statisties of primary mining production and the manufacture of products which have minerals as their chief component part. The farm implement industry is under our iron and steel division. Automobiles would be another similar case.

I have passed around tables of the general statistics, and charts.
The statistics in Tables 1 to 7 of this repont cover only those manufacturers which report farm implements as their principal items of production. These concerns, of course, make some commodities other than farm implements and any such production is included in the total figures for the industry. On the other hand, certain companies in other industries produce some farm implements as secondary products and any such output is not included in the production totals or in the general statistics for the Farm Implement Industry. On the whole, however, [Mr. W. H. Losee.]
these discrepancies are of minor importance and the statistics quoted may be taken as being quite representative of the manufacture of farm implements in this country.

I mean by that that there are certain farm implement industries who perhaps make furnaces or anything else they can sell as a secondary product, but in our statistical set-up we take the major product of the industry to classify it.

TABLE 1-PRINCIPAL STATISTICS OF THE FARM IMPLEMENTS INDUSTRY IN CANADA, 1920-1934

| Years | No. of plants | Capital employed | Average number of employees | Salaries and wages | Cost of fuel and electricity works | Cost of materials at at works | Selling value of products at works |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | \$ |  | \$ | \$ | \$ | \$ |
| 1920 | 99 | 110,868713 | 12,838 | 16,941,987 | 1,062,337 | 22,588,390 | 50, 301,302 |
| 1921 | 90 | 100, 285, 688 | 9,198 | 11, 808,700 | 1,045, 918 | 18,854, 537 | 38,947,968 |
| 1922. | 73 | 92, 566,964 | 6,221 | 7,084,947 | 450,536 | 7,967,767 | 18,240,381 |
| 1923. | 67 | 92,277,040 | 7,792 | 9, 112, 214 | 840,413 | 11,592,401 | 26,026,419 |
| 1924 | 63 | 82, 877, 387 | 6,700 | 8,192,861 | 605, 614 | 11,700,644 | 26,447, 171 |
| 1925 | 61 | 81,861,961 | 7,559 | 9,089, 221 | 642,769 | 11,089, 186 | 24,770, 216 |
| 1926 | 69 | 78, 947, 274 | 10,091 | 12, 636, 915 | 835, 088 | 18,160,336 | 38,269,214 |
| 1927 | 65 | 88, 981, 203 | 11, 011 | 13,315,500 | 805,876 | 19,317,415 | 42, 996, 288 |
| 1928 | 66 | 91, 142,820 | 10,867 | 13,599,953 | 721,123 | 17,607,861 | 41,199,841 |
| 1929 | 62 | 103,356,773 | 11,408 | 14,775,889 | 799,634 | 19,016,981 | 40,659,479 |
| 1930 | 57 | 98,684,828 | 7,405 | 9,564, 049 | 661,392 | 11,353,523 | 26,902,139 |
| 1931 | 57 | 84, 501,405 | 4,471 | 4,997, 732 | 381,925 | 3,597,534 | 11, 175, 404 |
| 1932 | 47 | 73, 576,979 | 2,758 | 3,097,975 | 262,571 | 1,907,768 | 5, 510,078 |
| 1933 | 40 | 63, 903,380 | 3,039 | 3, 047, 501 | 283,748 | 2,215, 031 | 5,326,416 |
| 1934 | 35 | 55, 742,696 | 3,706 | 3,776,918 | 368,292 | 3,632,821 | 8,817,756 |

The decline in the number of plants from 99 in 1920 to 35 in 1934 was due partly to changes in the statistical arrangement, but principally to the fact that many of the smaller plants are not now in operation. By changes in the statistical arrangement is meant that when a firm ceased to produce farm implements as its principal product, it was transferred to another industrial group.

Table 1-is comprised of what is known as the principal statistics of the Farm Implement Industry in Canada from 1920 to 1934. The figures are compiled from annual questionnaires which are sent out each year to the manufacturers.

## By Mr. Graham:

Q. To make that clear, that has nothing to do with the capital structure of the company?-A. No.
Q. It is the money employed in the industry?-A. That is right, sir. We want to know how much money they have invested, or how much it is worth, how much they have there to run their business with. We try to get at the point: What is your plant worth?

> By Mr: Mitchell:
Q. Does that include only plants actually in use producing these results, or does it include properties that are not in use?-A. It includes operating plants only.

## By Mr. Graham:

Q. It would not include any plant not being presently used?-A. If the plant is not used in 1935 it is not there.
Q. It is not there?-A. It is not there. We say that the plant is idle for that year and therefore the money is not being used for producing the article.


## By Mr. McLean:

Q. Supposing a plant is in use to 25 per cent of its capacity?-A. The total would be there.

By Mr. Ward:
Q. What method do you employ to get this information?-A. We sent out questionnaires; otherwise it would take a lot of auditing to go through the books. Then:

The information obtained includes such items as capital employed, number of employees, salaries and wages paid, cost of fuel and electricity used, cost of materials laid down at works, and selling value of products at the works.

In other words, they make so much and get so much money for it at the plant.
By Mr. Graham:
Q. In all likelihood, Mr. Losee, that is the price that the dealer would purchase at less commission and less freight to his point?-A. I would expect that would be it.

## By Mr. Mitchell:

Q. Factory price?-A. Yes.

## By Mr. Graham:

Q. Not the cost price?-A. No, the factory price, the factory selling price.

## By Mr. Douglas:

Q. These figures are submitted by the companies themselves and are not subject to audit?-A. No.
Q. And the number of employees engaged in the industry includes the officials?-A. Yes, the officers and employees engaged in the plant.

I would like to refer to the paragraph at the bottom of Table No. 1:-
The decline in the number of plants from 99 in 1920 to 35 in 1934 was due partly to changes in the statistical arrangement, but principally to the fact that many of the smaller plants are not now in operation. By changes in the statistical arrangement is meant that when a firm ceased to produce farm implements as its principal product, it was transferred to another industrial group.

## By Mr. Douglas:

Q. What happens in the case of a firm passing out of existence or merging with another firm?-A. If a firm passes out of existence we cease to get the return. If it is tied in with another firm and continues to operate we would get the statistics.
Q. But there is no figure available to show how many of these firms are absorbed by other firms?-A. Not here.

Mr. Graham: And it may be well to point out that that is the number of plants, not the number of companies.

Mr. Douglas: Yes.
Witness: Then:
The above terms are defined as follows:-
Capital Employed includes-

1. Present value of lands, buildings, machinery, tools and other equipment.
2. Inventory value of materials on hand and stocks in process.
3. Inventory value of finished products on hand.
4. Operating capital: cash, bills and accounts receivable, prepaid expenses, etc.

## Number of Employees-

Includes salaried employees and wage-earners.

## Cost of Materials-

Cost laid down at the plant.
Selling Value of Products-
Selling value of the products at the plant.
Capital Employed, etc.-
The chart which accompanies the table is a pictorial representation of the figures in the table.
Capital employed, which totalled nearly 111 million dollars in 1920 showed a downward trend until 1926, when it reached $\$ 79$ millions from which point it rose to $\$ 103$ millions in 1929. The curve again turned downward and in 1934 the capital employed stood at $\$ 55 \cdot 7$ millions.

During the same time, the number of plants included in this group dropped from 99 in 1920 to 61 in 1925. In 1926 the number had risen to 69 plants but since that time a gradual reduction is in evidence and in 1934 the number stood at 35 .

In 1920 the value of products was at its highest point. There was a sharp downward trend to 1922 and then a slight improvement occurred during the next two years. Value of output was less in 1925 than in the previous year but 1926 and 1927 showed a marked rise. During 1928 and 1929 a slight downward movement was in evidence but the decline during the next two years was exceedingly sharp. The low points in value of production were registered in 1932 and 1933. Improvement will be noticed in 1934 and from preliminary statements already returned to the Bureau, 1935 was better than 1934

## By Mr. Graham:

Q. Would that be the calendar year?-A. Yes, all calendar year figures.

By Mr. McLean:
Q. You said the value of production had lowered in 1925 over 1924, is that right?-A. It is 1.7 million dollars less. You will see it on the first table there.
Q. They had nearly 1,000 more men employed in 1925 than in 1924 and you say the value of production was less?-A. Possibly they came on in the fall to get ready for the next year's production.
Q. But this is the average number of employees?-A. Yes, for the year

## By Mr. Graham:

Q. Could that be explained by the fact that in the next year there is a substantial jump, and as you say in the fall they were getting ready for the next year's production?-A. That is my assumption.

## By Mr. McLean:

Q. These prices are only the value at the plant when shipped?-A. Only the value at the plant.
Q. Let us look at the other figures. They employ a little less capital and nearly 1,000 more men, and nearly $\$ 1,000,000$ paid out in larger salaries and wages, and more money for fuel and electricity, and less for materials, and
[Mr. W. H. Losee.]
yet there is a difference of one and three-quarter millions in the value of their output?-A. I could look into those figures.

By Mr. Graham:
Q. Will you make a point of doing that?-A. Yes, I will look into that, sir.

You will notice that the cost of materials as to the value of products in 1931 ran as low as 32 per cent, but generally speaking the cost of materials was 40 to 44 per cent of the value of products. The wages and salaries ran from 31 per cent to 42 per cent of the value of products. The cost of materials, fuel, electricity and wages ran around 80 per cent of the total value of products. You will notice on the chart that in 1931 1932, 1933 and 1934 the salaries and wages were greater than the cost of materials used.

## By Mr. Mitchell:

Q. I notice on the Materials line of the charts that changes are all fairly gradual until 1928 when there is a decided drop in one year. To what is that attributable?-A. Just a little drop in 1928.
Q. Yes, between 1927 and 1928 apparently, whereas wages and products and capital employed, and so on, remain fairly constant. To what is that attributable?-A. I could not tell you offhand, sir.

## By Mr. Graham:

Q. Will you make a note of that and consider it?-A. Yes.

The Chatrman: May I suggest that the members of the committee speak up when questioning the witness in order that the shorthand reporters may have an opportunity of accurately recording their questions.

Witness: I divided the salaried employees and wage earners for each year over the period, and I found that the average annual salary varied from a low of $\$ 1,599$ in 1927 to a high of slightly more than $\$ 1,900$ in 1930 and 1931. The average wage ranged from a high of $\$ 1,249$ in 1920 to a low of $\$ 805$ in 1933. The drop in the average annual wage was probably due to the employment of men on part time during the past few years.

By Mr. Mitchell:
Q. Are these wages of permanent employees or are there seasonal employees included?-A. They would be wages of any men they hire during the year.
Q. They are all on an annual basis?-A. The salaried men would be on an annual or monthly basis; the wage earners might be on a weekly or hourly basis.

## By Mr. Douglas:

Q. Are these labourers, or labourers and salaried men?-A. In the figures you have are salaried men and wage earners together.
Q. Does it include officials?-A. How do you mean "officials"?
Q. Superintendents and managers?-A. Yes.

## By Mr. Coldwell:

Q. How do you account for the rise in salaries in 1930 and 1931 over 1927 and 1928?-A. Well, you will notice in 1931, if you have the figures there, that there were 1,064 salaried employees in that year and in 1932 there were 691.

Mr . Graham: It might be interesting to give a gist of the number of employees that appear on page 4.

Witness: Do you want me to read it?
Mr. Graham: Yes.

## Witness

TABLE 2-THE FARM IMPLEMENT INDUSTRY IN CANADA
Average Salaries and Wages Paid from 1920 to 1934 inclusive

| Year | Salaries |  |  | Wages |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of Employees | Salaries | Average Salary | Number of WageEarners | Wages | Average Wage |
|  |  | \$ | \$ |  | \$ | \$ |
| 1920 | 1,718 | 3,047,426 | 1,774 | 11,120 | 13,894,561 | 1,249 |
| 1921 | 1,664 | 2,881, 240 | 1,732 | 7,534 | 8,927,460 | 1,185 |
| 1922 | 1,348 | 2,282,890 | 1,694 | 4,873 | 4, 802,057 | 985 |
| 1923. | 1,353 | 2,395,367 | 1,770 | 6,439 | 6,716,847 | 1,043 |
| 1924. | 1,288 | 2,317,521 | 1,799 | 5,412 | 5,875,340 | 1,085 |
| 1925. | 1,353 | 2,254,068 | 1,665 | 6,206 | 6,835,153 | 1,101 |
| 1926. | 1,528 | 2,548,069 | 1,667 | 8,563 | 10,088,846 | 1,178 |
| 1927 | 1,518 | 2,427,643 | 1,599 | 9,493 | 10,887,857 | 1,146 |
| 1928. | 1,659 | 2,936,250 | 1,769 | 9,208 | 10,664,703 | 1,158 |
| 1929 | 1,765 | 3,323,356 | 1,882 | 9,643 | 11,452,533 | 1,187 |
| 1930. | 1,530 | 2,915,138 | 1,905 | 5,875 | 6,648,911 | 1,131 |
| 1931. | 1,064 | 2,034,734 | 1,912 | 3,407 | 2,962,998 | 869 |
| 1932. | -691 | 1,322,367 | 1,913 | 2,067 | 1,775,608 | 859 |
| 1933. | 615 | 1,094,880 | 1,780 | 2,424 | 1,952,621 | 805 |
| 1934. | 578 | 1,990,107 | 1,886 | 3,128 | 2,686,811 | 858 |

By Mr. McLean:
Q. What kind of employees are they?-A. Salaried employees.
Q. Salaried men?-A. Yes.

By Mr. Mitchell:
Q. You are giving the number of salaried employees?-A. Yes.
Q. How do you account for the fact that the average of employees is less than the total salaried employees all the way down. The average number of employees shown in this chart is less in every figure than the total of salaried employees, according to the figures you gave?-A. I gave years first. Did that confuse you? For instance, take 1920. In that year there were 12,000 employees. Is that right?
Q. 12,838 is the average number of employees?-A. Yes.
Q. What is the figure for the last year you read out?-A. 578 salaried employees for 1934.

## By Mr. Coldwell:

Q. Is this a fair inference to draw: In the years 1928 to 1931 the salaried men who were let out of those plants were the lower salaried men; the higher salaried men remained?-A. I am inclined rather to agree with you. I think when they were not so busy the stenographers, clerks and similar employees, were let out, and the other higher class men were kept on. That is the inference I have drawn. The superintendents, foremen, and other men on a monthly basis they would want to keep as a nucleus to hold the plant together; they would be retained.

Mr. Graham: It might be well to complete that information.
By Mr. Coldwell:
Q. Have you anything worked out on labour units in regard to producing a machine in the years $1920,1925,1930$ and 1932 ?-A. The cost of producing it?
Q. Yes, on the basiș of labour cost, a unit man hour?-A. No, I have not done that.
[Mr. W. H. Losee.]

Mr. Graham: We are having the labour department prepare the actual hourly rates on all types. Is that the information you desire?

Mr. Coldwell: No. I should like information on all classes of labour, and the cost of that labour which goes into the implement for the years 1920 , 1925, 1930 and 1932.

Mr. Graham: Mr. MacDonald is working on it at the present time. If you notice in the price spreads committee evidence, some of the companies gave us material on labour costs and material costs for the comparative years 1913 and 1934. If I remember rightly, in our questionnaire we are asking for that information. That was given to the price spreads committee, and Mr. MacDonald is adjusting the information, and will give the committee the comparative cost of producing binders in 1913.

Mr. Coldwell: The point I am making is this: In getting a clear picture of this, rising labour costs is a factor in the production of a machine.

Mr. Graham: That is a point, and in checking that, we asked the Labour Department to produce the wages paid per hour for the different types of work that go into the manufacture of an implement.

Mr. Mitchell: On a per man hour basis?
Mr. Donnelly: These statistics have nothing to do with the sales agency at all.

Witness: No, sir.
Mr. Donnelly: Just the manufacturing end?
Witness: Just at the plant.
Mr. Golding: The implement manufacturers should be able to give the cost of labour in the production of their machines, along with all other costs. That is important information to have.

Witness: Yes.

> By Mr. Donnelly:
Q. We can get figures as to the meaning of the third column?-A. I beg your pardon?
Q. We can get information on salaries and wages, and to what amount is wages and what is salary?-A. Yes.
Q. Wage earners and salaried employees?-A. Yes.

The Chairman: The table will go in the records, and it is divided there.

## By Mr. Donnelly:

Q. You gave us the number of salaried employees?-A. Yes, and I have also the amount received, the annual salary and the annual wages. That will all be on the record.

## By Mr. Mitchell:

Q. You have given us the averages already?-A. Yes. I might say this, that the average wage during the last four years is something over $\$ 800$. The drop there was probably due to employing men on a part-time basis. They would have more men, possibly, getting the former rates of wages, but they would not be working full time.

## By Mr. Thorson:

Q. They might have been working at an increased rate?-A. That may be, but they would still have a less average annual wage per man.

By Mr. Perley:
Q. Explain the first column?-A. As I explained at the beginning, we classified the firms according to their major product. If a man is making wash-
ing machines and ploughs, and he makes more ploughs the value of the plough production is greater than the washing machine production; therefore he will be classified in the agricultural implement industry, but if he makes more washing machines than ploughs, he would be classified in the machinery industry. That is the way we indicate it, because there are many cases, especially in the iron and steel industry, where we have companies making various products. They are big casting plants, you see; so it is obvious that is the best we can do in the matter of classification.
Q. Is it an indication that the number of small implement concerns have been absorbed by the larger?-A. They may have been absorbed, or they may have quit.
Q. Disappeared?-A. Yes.

## By Mr. McLean:

Q. The plants may have been closed down temporarily?-A. Yes, that would happen also.

In order that the information could be studied in greater detail, the statistics of the value of production, number of employees, and capital employed, were divided into certain specified groupings for the years 1934, 1929, 1924 and 1920. The results are shown in tables $3,4,5$ and 6 . From these tables the following facts were obtained:-

## Value of Production

In 1920 there were 32 plants each with an annual output of more than $\$ 250,000$ and comprised 33 per cent of the total number in the industry. The combined production of these plants amounted to 94 per cent of the total value of production.

In 1924 there were 16 plants each with an annual output of more than $\$ 250,000$ and comprised 25 per cent of the total number in the industry. The combined production of these plants amounted to 89 per cent of the total value of production.

In 1929 there were 22 plants each with an annual output of more than $\$ 250,000$ and comprised 35 per cent of the total number in the industry. The combined production of these plants amounted to 94 per cent fo the total value of production.

In 1934 there were 8 plants each with an annual output of more than $\$ 250,000$ and comprised 23 per cent of the total number in the industry. The combined production of these plants amounted to 85 per cent of the total value of production.

## Number of Employees

In 1920 there were 27 plants or 27 per cent of the total number, each employing more than 100 people. These employees represented 88 per cent of the total number in the industry. The combined production of this group of plants amounted to 89 per cent of the total value of production for the year.

In 1924 there were 16 plants or 25 per cent of the total number, each employing more than 100 people. These employees represented 84 per cent of the total number in the industry. The combined production of this group of plants amounted to 89 per cent of the total value of production.

In 1929 there were 19 plants or 30 per cent of the total number, each employing more than 100 people. These employees represented 90 per cent of the total number in the industry. The combined production of this group of plants amounted to 92 per cent of the total value of production.

In 1934 there were 8 plants or 25 per cent of the total number, each employing more than 100 people. These employees represented 84 per cent of the total number in the industry. The combined production of this group of plants amounted to 85 per cent of the total value of production.
[Mr. W. H. Losee.]

## Capital Employed

In 1920 there were 27 plants each with a capital employed of more than $\$ 500,000$ and comprised 27 per cent of the total number of plants. This group represented 93 per cent of the total capital employed and accounted for 86 per cent of the total value of production.

In 1924 there were 17 plants each with a capital employed of more than $\$ 500,000$ and comprised 28 per cent of the total number of plants. This group represented 92 per cent of the total capital employed and accounted for 89 per cent of the total value of production.

In 1929 there were 17 plants each with a capital employed of over $\$ 500,000$ and comprised 27 per cent of the total number of plants. This group represented 94 per cent of the total capital employed and accounted for 90 per cent of the total value of production.

In 1934 there were 12 plants each with a capital employed of over $\$ 500,000$ and comprised 34 per cent of the total number of plants. This group represented 95 per cent of the total capital employed and accounted for 89 per cent of the total value of production.

Table 3．－THE FARM IMPLEMENT INDUSTRY IN CANADA， 1920
Principal Statistics，according to Production，Number of Employees，and Capital Employed

|  | $\begin{gathered} \text { Number } \\ \text { of } \\ \text { plants } \end{gathered}$ | Capital employed | Salaried employees | Salaries | Wage－ earners | Wages | Fuel costs | Cost of materials at works | Selling value of products at works |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| （a）Production－ <br> Under $\$ 5,000$ <br> $\$ 5,001$ to $\$ 10,000$ <br> $\$ 10,001$ to $\$ 25,000$ <br> $\$ 25,001$ to $\$ 50,000$ ． <br> $\$ 50,001$ to $\$ 100,000$ ． <br> $\$ 100,001$ to $\$ 250,000$ <br> $\$ 250,001$ to $\$ 500,000$ <br> $\$ 500,001$ to $\$ 1,000,000$ <br> Over $\$ 1,000,000$ |  | \＄ |  | \＄ |  | \＄ | \＄ | \＄ | \＄ |
|  | 12 | 53，499 |  |  | 14 | 10，371 | 1，086 | 7，727 | 26，785 |
|  | 5 | 58，341 |  | 4，647 | 11 | 9，092 | 1， 851 | 10，387 | 23，783 |
|  | 10 | 296，864 | 10 | 9，826 | 61 | 62，879 | 4，590 | 60，197 | 168，662 |
|  | $\begin{aligned} & 13 \\ & 11 \end{aligned}$ | 982,043 $1,421,271$ | 35 49 | 51，378 | 154 | 147，831 | 12，448 | 163，518 | 496，846 |
|  | 16 | 3， 3 ， 830,883 | 115 | 203，515 | 128 | 130,980 606,150 | 7,479 27,401 | － 338,664 | 800,367 $2,344,806$ |
|  | 11 | 7，215，924 | 205 | 277， 707 | 996 | 1，067，673 | 90，719 | 1，577，698 | $2,344,806$ $4,064,056$ |
|  | 9 | 17，055，085 | 206 | 578，279 | 1，324 | 1，629，112 | 126，351 | 2，739，831 | 6，631，890 |
|  | 12 | 79，954，803 | 1，092 | 1，844，706 | 7，855 | 10，230，473 | 791，412 | 16，818，648 | 35，734，267 |
|  | 99 | 110，868， 713 | 1，715 | 3，047，426 | 11，123 | 13，894，561 | 1，062，337 | 22，588，390 | 50，301，302 |
| （b）Employees $\begin{array}{r}\text { Under } 11 \ldots \\ 11 \text { to } 20 \ldots \ldots \\ 21 \text { to } 50 \ldots \ldots \\ 51 \text { to } 100 \ldots \\ 101 \text { to } 200 \ldots \\ 201 \text { to } 500 \ldots \\ \text { Over } 500 \ldots \\ \text { Tot }\end{array}$ |  |  |  |  |  |  |  |  |  |
|  | $\begin{aligned} & 33 \\ & 15 \end{aligned}$ | $\begin{array}{r} 777,303 \\ 1,687,793 \end{array}$ |  | 52,425 88,659 | 97 167 | 108，907 | 7，395 | 273，177 | 608，491 |
|  | 15 | 2，871，776 | 64 98 | r 169,298 | 401 | 170,026 416,494 | $\begin{aligned} & 12,274 \\ & 26,285 \end{aligned}$ | $\begin{aligned} & 311,855 \\ & 694,785 \end{aligned}$ | $\begin{array}{r} 852,071 \\ 1,777,435 \end{array}$ |
|  |  | 3，733，645 | 94 | 135，727 | 573 | 581，765 | 44，945 | 971，493 | 1，232，328 |
|  | 13 | 18，769，317 | 313 | 752，644 | 1，541 | $1,918,652$ | 141，109 | 2，779，099 | $8,151,696$ |
|  |  | 10，704，694 | 240 | 328，180 | 1，701 | 1，880，950 | 123，973 | 3，654，688 | 7，469，148 |
|  | 7 | 72，324，185 | 877 | 1，520，493 | 6，643 | 8，817，767 | 706，356 | 13，903，293 | 29，210，133 |
|  | 99 | 110，868， 713 | 1，715 | 3，047，426 | 11，123 | 13，894，561 | 1，062，337 | 22，588，390 | $50,301,302$ |
| （c）Caprpal Employed |  |  |  |  |  |  |  |  |  |
|  |  | 222，783 | 18 | 25，134 | 71 | 68，962 | 3，913 | 107，626 | 270，125 |
|  | 22 | 1，274，000 | 69 | 108，932 | 215 | 242，192 | 14，921 | 452，112 | 1，203，195 |
|  | 26 | 6，616，305 | 211 | 318，114 | 1，324 | 1，362，560 | 74，114 | 2，299，252 | 5，487，607 |
|  | 10 | 5，685，485 | 161 | 234， 175 | 864 | 901，772 | 95，918 | $1,697,184$ | $4,200,172$ |
|  | 10 | 16，041，213 | ${ }_{0} 323$ | $\begin{array}{r}506,483 \\ 1 \\ 854 \\ \hline\end{array}$ | 1，940 | $2,414,467$ $8,809,608$ | 193，385 | 3，549，748 | $8,819,923$ |
|  |  | 81，028，927 | 933 | 1，854，590 | 6，709 | 8，899，608 | 680，086 | 14，482，468 |  |
|  | 99 | 110，868，713 | 1，715 | 3，017，426 | 11，123 | 13，894，561 | 1，062，337 | 22，588，390 | $50,301,302$ |

[^5]TABLE 4.-THE FARM IMPLEMENT INDUSTRY IN CANADA, 1924
Principal Statistics, according to Production, Number of Employees, and Capital Employed


Principal Statistics, According to Production, Number of Employees and Capital Employed,


Table 6-THE FARM IMPLEMENTS INDUSTRY IN CANADA, 1934
Principal Statistics, according to Production, Number of Employees, and Capital Employed

|  | Number of plants | Capital employed | Salaried employees | Salaries | Wageearners | Wages | Fuel Costs | Cost of materials at works | Selling value of products at works |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (a) Production- <br> Under $\$ 5,000$ <br> $\$ 5,000$ to $\$ 10,000$ <br> $\$ 10,001$ to $\$ 25,000$. <br> $\$ 25,001$ to $\$ 50,000$. <br> $\$ 50,001$ to $\$ 100,000$. <br> $\$ 100,001$ to $\$ 250,000$. <br> $\$ 250,001$ to $\$ 500,000$. <br> Over $\$ 500,000$. $\qquad$ <br> Total............ <br> (b) Employees- <br> Under 11 <br> 11 to 20 <br> 21 to 50. <br> 51 to 100 | $\begin{aligned} & 3 \\ & 4 \\ & 5 \\ & 6 \\ & 4 \\ & 4 \\ & 5 \\ & 3 \\ & 5 \end{aligned}$ | $\$$ 224,801 126,683 526,107 626,323 $3,336,064$ $2,675,721$ $4,253,572$ $43,943,425$ | $\begin{array}{r} 8 \\ 4 \\ 12 \\ 24 \\ 39 \\ 49 \\ 121 \\ 321 \end{array}$ | $\$$ 8,097 4,730 16,857 26,484 88,929 85,649 161,122 698,239 | $\begin{array}{r} 4 \\ 11 \\ 62 \\ 70 \\ 102 \\ 188 \\ 290 \\ 2,401 \end{array}$ | $\$$ <br> $\vdots \quad 2,458$ <br> 8,625 <br> 33,927 <br> 54,955 <br> 70,845 <br> 153,979 <br> 228,515 <br> $2,133,507$ | $\begin{array}{r} \$ \\ 209 \\ 2,303 \\ 2,428 \\ 4,780 \\ 7,557 \\ 16,474 \\ 41,765 \\ 292,776 \end{array}$ | $\begin{array}{r} \S \\ 1,869 \\ 9,676 \\ 26,173 \\ 74,849 \\ 92,479 \\ 193,625 \\ 465,954 \\ 2,768,196 \end{array}$ | $\$$ 10,408 32,641 89,625 245,834 284,957 632,547 $1,217,803$ $6,303,941$ |
|  | 35 | 55,742,696 | 578 | 1,090,107 | 3,128 | 2,686,811 | 368,292 | 3,632,821 | 8,817,756 |
|  | $\begin{array}{r} 11 \\ 4 \\ 8 \\ 4 \\ 3 \\ 5 \end{array}$ | $\begin{array}{r} 559,153 \\ 347,949 \\ 2,130,790 \\ 4,507,807 \\ 4,253,572 \\ 43,943,425 \end{array}$ | $\begin{array}{r} 23 \\ 15 \\ 50 \\ 48 \\ 121 \\ 321 \end{array}$ | $\begin{array}{r} 25,323 \\ 21,280 \\ 73,704 \\ 110,439 \\ 161,122 \\ 698,239 \end{array}$ | $\begin{array}{r} 34 \\ 34 \\ 178 \\ 191 \\ 290 \\ 2,501 \end{array}$ | $\begin{array}{r} 27,359 \\ 36,165 \\ 11,514 \\ 144,751 \\ 228,515 \\ 2,133,507 \end{array}$ | $\begin{array}{r} 4,989 \\ 1,784 \\ 16,428 \\ 10,550 \\ 41,765 \\ 292,776 \end{array}$ | 36,706 71,989 194,881 95,095 45,954 $2,768,954$ | $\begin{array}{r} 153,832 \\ 188,318 \\ 53,217 \\ 419,645 \\ 1,217,803 \\ 6,303,941 \end{array}$ |
|  | 35 | 55,742,696 | 578 | 1,090,107 | 3,128 | 2,686,811 | 368,292 | 3,632,821 | 8,817,756 |
| (c) Capital Empio Under $\$ 25,000$ $\$ 25,000$ to $\$ 100$$\$ 100,001$ to $\$ 50$ $\$ 500,001$ to $\$ 1$, $\$ 1,000,000$ to Over $\$ 2,000,00$ Total | $\begin{array}{r} 3 \\ 11 \\ 9 \\ 3 \\ 3 \\ 6 \end{array}$ | $\begin{array}{r} 39,756 \\ 566,088 \\ 1,927,989 \\ 2,304,800 \\ 3,755,662 \\ 47,148,401 \end{array}$ | $\begin{array}{r} 2 \\ 27 \\ 62 \\ 53 \\ 115 \\ 319 \end{array}$ | $\begin{array}{r} 1,430 \\ 287,325 \\ 97,372 \\ 70,040 \\ 147,098 \\ 745,842 \end{array}$ | $\begin{array}{r} 2 \\ 95 \\ 181 \\ 179 \\ 308 \\ 2,363 \end{array}$ | $\begin{array}{r} 1,987 \\ 59,227 \\ 133,451 \\ 151,281 \\ 276,586 \\ 2,064,279 \end{array}$ | $\begin{array}{r} 875 \\ 7,093 \\ 13,946 \\ 21,281 \\ 28,982 \\ 296,115 \end{array}$ | $\begin{array}{r} 3,910 \\ 73,426 \\ 240,730 \\ 287,608 \\ 30,247 \\ 2,722,900 \end{array}$ | $\begin{array}{r} 19,540 \\ 246,047 \\ 673,466 \\ 635,835 \\ 1,06,384 \\ 6,177,484 \end{array}$ |
|  | 35 | 55, 742, 696 | 578 | 1,090,107 | 3,128 | 2,686,811 | 368,292 | 3,632,821 | 8,817,756 |

Table 7 indicates the percentage costs of materials to the value of products. In 1920 they were $44 \cdot 8$ per cent; in $1924,44 \cdot 2$ per cent; in 1929, $46 \cdot 7$ per cent, and in $1934,41 \cdot 1$ per cent. The relation of salaries and wages to products during the same four years was as follows:-


These two elements of costs, along with the fuel costs, for these four years, in relation to the value of products is also indicated in the table, as follows:-

| 1920. | $80 \cdot 5$ per |
| :---: | :---: |
| 1924 | $77 \cdot 3$ per |
| 1929 | $84 \cdot 9$ per |
| 1934 | $88 \cdot 0$ per |

The materials curve naturally follows the products curve and the relation between the cost of materials and the value of products ranges between 32 per cent in 1931 to 48 per cent in 1921 and 1926. During most of the years the figure was in the neighbourhood of 44 per cent.

During the four years, 1931 to 1934 , the wages and salaries were greater than the cost of materials.

Table 7.-PERCENTAGE OF CERTAIN COSTS TO PRODUCTS


## By Mr. Coldwell:

Q. There is a statement in the price spreads commission report at page 4144 which shows that in 192950 executives received $\$ 369,708$ and in 1933 $\$ 306,054$. That would average about $\$ 7,000$ a year.-A. Do they define an executive? Do you know if that would be for managers or would it be for the board of directors
Q. They just give the figures.-A. They do not say what they are?
Q. No, but it is subdivided, yes. It would tend to show that the executive was a very highly paid man in the plant and did not receive the cuts of men who were employed at a lower wage scale. That would be the inference. That is a factor.

The Chatrman: Quite.
Mr. McLean: What year?
Mr. Coldwell: 1929, 1930 and 1933.
Witness: In the matter of production of farm implements we took the total number of implements made each year and divided them into the value at the plant. They are all listed here. I shall read them to you, if you like, but they will appear in the record.

Mr. Graham: Mr. Chairman, to keep the record straight, I may say that tables $3,4,5$ and 6 are not being read because they are of a voluminous nature, but I suppose the detailed information will appear in the record.
[Mr. W. H. Losee.]

The Charman: Yes, it will be printed.

## By Mr. McLean:

Q. Have you anything to indicate the volume; have you any index figure?A. No, it has not been worked out on an index basis; we have the actual figure, but you can apply an index figure to the first table, you see.
Q. The first table?-A. The volume of output. You mean on the basis of-
Q. On the basis of the volume, and the price value.

Mr. Graham: The charts to which I have been referring, Mr. McLean, show the production of companies from $\$ 500,000$ to over a million, and it also shows the selling value of products at the works.

Mr. McLean: That is not what I mean. I am talking of volume as you would talk of the volume of wheat in bushels rather than dollars. I should like to have the volume of machinery the same way. It would not be very hard to do; it is not beyond the powers of the Bureau. They could enumerate so many ploughs, mowers, and so on and give an index figure.

Witness: Do you want that for individual commodities?

## By Mr. McLean:

Q. I was wondering if you had anything indicating the gross output? Mr. Coldwell asked about the unit cost per man. If you had an index of the volume of output it would answer that.

The Chairman: That can probably be worked out and a statement prepared for you.

## By Mr. Douglas:

Q. I wonder if the witness can give us any interpretation of the fact that the decline in capital is not proportionate to the decline in the number of men employed, the production or cost of material? Is there any explanation for that?-A. That is the same question that was put to me some time ago.
Q. The decline in the amount of capital invested between 1922 and 1934 shows a reduction of 50 per cent compared with a reduction of 20 per cent in everything else. The value of the products, cost of the material, number employed and wages paid are all included in that 20 per cent, and I wonder if there is any explanation for it?-A. The decline in capital was not as great.
Q. Yes; it is out of all proportion.-A. Well if you had a plant worth, say, $\$ 1,000,000$ - I am just trying to answer the question-and you were not running very well that year, did not have very big sales, and produced $\$ 50,000$ worth, but you are capable of producing $\$ 200,000$ worth, you would still have the same capital cost, your capital would not change. The value of the production would go up or down, would it not? Is that an answer to your question?
Q. That is what I want to get. Do you suggest that a lot of these plants are over-capitalized?-A. No, sir; I do not know anything about that. This has nothing to do with capitalization of a plant.

## By Mr. Mitchell:

Q. Would you charge depreciation on your whole plant that could have produced many times more than you did produce? Would you charge the depreciation in the cost of what you actually produced?-A. Well, the goods that are actually produced have a selling value at the plant, and I imagine different plants have different systems.

Mr. Golding: You have to write off depreciation, anyway.
By Mr. Mitchell:
Q. Is the total depreciation of the plant charged into the machines that are produced in that year, or is it not?-A. I could not answer that.

Mr. McLenn: I do not think the witness can answer that question.
By Mr. Ward:
Q. Would it be reasonable to say that they are still charging interest on the total value, the $\$ 55,000,000$ as you have it here, taxes on the entire property, depreciation, insurance and all the things that are charged? Are all these charges covering the whole plant being made on the machines that are being produced?A. I do not know whether I can answer that or not.

Mr. Graham: I do not think this witness can answer that.
Mr. Ward: Is there any possible hope of getting that information?
Mr. Thorson: That will come along.
Mr. Graham: Yes; that is one of the vital pieces of information we are obtaining.

Mr. Ward: This is a result of a questionnaire.
Mr. Thorson: But on a totally different basis.
The Charman: This information is collected for statistical records by a governmental department. I do not suppose they have the means whereby they can get details as to how the different figures were arrived at. This committee should be able to get the information by examining the implement companies themselves. I do not think the witness is in a position to give that information. I do not suppose he is privileged to know.

Mr. Ward: I am glad to"see you used the words "examining the companies themselves". Who is going to make this examination?

The Chatrman: We hope, if we can get them in a position to give the information, that the committee will examine them.

Mr. Ward: I do not want to go too far afield, but is Mr. Graham supposed to be able to get that information?

Mr. Graham: We sent out questionnaires, and it is on the basic information supplied by them as well as their affirmative statements that we shall proceed. This is the background for checking. There may be specific information that will have to be checked very carefully in the light of the specific information furnished by the companies, but cross examination will proceed naturally.

Mr. Ward: Mr. Chairman, there is a further question I should like to ask Mr. Graham. Does he intend to rest his ease entirely upon the evidence that is obtained from the companies?

Mr. Graham: No.
The Chatrman: No, not necessarily.
Mr. Grafam: After we have had the opportunity of considering the statistical basic information asked for, in the light of these trends, we shall ask the machine company officials to come before this committee to answer a great many questions concerning the information.

Mr. Mitchell: The committee will be ready to ask the questions?

## By Mr. McLean:

Q. These figures, I understand, are figures that have been collected and retained for nearly twenty years with no idea of an investigation at all?-A. Yes, that is so.

## By Mr. McKenzie:

Q. The number of plants gradually decreased from 1920 to 1935; did the number of firms decrease likewise? Or do you know how many firms are making agricultural implements?-A. I can get that information for you. You would like to know the number of firms corresponding to these plants? Is that the information you desire?
[Mr. W. H. Losee.]
Q. Yes.-A. Yes, we can get that.

By Mr. Evans:
Q. In your foot note you show a decline in the number of firms?-A. That should be "plants". Where the word "firm" appears on page 2, it should be changed to "plants". As I said, we took the total number of implements made in any one year and divided them into the total value given, and we found under dise ploughs in 1920 at the plant, the production of all the companies was 2,188 , and the value per plough was $\$ 69.70$.

Shall I read this Table 8, Mr. Chairman?
By Mr. Graham:
Q. Select the items you have in mind?-A. In 1924 the average price of disc ploughs was $\$ 99.52$; in 1929 the average price was $\$ 113.70$; in 1934 the average price was $\$ 103.61$. Then taking grain binders, in $1920,36,090$ were made, and the average price at the plant was $\$ 170.66$. In 192421,323 grain binders were made and the average price was $\$ 177.76$, a slight rise.

By Mr. Tomlinson:
Q. Is that one variety of binders?-A. All sizes together.

By Mr. Ward:
Q. Those are the selling prices you are giving us now?-A. At the plant.

Mr. Graham: That price would be the price realized by the implement company at the plant. It is not the factory price but the price invoiced to the dealers less the commission. That is Mr. Losee's opinion of what that represents.

By Mr. Wood:
Q. Is the freight added to this price? (No response).

Mr. Graham: It would be less freight.
Mr. Ward: We have no evidence that the price invoiced to the dealer has any relationship whatsoever to the actual cost?

Mr. Graham: No; this is purely what they say they realized at the factory door.

## By Mr. McLean:

Q. Give me the value for binders in 1933?-A. I have a report here.

Mr. Johnston: This price is the same as the wholesale price.

## By Mr. McLean:

Q. What years have you there?-A. 1920, 1924, 1929 and 1934.
Q. Give it for 1934?-A. They averaged $\$ 154.81$.

The Chairman: The total number was 7,253 grain binders in 1934 ?
Witness: Then seed drills, 1920: 18,420; average price $\$ 140.69$. 1924: 5,808, average price $\$ 137.48$. 1929: 20,184; aveage price $\$ 157.39$. 1934: 1,055; average price $\$ 112.77$. All the other principal items will be in the records.

## By the Chairman:

Q. These prices are the prices the implement company placed on these implements at the plant?-A. Yes.
Q. That is their figure?-A. Yes. I have added the names of the companies to these records as being in production in 1934.

Table 8.-PRODUCTION OF CERTAIN AGRICULTURAL IMPLEMENTS, AND AVERAGE PRICES AT WORKS


There has been some change over the period in the nomenclature of the different items but it is believed that the figures are comparable.

# THE FARM IMPLEMENT INLUSTRY IN CANADA <br> <br> LIST OF FIRMS THAT MADE FARM IMPLEMENTS AS THEIR <br> <br> LIST OF FIRMS THAT MADE FARM IMPLEMENTS AS THEIR MAIN PRODUCTS IN 1934 

 MAIN PRODUCTS IN 1934}

Name
Prince Edward Island-Hall Manufacturing Co.
Quebec-
Desjardins, Ltee St. Andre de Kamouraska
Dion et Frere.La Cie Justras Ltee.Victoriaville
Moody, Matthew, \& Sons, Co. Ltd. Terrebonne
Omega Machinery Co. Ltd St. Hyacinthe
Ontario-
Bissell, T. E. Co. Ltd. Elora
Canadian Potato Machinery Co. Ltd. ..... Galt
Cockshutt Plow Co Brantford
De Laval Co. Ltd. Peterboro
Ebersol, John R. Milverton
Empire Farm Machinery Co. Ltd. Tecumseh
Ernst Bros. Co. Ltd. Mount Forest
Erie Iron Works, Ltd St. Thomas
Goodison, John, Threshing Machine Co. Ltd. SarniaFleury's Sons, Ltd.Aurora
Frost \& Wood Co. Ltd. Smith's Falls
Hergott Co Mildmay
International Harvester CoJamesway LtdWeston
Massey-Harris Co. Ltd. Brantford
Massey-Harris Co. Ltd Toronto
New Perfection Sprayer Co ..... Galt
Percival Plow \& Stove Co. Ltd. Merrickville
Renfrew Machinery Co. Ltd. Renfrew
Sawyer-Massey, Ltd Hamilton
Spramotor Ltd London
Sunshine Waterloo Co. Ltd. Waterloo
Tweed Foundries Ltd. Tweed
Waterloo Manufacturing Co. Ltd. Waterloo
Watson, John, Manufacturing Co. Ltd. ..... Ayr
White, George, \& Sons, Co. Ltd. London
Wood, W. C., Co. Ltd Toronto
Manitoba-
Gregg Manufacturing Co. Ltd. Winnipeg
Hart-Emerson Co. Ltd Winnipeg

The Chairman: Does any member of the committee desire to ask Mr. Losee any questions before he leaves?

## By Mr. Tomlinson:

Q. What is the reason for the increase in the price of seed drills?-A. It may be that the seed drills were made larger.
Q. And is that true also of the grain binders?-A. Yes, you would have to compare a binder in 1920 with a binder in 1934.

## By Mr. Johnston:

Q. In regard to Table No. 1, Mr. McLean referred to the years 1924 and 1925. I wish you would give that some attention, because if you look at the table you will find there is an increase in the average number of employees in 1925 over 1924 of 859 , and an increase in the cost of fuel and electricity used of some $\$ 37,000$, while there is a falling off in the selling value of the products in 1925 of $\$ 24,770,216$ as compared with $\$ 26,447,171$ in 1924. Perhaps if we could get the correct information as to that it might help us?-A. I will see what I can find on that. I will have to go back into the old records.

Mr. Graham: Please make a note of that. We will try to bring before the committee an explanation of that problem as presented by those figures.

Mr. Leader: Mr. Graham, would there be any way of finding out the cost of this machinery, not the selling price but the cost? Will we be able to find out about any specific case where a carload of machinery was destroyed or something like that, and where a railway company had to settle with the manufacturer on a cost basis? I have been told that they have had these cases and that the railway companies have settled on the basis of $\$ 30$ per binder. Is it possible for us to ascertain that information?

Mr. Graham: The only thing I can tell you with regard to that is that in the 1923 inquiry the representative of the Massey-Harris Company placed himself strongly on record in saying that no such case had occurred up to that date. We have not inquired from the railroad companies since. The argument then took place between Mr. Evans and the Massey-Harris representative over that very point.

Mr. Coldwell: One further point I would like to make in connection with the other matter being discussed. Out of the total wages and salaries paid by the four largest manufacturers of farm implements in $19292 \cdot 51$ per cent was paid to their fifty executive officers and in $19337 \cdot 39$ per cent of the total was paid to their forty-seven executive officers. Out of the total wages and salaries paid by ten small companies manufacturing farm implements in 192910.6 per cent was paid to their twenty executive officers, and in 193315.59 per cent of the total wage bill was paid to their twenty executive officers.

Mr. Graham: Do you refer to the Price Spreads report?
Mr. Coldwell: Yes, Volume 60, page 4144 of the Price Spreads report.

> By Mr. Edwards:
Q. What other things enter into the cost of production over and above the interest on capital employed, salaries, wages and cost of materials?-A. Depreciation, insurance and taxes.
Q. Can you give us those figures?-A. No; we do not go into that in the Bureau, because it would entail considerable investigation into all plants.

The Charman: I think the information you have in mind, Mr. Douglas, will come from the implement companies themselves.

Mr. Losee, the committee thank you very much for the information you have given us this morning.

Mr. Johnston: I move that the committee adjourn now until 4.00 o'clock this afternoon.

Mr. Leader: I second the motion. (Carried).
-Whereupon the conmittee adjourned at 12.45 o'clock p.m. until 4.00 o'clock p.m.

## AFTERNOON SESSION

The committee resumed at 4 p.m.
The Chatrman: I think we shall proceed with our meeting. The presentation this afternoon has to do with an item which, I think all of us have felt was rather important. I am sure we are all interested in knowing what has taken place in the last few years with respect to freight rates. Mr. Bangs is prepared to give us the general information as to what has taken place with respect to freight rates in the last few years, and if the committee is agreeable we shall hear him now.

Raymond G. Bangs, called.

## By the Chairman:

Q. Will you kindly inform the committee as to your official position?-A. I am connected with the Public Utilities and Transportation Branch of the Dominion Bureau of Statistics. Mr. Chairman and gentlemen, the brief which I submit has to do with the relative cost of farm implements, raw materials and the manufactured articles entering into their manufacture over the period 1913 to 1936. The freight rates used in the preparation of this brief have been compiled from the tariff filed with the Board of Railway Commissioners.

For the purpose of the investigation of freight rates on farm implements a list of the more generally used implements were selected. The following agricultural implements in carloads and taking sixth class according to the Canadian Freight Classification No. 18 were used:-

1. Binders, harvesters, mowers or reapers combined or separate S.U. or K.D. loose or in packages.
2. Cultivators S.U. or K.D. loose or in packages.
3. Field rollers, poles or shafts detached-loose.
4. Furrow or row markers-loose or in packages.

5 . Grain, headers-K.D. loose or in packages.
6. Grain, seed or fertilizer drills-S.U. or K.D. loose or in packages.
7. Grain, seed or fertilizer sowers - S.U. or K.D. loose or in packages.
8. Harrows-S.U. or K.D. loose or in packages.
9. Harvesters and threshers combined-S.U. or K.D. in straight or mixed carloads.
10. Manure loaders-K.D. loose or in packages.
11. Manure or straw spreaders-S.U. or K.D. loose or in packages.
12. Ploughs-S.U. or K.D. loose or in packages.
13. Rakes-S.U. or K.D. loose or in packages.
14. Farm Wagons-S.U. or K.D. loose or in packages.
15. Farmers' Sleighs-K.D. loose or in packages.

The terms " knocked down, loose or in packages," illustrates the manner in which they are shipped. They are shipped, set up, knocked down, loose or. in packages.

The farm implement industry is principally located in the province of Ontario at such important centres as Toronto, Hamilton and Brantford which have been used as typical shipping points. The whole territory between and including Montreal on the east, and Windsor, Sarnia and Sault Ste. Marie on the west and between and including Niagara Falls on the south and Sudbury on the north is blanketed. Consequently the rate between any point in this territory and Fort William or any point west thereof is the same. The reason why this great expanse of territory- 560 miles from Montreal to Windsor-is blanketed is that in all this area the effects of water competition are very evident.

Typical points of destination for farm implements were taken as, Winnipeg and Brandon in Manitoba; Yorkton, Regina, Saskatoon and Swift Current in

Saskatchewan; Calgary and Edmonton in Alberta; Ottawa in Ontario ; Montreal in Quebec and Moncton, Halifax and Charlottetown in the Maritime Provinces. These destinations are representative distributing centres of the farm implement industry in Canada.

The following table illustrates in the form of an index the trend of freight rates on farm implements from January 1, 1913, to May 1, 1936. The year 1913 has been used as a base equal to $100 \cdot 0$.

TABLE 1.-RAILWAY FREIGHT RATE INDEXES OF ALL-RAIL CARLOAD RATES ON AGRICULTURAL IMPLEMENTS FROM ONTARIO POINTS TO DISTRIBUTING CENTRES IN CANADA

|  | $\begin{aligned} & \text { Jan. } \\ & 1913 \end{aligned}$ | Sept 1914 | $\begin{aligned} & \text { April } \\ & 1915 \end{aligned}$ | $\begin{aligned} & \text { Dec. } \\ & 1916 \end{aligned}$ | Sept. $1917$ | $\begin{aligned} & \text { Jan. } \\ & 1918 \end{aligned}$ | $\begin{aligned} & \text { Mar. } \\ & 1918 \end{aligned}$ | $\begin{aligned} & \text { April } \\ & 1918 \end{aligned}$ | Aug. <br> 1918 | $\begin{aligned} & \text { Sept. } \\ & 1920 \end{aligned}$ | $\begin{aligned} & \text { Jan. } \\ & 1921 \end{aligned}$ | Dec. $1921$ | $\begin{aligned} & \text { May } \\ & 1923 \end{aligned}$ | $\begin{aligned} & \text { April } 1924 \\ & \text { to } \\ & \text { May } 1936 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| To points in Manitoba, |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Alberta............. | $100 \cdot 0$ | 97.0 |  |  | $97 \cdot 7$ |  |  | $110 \cdot 7$ | $126 \cdot 5$ | $173 \cdot 3$ | $167 \cdot 1$ | $154 \cdot 2$ |  |  |
| To Ottawa and Montreal. | $100 \cdot 0$ |  |  | 4.8 |  |  | $120 \cdot 6$ |  | $150 \cdot 8$ | $211 \cdot 3$ | $203 \cdot 2$ | 188.7 |  |  |
| To. Moncton, Halifax and Charlottetown. | $100 \cdot 0$ |  | 100.9 | 110.0 |  | $109 \cdot 1$ | $125 \cdot 7$ |  | 157 -2 | $219 \cdot 5$ | 204-4 | $189 \cdot 7$ | $180 \cdot 8$ | $170 \cdot 2$ |

To arrive at a trend showing the freight rates on raw materials and manufactured articles used in the manufacturing of farm implements the following list was used:-

1. Iron and steel articles-angle iron, bar iron or steel, bolts, iron (galvanized or corrugated), nails, nuts, sheet iron or steel, washers and structural shapes (angles, channels, etc.).
2. Iron or steel castings.
3. Pig iron.
4. Cold rolled or cold drawn steel bars.
5. Lumber.
6. Bituminous coal.
7. Fuel oil.
8. Linseed oil.
9. White or red lead.
10. Cotton duck.

Typical shipping points in Ontario and Quebec accessible to the implement industry located in Hamilton, Brantford and Toronto have been used as follows:-

1. Iron and steel articles as above-Montreal and Hamilton.
2. Iron and steel castings-Galt, Guelph, Hamilton, Owen Sound, Montreal.
3. Pig iron-Port Colborne and Hamilton.
4. Cold rolled or cold drawn steel bars-Welland and Hamilton.
5. Lumber-North Bay, Peterborough, Lindsay, Braeside, Parry Sound and Owen Sound.
6. Bituminous coal-Suspension Bridge and Black Rock.

Most of the bituminous coal was American coal and would come in either by Suspension bridge or Black Rock on the Niagara frontier.
7. Fuel oil-Sarnia and Toronto.
8. Linseed oil-Baden and Montreal.
9. White or red lead-Montreal, Toronto and Hamilton.
10. Cotton duck-Welland, Hamilton and Montreal.

TABLE 2.-COMPONENT AND COMPOSITE INDEXES OF RAW MATERTALS AND MANUFACTURED ARTICLES USED IN THE MANUFACTURE OF FARM IMPLEMENTS $1913=100 \cdot 0$

| Item | $\begin{aligned} & \text { Jan. } \\ & 1913 \end{aligned}$ | $\begin{aligned} & \text { Dec. } \\ & 1916 \end{aligned}$ | $\begin{aligned} & \text { Mar. } \\ & 1918 \end{aligned}$ | $\begin{aligned} & \text { Aug. } \\ & 1918 \end{aligned}$ | Sept. 1920 | Jan. | Dec. 1921 | $\begin{aligned} & \text { Aug. } \\ & 1922 \end{aligned}$ | $\begin{aligned} & \text { May } \\ & 1936 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (1) Iron and Steel Articles. | $100 \cdot 0$ | 101.4 | 116.8 | $146 \cdot 8$ | $202 \cdot 8$ | 198.6 | 183.9 | 179.0 | $172 \cdot 7$ |
| (2) Iron or Steel Castings | $100 \cdot 0$ | $98 \cdot 4$ | $113 \cdot 3$ | $142 \cdot 2$ | 196.9 | $190 \cdot 6$ | $178 \cdot 1$ | $176 \cdot 6$ | $176 \cdot 6$ |
|  | $100 \cdot 0$ | $105 \cdot 3$ | $122 \cdot 3$ | $153 \cdot 2$ | 213.8 | 206.4 | 191.5 | $180 \cdot 1$ | $174 \cdot 5$ |
| (4) Cold Roll Drawn St | $100 \cdot 0$ | 108.9 | $125 \cdot 5$ | 158.9 | 217.8 | 211.1 | 197.8 | 197.8 | $197 \cdot 8$ |
| (5) Lumber. | $100 \cdot 0$ | $104 \cdot 2$ | $120 \cdot 8$ | $144 \cdot 8$ | $200 \cdot 0$ | $193 \cdot 7$ | 179.2 | $166 \cdot 7$ | $163 \cdot 5$ |
| (6) Bituminous C | $100 \cdot 0$ | $110 \cdot 0$ | 135.0 | 166.7 | 191.7 | 191.7 | 191.7 | 166.7 | 166.7 |
| (7) Fuel Oil. | $100 \cdot 0$ | 106.7 | $125 \cdot 7$ | $160 \cdot 9$ | 229.5 | $220 \cdot 9$ | 205.7 | 205.7 | $205 \cdot 7$ |
| (8) Linseed Oil. | $100 \cdot 0$ | $111 \cdot 3$ | 128.7 | $161 \cdot 3$ | $225 \cdot 3$ | 216.7 | 202.0 | 202.0 | $202 \cdot 0$ |
| (9) White or Red Lead | $100 \cdot 0$ | $118 \cdot 6$ | $132 \cdot 4$ | 166.9 | $232 \cdot 4$ | $223 \cdot 4$ | 208.3 | 208.3 | $208 \cdot 3$ |
| (10) Cotton Duck | $100 \cdot 0$ | $107 \cdot 5$ | $123 \cdot 9$ | $155 \cdot 4$ | $217 \cdot 4$ | $208 \cdot 9$ | $194 \cdot 4$ | $194 \cdot 4$ | $194 \cdot 4$ |
| Composite Index Average per cent change from previous rate...... | $100 \cdot 0$ | $107 \cdot 3$ | 124.4 | $155 \cdot 7$ | 212.8 | 206.2 | $193 \cdot 3$ | 187.7 | $186 \cdot 2$ |
|  |  | $+7 \cdot 3$ | $+15.0$ | $+25.1$ | $+36 \cdot 7$ | $-3 \cdot 1$ | $-6 \cdot 3$ | $-2.9$ | -0.8 |

I have prepared two charts showing the trend of farm implements in Canada. The black line is the farm implements from Ontario points such as Hamilton, Brantford and Toronto, to points in the west. The blue line is the trend of freight rates on farm implements to Ottawa and Montreal, typical Ontario and Quebec points. The red line indicates the trend of freight rates on farm implements to Moncton, Halifax and Charlottetown, as typical Maritime points.

## By Mr. Johnston:

Q. You say there is no change in freight rates from 1920 on?-A. Well, in the case of the Maritimes only, and not since December, 1921, has there been any change in points in Manitoba, Saskatchewan and Alberta.
Q. Since when?-A. December, 1921. To Ottawa and Montreal, it is 188. 7 from December, 1921, to the present time. There has been a reduction in the Maritimes; there was a reduction in May, 1923, and also in May, 1924.
Q. I was under the impression that there was a reduction in freight rates on farm implements westbound following the session of parliament in the spring of 1922 when the Crowsnest Pass rates were restored?-A. The Crowsnest Pass agreement was restored only as far as grain coming east is concerned, not as far as traffic going west is concerned.
Q. But was it not restored in so far as farm implements were concerned?A. No; they made a reduction on certain basic commodities and left the farm implements as they were.
Q. That would apply as from the year 1919, but what do your figures indicate between 1913 and 1919?-A. They indicate quite a rise.
Q. And the year 1922?-A. Up to the peak in 1920 and a slight reduction in January, 1921, and a reduction in December, 1921.

## By Mr. Leader:

Q. Is it a fact that during the years that the Crowsnest Pass agreement was suspended all freight rates went up?-A. Yes.
Q. And it never did affect agricultural implements going west after that?A. No; they were never restored. I understand they were restored for a portion of the time, but I think the railways were going to apply it only to the mileage which was in existence in 1897, which would so distort the rates that, if I remember rightly, it was appealed to the Supreme Court of Canada and defeated.

CHART NO. 1:- Railway Freight Rate Indexes of All-Rail Carload Rates on Agricultural Implements from Toronto, Hamilton and Brantford to Distributing Centres in Canada.

Legend:-

- To points in Manitoba, Saskatchewan and Alberto


CHART NO．2：－Composite Railway Freight Index of Carload Rates
on Raw Materials and Manufactured Articles from
Ontario Points to Toronto，Hamilton and Brantford，

Q. I do not think it was restored on commodities going west?-A. That is my impression.

## By Mr. McLean:

Q. Does that chart indicate that rates on implements to the central points have been increased much more than to the west?-A. The trend is similar, although farm implements going to Western Canada enjoy a better rate because there is a heavier volume of farm implements which go to the west. I made a rough calculation of car loadings and the approximatee distribution of farm implements in normal years in carload lots throughout Canada are:-
To Per cent
The Maritime Provinces about ..... 2
Quebec ..... 5
Ontario ..... 15
Manitoba ..... 13
Saskatchewan ..... 40
Alberta ..... 23
British Columbia ..... 2

In other words, the three prairie provinces, as far as carloads are concerned, constitute about 76 per cent as the result of the fact that they got a commodity rate, whereas in Ontario and the Maritimes they moved on regular sixth-class rate.
Q. Is that on a mileage basis, referring to your chart?-A. No. As far as the commodity rate is concerned mileage does not enter very much into it. They do take into account the class rate a little bit, but for competitive purposes and commodity rates it does not figure largely.
Q. Does that mean that from Brantford to Toronto or Ottawa the rate would be higher than to Regina? I would like to know the basis?-A. The reason why the black line or western rate is lower is that they are getting lower rates for long-distance haul and more volume.
Q. Is it absolutely or relatively lower?-A. Relatively lower.
Q. Then what is the basis as to distance?-A. It is based on a commodity rate, and it would take an expert railway traffic man to explain how they base it. They do not take distance into account.
Q. You must be able to explain to us just what factors are used in basing those rates. Is the western rate a composite of all western points?-A. Yes.
Q. And the top line, the eastern rate, would be a composite of the eastern points?-A. Yes.
Q. You are giving us a commodity rate there which is lower?-A. Ordinary sixth class.
Q. With a very much shorter mileage?-A. Yes.
Q. Does that mean that it is absolutely lower, because you are starting at the same point, 100 , and running up to 160 or 220 -or are you starting at the actual rate in 1913?-A. I am calling the actual rates equal to 100 , in each case in 1913.
Q. So this is not the basic but a relative rate?-A. No, not specific rates. I have a table here showing that rates were higher for longer distances.
Q. Have you compiled figures showing the approximate cost per 500 miles? -A. There would not be anything go on mileage rates. The mileage is the highest rate which can be charged.
Q. But you must be in a position to show what it costs per 500 or 1,000 miles?-A. Yes. Do you mean to take the specific charges and the mileage and figure out what it costs per mile?
[Mr. Raymond G. Bangs.]
Q. The distance from Brantford to Ottawa is possibly 400 miles and the distance from Brantford to Regina is possibly 2,000 miles; I do not know. I would like to see the comparison? (No response.)

## By Mr. Perley:

Q. Is there not a certain mileage of free haulage between Fort William and the western prairies?-A. I think perhaps the gentleman has reference to between Font William and Winnipeg. They use what they call a constructive mileage, 290 miles, and the actual mileage is 420 ; but that would not enter into this.

Mr. McLean: That does not apply to Regina.
Mr. Perley: It works out in Regina's favour.
Mr. McLean: It is to Winnipeg. When they figure from Fort William to Regina the mileage is actual mileage.

Witness: But none of these rates are based on mileage; they are straight commodities or class.

> By Mr. McLean:
Q. Woould you mind getting us that other information as to the absolute rates, the absolute cost, not the relative increase? You have given us now the relative increase. Would it be possible to get the relative costs?-A. The actual rates?
Q. The relative freight rates?-A. I have those in tables here. Chart No. 2 is a composite railway freight index of all those raw materials which are selected. It is unweighted. It shows the rise in 1913 as 100 up to a peak in September, 1920, and practically horizontal since.

## By the Chairman:

Q. Advancing in 1920?-A. I should say from 1922 it is horizontal.

## By Mr. McLean:

Q. Are most of these raw materials produced in Canada that you have taken into your calculation?-A. I understand that perhaps some of the hardwoods like hickory are brought up from the United States, and coal.

The Chatrman: But for the purposes of this calculation certain basic points have been taken to compare with other places. It does not matter whether imported or not, the freight is charged from there.

Mr. McLean: As long as they were taken from the same place in 1913 and 1936.

Mr. Graham: Quite so.
Witness: Then:-

## Chronological data concerning imortant rate changes

 (1) Crow's Nest Pass Agreement 1897 (60-61 Vic. cap. 5).This agreement from its inception has had a very definite bearing upon the rate level in western Canada that it seems advisable to discuss very briefly the circumstances under which the agreement came into force. As the outcome of a subsidy given by the Dominion Government to the Canadian Pacific to assist in the construction of the Crow's Nest line from Lethbridge, Alberta, to Nelson, British Columbia, through the Crow's Nest Pass, the Canadian Pacific entered into an agreement to grant certain reductions in rates from its existing tariff. Reductions westbound from Fort William and points east thereof to all points west of Fort William on the company's main line or on any line of railway
owned or leased by or operated by the company were made on the following items: Coal oil 20 per cent; cordage and binder twine 10 per cent; agricultural implements, all kinds set up or in parts 10 per cent; iron, including bar, band, Canada galvanized sheet, pipe, pipe fittings, plates, nails, spikes and horse shoes 10 per cent; paints 10 per cent; window glass, roofing and building paper 10 per cent; and household furniture 10 per cent. From the list mentioned in the agreement it is evident that the westbound reduced rates were given on those items which the western settler required most urgently for the operations of farming and the erection of barns and dwellings. The statute further provided for reduction of the existing rates on grain and flour moving eastward on the company's main line and branches west of Fort William to Fort William and Port Arthur and all points east of 3 cents per 100 pounds, the reduction to be made half and half for the next two years.
(2) Manitoba Agreement (Manitoba Statutes 1901 cap. 39).

Under this agreement the Canadian Northern Railway Company in consideration of the Province of Manitoba guaranteeing its bonds and giving it a lease of the Northern Pacific and Manitoba Railway agreed that it would reduce its rates by about 15 per cent of the existing tariff on all freights other than grain to Fort William and Port Arthur from points in Manitoba and vice versa. Grain rates were also substantially affected. The result of this agreement was that for competitive reasons the Canadian Pacific was compelled to accept the Manitoba scale of rates. If we assume that the Canadian Pacific tariff in force prior to the Manitoba Agreement represents 100, the rates became under the Manitoba Agreement 85. Complementary to this action the Canadian Pacific voluntarily reduced its rates in Saskatchewan and most parts of Alberta to $92 \cdot 5$.
In other words, the Manitoba agreement prevented the Crow's Nest Pass agreement from being in operation from 1901. From 1897 to 1901 the Crow's Nest Pass agreement was in force, but in the Manitoba agreement the rates were forced lower than the Crow's Nest Pass rate.

> By Mr. Perley:
Q. That is on rates west of the Manitoba boundary; they had a cheap rate through the province of Manitoba?-A. Yes, they had to distort the rates as far back as Saskatchewan and Alberta.
(3) Regina Rate case (Ann. Rept. B.R.C. 1911, pp. 169-175).

The complaint of the Regina Board was that freight could be shipped from Fort William into Winnipeg and from Winnipeg to points west of distributing centres in Saskatchewan and Alberta at lower rates than the same goods could be shipped from Fort William to the redistributing centres in Saskatchewan and Alberta and therefrom to the same points west of these distributing centres. The Railway Board reduced the first class rate from Winnipeg to Regina from $\$ 1.17$ to $\$ 1.02$ and other classes were scaled accordingly. The higher scales applying in Saskatchewan and Alberta on shipments from distributing points in these two provinces were left untouched.

## By Mr. McLean:

Q. The higher scale?-A. Yes. In other words, Regina felt at that time that she was being injured and discriminated against, and they lowered the rates to [Mr. Raymond G. Bangs.]

Regina. As a matter of fact it was just simply a Regina case, and the rates were made favourable to Regina at that time, and other points in Saskatchewan were left untouched.
(4) Western Rates Case 1914.

Initiated in 1911 by the passing of a resolution by the Winnipeg Board of Trade that the disparity of rates between eastern and western Canada should be removed to the fullest possible extent. Railway companies admitted that there was discrimination in rates in favour of the east but upheld the claim that this discrimination was neither undue nor unjust. Eastern rates were held down by the influence of water competition extending throughout the entire portion of the country from Fort William to the seaboard and by a real and effective railway competition afforded by American lines in Ontario. Up to this time (1914) the Saskatchewan scale of rates which also applied to most parts of Alberta was higher than the Manitoba scale of rates and the Board of Railway Commissioners in its judgment on the Western Rates Case stated that the operating conditions were sufficiently alike that they should be grouped under one scale and this was made the Manitoba scale. Through the judgment on the Western Rates Case the freight rates on farm implements to the distributing centres of Saskatchewan and Alberta were reduced approximately 3 per cent, September 1, 1914.

## (5) Eastern Rates Case 1916.

This was an application of the Canadian Freight Association on behalf of all the railway companies operating in Canada, east of Port Arthur, Ontario for a general increase of freight rates to offset the higher costs of operation. In regard to the general classified traffic in eastern Canada which had been carried on what were called Schedule "A" rates....
Schedule "A" rates rather centre in Ontario. They get special class rates, what they call town tariffs, in good sized cities and towns in Ontario.
....which were lower than those of the standard tariffs, the Board ordered that in this territory (east of but excluding Port Arthur) there should be an increase of 2 cents per 100 lbs . on first class freight and 1 cent per 100 lbs . on fifth class, the rates on the other classes being scaled proportionally as shown in the standard tariffs for the mileage covered by any particular movement, excepting the through rates to and from the Maritime Provinces and also for the Quebee stations of the Intercolonial east of Levis. As a result of this judgment freight rates on farm implements to Ottawa and Montreal were increased approximately $5 \%$ and to the Maritime Provinces approximately $9 \%$.

## (6) $15 \%$ case effective March $15,1918$.

By the spring of 1917 the high operating expenses of the railroads in Canada necessitated the railroads applying to the B.R.C. for a general increase of 15 per cent in the level of freight rates. In the judgment of the Board the freight rates generally speaking in so far as the western territory was concerned were increased approximately 10 per cent and the rates of the eastern territory approximately 15 per cent. Raw materials and manufactured articles used in the manufacture of farm implements with few exceptions were increased 15 per cent. Special rates were provided for particular commodities. The rates on coal and coke were increased 15 cents a ton east and west which was less than 15 per cent on long hauls but more than 15 per cent on short hauls. On hauls
from Suspension Bridge and Black Rock to Hamilton, Brantford and Toronto the increases on bituminous coal amounted to appriximately 23 per cent.

## By Mr. McLean:

Q. Would bituminous coal not come into Hamilton by water?-A. Yes.
Q. It would not come by rail movement?-A. Yes, there is quite a rail movement.
Q. Of course the rail movement will be carried at a very low rate?-A. About \$1.
Q. In order to meet the water rate?-A. Yes, there would be quite a low rate. At the present time from Black Rock to Toronto is $\$ 1$ per ton; it was 60 cents per ton in 1913.
Q. $\$ 1$ per ton to Hamilton?-A. To Toronto; but they are held down through water competition.
Q. Is the water rate higher now than in 1913?-A. I could not say, sir.

In the case of through traffic from Ontario to western points the 15 per cent increase was allowed on the through rate as far as the territory west of Port Arthur but on the eastern part of the through rate the increase was held down to 10 per cent. In the case of through traffic on farm implements from Ontario points to the distributing centres of Manitoba, Saskatchewan and Alberta the percentage increase in the rates amounted to approximately 13.4 per cent effective April 1, 1918. In the east the increased rates were effective March 15, 1918.
(7) 25 per cent case effective August 12, 1918.

This case was brought about as a result of wage increases on the United States railroads under the "McAdoo Award." The railroads of the United States had been taken over by the government about this time as a war measure. On account of the similarity of labour conditions in Canada the Governor-in-Council ordered that the "McAdoo Award" should be put into effect upon the publicly owned railways in Canada and the C.P.R. through force of necessity was obliged to comply. The Board of Railway Commissioners judgment was put into effect by the Governor-in-Council under Order-in-Council No. P.C. 1863 July 27, 1918, and provided:-
(1) in the territory east of Fort William all class rates were to be increased 25 per cent and commodity rates according to a definite schedule, while the rates on commodities not enumerated were to be increased 25 per cent.
(2) in the territory west of Fort William, all class rates were increased 25 per cent calculated on the tariffs in force prior to March 15, 1918, when the 15 per cent increases went into effect. In other words the 15 per cent increase of March 15, 1918, was to be included in the 25 per cent increase. Commodity rates many of them being increased less than 25 per cent were scheduled and for commodities not enumerated the rates were increased 25 per cent, these also to be calculated on the tariffs in force prior to March 15, 1918. The increased rates were put into effect August 1918 throughout Canada.
(8) 40 per cent case effective September, 1920.

This case was brought about as a result of the higher operating costs due to the "Chicago Award" increasing the wages of railway workers in the United States and Canada. The judgment of the Board of Railway Commissioners September 9, 1920, General Order No. 308 is as follows:-
(1) Until December 31, 1920, there should be a general increase of 40 per cent in eastern freight rates and 35 per cent in western freight rates.
(2) Beginning January 1, 1921, the above rates were to be reduced to 35 per cent in the east and 30 per cent in the west.
A variation in this order was made in the case of certain commodities. For example on bituminous coal an increase of 10 cents per ton was allowed on all rates up to 80 cents per ton, 15 cents per ton on all rates from 80 cents to $\$ 1.50$ per ton and 20 cents on all rates over $\$ 1.50$ per ton. On coal hauls from Suspension Bridge and Black Rock to Hamilton, Brantford and Toronto these increases amounted to 15 per cent.
(9) Reductions effective December 1, 1921.

In July, 1921, a reduction was made in the wages on United States and Canadian Railways approximating in the case of Canadian Railways to a decrease of 9 per cent and the Board of Railway Commissioners of its own volition instituted an enquiry to determine whether or not a reduction of rates should be made in Canada.

Under the Board of Railway Commissioners' General Order No. 350 the following changes were ordered effective December 1, 1921:-
(1) In the territory east of and including Port Arthur, Fort William and Westfort freight rates were to be based upon 25 per cent over the rates in effect prior to September 13, 1920.
(2) In the territory west of and including Port Arthur, Fort William and Westfort freight rates should be based upon 20 per cent over the rates in effect prior to September 13, 1920.
(3) On through rates between eastern and western territories the above mentioned percentages should apply to the eastern and western factors respectively.

Other changes were made which are not applicable to this enquiry and need not be mentioned.
(10) Reductions, August 1, 1922.

To understand the conditions attending this reduction in the level of rates it is necessary to go back to the year 1918. When as a result of the acceptance by the Canadian railways of the "McAdoo Award" in 1918 they were allowed to increase their rates to compensate for the additional expenses of operation, the rates were forced higher in the West than was allowed by the Crow's Nest Pass Agreement and the government by Order in Council of July 27, 1918, gave authority for suspension of this agreement. This was confirmed by Parliament in 1919 for a period of three years, so that this suspension would continue until July 6, 1922.

In the spring of 1922 Parliament appointed a committee to enquire into the question as to whether the suspension of the Crow's Nest Pass agreement should continue after the date when it was due to expire. Parliament restored the Crow's Nest Pass agreement in so far as the eastbound rates on grain and flour were concerned but the suspension was continued so far as the commodities included under the agreement were concerned for a period of one year from July 6, 1922 with the option of extending this suspension for a second year if necessary. It was also recommended about this time that the Board of Railway Commissioners should institute an enquiry to see if conditions had not changed materially in recent years as to make possible the fullest measure of equalization of eastern and western rates. What the Board had to decide was what percentage reduction in the freight rates on basic commodities other than
grain and flour eastward could be made to offset the continued suspension of the Crow's Nest Pass agreement in so far as other commodities were concerned.

The Board after very careful consideration concluded that a reduction of $7 \frac{1}{2}$ per cent on the rates then in existence (June 30, 1922) could be made on certain basic commodities. This decision left increases on these commodities $12 \frac{1}{2}$ per cent above the rates prior to the September 13, 1920 level in western Canada and $17 \frac{1}{2}$ per cent above the rates prior to the September 13, 1920 level in eastern Canada.

Rates on coal other than anthracite were not to be reduced by $7 \frac{1}{2}$ per cent for they had not been increased on a percentage basis but by flat rates. Therefore all increases on coal other than anthracite granted by General Order No. 308 (September 9, 1920) were to cease and the rates in effect immediately preceding September 13, 1920 were to be re-established.

Such commodities as lumber and pig iron used in the farm implement industry had their freight rates reduced by approximately $7 \frac{1}{2}$ per cent.

In conclusion tables of freight rates on farm implements, raw materials and manufactured articles used in the manufacture of farm implements are herewith attached.

I have a series of tables giving the specific rates on farm implements, raw materials and manufactured articles entering into the manufacturing costs over this period.

The rates are all tabulated in the different tables.

## By the Chairman:

Q. Those tables will show us the extent to which rates have increased or decreased over this period?-A. Yes, they give the specific rate charge in cents per 100 pounds as taken from the tariff of the Board of Railway Commissioners.
Q. Is there any distinction in the machinery that might be set up or knocked down with respect to rates?-A. No distinction as far as carload shipments are concerned, according to the Canadian classification.
Q. Both carry the same rate?-A. In carload quantities, yes.

## I. FARM IMPLEMENTS

Table No. 1.-All-Rail Carload Rates on Agricultural Implements in cents per 100 lbs . From Toronto, Hamilton and Brantford to points in Manitoba, Saskatchewan and Alberta

| Tariff Number | Effactive Date | Winnipag | Brandon | Yorkton | Regina | Saskatoon | Swift Current | Calgary and Edmonton | Average <br> Per Cent change from the previous rate | $\begin{gathered} \text { Index } \\ \text { of } \\ \text { Freight } \\ \text { Rates } \\ 1913=100 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CRC No. E 2320 | Jan. 1, 1913 | 64 | 72 |  |  |  |  | 120 |  |  |
| CRC No. E 2841. | Sept.1, 1914 | 62 |  | 81 | 88 | 94 | 95 | 115 | $-3.0$ | 97.0 |
| CFA-CRC No. 3. | Sept.1, 1917 | 63 |  | ${ }_{92}{ }_{92}$. | 87 98.5 | ${ }_{107}^{95}$ | 96 109 | 116 | + +0.7 +13.4 | 97.7 110.7 |
| CFA-CRC No. 7. | Apr. 1, 1918 | 71 82.5 | ${ }_{95}^{82 \cdot 5}$ | 92.5 106.5 | 98.5 112.5 | 107.5 122.5 | 109 | 132 | $+13 \cdot 4$ +14.2 | $110 \cdot 7$ 126.5 |
| CFA-CRC No. 16 sup. No. 10 | Sept.17,1920 | $113 \cdot 5$ | $130 \cdot 5$ | 146 | 154 | 167.5 | 169.5 | 203.5 | +36.9 | 173.3 |
| CFA-CRC No. 59 | Jan. 1, 1921 | $109 \cdot 5$ | 126 | $140 \cdot 5$ | 148.5 | 161.5 | 163.5 | 196 | $-3.5$ | $167 \cdot 1$ |
| CFA-CRC No. 59 sup. No. 8 | Dec. 1, 1921 | 101 | 116 | 130 | 137 | 149 | 151 | 181 | - 7.7 | $54 \cdot 2$ |

Note.-Rail and Water "differential" 5 cents.
Table No. 2.-Carload Rates on Agricultural Implements in cents per 100 lbs . From Toronto, Hamilton and Brantford to Ottawa and Montreal

| Tariff Number |
| :--- |

Table No. 3-Carloads Rates on Agricultural Implements in cents per 100 lbs . From Toronto, Hamilton \& Brantford to Moncton, Halifax \& Charlottetown

*Reduction putting Charlottetown on the main line basis.

## II. RAW MATERIALS AND MANUFACTURED ARTICLES

 Structural Shapes (angles, channels, etc.). In straight or mixed carloads in cents per 100 lbs .

| Tariff Number | Effective Date | Montreal to |  |  | Hamilton to |  | Average Per Cent change from the previous rate | Freight Rate Index $1913=100$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Toronto | Hamilton | Brantford | Toronto | Brantford |  |  |
| CRC No. E 1433; 1157; 150. | Jan. 1, 1913 | $17 \cdot 5$ | $18 \cdot 5$ | $19 \cdot 5$ | 8 | 8 |  | $100 \cdot 0$ |
| CRC No. E $3434 \ldots . . . . . . .$. | Nov. 6, 1916 | 18.5 | 17 | $20 \cdot 5$ | $8 \cdot 5$ | 8 | $+1.4$ | 101.4 |
| CRC No. E 3434 sup. No. 45 | Mar. 15, 1918 | 21.5 | $19 \cdot 5$ | $23 \cdot 5$ | 10 | 9 | $+15 \cdot 2$ | 116.8 |
| CRC No. E 3434 sup. No. 61. | Aug. 12, 1918 | 27 | $24 \cdot 5$ | $29 \cdot 5$ | $12 \cdot 5$ | 11.5 | $+25.7$ | $146 \cdot 8$ |
| CRC No. E 4113 sup. No. 21. | Sept. 13, 1920 | 38 | $33 \cdot 5$ | $41 \cdot 5$ | $17 \cdot 5$ | 16 | $+39.5$ | $202 \cdot 8$ |
| CRC No. E 4113 sup. No. 26. | Jan. 1, 1921 | $36 \cdot 5$ | 33 | 40 | 17 | $15 \cdot 5$ | $-3 \cdot 1$ | 198.6 |
| CRC No. E 4482 sup. No. 20. | Dec. 1, 1921 |  | $30 \cdot 5$ | 37 | $15 \cdot 5$ | $14 \cdot 5$ | -7.4 $-\quad 2.7$ | $183 \cdot 9$ |
| CRC No. E 4482 sup. No. $33 \ldots \ldots$... | May 31, 1922 |  |  |  | 12 |  | -2.7 -3.5 | $179 \cdot 0$ $172 \cdot 7$ |
| CRC No. E 1283; 1870, 1936 sup. No. | Dec. 5, 1932 to May 1936 |  |  |  |  | 10 | $-3 \cdot 5$ | $172 \cdot 7$ |

Table No. 5.-Carload Rates on Iron or Steel Castings in straight or mixed carloads, in cents per 100 lbs.

| Tariff Number | Effective Date | $\begin{aligned} & \text { Galt } \\ & \text { to } \\ & \text { Toronto } \end{aligned}$ | $\begin{aligned} & \text { Guelph } \\ & \text { to } \\ & \text { Toronto } \end{aligned}$ | Hamilton Toronto | Montreal to Toronto | $\begin{gathered} \text { Galt } \\ \text { to } \\ \text { Hamilton } \end{gathered}$ | $\begin{gathered} \text { Guelph } \\ \text { to } \\ \text { Hamilton } \end{gathered}$ | Owen <br> Sound to Hamilton | Montreal to Hamilton | Galt to Brantford | Owen <br> Sound to Brantford | $\begin{aligned} & \text { Hamilton } \\ & \text { to } \\ & \text { Brantford } \end{aligned}$ | Average per cent change from the previous rate | Freight Rate Index $1913=100$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CRC No E 1729, 1080, 2644. | Jan. 1, 1913 | 11 | 10 | 9 | 22 | 9 | 10 | $16 \cdot 5$ |  | 7 | $15 \cdot 5$ | 8 |  |  |
| CRC No E 3434 sup. Nos 30 and 31 | Nov. 6, 1916 | 11.5 | $10 \cdot 5$ | $9 \cdot 5$ | 18.5 | $9 \cdot 5$ | 10 | 17.5 | 19.5 | 7 | 16.5 | $8 \cdot 5$ | - 1.6 | 100.0 98.4 |
| CRC No E 3434 sup. No 45. | Mar. 15, 1918 | 13 | 12 | 11 | 21.5 | 11 | 11.5 | 20 | 22.5 | 8 | 19 | 10 | $+15 \cdot 1$ | $113 \cdot 3$ |
| CRC No E 3434 sup. No $61 \ldots \ldots .$. | Aug. 12, 1918 | 16.5 | 15 | 14. | 27 | 14 | 14.5 | 25 | 28 | 20 | 24 | 12.5 | +25.5 | 142.2 |
| CRC No E ${ }^{\text {Cr }}$ 4113........ 2113 | July 12,1919 |  |  | 12.5 |  | $19 \cdot 5$ |  |  | 39 |  | 33.5 | 11.5 | -1.1 | $140 \cdot 6$ 196.9 |
| CRC No E 4113 sup. No 26. | Jan. 13, 1921 | 22.5 | 20.5 | 17. | 38 36.5 | 19 | 19.5 | 34 | 38 | 14.5 13 | $33 \cdot 5$ $32 \cdot 5$ | ${ }_{15}^{15} 5$ | +40.0 -3.2 +7.8 | $196 \cdot 9$ $190 \cdot 6$ |
| CRC No E 4482 sup. No 25 | Dec. 1, 1921 | $20 \cdot 5$ | 19 | $15 \cdot 5$ |  | $17 \cdot 5$ | 18 | 31.5 | 35 | $12 \cdot 5$ | 30 | 14.5 | - 7.8 | 178.1 |
| CRC No E 1870............ | $\left\|\begin{array}{rr} \text { Jan } 31, & 1922 \\ \text { to May, } & 1936 \end{array}\right\|$ |  |  |  | 34 |  |  |  |  |  |  |  | $-0.9$ | $176 \cdot 6$ |

Table No. 6. Carload Rates on Pig Iron, per ton of $2,240 \mathrm{lbs}$. in dollars from Hamilton and Port Colborne to Toronto, Hamilton and Brantford. Minimum C.L. weight 30 tons

| Tariff Number | Effective Date | From ${ }_{\text {to }}^{\text {Hamilton }}$ |  | From Port Colborne |  |  | Average per cent change from the previous rate | Freight Rate Index $1913=100$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Toronto | Brantford | Toronto | Hamilton | Brantford |  |  |
| CRC No. E 2783. | 1913 | 0.85 | 0.75 | $1 \cdot 10$ | 1.00 | 1.00 |  | $100 \cdot 0$ |
| CRC No. E 3433. | Nov. 6, 1936 | 0.90 | 0.80 | $1 \cdot 15$ | 1.05 | 1.05 | $+5 \cdot 3$ | $105 \cdot 3$ |
| CRC No. E 3758. | Mar. 15, 1918 | 1.035 | 0.92 | 1.325 | 1.21 | $1 \cdot 21$ | $+15.1$ | $122 \cdot 3$ |
| CRC No. E 3989......... | Aug. 12, 1918 | 1.30 | 1.20 | $1 \cdot 70$ | 1.50 | 1.50 | +26.3 | 153.2 |
| CRC No. E 4114 sup. No. 13. | Sept. 13, 1920 Jan. 1, 1921 | 1.80 1.80 | 1.68 1.60 | $2 \cdot 38$ $2 \cdot 30$ | $2 \cdot 10$ $2 \cdot 00$ | $2 \cdot 10$ 2.00 | +39.6 +3.5 | 213.8 206.4 |
| CRC No. E 4419 sup. No. 11. | Dec. 1, 1921 | $1 \cdot 60$ | 1.50 | $2 \cdot 10$ | 1.90 | 1.90 | - 7.2 | 191.5 |
| CRC No. E $4745 ; 1283 \ldots \ldots$. | Aug. 1, 1922 | 1.50 | $1 \cdot 40$ | $2 \cdot 00$ | 1.80 | 1.80 | - 5.6 | $180 \cdot 1$ |
| CRC No. E 1283 sup. No. 21. | April 22, 1929 |  |  |  | 1.50 |  | $-3.5$ | $174 \cdot 5$ |
| CRC No. E 1870. | May 1936 |  |  |  |  |  |  |  |



- Table No. 8.-Carload Rates on Lumber in cents pet 100 lbs . From North Bay, Peterborough, Lindsay, Braeside, Parry Sound and Owen Sound to Toronto, Hamilton and Brantiord.

| Tariff Number | $\begin{aligned} & \text { Effective } \\ & \text { Date } \end{aligned}$ | $\begin{aligned} & \text { North- } \\ & \text { Bay } \\ & \text { to } \\ & \text { Toronto } \end{aligned}$ | $\begin{aligned} & \text { Peter- } \\ & \text { boro } \\ & \text { to } \\ & \text { Toronto } \end{aligned}$ | $\begin{aligned} & \text { Lindsay } \\ & \text { to } \\ & \text { Toronto } \end{aligned}$ | $\begin{gathered} \text { Brae- } \\ \text { side } \\ \text { to } \\ \text { Toronto } \end{gathered}$ | Parry Sound Toronto | $\underset{\text { North Bay }}{\text { No }}$ |  | Parry Sound to |  | Owen Sound to |  | Average per cent change from theprevious rate | $\begin{gathered} \text { Freight } \\ \text { Rate } \\ \text { Index } \\ 1913=100 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | Hamilton | Brantford | Hamilton | Brantford | Hamilton | Brantford |  |  |
|  | Jan. 1,1913 <br> Feb.  | 10.5 | 8 | 8 | 10.5 | 8.5 | 11 | 11.5 | 9.5 | 10.5 | ${ }_{8.5}^{9}$ | 8.5 |  | $100 \cdot 0$ |
| CRC No. E 22917. | Feb. <br> Dec. <br> Der <br> Mar <br> 1, <br> 191916 <br> 1918 | 11 | $8 \cdot 5$ | $8 \cdot 5$ | 11. | 9 | 11.5 | 12 | 10. | 11.5 | 8.5 9 10.5 | ${ }_{10}{ }^{-5}$ | +4.2 |  |
| CRC No. E 3225 sup. No. 18 CRC No. E 2225 sup. No. 27 | Mar. 15, 1918 Aug. 12,1918 | ${ }_{15}^{12 \cdot 5}$ | 10 | 10 | ${ }_{15}^{12} 5$ |  | ${ }_{15}^{13} 5$ | ${ }_{16}^{14} 5$ |  |  |  |  |  |  |
|  | Nov. 1, 1919 |  |  | 14.5 |  |  |  |  | 19.5 |  | 17.5 | 17.5 |  |  |
| CRC No. E 3818........... | Jan. 1. 1921 | 20.5 | 16 | 14 | 20.5 | 17. | 21 | 22.5 | 19 | $20 \cdot 5$ | 17. | 17 | -3.1 | 193.7 |
| CRC No. E 3818 sup. No. 11 <br> CRC No. E 3818 sup. No. 26 | Dec. 1, 1921 <br> Aug. 1, 1922 | ${ }_{17.5}^{19}$ | $\begin{aligned} & 15 \\ & 14 \end{aligned}$ | ${ }_{12.5}^{13}$ | ${ }_{17}^{19} .5$ | 15.5 14.5 | ${ }_{18}^{19.5}$ | 20.5 19.5 | 17.5 16.5 | ${ }_{17}^{19} 5$ | ${ }_{14.5}^{15.5}$ | 15.5 14.5 | - 7.5 -7.0 | $179 \cdot 2$ 166.7 |
| CRC No. E 3818 sup. No. 26. | Aug. ${ }^{\text {April }} \mathbf{1}$ 1,, 1923 <br> 1933 | $\begin{aligned} & 17 \cdot 6 \end{aligned}$ | $\begin{aligned} & 14 \\ & 12 \end{aligned}$ | ${ }_{11}^{12 \cdot 5}$ | 17.5 | $\begin{aligned} & 14 \cdot 5 \\ & 14 \cdot 5 \end{aligned}$ | 18 | 19.5 19.5 | 16.5 16.5 | 17.5 | 14.5 | 14.5 | -7.0 -1.9 | 163.5 |

Table No. 9.-Carload Rates on Bituminous Coal in cents per ton of $2,000 \mathrm{lbs}$. From Suspension Bridge to Hamilton, Brantford and Toronto

| Tariff Number | Effective Date | From Suspension Bridge, N.Y. to |  |  | Average per cent change from the previous rate | Freight Rate Index $1913=100$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Hamilton | Brantford | Toronto |  |  |
| CRC No. E 2377 | 1913 | 50 | 70 | 60 |  | $100 \cdot 0$ |
| CRC No. E 3397 | Sept. 15, 1916 | 55 | - 77 | 66 | $+10.0$ | $110 \cdot 0$ |
| CRC No. E 3766 | Mar. 15, 1918 | 70 | 92 | 81 | $+22.8$ | $135 \cdot 0$ |
| CRC No. E 3988 ...... ${ }^{\text {CRC }}$ No. 3988 sup. No. | Aug. 12, 1918 | 90 105 | 110 | 100 115 | +23.4 +15.0 | 166.7 191.7 |
| CRC No. E 4742 .......... | Aug. 1, 1922 | 90 | 110 | 100 | ${ }_{-13.0}$ | $166 \cdot 7$ |
| CRC No. E 256. | $\text { May } 1936 .$ |  |  |  |  |  |

Table No. 10.-Carload Rates on Fuel Oil in cents per 100 lbs . from Toronto and Sarnia to Toronto, Hamilton and Brantford

| Tariff Number | Effective date | Sarnia to |  | Toronto to |  | Average per cent change from the previous rate | Freight Rate Index $1913=100$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Toronto | Hamilton | Hamilton | Brantford |  |  |
| CRC No. E 1827. | Jan. 1, 1913 | 13 | 13 | 7 | 9 |  | $100 \cdot 0$ |
| CRC No. E 3205. | Oct. 16, 1916 | 14. | 13. | 8 | 10 | +6.7 | 106.7 |
| CRC No. E 3403........ | Mar. 15, 1918 | $16 \cdot 5$ | $15 \cdot 5$ | 9.5 | 11.5 | $+17.8$ | 125.7 |
| CRC No. E 3403 sup. No. 3 | Aug. 12, 1918 | 21 | 20 | 12 | 14.5 | $+28.0$ | $160 \cdot 9$ |
| CRC No. E $3767 .$. | Sept. 13, 19\% 0 | 30 | ${ }_{27.5}$ | 17 | 20.5 | +42.6 | $229 \cdot 5$ |
|  | Jan. 1, 1921 Dec. 1, 1921 | 29 29 | 27.5 25.5 | 16.5 15.5 | ${ }_{18}^{20} 5$ |  | $\begin{aligned} & 220 \cdot 9 \\ & 205 \cdot 7 \end{aligned}$ |
| CRC No. E 4468 | May to 1936 |  |  |  |  |  |  |

Table No. 11.-Carload Rates on Linseed Oil in cents per 100 lbs . from Baden and Montreal to Toronto, Hamilton and Brantford


Table No. 12.-Carload Rates on White and Red Lead in cents per 100 lbs . from Montreal, Toronto and Hamilton to Toronto, Hamilton and Brantford

| Tariff Number | Effective Date | Montreal to |  |  | Toronto to |  | Hamilton to Brantford | Average per cent change from the previous rate | Freight Rate Index, $1913=100$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Toronto | Hamilton | Brantford | Hamilton | Brantford |  |  |  |
| CRC No. E. 2644 <br> CRC No. E 3426 <br> CRC No. E 3450; 3448. <br> CRC No. E 3426 sup. No. 7 <br> CRC No. E 3426 sup. N. 61 ; $3450-$ No. $3 ; 3448-$ <br> No. 6. <br> CRC No. E $3983 ; 3450$ sup. No. $5 ; 3448$ sup. No. 11 <br> CRC No. E 4198 sup. No. $17 ; 3450$ sup. No. 6 ; <br> 3448 sup. No. 19 <br> CRC No. E $4420 ; 3450$ sup. No. $7 ; 3448$ sup <br> No. 20 <br> CRC No. E 4420 sup. No. $64 ; 4562$ sup. No. 1 ; 3448 sup. No. 24 <br> CRC No. E 1721; 1539. | Jan. 1, <br> Nov. 1913 <br> Ne. 1, 1916   <br> Dec. 15, 1916 | $\begin{aligned} & 18 \\ & 22 \mathrm{c} \\ & 23 \\ & 20 \end{aligned}$ | $\begin{aligned} & 20 \\ & 23 \mathrm{c} \\ & 24 \end{aligned}$ | 2125 c26 | 9 | 11 | 8 | $+18.6$ | $100 \cdot 0$ |
|  |  |  |  |  | 10 | 12 | 8 |  |  |
|  |  |  |  |  | 10 | 12 | 8 |  | $118 \cdot 6$ |
|  | M.ar. 15, 1918 | 23 | $27 \cdot 5$ | 30 | 11.5 | 14 | 9 | +11.8 | $132 \cdot 4$ |
|  | Aug. 12, 1918 | 29 | $34 \cdot 5$ | 37.5 | 14.5 | 17.5 | 12 | $+26.0$ | 166.9 |
|  | Sept. 13, 1920 | $40 \cdot 5$ | $48 \cdot 5$ | 52.5 | $20 \cdot 5$ | 24.5 | 16 | +39.2 | $232 \cdot 4$ |
|  | Jan. 1, 1921 | 39 | $46 \cdot 5$ | 50.5 | 19.5 | $23 \cdot 5$ | 15.5 | $-3.8$ | $223 \cdot 4$ |
|  | Dec. 1, 1921 | 36.5 | 43 | 47 | 18 | 22 | 14.5 | -6.8 | $208 \cdot 3$ |
|  | May, ${ }^{\text {to }} 1936$ |  |  |  |  |  |  |  |  |

Table No. 13.-Carload Rates on Cotton Duck in cents per 100 lbs . from Welland, Hamilton, Montreal to Toronto, Hamilton and Brantford

| Tariff Number | Effective Date | Welland to |  |  | Hamilton to |  | Montreal to |  |  | Average per cent change from the previous rate | Freight Rate Index, $1913=100$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Toronto | Hamilton | Brantford | Toronto | Brantford | Toronto | Hamilton | Brantford |  |  |
| CRC No. E 1729; 1080 | Jan. 1, 1913 | 16 | 11 | 14 | 11 | 10 | : 28 | 29 | 31 |  | $100 \cdot 0$ |
|  | Dec. 1, 1916 | 18 | 13 | 15 | 13 |  |  | 30 | 33 | $+7.5$ | 107.5 |
| 3................................. | Mar. 15, 1918 | 20.5 | 15 | 17.5 | 15 | 11.5 | 33.5 | $34 \cdot 5$ | 38 | $+15 \cdot 5$ | 123.9 |
| No. 5 | Aug. 12, 1918 | $25 \cdot 5$ | 19 | 22 | 19 | 15 | 42 | 43 | 47.5 | -28.2 | 155.4 |
| RC No. E 3448 sup. N :o 19; 3450 sup. No. 6 | Sept. i3, 1920 | $35 \cdot 5$ | 26.5 | 31 | 26.5 | $20 \cdot 5$ | 59 | 60 | 66.5 | +39.9 | $217 \cdot 4$ |
| CRC No. E 3448 sup. No. 20; 3450 sup. No. 7. | Jan. 1, 1921 | $34 \cdot 5$ | 25.5 | 29.5 | $25 \cdot 5$ | $19 \cdot 5$ | $56 \cdot 5$ | 58 | 64 | $-3.9$ | 208.9 |
| CRC No. E 3448 sup. No. 24; 4562 sup. No. 1 | Dec. 1, 1921 | 32 | 24 | 27.5 | 24 | 18 | 52.5 | 54 | $59 \cdot 5$ | -6.9 | $194 \cdot 4$ |
| CRC No. E 1539 | $\begin{gathered} \text { to } \\ \text { May, } 1936 \end{gathered}$ |  |  |  |  |  |  |  |  |  |  |

The Chairman : Does any member of the committee desire to ask the witness any questions?

The Wirness: These tables will show the relative trends of freight rates in Canada over that period.

Mr. McLean: Will these tables be printed in the record of the proceedings?
The Chairman: Yes.

## By Mr. McLean:

Q. Before the tables are printed would it be possible for you to put in the mileage to these points?-A. I could look up the mileage.
Q. I do not think it would be very difficult to do that. There are quite serious discrepancies in the mileage.-A. Of course, the railways do not base their rates on mileage; they do not take mileage into consideration. Take iron and steel products. You can ship them from the Maritime provinces to Montreal, 418 miles, about as cheaply as you can ship them from Toronto to Kingston, 198 miles.
Q. By water?-A. No. Freight rates for 400 miles are the same as for 198.
Q. They do not ship as cheaply? (No response).

An Hon. Member: At the same price.
Mr. McLean: The witness said they shipped as cheaply.
Q. Are many of these implements shipped west by water? (No response.)

Mr. Graham: They ship to the lake head and then by rail, according to my information.

The Chairman: If the witness is required to put in the mileage figures in these tables the printing of the evidence will probably be delayed.

Mr. McLean: It should not take very long to get the mileage and insert it in the tables.

The Chairman: Probably we could have a statement of mileage prepared and added as an appendix.

Mr. McLean: That could be done, but it would be better to have it in the same tables.

The Chairman: I do not think we had better delay the printing of this evidence, because we will lose our place in the printing bureau. Are there any other questions?

By Mr. Evans:
Q. You do not know the difference between the prevailing rates and the Crow's Nest Pass rates on farm implements going west?-A. I could not say, sir.

Mr. Graham: On farm implements?
Mr. Evans: Yes.
Mr. Graham: Ten per cent.
By Mr. Evans:
Q. Ten per cent is the difference between the prevailing rates and the Crow's Nest Pass rates on farm implements going west?-A. Yes.

Mr. Graham: The preferential in the Crow's Nest Pass agreement on farm implements was 10 per cent.

## By Mr. McLean:

Q. In these figures on tariff rates you give "CRC " I suppose that means Canadian Railway Commission?-A. Yes.
Q. And "CFA"?-A. Canadian Freight Association.
Q. These are not comparable tariff numbers. Of course they could not be because they are to different points, but would they be for the same items?-
[Mr. Raymond G. Bangs.]
A. Well, on a good many of these hauls you get them out of the same tariff, you use a commodity tariff like coal.
Q. I have in my hand the tariff on farm implements: Tablè No. 3. Carload rates on agricultural implements in cents per 100 pounds from Toronto, Hamilton and Brantford to Moncton, Halifax and Charlottetown, tariff CRC No. E 2475. I suppose that is a different item from CRC No. E 2320 which is the first item in Table No. 1?-A. They cover different territories.
Q. There is no way of knowing whether it covers the same article or not?A. Well, Tables Nos. 1, 2 and 3 cover farm implements.

## By Mr. Graham:

Q. As enumerated?-A. Yes.

## By Mr. McLean:

Q. Is the rate on all implements the same?-A. Oh, no. I give the rate to Winnipeg: 64 cents.
Q. But I mean on the different items that enter into a car of implements, binders, ploughs, or whatever it may be?-A. The raw materials?
Q. No, implements? (No response.)

## By the Chairman:

Q. Mr. McLean means that if there was a carload made up from so many binders, seed drills, ploughs, etc., would the rate on the lot be the same?-A. On a mixed carload?

## By Mr. McLean:

Q. On any carload? I have no way of telling from these tables whether the rate is on binders, drills, or anything else?-A. They all travel sixth class.
Q. Then these rates are comparable on that ground?-A. Yes, there would be other items which perhaps would take fifth class, but the most of them take sixth class.

## By Mr. Evans:

Q. When was the last reduction in freight rates on farm implements going west? Did not the Saskatchewan provincial government have a hearing before the Board of Railway Commissioners?-A. I could not say that, frankly; I am not attached to the Board of Railway Commissioners. The question of freight rates is rather complicated, and I am afraid I could not answer the question. There is no indication in the tables of any reduction.

The Chatrman: The tables do not indicate that there has been any reduction particularly applied to farm implements.

Mr. Bangs, the committee is grateful to you for your contribution this afternoon.

Witness discharged.
Gentlemen, arrangements have been made for the members of the committee to visit the Experimental Farm, leaving here at 10.30 to-morrow morning. It is expected that there will be cars outside to convey us to the farm, but if any members have their automobiles in town it would be helpful if they could bring them.

We shall adjourn now until Thursday morning next at eleven o'clock.
Whereupon the committee adjourned at 5 o'clock p.m. until 11 o'clock a.m. on Thursday, May 14, 1936.

# agriculture and colonization 

MINUTES OF PROCEEDINGS AND EVIDENCE<br>(Farm Implement Price Inquiry)

$\qquad$

THURSDAY, MAY 14, 1936
No. 4

WITNESS:
Mr. F. H. Greenway, Prices Statistician, Internal Branch, Dominion Bureau of Statistics.

## MINUTES OF PROCEEDINGS

## House of Commons,

Thursday, May 14, 1936.
The Standing Committee on Agriculture and Colonization met this day at 11 o'clock a.m., Mr. Weir, the Chairman, presiding.

Members present: Messrs. Beaubier, Bertrand, Bouchard, Cleaver, Coldwell, Davidson, Donnelly, Douglas, Dubois, Evans, Furniss, Gardiner, Golding, Gosselin, Graydon, Hayhurst, Johnston (Lake Centre), Leader, Leclerc, MacKinnon (Edmonton West), MacRae, McKenzie (Lambton-Kent), McLean (Melfort), McNevin (Victoria, Ont.), Mitchell, Motherwell, Needham, Patterson, Perley (Qu'Appelle), Rennie, Rheaume, Roberge, Robichaud, Ross (Middlesex East), Senn, Taylor (Norfolk), Thorson, Tomlinson, Turner, Ward, Weir.

In attendance: Mr. R. T. Graham, K.C., Counsel for the Committee.
The Chairman presented to the Committee the information asked for by Mr. McLean (Melfort), regarding the mileage distances, from Mr. Bangs of the Dominion Bureau of Statistics.

Ordered,-TThat it be printed as Appendix No. 3.
Mr. F. H. Greenway, Prices Statistician, Internal Branch, Dominion Bureau of Statistics, presented a brief on the subject matter of the Order of Reference.

The Chairman thanked Mr. Greenway for his presentation.
Ordered,-That the charts and tables referred to in the brief be printed as Appendix No. 4.

The Committee adjourned to meet to-morrow, May 15, at 11 o'clock a.m.

WALTER HILL,<br>Clerk of the Committee.

(2)

## MINUTES OF EVIDENCE

House of Commons, Room 231,
May 14, 1936.
The Select Standing Committee on Agriculture and Colonization appointed to inquire into the prices of argicultural implements met at 11 o'clock, Mr. Weir the chairman, presided.

Counsed for the committee, R. T. Graham, Esq., K.C.
The Chatrman: Order, gentlemen. We will proceed. At the last meeting Mr. McLean requested that some information be placed on record with regard to mileage distance from different places to link in with the statement that had been presented by Mr. Bangs on that occasion. Mr. Bangs has presented a statement and sent it over. Would it be agreeable to have it included in the record?
(Statement appears as appendix 3 to to-day's proceedings).
The Chairman: Our witness for to-day is Mr. Greenway of the Internal Branch, Bureau of Statistics. I think Mr. Greenway's presentation will be a very valuable one, and members should be prepared to question him from time to time. His presentation has to do with the price trends of raw materials used in the manufacture of agricultural implements. I think you will agree with me that that is a rather important matter when dealing with this whole change in prices.

Mr. H. F. Greenway, called.
By the Chairman:
Q. Mr. Greenway, will you give the committee your full name and posi-tion?-A. H. F. Greenway of the Internal Trade Branch, Bureau of Statistics. I am occupied there in the capacity of prices statistician. The matter I have to offer this morning bears mainly upon three points: first, certain aspects of the general price structure of the country which have a direct bearing, I believe, on the questions you are investigating; second, a consideration of long term price movements of implement materials viewed against the background of the movement of implement prices themselves and of the general price level. When I refer to the general price level from now on, I mean the wholesale price level. In that connection, we have prepared an appendix consisting of six tables, and my second point is shown most clearly in table 5.
(Tables and charts appear as appendix 4 of to-day's evidence.)
I would like to refer you most particularly to tables 5 and 6 -table 5 showing the annual wholesale price index of some of the more basic materials used by the implement compranies for Canada, the United States and the United Kingdom. These two countries are chosen for comparative purposes, because most of our imports of these materials come from these countries. The third point is to direct your attention to price movements of materials more particularly in the last two or three years in contrast again with the movements of farm implement prices. I have summarized this presentation under four main headings.

1. Prices for materials used in farm implements have responded to the more important price movements since 1913 -rising sharply during the war years
and nearly all reaching a peak in 1920 - declining abruptly from the middle of 1920 to the end of 1921 -remaining relatively stable from 1922 to 1929, again declining from 1930 to the end of 1932, rising moderately in 1933 and 1934, and tending to stabilize in 1935 and 1936 at from 10 per cent to 20 per cent above 1913 levels. Farm implement prices followed the same general pattern, but have been less flexible. They are now roughly 60 per cent above 1913 levels, although technical and qualitative improvements may have tended to make the real cost relatively less high. This is a point calling for expert opinion of mechanical engineers or somebody with technical training in engineering problems.
2. Varying degrees of flexibility in prices of different commodities present an economic problem which has become particularly serious in recent years. Prices of materials for implements, and of implements themselves have been amongst the most rigid, while prices of farm products have been amongst the most flexible. Declines in the latter have resulted in a drastic curtailment in the incomes of the agricultural community which represent nearly one-half of Canada's population. The failure of farm commodity requirements to decline in line with prices of farm products has reduced farm purchases, which in turn not only limited the farmer's power to produce, but contributed to acute unemployment and deeper depression in the secondary manufacturing industries. Rigidity in prices of manufactured products has been more marked in Canada than in the United Kingdom or the United States.
3. Manufactured products generally have shown little response to the upward movement in prices since 1932. The more rigid the price structure of a commodity, the less has been the response in most cases. In fact, in some noteworthy instances, manufactured product price levels are now as low or lower than in 1932. This is true of iron and steel, the most important basic materials used in the manufacture of farm implements.
4. Contrasted with prices for other farm requirements, those for implements are relatively high when compared with 1913, although by no means the highest. Generally speaking, the longer an industry has been established the higher are current prices in relation to those of pre-war years. In contrast to the implement industry which was well established in 1913, rubber manufactures and gasoline were in their initial stages of mass production. Correspondingly, rubber goods and gasoline are now cheaper than in 1913, whereas farm implements and hardware are more expensive.

From 1913 to 1920 the Canadian wholesale price index number advanced 143 per cent and many materials needed for war purposes, including iron, mounted even more precipitously. The subsequent abrupt decline from May, 1920, until the end of 1921 left wholesale prices still over 50 p.e. above 1913 levels. Deflation halted at this point, and a period of relative stability followed which continued until the latter half of 1929. From then until February, 1933, a second decline carried the general wholesale price level downward again until it was almost exactly upon a par with that in 1913.

## By Mr. Donnelly:

Q. You do not give any reason why you think these longer established manufacturers should have prices remain more stable, or remain higher. You don't give the reasons?-A. It has to do I believe with the fact that a new product which has a potentially large market is able to make substantial savings in its production processes as the market expands. If I am producing a product for say 100 people my plant costs would be higher per unit of output than if I am producing for 100,000 people. That is I think at the basis of the problem.
Q. Why is the rigidity of prices in this country greater than it is in the United States or England?-A. That is a large order. I would like-
[Mr. F. H. Greenway.]
Q. Why should our prices not go down, or not go up, just the same as they do throughout the world, say in England or the United States?-A. I am not saying that they do not go up, and do not go down; but the movement is less marked.
Q. That is to say there has been greater rigidity, it has not been as flexible as it has been in the other countries. Why?-A. I think if you will let me continue. If I do not satisfy you I can come back to it.

Mr. Donnelly: Surely.

## By Mr. Cleaver:

Q. Is it possible that one of the reasons why the selling prices of articles made by old established firms are higher than the selling prices of new firms is on account of the fact that the watering of stock has weakened the capital structure and accounts for some of that increase in price?-A. That is a possibility but I am not prepared to say yes or no to your question.

The Chairman: Mr. Cleaver, may I say that I think that question is one which will be dealt "with later on by a witness who will be here.

Mr. Coldwell: I understood you to say that you did not have the data regarding the effects of technological improvements to machinery. Has the department any official having this matter who could appear here? I believe that is another very important point, as to why the costs of agricultural implements have not come down when the machinery for making these implements has improved and the relative amount of labour which is a more or less rigid cost has decreased in the manufacture of machines.

The Chairman: Mr. Coldwell, may I just in reply to you point out that we have looked carefully into the matter of whether or not the government had engineers. They had engineers who looked into this phase of it in the United States. But we have not been able to satisfy ourselves, and I think the evidence given here by Mr. Armstrong the other day is about all the evidence we will be able to get from departmental sources in that regard. It may be necessary for us to secure the services of expert agricultural engineers to assist us in going into that.

Mr. Coldwell: The department seem to have practically all the information we required on most of these things and I thought they might be able to help us on that.

The Chairman: I am afraid that is not in the department.
Mr. Coldwell: It is not?
The Chatrman: No.
Mr. Tomlinson: Will any member of the department be able to give us information with respect to the point raised by Mr. Cleaver, that watered stock in the companies is a cause of high prices?

The Charman: May I say in reply to that question, and I am just speaking for myself in this regard, I think that will be a job for our solicitor and auditor to bring out in their examination of the implement companies themselves.

Mr. Coldwell: While we were discussing this matter I thought it would be of interest to take into consideration the technological improvement, not in in the farm machines, but in the machines used in the production of farm machinery.

The Chairman: I beg your pardon. I had in mind the farm implement itself.

Mr. Coldwell: That ought to be a factor entering into the cost of agricultural machinery, increased efficiency in the machinery that enters into the production of farm implements.

## The Chairman: I had that point in mind.

Mr. Coldwell: Is there any department which deals with that?
Mr. Perley: Isn't that set out in the questionnaire?
Mr. Graham: We have that information in mind. There is no departmental official available that we have as yet been able to get in touch with.

Mr. Coldwell: That is my point. The point I am making is this, we should know the reliability of the data submitted by the machine companies. We should have some independent adviser, or witness, to gather information on that point.

Mr. Graham: That is information that we should have.
The Charrman: That information is being sought in the questionnaire which has been submitted to the implement companies. The question of how we are going to check it remains to be determined.

Mr. Coldwell: That is the point. I had hoped that we would find someone in one of the departments who could assist us in that regard.

Mr. Graham: We have not been able to discover anyone who would undertake to advise the committee as to that. We have that problem in mind.

Mr. Sfnn: There is another matter which has a bearing on what the witness has to say. He has referred to the price trends of pig iron and steel. What about the price trend for wood? A large part of the wood in the binder in 1919 has to-day been replaced by steel or some metal. In giving these price trends has witness made any calculations as to the difference in cost due to the substitution?

Witness: No. I am presenting purely the price trends of some of the raw materials. What you want would call for further calculation.

Mr. Senn: That would come in under the question presented by Mr. Coldwell, I suppose.

The Chairman: Very likely it would.
Mr. Douglas: I wonder could witness give us any idea of what proportion of each particular material would enter into the production of any one item. An item might go down in price but the amount of it used out of the total might be so small that it might not greatly affect the price.

The Chatrman: I think you have in mind, Mr. Douglas, the same thing that Mr. Senn has in mind, and I believe that the only way we can get that is when we come to break down the actual costs of the individual implement. That being so, these calculations will be valuable to us in that regard. Perhaps we should let Mr. Greenway proceed. It may be that he will answer some of the questions you already have in mind as he goes along.

## By Mr. Tomlinson:

Q. You are speaking now of iron products?-A. I am to give the background showing the price movements of individual commodities. It may not be necessary, but I have it.

Witness: For the past three years, gradual recovery has taken place until in March, 1936, the Canadian wholesale index was $13 \cdot 1$ per cent above the 1913 average. In March, 1936, an index of Canadian farm products was only $2 \cdot 6$ per cent higher than in 1913.

## By Mr. Cleaver:

Q. Would you repeat that last sentence again?-A. In March, 1936, an index of Canadian farm products was only $2 \cdot 6$ p.c. higher than in 1913.
Q. How do you harmonize that with the statement which appears in your table 1, farm implements $153 \cdot 8$ ?-A. Those are farm products.

[^6]
## By Mr. McLean:

Q. Would you say why the 1935 mark for farm products is higher than the 1913?-A. It is mostly in the live stock field, and I think in milk and things of that type; not grains, grains are lower than 1913.

## By Mr. Tomlinson:

Q. What did you do, take it on an average?-A. We have monthly figures, and the simple average of these monthly figures is used as the basis for the annual figure.

## By Mr. McLean:

Q. It is the first calculation I have seen that is higher than 1913?-A. I can give you the detail later.

Mr. McLean: Yes, that will do.
The Witness: The behaviour of wholesale prices in other countries throughout this period has been generally similar. During the war and the years immediately following, almost world-wide inflation occurred which in occasional instances practically destroyed the value of currency units. Then followed deflation and the stabilization of currencies in terms of gold, which was completed in nearly all countries by 1927. For a variety of reasons, however, it was not possible to maintain relationships then established between price levels and currency values, and the protracted and painful decline from 1929 to 1933 ensued. Moderate price recovery has followed where attempts to maintain post-war gold parities were abandoned.

The seriousness of the price movements outlined above has not arisen so much from the fact that changes were violent, as from the different amount of rise or fall for various commodities. Differing rates of decline have led to a severe shrinkage in the income of primary producers whose products fell in price much more rapidly than prices for manufactured goods. It has also meant that the primary producer was no longer able to purchase the same volume of manufactured goods as hitherto, with resultant depression and unemployment in the manufacturing industries.

The difference in the behaviour of various commodity groups during times of pronounced change in general price levels is indicated in chart 1. This shows graphically the number of months in which prices were altered between 1929 and 1933 for 546 of the items used in compiling the Dominion Bureau of Statistics index number of wholesale commodity prices. On the extreme left, it may be observed that there were 56 items which changed in four months or less throughout this period, and 91 items which changed in from 5 to 9 months. Incidentally, that relates to table 3 .

Mr. Graham: But this is chart No. 1 ?
The Witness: Chart No. 1 and table 3 contain the same material, page 2 and page 11. The number of items then decreases steadily as the number of price changes increases until the group on the extreme right of the chart is reached. During this period of 95 months there were 60 items which changed in price between 90 and 95 times. In the two groups on the extreme left were included pig iron, steel, coal and coke, items used in considerable quantities by farm implement companies. In the group on the extreme right were included the principal products of the farm: wheat, oats, barley, livestock and eggs. A more complete understanding of the significance of this price behaviour may be obtained from chart 2, which shows index numbers of the items included in the group on the extreme left compared with index numbers for the group on the extreme right during the years 1929 to 1935 inclusive. The decline between 1929 and 1933 in the flexible group including farm products offers a marked contrast to the rigid character of the group which includes metals and coal.

I might state that these index prices are what we call simple or unweighted indices. If wheat and corn were given a weight in keeping with their relative importance, that is if we weighted these prices by the value of the production that flexible curve would go still lower because wheat, a very important item, would tend to drag down the lower line still further.

Mr. Coldwell: One interesting feature in that table No. 5 on coal is that the flexibility of coal prices in the United States and Canada as compared with Great Britain shows that there has been greater rigidity in these two countries. Again, there is the matter of machines producing coal. Why should the rigidity be more marked in the United States and Canada where machine production has so greatly increased? On the other hand, in Great Britain they are still using the older methods and we find more flexibility.

Witness: Yes.
Mr. Coldwell: That is the point. It looks as though there is some cartel, or duress, or something of that sort operating to maintain the rigidity of these prices there.

Witness: That is not limited to coal, and in any case I think it is a special problem. That very problem I agree is a serious one, but it is one which calls for an investigation more on the basis of this type by itself.

Mr. Coldwell: Yes, it is basical I would say.
Witness: Yes, absolutely.
In the case you mention, of course, the use of domestic coal in the implement industry is very slight. It is practically all imported. But I have used the domestic price as a basis for comparison.

Mr. Coldwell: I see.
Witness: There is likewise a decided difference in the rate of recovery in the two groups, although it will be noted that the flexible commodity prices are still lower relative to 1929 than are the rigid commodity prices. This inherent difference in the price behaviour of commodity groups cannot be ignored in any examination of the relative position of the farmer and the implement company. It is a recurrent problem which presents itself on the occasion of every considerable change in the general wholesale price level and is not, of course, limited to the fields mentioned. The decline in basic materials generally was of greater extent between 1929 and 1933 than that for finished goods made from these materials. Charts 3,4 and 5 showing the price movements of raw foods and finished foods, raw textiles and finished textiles, basic metals and finished metal products make this point clear.

## By Mr. Leader:

Q. Before you leave that, would you mind indicating so that we will have it on the record the articles which you have included in your rigid commodity prices, and the articles which you have included in your flexible commodity prices?-A. Yes, I can do that. There is quite a list of them.
Q. Just the high-lights?-A. Some of the more important?
Q. Yes?-A. Well, in the rigid index I included such things strangely enough as bread, evaporated milk, steel billets, steel bars-there are quite a number of items, metal items, structural shapes-
Q. Implements?-A. This index is based on non-manufactured, that is nonassembled products. The individual unit of production, I mean. Things that are assembled are not included.
Q. These are parts, non-assembled products?-A. Yes, almost entirely. Nickel, brick, coal, plaster, building-stone, and a considerable number of chemicals, also asbestos. The flexible group includes barley, corn, flax, oats,
[Mr, F. H. Greenway.]
rye, wheat, flour, raw rubber, steers, hogs, calves, lambs, eggs, raw cotton, lead, silver, zinc and shellac.

It is also of interest, although not of present significance, that in periods of violent price increases such as that culminating in 1920, finished goods rose higher and more rapidly than raw materials.

## By Mr. Coldwell:

Q. Flour is flexible?-A. Yes.
Q. And bread is not?--A. There is a decided difference.

## By Mr. McLean:

Q. The index is not weighted?-A. No.
Q. If it were there would be a much wider spread between the two?-A. Yes, there would, I do not think charts 3,4 and 5 call for any particular comment; they merely illustrate the point which has been already made in referring to chart 2. They simply take specific commodity groups. You will notice in the case of metals that finished metals and raw materials have been less responsive to movements than finished foodstuffs; textiles are a sort of in-between.
Q. Finished foodstuffs are not weighted either?-A. Yes, they are.
Q. They have kept pretty close together?-A. We now turn to a consideration of the actual materials individually. The behaviour of prices since 1913 for a list of the more important and basic materials used by implement companies is examined in the sections which follow and particular attention is paid to the relationship between 1913 and 1935 price levels for these products and for farm implements as a group. Comparisons with price movements in the United Kingdom and the United States are also given.

A general idea of the relative importance of basic materials used by implement companies may be obtained from the following figures. In 1934, the value of all materials used in manufacturing farm implements amounted to $\$ 3,632,821$, of which various descriptions of steel accounted for over $\$ 1,000,000$. Pig iron and castings added over $\$ 350,000$ more. Other basic materials of considerable importance included cotton duck and other textiles $\$ 109,884$; lumber $\$ 363,062$, and paints, oils and varnishes $\$ 92,885$. The principal items in the fuel bill amounting to $\$ 368,292$ were $\$ 130,581$ for imported bituminous coal and $\$ 132,380$ for electricity.

As already intimated, the history of commodity price movements since 1913 falls naturally into three periods, first, the years of war and post-war inflation and deflation, second, the period of relative stability from 1922 to 1929, and finally the decline and moderate recovery since 1929. The behaviour of farm implement prices and prices of basic commodities used by implement companies can be examined to advantage by keeping in mind these three periods. The brief table following presents price index numbers showing the relative position of prices in 1913, at the post-war peak, in 1922 after deflation, in 1929 at the beginning of the secondary decline, in 1932 when it reached its lowest point, in 1935 and in March 1936.

I do not know that anything would be gained by reading off the figures from this table; it is rather too long to keep in mind. But I might give you the March 1936 position of the various items relative to 1913. Farm implements, $158 \cdot 5$; mild merchant steel bars-

## By Mr. Perley:

Q. What is farm implements?-A. 158.5 ; mild merchant steel bars, 109; steel sheets, hot rolled and annealed, $129 \cdot 3$; No. 1 foundry pig iron, 111.4; cast iron scrip, $49 \cdot 0$.

By Mr. Johnston:
Q. That does not show on the table we have?-A. No; it is not quite complete. After this was stencilled I enlarged the table; it is unfortunate.

By Mr. Perley:
Q. Give us the ones in the list?-A. All right.

PRICE INDEX NUMBERS OF FARM IMPLEMENTS AND MATERIALS USED BY
IMPLEMENT COMPANIES, $1913-1935$
$(1913=100)$

|  | 1913 | Post War Peak | 1922 | 1929 | 1932 | 1935- | $\begin{gathered} \text { March } \\ 1936 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Farm Implement. ${ }_{\text {Mild Merchant Steel Bars }}$ | $100 \cdot 0$ | 201.5 (1921) | $166 \cdot 5$ | $165 \cdot 1$ | 161.4 | $153 \cdot 8$ | $158 \cdot 5$ |
|  | $100 \cdot 0$ | $204 \cdot 4$ (1918) | $115 \cdot 2$ | $116 \cdot 3$ | $109 \cdot 0$ | $109 \cdot 0$ | 109.0 |
| and Annealed | $100 \cdot 0$ | 234.7 (1918) | $147 \cdot 6$ | $136 \cdot 8$ | 134-1 | $130 \cdot 6$ | $129 \cdot 3$ |
| No. 1 Foundry Pig Iron. | $100 \cdot 0$ | 275.2 (1920) | 166.5 | $128 \cdot 2$ | $120 \cdot 1$ | 111.4 | 111.4 |
| Cast Iron Scrap.......... | $100 \cdot 0$ | 279.0 (1918) | $101 \cdot 0$ | $88 \cdot 2$ | 51.5 | 48.5 | 49.0 |
| Red Oak Lumber | $100 \cdot 0$ | $295 \cdot 8$ (1920) | $215 \cdot 5$ | $128 \cdot 5$ | $105 \cdot 7$ | $107 \cdot 1$ | $107 \cdot 1$ |
| White Lead in Oil | $100 \cdot 0$ | $240 \cdot 8$ (1920) | 161.9 | $171 \cdot 3$ | $123 \cdot 5$ | $121 \cdot 3$ | $130 \cdot 2$ |
| Read Lead, dry | $100 \cdot 0$ | 241.0 (1920) | $160 \cdot 0$ | $195 \cdot 5$ | 141.9 | 148.8 | 152.9 |
| Linseed Oil, raw | $100 \cdot 0$ | 391.9 (1919) | $176 \cdot 5$ | $171 \cdot 2$ | $93 \cdot 1$ | 121.8 | $140 \cdot 0$ |
| U.S. Bituminous Coal* | 100.0 | 265.9 (1920) | 236.5 | 149.9 | $134 \cdot 6$ | 158.8 | 165.5 |

*United States price.
By Mr. McLean:
Q. Does that mean that farm implements to-day are as low as they were in 1932?-A. Lower than in 1932 ; it means that the list prices as shown by the companies are lower, yes.
Q. Than they were in 1932 ?-A. Yes. There were special discounts at that time which our index does not show relative to the 70 cent price for wheat.
Q. The price was never really reduced but a discount was being given?-A. For certain products. It is very hard to place that upon an index basis.

The relatively slower and less extended rise of farm implements in the war years is clearly apparent from this table. Their rigidity between 1922 and 1935 relative to material prices is also evident. One significant point not clearly revealed, however, is the stable behaviour of material prices in 1934 and 1935 following the brief advance in 1933. The new level established for the more important basic materials during these years was between 10 per cent and 20 per cent above 1913 levels, whereas 1936 farm implement prices wereapproximately 60 per cent higher than in 1913. This assertion relating to the stability of material prices since 1934 may be verified by reference to table 6 of the statistical appendix.

Pig Iron: After fluctuating narrowly in the first years of the war, prices for pig iron advanced very rapidly in 1916 and 1917 due to increasing war-time demand. Canadian quotations in 1918 were nominally unchanged because of control measures in the United States and Canada, but a reaction occurred in the following year, when the industry which had been geared up to war requirements was again forced to find outlets for its products in usual peace-time channels. A second rise followed, however, when the post-war inflationary wave swept pigiron prices upward from $\$ 37.50$ per gross ton in November 1919 to $\$ 61.80$ in November, 1920. The average price in 1920 was 175 per cent above the corresponding 1913 level. Farm machinery prices, however, did not reaeh their postwar peak until 1921, when they were approximately 100 per cent above those in 1913. Except for slight interruptions in 1923 and 1929, pig iron prices declined
[Mr, F. H. Greenway.]
intermittently from 1920 to 1933, and subsequently have shown no change. For 1935, No. 1 foundry pig iron averaged 11 per cent higher than in 1913, while the general level of commodity prices at wholesale was $12 \cdot 6$ per cent higher, and that for farm implements approximately 54 per cent higher. (See chart 6 in appendix). With the exception of the war period, when prices were placed under control, first in the United Kingdom and later in the United States, pig iron quotations in Canada until recent years moved fairly closely in line with those in the two most closely associated outside markets. The coal strike of 1926 in the United Kingdom created a temporary rise which was not followed elsewhere, but no other appreciable divergence in trend occurred until 1931 and 1932. In those years, prices in the United Kingdom and the United States declined appreciably, while Canadian quotations remained unchanged. Then in 1933 when prices in outside markets were rising, a moderate reduction was made in Canada, with no subsequent revisions of consequence.

## By Mr. Donnelly:

Q. Are you talking about table No. 5?-A. Chart No. 6 or table No. 5; you are right; either onee. The figures in table 5 are shown for the most part in charts later on.

## By Mr. Perley:

Q. The greatest difference is in pine?-A. Pine, yes.
Q. The decks of the binders are all pine?-A. Oak is taken as one item for the reason that we are comparing international prices and the prices in Canada and elsewhere. I could give you the prices of pine and of quite a number of other items, but it would keep you most of the day.

## By Mr. Senn:

Q. They were using oak in 1913?-A. Yes, and Douglas fir.

Mr. Donnelly: There is very little lumber in the machines to-day, anyway; practically a negligible quantity.

## By Mr. Coldwell:

Q. Would the movement in pine and the other woods be approximately the same as the movement in oak?-A. I think it would be rather more than the movement in oak in recent years.

Mr. Ward: There is practically no oak at all in farm machinery to-day.
Mr. McLean: There is much more copper in farm machinery in western Canada to-day than oak.

Mr. Donnelly: Barbed wire and binder twine?
Mr. McLean: Yes.
Witness: I have to correct myself on that. Oak prices have declined much more than pine in the past few years. If the committee is interested in the prices of the woods I shall be glad to get them.

By Mr. Coldwell:
Q. The relative prices of these woods would be interesting and would show whether the new woods are relatively cheaper?-A. The price of pine is very much less than the price of oak; the movement has not been as great; the decline has not been as great.

## By Mr. Taylor:

Q. The percentage of wood going into the farm implement is very small, is it not?-A. I think I mentioned the total amount spent on lumber in 1934 was $\$ 363,000$ out of $\$ 3,632,000$, almost exactly one-tenth.

## By Mr. Mitchell:

Q. A lot of that would go in the crating?-A. Yes; that includes all wood used by the company.
Q. There is more wood used in crating the machinery than in the machine itself?-A. Yes; of course, it is a cost.

## By Mr. Johnston:

Q. You include farm wagons in your list?-A. Yes.
Q. There is considerable wood there?-A. Yes.

## By Mr. Perley:

Q. In the wagon boxes?-A. I believe the sides of the box are made of pine and the floor is elm.

## By Mr. Ward:

Q. The side is elm and the floor is usually fir?-A. I believe elm goes into it. The axles of the wagon are made up of white maple. Turning again to the international comparison of pig iron, United States prices continued upward from 1932 to 1935 and are now further above 1913 levels than Canadian quotations, although United Kingdom prices remain relatively lower than those for Canada and the United States despite sharp increases in 1933 and 1934. Two points regarding this international comparison of pig iron prices are of particular interest. First the gradual decline from 1923 to 1930 was less in Canada than in outside markets, and second, for the first time in the period for which records are available, Canadian pig iron prices in the past five years have failed to respond closely to changes in the United Kingdom and the United States. This is largely shown by the following table of price index numbers for foundry pig iron (see also table 6 of appendix).

INDEX NUMBERS OF FOUNDRY PIG IRON PRICES, 1929-1935
$(1929=100)$

|  | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | 1935 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Canada. | $100 \cdot 0$ | $93 \cdot 6$ | $93 \cdot 6$ | $93 \cdot 6$ | 86.9 | $86 \cdot 6$ | 86.9 |
| United Kingdom | $100 \cdot 0$ | 94.9 | $80 \cdot 0$ | 67.8 | $81 \cdot 3$ | $96 \cdot 8$ | $97 \cdot 4$ |
| United States. | $100 \cdot 0$ | 98.6 | $91 \cdot 0$ | 83.4 | 88.9 | $99 \cdot 6$ | $102 \cdot 3$ |

Canadian prices remained rigid during 1931 and 1932 and did not decline until outside prices were again ascending. Canadian prices for pig iron, however, are now lower relative to 1929 levels than prices in the United Kingdom and the United States.

## By Mr. Donnelly:

Q. I note by the table you have, 105 in the United Kingdom and 111 in Canada?-A. That is the 1913 comparisons; this is the 1929 comparison.
Q. That is the 1929 comparison?-A. Yes. That is table 6 ; you are looking at table 5 .

Steel Merchant Bars: Steel prices normally reflect major fluctuations for pig iron. During the war, they registered parallel advances until 1917, when steel failed to rise as rapidly as pig iron. In 1918, prices for mild steel merchant bars averaged nearly 109 per cent above 1913 levels, before declining along with pig iron in 1919. The secondary advance of steel in 1920 was much less precipitous than that of pig iron, and whereas 1920 pig iron prices exceeded
[Mr. F. H. Greenway.]
war time levels, merchant steel bar quotations averaged only 97 per cent higher than in 1913, as compared with nearly 109 per cent in 1918 as already noted. The rise in 1922 and 1923 subsequent to the sharp decline in 1921 and the first quarter of 1922 was much more pronounced than the inflationary rise of 1920. The general volume of business increased materially in 1923 and steel production almost doubled in response to active demand. Recession in business activity in 1924, however, affected markets for steel adversely, and the downward movement in prices was resumed until 1931. Since then no change has occurred in the price of mild merchant steel bars. For 1935 they averaged 9 per cent higher than in 1913, as compared with increases of $12 \cdot 6$ per cent for general wholesale prices and approximately 54 per cent in farm implement prices.

## By Mr. Graham:

Q. Fifty-four per cent or 64 per cent?-A. It is the 1935 average; 1936 would show $58 \cdot 5$.

Canadian steel price movements since 1913 have been much narrower than those for the United Kingdom and the United States both in war and post-war years. Only in the temporary rise of 1922 and 1923, and in the subsequent decline did they reveal a greater degree of flexibility than prices in outside markets. From the period of post-war readjustment until 1929, fairly close uniformity in price movements was apparent in the three countries under review, although British prices tended to be more rigid than those elsewhere. This rigidity in British prices broke in 1931, and the 1932 average was 23 per cent below that for 1930, whereas only slight declines occurred during these years in Canada and the United States. Since 1932, Canadian prices have continued unchanged while British and American prices have risen considerably. All revisions in the Canadian price of steel merchant bars have been downward, however, from 1923 to 1935 . In the latter year, prices were 9 per cent above 1913 levels as compared with 17 per cent in the United States and 30 per, cent in the United Kingdom.

Comparisons for the three countries related to prices in 1929, reveal the same growing independence in Canadian steel quotations that was observed for pig iron in recent years.

INDEX NUMBERS OF STEEL MERCHANT BAR PRICES, 1929-1935
$(1929=100)$

| - - | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | 1935 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Canada | $100 \cdot 0$ | $97 \cdot 6$ | $93 \cdot 7$ | $93 \cdot 7$ | $93 \cdot 7$ | $93 \cdot 7$ | 93.7 |
| United Kingdom. | $100 \cdot 0$ | $99 \cdot 5$ | $95 \cdot 9$ | $76 \cdot 6$ | 88.3 | $98 \cdot 2$ | $100 \cdot 8$ |
| United States.... | $100 \cdot 0$ | 88.8 | $84 \cdot 4$ | $82 \cdot 0$ | $85 \cdot 1$ | $93 \cdot 9$ | 94.2 |

That table is comparable with the preceding one, the material for which appears in table 6 of the appendix.

Although Canadian prices did not decline in 1932, they have not risen latterly as have those in the United Kingdom and the United States, and consequently relative to 1929 compared favourably in 1935 with the relative position of prices in these other countries.

Coal-The behaviour of coal prices since 1913 is unusual in contrast with other basic materials of considerable commercial importance. After showing little or no response to general price advances in the first three years of the war, coal prices commenced to rise rapidly in 1917 and continued upward until 1921. At that time, Canadian domestic run-of-mine coal averaged 154 per cent above 1913 prices. After a brief decline beginning in the latter half of 1921, prices
remained steady at approximately 120 per cent above 1913 levels until 1932. In that year and again in 1933 moderate declines occurred, but customary stability was resumed again in 1934 and 1935. In the latter year, domestic run-of-mine coal was 91 per cent above 1913 levels, as compared with increases of $12 \cdot 6$ per cent for general wholesale prices, and roughly 54 per cent in farm implement prices. Wages in the coal mining industry moved forward faster than wages generally during the war years, but in the past decade this situation has changed. Coa! miners' wages relative to 1913 are now not high when compared with those in other occupations.

## By Mr. Malcolm McLean:

Q. What you have here is Nova Scotia domestic coal?-A. That is the only Canadian coal I have used, because I think the amount of other coal getting as far as Ontario is negligible.
Q. Well, is there any Nova Scotia domestic coal used in Ontario?-A. Some.
Q. Very little?-A. Very little.
Q. There is more Alberta domestic than Nova Scotia domestic coal coming to Ontario, is there not?-A. I would not like to say positively. I doubt it.
Q. I would like to gamble a little.-A. I would not gamble on it.

Mr. Mitchell: There is difficulty in moving coal east; the moisture and evaporation makes it slack down.

Mr. Malcolm McLean: The greatest quantity is coming from Alberta in the last twenty years.

## By Mr. Donnelly:

Q. Is that price 629.5 correct?-A. I believe so.
Q. It seems so large.-A. It is terrific. It has been checked.

Mr. Malcolm McLean: Lethbridge and Drumheller coal can be stored outdoors. The point I want to make is that this Nova Scotia domestic so called does not enter the Ontario implement industry.

Witness: I am going to make that point.

## By Mr. Donnelly:

Q. Is it coal that is used?. Is it not chiefly coke?-A. There is a considerable amount of coke, but it does not bulk large in the actual purchase. I think coke purchases in 1934 amounted to only $\$ 1,200$ or $\$ 1,300$.

## By Mr. Tomlinson:

Q. The coal used by the manufacturing company is steam coal, is it not?A. Yes.
Q. It is not hard coal, is it?-A. No. It is not anthracite. Price movements of United States bituminous coal, are of more immediate concern to the farm implement industry than domestic prices, for most of the coal used is imported bituminous from the United States. Imports of British bituminous coal are negligible, although British and United States prices have moved almost parallel to each other since their post-war readjustment. The rise in prices for domestic and United States bituminous coal was approximately equal during the war years and immediately after, although the United States advance was more irregular and reached its peak in 1920, as compared with 1921 for Canadian coal. United States prices declined materially, however, between 1920 and 1932, as indicated by the price indexes of $265 \cdot 9$ and $134 \cdot 6$ for these respective years. Canadian eastern domestic coal price indexes for 1921 and 1933 were $254 \cdot 5$ and $190 \cdot 9$ respectively, and subsequently have showed no change.
[Mr, F. H. Greenway.]

As in the case of both iron and steel, Canadian coal prices have been less flexible than quotations in the United Kingdom and the United States. Unlike iron and steel, however, Canadian coal is now relatively higher in price when compared with 1913 levels, than coal in the United Kingdom or the United States. This is indicated by the following 1935 price indexes which are related to 1913: Canadian domestic 190.9 United States bituminous 158.8 and United Kingdom bituminous $123 \cdot 3$.

Red Oak: Oak lumber prices declined moderately in 1914 and 1915, but mounted rapidly during the next five years, with the result that the 1920 average of red oak, plain firsts and seconds at Toronto was nearly 196 per cent above the 1913 level. From that point prices declined, almost without interruption until 1932, when quotations for the same description of oak averaged less than 6 per cent above its 1913 level. This recession was particularly marked in 1921 and 1924. A slight rise in 1933 brought the price up to 7 per cent above the 1913 level, and it has not changed since that time. Oak lumber is therefore closer to 1913 levels at the present time than either general wholesale prices or prices of farm implements.

The only important outside market from which oak lumber is shipped into Canada is the United States. Canadian oak prices rose less sharply during and after the war than those in the United States. Although their subsequent decline was less rapid, they have been lower relative to 1913 than United States prices for the past twelve years. Canadian oak quotations did not advance in 1933 and 1934 as did prices in the United States, nor did they decline in 1935. Price index numbers for oak lumber in $1935 \quad(1913=100)$ were $107 \cdot 1$ in Canada, and $120 \cdot 3$ in the United States.

## By Mr. Donnelly:

Q. And we buy from the United States?-A. Remember, that is the trend.

## By $M r$. Senn:

Q. Don't you think a better basis of comparison would have been the prices of oak used in 1913 and the prices of pine and fir used to-day? I think that they use maple mostly to-day in Ontario; they do not use oak any more? $\rightarrow$ A. Will that not come out when the reference is made to changing the types of materials? Oak is still used.

Mr. Donnelly: You have just taken oak?
Witness: Yes.
Mr. Senn: Wheels and spokes are made of oak.
Witness: I am not attempting to take a waggon or a binder and relate 1913 prices of the materials in it to the 1935 prices; I am simply taking some of the main items and following them through. I admit it is only part of the picture, but it is all I have contracted to do.

## By Mr. Malcolm McLean:

Q. Probably the price of all lumbers would be changed, approximately, as the price of oak has changed?-A. Not quite. The decline appears to have been less in some other items.
Q. Would it be less in some other items than in oak?-A. Yes.
Q. Less in pine than in oak?-A. Yes. That is, in recent years. I have not got the 1913 comparison.
Q. I do not think that matters much.

By Mr. Coldwell:
Q. If they are using more pine than oak, or a great proportion of pine, it would tend to cheapen the cost of the machine, would it not; pine would be cheaper than oak?-A. Yes.

Mr. Donnelly: They are not using much pine in these days.

## 18799-2

## By Mr. Senn:

Q. Would the use of pine to-day be cheaper than the use of oak in 1913?A. I will have to check that. I could not tell offhand.
Q. A little while ago you gave a percentage of material used in a machine and in the total number of machines in comparison with the lumber that was used. That is this year or last year. Will you give the same comparison for the year 1913?-A. I am sorry, I cannot.

The Chairman: The lumber requirements of the implement industry today

Mr. Senn: -are less than they were.
The Chairman: Yes. It must be used in crating largely, apart from wagons.

Mr. Senn: It may be cheaper.
Witness: Oak is one of the items of lumber which was cited by implement companies at an earlier investigation.

Paint Materials.-Price movements of the principal paint ingredients are frequently violent in character. This is particularly true of linseed oil which follows the flax market. The rise in linseed oil during the war was one of the sharpest on record, the 1919 peak average price for raw linseed oil at Montreal being 292 per cent above the 1913 level. Subsequent declines, however, reduced it by 1921 to 54 per cent above the 1913 level, which left approximately the same differential as in the case of the general index of wholesale prices. Since 1921 there have been three cycles of rising and falling prices, each peak being lower than the preceding one. Thus the 1935 average price was less than 22 per cent above 1913 levels.

## By Mr. Donnelly:

Q. Have you got the comparison between the price of linseed in 1913 as compared with 1935, and flaxseed?-A. Not here.

## By Mr. McLean:

Q. And you have not got it for 1929 either?-A. No. The price of linseed oil related to 1929 is shown in table 6.
Q. But Dr. Donnelly was asking about flax?-A. That can be obtained, of course.
Q. It seems peculiar that oil should be higher in this year than it was in 1929 because I do not think flax is higher during the past five months than it was during the first months of 1929?-A. No.
Q. The index is higher?-A. Yes.
Q. Flax must be a little lower than it was then?-A. I am almost sure that is true, but I do not think there is any questioning our linseed oil prices; they come from producing companies.
Q. Could you look that up with regard to the relative position of flax in 1929 - the earlier part-the crop of 1929 as compared with the crop of 1935 and the early months of 1936 ? There is a difference there of eight points?-A. Yes, I could.

Price movements for red and white lead have been less erratic, but fluctuations have nevertheless been wide. The post-war peak average price was 140 per cent above that for 1913 for both kinds of lead. Since then white lead has declined to a greater extent than red lead, and in 1935 the latter was still nearly 49 per cent higher than in 1913, as compared with roughly 20 per cent higher for white lead.

Both linseed oil and lead are commodities whose prices react readily to international market factors. Price movements for linseed oil have been very similar since 1913 in Canada, the United Kingdom, and the United States. United Kingdom quotations, however, have been relatively lower than in the
[Mr. F. H. Greenway.]
other two countries when compared with 1913 prices. This is illustrated by the 1935 price index numbers for linseed oil, of 100 for the United Kingdom, $121 \cdot 8$ for Canada, and $151 \cdot 6$ for the United States. Relative to 1913 levels, lead prices in the United States have been higher than in Canada.

Other Materials.-As intimated earlier, only a few of the more important implement materials have been considered in any detail. There are a number of others, however, which deserve brief comment. Considerable quantities of scrap iron, for instance, are used along with pig iron, persumably in the manufacture of castings. A price index for No. 1 scrap iron mounted from 100 in 1913 to 279 in 1918, but had dropped to 101 in 1922, and kept almost steadily downward to 48.5 in 1935. Various types of steel sheet are also used extensively. Although steel sheets advanced more rapidly than merchant steel during the war, subsequent declines have been less extensive, and in 1935 hot-rolled and annealed steel sheet prices were about 30 per cent above 1913 levels. Cotton fabrics in 1935 were also approximately 30 per cent higher than in 1913, although the more basic cotton materials have not shown so large an increase. Rates for electricity, an important item in fuel costs, have declined materially in the past 25 years. Domestic rates are now 40 per cent below those of 1913, and there is reason to believe that commercial rates have been reduced correspondingly.

Wholesale Prices of Products Purchased by the Farmer-1913-1935
Turning to compare the behaviour of farm implement prices with those for other products required by the farmer, wide differences are found in relationships between 1913 and 1935 price levels. Certain products which were more or less in experimental stages of mass production in 1913, are now materially lower in price than at that time. Rubber goods, rayon, electric light bulbs and gasoline are important cases of this type. Rope and binder twine are also lower in price than in 1913. The majority of commodities required by the farmer, however, have increased in price during the past twenty-five years, although in many instances the rise has not been large. Advances of less than 25 per cent have been recorded for flour and other milled products, boots and shoes, lumber, cement, and paint materials. Increased between 25 per cent and 50 per cent have been shown for cotton fabrics, furniture, hardware, and wire. Other products which have risen still more include tea and coffee, matches, farm implements, tools and hand implements, brick and chinaware.

Then follows a final table which is table 2 in the appendix.

## Percentage Change in Wholesale Prices for Specified Farm Purchases Between 1913 and 1935 <br> Item <br> Percentage Change

Gasoline ..... 31
Binder twine ..... 28
Men's rubbers ..... 15
Manila rope ..... 6
Boots and shoes ..... 12
Lumber ..... 15
Flour and other milled products ..... 16
Cement ..... 16
Paint materials ..... 17
Furniture ..... 30
Cotton fabrics ..... 38
Wire ..... 44
Hardware ..... 45
Brick ..... 51

* Farm implements ..... 54
Tea, coffee, etc ..... 59
Tools and Hand Implements ..... 76* Retail prices.


## By Mr. Coldwell:

Q. There are a good many castings in some of these farm machines. Have you any figures to show the relative amount of pig iron and scrap iron used by the implement companies, because if the scrap iron has decreased so that it is only about half the price of 1930, and much of that is used, again we have a picture that is important in our consideration of the question of farm machinery? -A. It is not a large amount. In 1934 it ran around, as I recall, $\$ 50,000$. It is not a big item, $\$ 53,000$. I believe in 1935 it will be considerably larger and other amounts will be considerably larger also.

## By Mr. Cleaver:

Q. I have one general question to ask. Having in mind the percentagethe different types of material contained in agricultural implements, are you prepared now to give an over-all estimate or a summary of the percentage of increase in the cost of materials entering into agricultural implements?-A. No, I am not prepared to do that for the reason that the materials entering into farm implements are different-not that the materials are different but the proportions used are different.

The Chatrman: Order, gentlemen, please. It is very difficult for the reporters to hear.

## By Mr. Leader:

Q. Yes?-A. I am not prepared to do that.

By the Chairman:
Q. Are there any other questions?

## By Mr. Ribichaud:

Q. Summarizing your proportions would it be correct to say that the proportion of increase in price since 1913 is much greater than the proportion of decrease in the raw materials entering into manufacturing?-A. As a straight statement, that is true. There are all sorts of qualifications.
Q. Your tables show that?-A. Yes.
Q. They do not include salaries and wages?-A. No.

## By Mr. Tomlinson:

Q. Would the lowering of the cost of raw products used in farm implements since 1929 cause any increase in the price of implements say in 1936? Would you venture to give an opinion on that?-A. On the lowering prices?
Q. Since 1929 the price of certain metals and raw materials has lowered? -A. Yes.
Q. Would that cause an increase in the price of implements in 1396?-7 A. It would be very difficult to say how such an event could produce such a result. No, I should say not.

## By Mr. Macdonald:

Q. Iron and steel are some of the products entering into the manufacture of machinery?-A. Yes.
Q. And the price of our machinery should fluctuate, everything else being equal according to that?-A. There should be some correlation. The fact remains that the machine companies did purchase a considerable amount of fabricated metals; that is, ball-bearings, roller-bearings and all sorts of other items which are a little more rigid than the basic materials. But there should be some relationship.
Q. Yes, there is no doubt about that, though we had some lumber, and some paint, and we had some textiles; but the main thing entering into the manufacture of the machine, by way of raw products, is iron and steel?-A. That is true.
Q. And as you say there should be some correlation, one with the other?A. Since 40 per cent of the cost of the machinery is in materials I should think there should be some direct relationship.

## By Mr. Needham:

Q. Would you say that farm machinery is dependent, just as any other lines of manufacturing are, on the purchase of the raw materials entering into the finished product for long periods ahead; and that the lowering of the price since 1929 of raw material should keep the price of farm implements down even after a rise in the cost of raw material? What I mean by that is this; you see, take war prices, when the war started farm implements went up very slightly compared to other things?-A. Yes.
Q. And then after the war was over other prices dropped but farm machinery still stayed up?-A. Yes.
Q. And the answer given at that time was that these materials were bought a year or two ahead and it takes so long to use up that material. There would be a lot better feeling if the prices of what the farmer has to sell and the price of machinery was to go up at the same time and come down at the same time. That is what I mean. If there could be some adjustment, say. But it is pointed out that raw material prices have been dropping since 1929. There is no justification for the price of farm implements going up now, on their own story? A. Not on the basis of raw material prices. No.

## By Mr. Leader:

Q. Going back to table No. 1 just once again; is it fair to state that steel, pig iron and lumber comprise the principal content of farm implements?-A. They would form far more than 50 per cent of the total.
Q. Right. Then, taking the percentage of increase over the 1913 par value in your table No. 3, and adding these three items it shows that the average increase in the cost of these three types of materials is just under 10 per cent?A. Yes.
Q. Whereas the increase in the cost of farm implements is 53 per cent. Would that be a fair basis of comparison?-A. Not quite, because steel and pig iron as referred to this table are basic materials, and the price of fabricated products of iron and steel which the implement companies have to buy in some quantity have not been quite as flexible as is the case with the price of iron and steel, so that figure is too low.
Q. It is too low?-A. Yes.

## By Mr. Donnelly:

Q. In other words, they have been rigid for some reason or other the same as farm machinery?-A. Yes.

## By Mr. Dauglas:

Q. You could not add the three together anyway. You would not have the same denominator. You would have to take into consideration the amount used?-A. Yes, that could be done.
Q. Merely to add the two together now would not give you that figure?A. No.

Mr. Cleaver: You will notice that there is very little difference in the purchases of these three. That is why I suggested that that might be a fair set up.

## By Mr. Tomlinson:

Q. Paint is a product which is largely used in connection with farm implements?

An. hon. Member: They use lots of putty too to fill in the cracks.
Witness: It amounts to about $\$ 100,000$ out of a total of $\$ 3,600,000$.
The Chairman: If there are no further questions, I am sure we are very grateful to Mr. Greenway for the information he has brought to us this morning, and that it will be of particular value to us as we continue on with this investigation. We have no other witnesses to call at this morning's session. We would like to meet again tomorrow if possible. I think Mr. McDonald, the auditor, will be ready with some material that he has prepared through his inquiry with the machine companies themselves.

Mr. Taylor: We have taken into consideration material costs, are you going to have any evidence in regard to labour costs?

The Chairman: Yes.
Mr. Graham: That will come in tomorrow morning.
Mr. McLean: Before we adjourn, Mr. Chairman. you do not intend to print these charts, do you?

The Chairman: No, I do not think so. Each member of the committee has a copy.

Mr. McLisan: Yes, but that does not help the other people who will be reading this evidence and who will not have them.

The Chairman: The committee will adjourn to meet again to-morrow morning at 11 o'clock.

The committee adjourned at 12.35 p.m., to meet again to-morrow, May 15, 1936, at 11 o'clock a.m.

## APPENDIX No. 3

## SUBMITTED BY MR. BANGS, DOMINION BUREAU OF STATISTICS

FREIGHT RATES ON FARM IMPLEMENTS; RAW MATERIALS AND MANUFACTURED ARTICLES ENTERING INTO THE MANUFACTURE OF FARM IMPLEMENTS


Dominion Bureau of Statistics,
Ottawa, May 13, 1936.

## APPENDIX No. 4

## SUBMITTED BY MR. GREENWAY, DOMINION BUREAU OF STATISTICS

Graphic and Statistical Appendix to Prices of Constituent Commodities Used by Farm Implement Companies in Relation to Wholesale Commodity Price Levels, and Prices of Farm Machinery, 1913-1936.

Table I.-PRICE INDEX NUMBERS OF FARM IMPLEMENTS AND MATERIALS USED BY IMPLEMENT COMPANIES, 1913-1935
$(1913=100)$

| Post War <br> Peak | 1922 | 1929 | 1932 | 1935 | 1936 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | 1913 |  |  |  |  |

* United States price.

Table II.-PERCENTAGE CHANGE IN WHOLESALE PRICES FOR SPECIFIED FARM PURCHASES BETWEEN 1913 AND 1935


## Table III.-FREQUENCY DISTRIBUTION TABLE OF WHOLESALE PRICE CHANGES, 1926-1933

(Indicating the number of months in which prices changed out of a possible total of 95 . The righthand column shows the number of commodities, and the left-hand column the number of changes.)


Table IV.-WHOLESALE PRICE INDEX NUMBERS FOR "RIGID" AND "FLEXIBLE" COMMODITIES, 1929-1935
$1929=100$

|  | 54 "Rigid" Commodities | 45 "Flexible" Commodities |  | 54 "Rigid" Commodities | 45 "Flexible" Commodities |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1929. | $100 \cdot 0$ | $100 \cdot 0$ | 1933. | $94 \cdot 1$ | 51.1 |
| 1930. | 99.4 | $76 \cdot 3$ | 1934. | $94 \cdot 6$ | $63 \cdot 3$ |
| 1931. | $96 \cdot 0$ | $52 \cdot 6$ | 1935. | $94 \cdot 4$ | $63 \cdot 2$ |
| 1932. | $95 \cdot 1$ | $47 \cdot 3$ |  |  |  |

Table V.-INDEX NUMBERS OF WHOLESALE PRICES OF PIG IRON, 1913-1935

$$
1913=100
$$

| Year | (a) Canada | (b) <br> -United <br> States | (c) United Kingdom | Year | ${ }_{\text {Canada }}^{\text {(a) }}$ | (b) <br> United <br> States | (c) <br> United Kingdom |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1913. | $100 \cdot 0$ | $100 \cdot 0$ | $100 \cdot 0$ | 1925 | $141 \cdot 1$ | $130 \cdot 3$ | $110 \cdot 9$ |
| 1914 | $93 \cdot 2$ | $86 \cdot 9$ | $87 \cdot 5$ | 1926. | $138 \cdot 2$ | $124 \cdot 4$ | $133 \cdot 0$ |
| 1915. | $102 \cdot 2$ | $92 \cdot 1$ | $105 \cdot 9$ | 1927. | $127 \cdot 1$ | $119 \cdot 3$ | $112 \cdot 2$ |
| 1916. | 129.4 | $139 \cdot 4$ | $137 \cdot 6$ | 1928. | $123 \cdot 3$ | $112 \cdot 1$ | $100 \cdot 9$ |
| 1917. | $247 \cdot 7$ | $254 \cdot 5$ | $148 \cdot 0$ | 1929. | $128 \cdot 2$ | $119 \cdot 9$ | $108 \cdot 2$ |
| 1918. | $248 \cdot 2$ | 214.0 | $153 \cdot 5$ | 1930. | $120 \cdot 1$ | $118 \cdot 3$ | $102 \cdot 7$ |
| 1919. | $198 \cdot 6$ | 181.7 | $200 \cdot 7$ | 1931. | $120 \cdot 1$ | $109 \cdot 1$ | $86 \cdot 6$ |
| 1920 | $275 \cdot 2$ | 259.5 | 276.4 | 1932. | $120 \cdot 1$ | 99.9 | $73 \cdot 3$ |
| 1921. | $175 \cdot 7$ | 147.5 | $195 \cdot 6$ | 1933 | 111.4 | $106 \cdot 6$ | 88.0 |
| 1922 | $166 \cdot 5$ | $161 \cdot 3$ | 142.8 | 1934 | 111.1 | 119.4 | $104 \cdot 7$ |
| 1923. | $172 \cdot 6$ | $169 \cdot 1$ | $158 \cdot 2$ | 1935. | $111 \cdot 4$ | $122 \cdot 6$ | $105 \cdot 4$ |
| 1924. | $143 \cdot 8$ | $135 \cdot 9$ | $124 \cdot 1$ |  |  |  |  |

(a) Pig Iron, foundry No. 1, Price per gross ton, carlots, f.o.b. sellers' works.
(b) Pig Iron, Bessemer, delivered Pittsburg, average price per long ton.
(c) Pig Iron, Foundry, Cleveland No. 3, price per gross ton, at London.

Table V (Con.)-INDEX NUMBERS OF WHOLESALE PRICES OF STEEL BARS, 1913-1935

$$
1913=100
$$

| Year | (a) <br> Canada | (b) <br> United <br> States | (c) <br> United Kingdom | Year | (a) <br> Canada | (b) United States | (c) <br> United <br> Kingdom |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1913 | $100 \cdot 0$ | $100 \cdot 0$ | $100 \cdot 0$ | 1925. | $128 \cdot 6$ | $130 \cdot 3$ | 129.2 |
| 1914. | 83.5 | 74.4 | 97.5 | 1926. | $118 \cdot 7$ | $128 \cdot 9$ | 121.8 |
| 1915. | 98.4 | 84.8 | 122.7 | 1927. | 117.5 | 118.5 | 128.6 |
| 1916. | 118.0 | $172 \cdot 2$ | 161.8 | 1928. | $116 \cdot 1$ | $120 \cdot 8$ | 128.8 |
| 1917. | $204 \cdot 4$ | $234 \cdot 3$ | 161.1 | 1929. | $116 \cdot 3$ | $124 \cdot 3$ | 129.4 |
| 1918. | 208.8 | 186.8 | 163.4 | 1930. | 113.5 | $110 \cdot 4$ | $128 \cdot 8$ |
| 1919 | $174 \cdot 6$ | $161 \cdot 1$ | $199 \cdot 2$ | 1931. | 109.0 | $104 \cdot 9$ | $124 \cdot 1$ |
| 1920 | $197 \cdot 4$ | 207.8 | $293 \cdot 4$ | 1932 | $109 \cdot 0$ | 101.9 | 99.2 |
| 1921 | $169 \cdot 0$ | $120 \cdot 9$ | 208.0 | 1933. | 109.0 | $105 \cdot 8$ | $114 \cdot 3$ |
| 1922. | $115 \cdot 2$ | 111.2 | 129.4 | 1934. | 109.0 | 116.7 | $127 \cdot 1$ |
| 1923. | $139 \cdot 8$ | $152 \cdot 2$ | 137.5 | 1935. | $109 \cdot 0$ | $117 \cdot 1$ | $130 \cdot 5$ |
| 1924. | $151 \cdot 6$ | 141.9 | $127 \cdot 4$ |  |  |  |  |

(a) Mild Steel, merchant bars, price per 100 pounds, carlots, f.o.b. plant.
(b) Steel, merchant bars, Pittsburg, average price per 100 pounds.
(c) Steel Rails, price per ton, at London.

Table V.-Con.-INDEX NUMBERS OF WHOLESALE PRICES OF COAL, 1913-1935
$1913=100$

| Year | (a) Canada | (b) United States | (c) United Kingdom | Year | (a) Canada | (b) United States | (c) United Kingdom |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1913. 1914. 1915 1916 1917 1918. 1919 1920 1922. 1923. 1924 | $100 \cdot 0$ <br> $100 \cdot 0$ <br> $100 \cdot 0$ <br> $100 \cdot 0$ <br> $118 \cdot 2$ <br> $152 \cdot 4$ $174 \cdot 5$ <br> $211 \cdot 1$ <br> $221 \cdot 2$ <br> $227 \cdot 3$ | $100 \cdot 0$ $100 \cdot 0$ 101.0 121.6 176.5 186.7 $265 \cdot 9$ 2076.5 195.8 155.8 | $\begin{array}{r} 100 \cdot 0 \\ 95 \cdot 4 \\ 143 \cdot 3 \\ 227 \cdot 1 \\ 255 \cdot 0 \\ 287 \cdot 3 \\ 441 \cdot 2 \\ 629 \cdot 5 \\ 258 \cdot 4 \\ 150 \cdot 7 \\ 169 \cdot 7 \\ 156 \cdot 0 \end{array}$ | $\begin{aligned} & 1925 . . \\ & 1926 . . \\ & 1927 . \\ & 1928 . \\ & 1929 . \\ & 1930 . \\ & 1931 . \\ & 1932 . \\ & 1933 . \\ & 1934 . \\ & 1935 . \end{aligned}$ | $\begin{aligned} & 227 \cdot 3 \\ & 221 \cdot 2 \\ & 218 \cdot 1 \\ & 218 \cdot 1 \\ & 218 \cdot 1 \\ & 218 \cdot 1 \\ & 218 \cdot 1 \\ & 211 \cdot 5 \\ & 190 \cdot 9 \\ & 190 \cdot 9 \\ & 190 \cdot 9 \end{aligned}$ | $154 \cdot 4$ <br> $164 \cdot 2$ <br> 164.7 <br> $153 \cdot 7$ <br> 149.9 146.8 <br> 138.9 <br> $134 \cdot 6$ <br> 136.0 <br> $158 \cdot 8$ | $149 \cdot 2$ <br> $146 \cdot 0$ <br> $133 \cdot 1$ <br> $113 \cdot 2$ <br> 124.0 <br> $116 \cdot 7$ <br> $98 \cdot 3$ <br> $113 \cdot 2$ <br> $123 \cdot 3$ |

(a) Coal, domestic, run of mine, price for small lots per net ton, f.o.b. mines, Nova Scotia.
(b) Coal, Kanawha, run of mine, f.o.b. Cincinnati, per short ton-from 1913-1926, spliced from 1926 to 1935 with the U.S. Bureau of Labour Statistics composite price of bituminous coal.
(c) Coal, Bituminous, second A, Cardiff, f.o.b. South Wales, per gross ton.

Table V.-Con.-INDEX NUMBERS OF WHOLESALE PRICES OF LINSEED OIL, 1913-1935
$1913=100$

| Year | (a) Canada | (b) United States | (e) United Kingdom | Year | (a) Canada | (b) United States | (c) United Kingdom |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1913. | $100 \cdot 0$ | $100 \cdot 0$ | $100 \cdot 0$ | 1925 | $209 \cdot 0$ | $224 \cdot 2$ | $174 \cdot 1$ |
| 1914. | 101.8 | $108 \cdot 1$ | $100 \cdot 0$ | 1926 | $172 \cdot 1$ | $180 \cdot 6$ | 127.8 |
| 1915. | $125 \cdot 2$ | 121.0 | 118.5 | 1927. | $161 \cdot 1$ | $169 \cdot 4$ | 127.8 |
| 1916. | $165 \cdot 3$ | $161 \cdot 3$ | 163.0 | 1928. | $142 \cdot 7$ | $161 \cdot 3$ | 118.5 |
| 1917. | $236 \cdot 6$ | 238.7 | $224 \cdot 1$ | 1929. | $171 \cdot 2$ | 198.4 | $142 \cdot 6$ |
| 1918. | $317 \cdot 1$ | $343 \cdot 5$ | $272 \cdot 2$ | 1930. | $173 \cdot 8$ | $201 \cdot 6$ | $146 \cdot 3$ |
| 1919. | 391.9 | $380 \cdot 6$ | $344 \cdot 4$ | 1931. | $110 \cdot 7$ | 135.5 | 68.5 |
| 1920. | $359 \cdot 0$ | $314 \cdot 5$ | 298.1 | 1932. | $93 \cdot 1$ | $101 \cdot 6$ | $57 \cdot 4$ |
| 1921. | $154 \cdot 3$ | $150 \cdot 0$ | 114.8 | 1933. | $112 \cdot 0$ | 146.8 | $79 \cdot 6$ |
| 1922. | $176 \cdot 5$ | $182 \cdot 3$ | $146 \cdot 3$ | 1934. | $130 \cdot 8$ | 151.6 | 88.9 |
| 1923. | 205.2 | $212 \cdot 9$ | 164.8 | 1935. | 121.8 | 151.6 | $100 \cdot 0$ |
| 1924. | 199.8 | $211 \cdot 3$ | 157.4 |  |  |  |  |

(a) Linseed Oil, raw, price per gallon, 6 to 10 barrels, at Montreal.
(b) Linseed Oil, raw, price per pound, at New York.
(c) Linseed Oil, raw, price per ton, at London.

Table V.-INDEX OF WHOLESALE PRICES OF OAK, 1913-1935.-Concluded $1913=100$

| Year | (a) Canada | (b) United States | Year | (a) Canada | (b) United States |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1913 | $100 \cdot 0$ | $100 \cdot 0$ | 1925. | $157 \cdot 1$ | $170 \cdot 7$ |
| 1914 | $92 \cdot 9$ | 89.4 | 1926. | 157.7 | $178 \cdot 5$ |
| 1915 | 82.9 | 85.4 | 1927. | $150 \cdot 0$ | $172 \cdot 0$ |
| 1916 | 87.0 | 91.9 | 1928. | $132 \cdot 2$ | $160 \cdot 0$ |
| 1917 | 96.7 | $106 \cdot 9$ | 1929. | 128.5 | $155 \cdot 8$ |
| 1918 | $115 \cdot 5$ | $124 \cdot 3$ | 1930. | $123 \cdot 2$ | $140 \cdot 9$ |
| 1919 | $176 \cdot 8$ | 181.7 | 1931. | 111.8 | $125 \cdot 2$ |
| 1920 | 295.8 | $350 \cdot 2$ | 1932. | 105.7 | $112 \cdot 6$ |
| 1921. | 218.5 | $159 \cdot 7$ | 1933. | $107 \cdot 1$ | 121.1 |
| 1922 | $215 \cdot 5$ | $182 \cdot 1$ | 1934 | 107.1 | $132 \cdot 8$ |
| 1923 | $206 \cdot 0$ $167 \cdot 9$ | 193.4 172.8 | 1935. | $107 \cdot 1$ |  |
| 1924. | $167 \cdot 9$ | $172 \cdot 8$ |  |  |  |

(a) Oak, red, plain firsts and seconds, price per thousand board feet, carlots, f.o.b. Toronto.
(b) Oak, white, plain, $4 / 4$ No. 1 common, Cincinnati, average price per thousand board feet.

# Table VI.-INDEX NUMBERS OF WHOLESALE PRICES OF PIG IRON, 1929-1936 

$(1929=100)$


United Kingdom
Pig Iron, Foundry, Cleveland, No. 3, Price per gross ton, at Lo. L , Pr
$1929 \ldots$
$1930 \ldots$
$1931 \ldots$
$1932 \ldots$
$1933 \ldots$
$1934 \ldots$
$1935 \ldots$
$1936 \ldots$

|  |  |
| ---: | ---: |
|  |  |
| $93 \cdot 3$ | $94 \cdot 2$ |
| 103.8 | $103 \cdot 3$ |
| $84 \cdot 3$ | $82 \cdot 7$ |
| $68 \cdot 6$ | $67 \cdot 4$ |
| $65 \cdot 5$ | $74 \cdot 6$ |
| $92 \cdot 3$ | $92 \cdot 4$ |
| $96 \cdot 1$ | $96 \cdot 0$ |
| $101 \cdot 2$ |  |


|  |  |
| ---: | ---: |
|  |  |
| $95 \cdot 2$ | $96 \cdot 7$ |
| $99 \cdot 8$ | $95 \cdot 6$ |
| $82 \cdot 6$ | $8 \cdot \cdot 8$ |
| $69 \cdot 2$ | $71 \cdot 1$ |
| $67 \cdot 4$ | 69.0 |
| $100 \cdot 4$ | $101 \cdot 2$ |
| $94 \cdot 8$ | $95 \cdot 6$ |
|  |  |
|  |  |


| $\begin{aligned} & \text { Mild Steel, Merchant Bars, } \\ & \text { price per 100 pounds, carlots, } \\ & \text { f.o.b. plant.......................1929 } \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & 193331 \\ & 1933 \\ & 1935 \\ & 1936 \end{aligned}$ | $\begin{array}{r} 100 \cdot 0 \\ 100 \cdot 0 \\ 93 \cdot 7 \\ 93 \cdot 7 \\ 93 \cdot 7 \\ 93 \cdot 7 \\ 93 \cdot 7 \\ 93 \cdot 7 \end{array}$ | $\begin{array}{r} 100 \cdot 0 \\ 100 \cdot 0 \\ 93 \cdot 7 \\ 93 \cdot 7 \\ 93 \cdot 7 \\ 93 \cdot 7 \\ 93 \cdot 7 \\ 93 \cdot 7 \end{array}$ | $\begin{array}{r} 100 \cdot 0 \\ 100 \cdot 0 \\ 93 \cdot 7 \\ 93 \cdot 7 \\ 93 \cdot 7 \\ 93 \cdot 7 \\ 93 \cdot 7 \\ 93 \cdot 7 \end{array}$ | $\begin{array}{r} 100 \cdot 0 \\ 100 \cdot 0 \\ 93 \cdot 7 \\ 93 \cdot 7 \\ 93 \cdot 7 \\ 93 \cdot 7 \\ 93 \cdot 7 \\ 93 \cdot 7 \end{array}$ | $\begin{array}{r} 100 \cdot 0 \\ 100 \cdot 0 \\ 93 \cdot 7 \\ 93 \cdot 7 \\ 93 \cdot 7 \\ 93 \cdot 7 \\ 93 \cdot 7 \end{array}$ | $\begin{array}{r} 100 \cdot 0 \\ 100 \cdot 0 \\ 93 \cdot 7 \\ 93 \cdot 7 \\ 93 \cdot 7 \\ 93 \cdot 7 \\ 93 \cdot 7 \end{array}$ | $\begin{array}{r} 100 \cdot 0 \\ 95 \cdot 8 \\ 93 \cdot 7 \\ 93 \cdot 7 \\ 93 \cdot 7 \\ 93 \cdot 7 \\ 93 \cdot 7 \end{array}$ | $\begin{array}{r} 100 \cdot 0 \\ 95 \cdot 8 \\ 93 \cdot 7 \\ 93 \cdot 7 \\ 93 \cdot 7 \\ 93 \cdot 7 \\ 93 \cdot 7 \end{array}$ | $\begin{array}{r} 100 \cdot 0 \\ 95 \cdot 8 \\ 93 \cdot 7 \\ 93 \cdot 7 \\ 93 \cdot 7 \\ 93 \cdot 7 \\ 93 \cdot 7 \end{array}$ | $\begin{array}{r} 100 \cdot 0 \\ 95 \cdot 8 \\ 93 \cdot 7 \\ 93 \cdot 7 \\ 93 \cdot 7 \\ 93 \cdot 7 \\ 93 \cdot 7 \end{array}$ | $\begin{array}{r} 100 \cdot 0 \\ 93 \cdot 7 \\ 93 \cdot 7 \\ 93 \cdot 7 \\ 93 \cdot 7 \\ 93 \cdot 7 \\ 93 \cdot 7 \end{array}$ | $\begin{array}{r} 100 \cdot 0 \\ 93 \cdot 7 \\ 93 \cdot 7 \\ 93 \cdot 7 \\ 93 \cdot 7 \\ 93 \cdot 7 \\ 93 \cdot 7 \end{array}$ | IC0.0 97.6 93.7 93.7 $93 \cdot 7$ $93 \cdot 7$ $93 \cdot 7$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| United States |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | $\begin{aligned} & 98 \cdot 8 \\ & 98 \cdot 1 \\ & 85 \cdot 1 \\ & 78 \cdot 0 \\ & 83 \cdot 2 \\ & 91 \cdot 0 \\ & 93 \cdot 6 \\ & 96 \cdot 2 \end{aligned}$ | $\begin{aligned} & 98 \cdot 8 \\ & 96 \cdot 2 \\ & 85 \cdot 8 \\ & 78 \cdot 0 \\ & 83 \cdot 2 \\ & 91 \cdot 0 \\ & 93 \cdot 6 \\ & 96 \cdot 2 \end{aligned}$ | $\begin{aligned} & 98 \cdot 8 \\ & 96 \cdot 2 \\ & 85 \cdot 8 \\ & 79 \cdot 0 \\ & 83 \cdot 2 \\ & 91 \cdot 0 \\ & 93 \cdot 6 \\ & 96 \cdot 2 \end{aligned}$ | $101 \cdot 4$ $93 \cdot 0$ $85 \cdot 8$ $83 \cdot 2$ $83 \cdot 2$ $92 \cdot 9$ $93 \cdot 6$ | $101 \cdot 4$ $91 \cdot 0$ $85 \cdot 8$ $83 \cdot 2$ $83 \cdot 2$ $98 \cdot 8$ $93 \cdot 6$ | $\begin{array}{r} 101 \cdot 4 \\ 89 \cdot 7 \\ 85 \cdot 8 \\ 83 \cdot 2 \\ 83 \cdot 2 \\ 98 \cdot 8 \\ 93 \cdot 6 \end{array}$ | $\begin{array}{r} 101 \cdot 4 \\ 85 \cdot 8 \\ 84 \cdot 5 \\ 83 \cdot 2 \\ 83 \cdot 2 \\ 94 \cdot 6 \\ 93 \cdot 6 \end{array}$ | $101 \cdot 4$ $85 \cdot 1$ $83 \cdot 2$ $83 \cdot 2$ $83 \cdot 2$ $93 \cdot 6$ $93 \cdot 6$ | $\begin{array}{r} 100 \cdot 7 \\ 83 \cdot 7 \\ 83 \cdot 2 \\ 83 \cdot 2 \\ 83 \cdot 2 \\ 93 \cdot 6 \\ 93 \cdot 6 \end{array}$ | $\begin{aligned} & 98 \cdot 8 \\ & 83 \cdot 2 \\ & 83 \cdot 2 \\ & 83 \cdot 2 \\ & 91 \cdot 0 \\ & 93 \cdot 6 \\ & 96 \cdot 2 \end{aligned}$ | $\begin{aligned} & 98 \cdot 8 \\ & 83 \cdot 2 \\ & 83 \cdot 2 \\ & 83 \cdot 2 \\ & 91 \cdot 0 \\ & 93 \cdot 6 \\ & 96 \cdot 2 \end{aligned}$ | $\begin{aligned} & 98 \cdot 8 \\ & 83 \cdot 2 \\ & 82 \cdot 1 \\ & 83 \cdot 2 \\ & 91 \cdot 0 \\ & 93 \cdot 6 \\ & 96 \cdot 2 \end{aligned}$ | $\begin{array}{r} 100 \cdot 0 \\ 88.8 \\ 84 \cdot 4 \\ 82 \cdot 0 \\ 85 \cdot 1 \\ 9.9 \\ 94 \cdot 2 \end{array}$ |
| United Kingdom |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Steel Rails, price per ton at |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lon 1930 | $100 \cdot 6$ | $100 \cdot 1$ | $99 \cdot 6$ | 99.5 | 99.5 | 99.4 | $99 \cdot 3$ | 99.5 | $99 \cdot 3$ | 99.3 | $99 \cdot 2$ | 99.4 | 99.5 |
| 1931 | 99.5 | $99 \cdot 4$ | $99 \cdot 2$ | 99.4 | 99.5 | $99 \cdot 7$ | $99 \cdot 6$ | $99 \cdot 6$ | $96 \cdot 0$ | $89 \cdot 6$ | $85 \cdot 7$ | $83 \cdot 7$ | $95 \cdot 9$ |
| 1932 | 80.4 | $76 \cdot 2$ | $78 \cdot 2$ | 80.4 | $80 \cdot 1$ | 81.0 | 78.4 | $76 \cdot 5$ | $74 \cdot 1$ | $71 \cdot 6$ | $72 \cdot 4$ | - $72 \cdot 9$ | $76 \cdot 6$ |
| 1933 | $74 \cdot 1$ | 78.9 | $79 \cdot 6$ | 81.5 | $86 \cdot 6$ | 88.8 | $94 \cdot 9$ | $92 \cdot 2$ | $93 \cdot 2$ | $92 \cdot 2$ | 97.8 | $98 \cdot 1$ | 88.3 |
| 1934 | 97.6 | $97 \cdot 7$ | 98.3 | $99 \cdot 1$ | $98 \cdot 2$ | 96.5 | $96 \cdot 0$ | $96 \cdot 5$ | 99.3 | 99.1 | 99.7 | $99 \cdot 9$ | $98 \cdot 2$ |
| 1935 1936 | $\begin{array}{r} 99 \cdot 9 \\ 101.6 \end{array}$ | $99 \cdot 9$ |  |  |  | $101 \cdot 1$ |  |  |  | $101 \cdot 8$ |  | $101 \cdot 8$ | $100 \cdot 8$ |

Table VI-INDEX NUMBERS OF WHOLESALE PRICES OF STEEL BARS, 1929-1936-Continued


United Kingdom
Coal, Bituminous, second A., Cardiff, fo..b. South Wales, per gross ton...................... 1929 1929.
1930. 1930.
1931. 1932. 1933. 1934 1935. 1936.

| $96 \cdot 0$ | $98 \cdot 1$ | $104 \cdot 8$ | $105 \cdot 0$ | $99 \cdot 6$ | $103 \cdot 0$ | 96.9 | $96 \cdot 9$ | $97 \cdot 7$ | $99 \cdot 2$ | $101 \cdot 1$ | $101 \cdot 8$ | $100 \cdot 0$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $101 \cdot 1$ | 99.9 | $98 \cdot 8$ | $98 \cdot 1$ | $98 \cdot 1$ | $97 \cdot 9$ | $97 \cdot 8$ | $98 \cdot 1$ | 97.8 | 97.8 | $97 \cdot 7$ | 98.0 | 98.4 |
| 98.0 | $97 \cdot 9$ | $97 \cdot 8$ | $98 \cdot 0$ | $98 \cdot 1$ | $98 \cdot 3$ | $98 \cdot 1$ | 98.1 | 93.7 | 87.8 | $83 \cdot 7$ | 81.7 | $94 \cdot 2$ |
| 80.4 | $79 \cdot 0$ | $81 \cdot 1$ | $83 \cdot 3$ | 83.0 | 83.9 | 81.3 | $79 \cdot 3$ | $76 \cdot 8$ | $74 \cdot 3$ | $75 \cdot 0$ | $75 \cdot 6$ | $79 \cdot 4$ |
| $76 \cdot 8$ | 81.8 | $82 \cdot 5$ | $84 \cdot 5$ | $89 \cdot 8$ | $92 \cdot 1$ | 98.4 | $95 \cdot 6$ | $96 \cdot 6$ | $95 \cdot 6$ | 101.4 | $101 \cdot 7$ | $91 \cdot 5$ |
| $101 \cdot 2$ | 101.3 | 101.9 | $102 \cdot 7$ | 101.8 | $100 \cdot 0$ | $99 \cdot 5$ | 98.8 | $96 \cdot 9$ | $96 \cdot 7$ | $97 \cdot 2$ | $97 \cdot 5$ | $99 \cdot 6$ |
| $97 \cdot 5$ | $97 \cdot 5$ | $96 \cdot 3$ | $97 \cdot 1$ | $97 \cdot 7$ | $98 \cdot 6$ | $99 \cdot 1$ | 99.5 | $99 \cdot 2$ | $99 \cdot 3$ | $99 \cdot 3$ | $99 \cdot 3$ | 98.4 |

Canada


United States


United Kingdom


Table VI-INDEX NUMBERS OF WHOLESALE PRICES OF LINSEED OIL, 1929-1936-Concluded
$(1929=100)$


Chart I.

548 ITEMS FROM DOMINION BUREAU OF STATISTICS WHOLESALE PRICE INDEX DISTRIBUTED ACCORDING TO FREquency of price change


Chart IV.

400 Chart $\mathrm{V}_{0}$


Chart VI.

Chart VII.

Chart VIII.





## HOUSE OF COMMONS

## STANDING COMMITTEE

# AGRICULTURE AND COLONIZATION 

## MINUTES OF PROCEEDINGS AND EVIDENCE (Farm Implement Price Inquiry)

FRIDAY, MAY 15, 1936
No. 5

WITNESS:
Mr. Walter J. Macdonald, C.A., Auditor for the Committee.

## MINUTES OF PROCEEDINGS

Friday, May 15, 1936.
The Standing Committee on Agriculture and Colonization met this day at 11 o'clock a.m.

The Chairman, Mr. W. G. Weir, presided.
Members Present:-Messrs. Bertrand (Prescott), Bouchard, Boulanger, Cleaver, Coldwell, Donnelly, Douglas, Evans, Fontaine, Furniss, Gardiner, Golding, Graydon, Johnson (Lake Centre), Leader, Lennard, MacKinnon, Macphail (Miss), McLean (Melfort), McNevin (Victoria, Ont.), Mitchell, Motherwell, Needham, Perley (Qu’Appelle), Robichaud, Senn, Spence, Stirling, Thorson, Thompson, Turner, Ward, Weir.

In attendance: Mr. Walter Macdonald, C.A., auditor for the Committee.
The Chairman informed the Members of the Committee that the meeting was called for the purpose of having Mr. Walter Macdonald, C.A., present a report on the work of the auditors in relation to the investigation of the Committee up to date, namely: the causes underlying the higher prices of agricultural implements.

Mr. Walter Macdonald was then called, read his report, and was questioned thereon.

The hour being 1 o'clock, the Committee adjourned to meet at 3.30 p.m. this date.

## AFTERNOON SESSION

The Committee resumed at 3.30 o'clock p.m., the Chairman presiding.
Members Present:-Messrs. Bertrand (Prescott), Bouchard, Cleaver, Cochrane, Coldwell, Donnelly, Douglas, Evans, Fontaine, Furniss, Gardiner, Golding, Graydon, Hayhurst, Johnson (Lake Centre), Lalonde, Leader, McLean (Melfort), McNevin (Victoria, Ont.), Needham, Perley (Qu'Appelle), Reid, Robichaud, Taylor (Norfolk), Thorson, Turner, Ward, Weir.

Mr. Walter Macdonald, C.A., auditor for the Committee, resumed his report left unfinished from this morning's session.

The Chairman presented Table No. 1, prepared by Mr. Rutherford of the Dominion Bureau of Statistics in answer to questions asked by the Committee.

Ordered that said Table be printed in the record.
Committee then adjourned to meet again at the call of the Chair.

> WALTER HILL, Clerk of the Committee.

## MINUTES OF EVIDENCE

## House of Commons,

> Room 231, May 15, 1936.
The Select Standing Committee on Agriculture and Colonization appointed to inquire into the prices of agricultural implements met at 11 o'clock, Mr. Weir, the chairman, presided.

The Chatrman: Gentlemen, I think we have a quorum and we shall now proceed. We have asked Mr. Macdonald who is acting as auditor for the committee to give us a summary of progress made and to give you a greater amount of detail with respect to the information that he is asking for as auditor. We are doing this so that the committee may be completely informed as to the steps that have been taken. I think. Mr. Macdonald's presentation to you this morning will be of considerable value. His report is in sections and I would suggest that you allow him to read each section first, and then if you wish to question him regarding that particular section you may do so when the section is presented. Now may I introduce to you Mr. Walter J. Macdonald of Miller, Macdonald and Company, Winnipeg, chartered accountants.

## Walter J. Macdonald called.

Witness: May I just say what I have to say to-day is really comprised of a statement or digest of the material that was available to the royal commission of 1934. It is really from that basis that I started. That will be evident to you as I read through what I have to say. This brief is addressed to the members of the committee, and is as follows:

In Mr. Graham's report to you under date of March 9, he made the following statement:

Mr. Macdonald has given particular attention to the work of the Royal Commission on Price Spreads and Mass Buying in 1934-35 in so far as it related to the farm implement industry, and particularly to the report of the auditors of the commission, Messrs. Clarkson, Gordon, Dilworth, Guilfoyle and Nash, Chartered Accountants of Toronto.

From the printed evidence it appears that the scope of the inquiry by that commission was limited to the consideration of that report, coupled with examination under oath of the auditors and of the representatives of one large maunfacturer.
That was the section that was referred to in the preliminary report Mr. Graham submitted to you. The report is dated March 27, and was submitted to you a few days later. Through the instrumentality of the Minister of Trade and Commerce and with the co-operation of the auditors all the data accumulated by questionnaire or otherwise, in the course of the inquiry as it affected the farm implement industry has been made available to me and I have been able to consider the value of it to the inquiry now being conducted by your committee.

It is the wish of your chairman that I should review the information available from this source i.e. the records of the Royal Commission on Price Spreads and Mass Buying of 1934, indicate the respects in which it is adequate or inadequate for your purpose and to what extent it must be added to by
questionnaire. In so doing I will endeavour to indicate the relationship of the various questions asked to the main purpose of the inquiry and, in some cases, how the information sought, may have to be co-ordinated with that obtained from other sources.

May I, at this point, disgress to point out the sources from which your committee will ultimately have information on which to base its findings.

These are, as I see it, as follows:-

1. Information available through the work of the Royal Commission on Price Spreads and Mass Buying 1934-1935.
2. Additional information requested from the principal companies in the industry by questionnaire on April 8, 1936.
3. Information statistical and otherwise now being placed before you by departmental officials of the government.
4. Information available from the provincial governments.
5. Information from individuals or associations who may wish to appear or to make statements before you.
6. Information available from the United States.

As your chairman has indicated, there is an inquiry projected in the United States and proceeding more or less concurrently with your own.

The submissions already made, or to be made, by officials qualified to set forth the position of agriculture and of the agricultural implement industry, in the economic life of Canada will be followed by submissions in connection with the following phases which have perhaps a more direct bearing on implement costs and prices.

Of these you have already heard Mr. Bangs speaking on freight and Mr. Greenway who yesterday spoke on price trends of the principal raw materials used. I was not here yesterday, but I read over the paper and I thought it was a very excellent one and had a bearing on what this committee has to consider. You heard Mr. Losee give an analysis of the factors in the selling value of the products of the industry at the factory. You have yet to hear submissions on tariffs, excise and sales tax. The information contained in these latter submissions, showing as they will the statistical trends within the industry must furnish the yardstick by which the questionnaire information supplied by the companies can be measured. I give some instances of this later on. When so measured, any substantial discrepancies observed in the material supplied by the companies will require to be investigated. Now, as to the general trend of the 1934 inquiry: The trend of the inquiry made by the commission appears to have been largely along three main lines.
Q. The Price spreads?-A. The inquiry by the Royal Commission, yes. For brevity's sake, I have called it the Royal Commission all the way through. When I use the words "Royal Commission" it means the Royal Commission on Price Spreads and Mass Buying. To give the whole name takes considerably longer.

The trend of the inquiry made by the commission appears to have been largely along three main lines:

1. The reasonability or otherwise of the "spread" between factory cost and sales price to the consumer, involving some study of distribution and accounting policies.
2. The adequacy or otherwise of the wages received by the employees.
3. The extent, if any, to which stock dilution had occurred in the capitalization of the interested companies.
The Commission did not make inquiry into cost of production except in a general way, nor did it approach analysis of distribution or sales costs, from the angle of your inquiry.
[Mr. Walter J. Macdonald.]
Q. When you say the commission approached the subject of costs of production in a general way, what do you mean?-A. I can show you that just a little later. In each case, I have touched on what was available from the Royal Commission and in what respects it was adequate or inadequate and then later what information we have had and in what respect we have had to supplement it. That, I think, will answer Mr. Thorson's question.

The commission did procure figures over the period 1913 to 1934 in which the companies show that in certain typical implements
(a) Material costs had increased materially.
(b) Labour costs had also increased.
(c) More particularly that factory overhead and administration expense had risen by much larger percentages during that period of approximately 21 years.

The commission specifically excluded the export business of the MasseyHarris company from the purview of its enquiry, although that company during the period reviewed sold from 60 per cent to 80 per cent of its output in markets outside of Canada.
Q. Did the Royal Commission not go into the export business at all; did they not consider it?-A. Practically not at all.
Q. As a factor?-A. They confined their inquiry to the industry within Canada; they were chiefly interested, as I say, in the study of the relationship of the spread between cost and the selling price to the consumer. To put it another way, it would seem-I am speaking of the price spreads people-that they approached this inquiry from the same angle with which they approached the Eaton and Simpson concerns, and they inquired chiefly into what the markup was.
Q. The price spread?-A. Exactly; they were chiefly interested in the price question.

## By Mr. Senn:

Q. They did not go into the export business?-A. Not at all, and of course, the Massey Harris did the most of it.

## By Mr. Thorson:

Q. They went into an analysis of the cost of production?-A. It really was not very much of an analysis of the cost of production, except in a general way. It did have the companies submit figures which showed the factory cost of a given implement at the door of the factory and they looked over the figures that were submitted, discussed them in a general way and asked the auditor for certain information regarding them, and as I had that basis-
Q. They were more concerned with the spread between the factory cost and what the consumer paid?-A. And the price the consumer paid, yes. If you wish further information on that I can give it to you from page 8 of the auditor's report, but I do not think it is essential at this time.
Q. What does it say?-A. Chiefly what I have said to you. They say this:-

The foreign business of this company (Massey-Harris Company) is so large that it overshadows the business done in Canada and an attempt has been made to include in the statement the Canadian business only. This has required an adjustment excluding from the operating results the foreign sales and expenses applicable thereto, and while the results may not be entirely accurate they are sufficiently so for the purpose of the statement.
That is what they say about it.

## By Mr. McLean:

Q. The foreign business entirely overshadows the domestic?-A. I will come to that a little later. I will complete that picture, if you like. This is all introductory and I think it is necessary for the committee to get that picture completely in order to evaluate the evidence that will be submitted to it. I am speaking as if I were a member of the committee. That is the way I should like to see it if I were a member.

The findings of the commission may be epitomized as follows:-
(a) That it is desirable to provide a fair deal in implements for the farmer without making any more precarious the continued existence of the manufacturer.
(b) That the present system of distribution is (1) rigid and (2) expensive. Trial of the American system is suggested where competent and financially responsible dealers can be found.

By Mr. Thorson:
Q. What proof was there for those findings that the present system of distribution is rigid and expensive?-A. Well they generally say compared with the American. I would not be prepared to say on what basis they formed their conclusions. Mr. Senn perhaps can tell you that.
Q. They did come to that conclusion?-A. They did draw that conclusion, yes.

Mr. Senn: We did go into the distribution costs and made quite a study of them and it was found that distribution costs were very high compared with production costs.

Witness: That is true. I shall come to that later on.
Mr. Senn: We were told in evidence by the companies that the cost of distribution was high.

The Chatrman: The figures used are the costs at the door of the factory as compared with the cost to the farmer. The price was nearly double that of the factory price.

Mr. Senn: In some cases yes, more so in later years when the volume of sales was small.

Witness:
(c) That the carrying of large parts inventories at many points has necessarily had its effect on prices.
(d) That standardization of parts could be considered with advantage.
(e) That the productive capacity of the plants is over-adequate for the normal needs of the industry and that idle plant expense as an item of cost has had its effect in the maintenance of high prices.

## By Mr. Thorson:

Q. I suppose that is what the commission meant by a state of imperfect competition?-A. Presumably, yes.
(f) The solution of this problem may come from external sources - a return to more normal demand through the increasing purchasing power of the farmer-or it may come from internal sources-a winding-up or recapitalization of one or more of the manufacturing companies.
In a word, it did not interest itself in a very comprehensive study of the factors which enter into factory cost, thus the information available to it was unsuitable for use by the present committee:-
(a) As to period covered. The Royal Commission limited its inquiries to the years 1929 to 1933, with occasional reference to the previous five
[Mr. Walter J. Macdonald.]
years and with some study of costs and selling prices as between 1913 and 1934. Your committee starts with 1913 and covers the intervening period to 1935.
(b) As to subject matter inquired into. The Royal Commission did not cover in its auditor's questionnaire such items as (1) raw materials; (2) plant; (3) factory costs. Your committee must cover these items as so done in its questionnaire.
Q. You say there was no attempt to break up the factory costs into its constituent elements?-A. No, excepting in regard to typical implements and I shall place before you one of those sheets which show the trend in this typical implement. Actually there were six implements of the International Harvester company and nine in the Massey-Harris Company. They simply examined the trend in these implements. The report of the auditor segregates the industry into seven groups. The first group consists of the large manufacturing plants, Massey-Harris Company, International Harvester Company of Canada, Limited, Cockshutt Plow Company and Frost and Wood Company. These four companiés during the period 1924 to 1930 produced approximately 75 per cent of the total sales of farm implements reported by the companies which replied to the questionnaire. Later on in the proceedings the auditors were asked what proportion of the industry that represented, and they said they thought about 90 per cent. From the statistics I have seen since, I think that was about right. So that these four companies produced 75 per cent of the sales of the companies that were reported to the Royal Commission, and these latter companies represented 90 per cent of the industry. That is a pretty fair proportion. It should be noted that the International Harvester Company in the years 1924 to 1929 and 1930 manufactured in Canada 50 per cent of its Canadian sales, the remaining 50 per cent being imported from the States.

## By Mr. Johnston:

Q. What years?-A. 1924 to 1930 approximately. In the more recent years this percentage has greatly increased and at times has been as high as 80 per cent, I am told.

## By Mr. Coldwell:

Q. Eighty per cent imported?-A. Eighty per cent manufactured in Canada.

## By Mr. Thorson:

Q. Eighty per cent of its Canadian sales were manufactured in Canada? -A. Yes, exactly. The next group they considered were eleven small companies with an output averaging $\$ 50,000$ to $\$ 600,000$ per annum. Then there is a group not wholly given over to the manufacture of farm implements. They consist of the DeLaval Company of Canada which manufactures cream separators, the Ontario Wind Engine and Pump Company and the Sawyer-Massey Company Limited.

Canadian subsidiaries of United States manufacturers are the next group. These are where the United States companies have formed separate incorporations in Canada, but as far as can be determined, none of those companies manufacture very much. I should like to have the reporters transcribe the full names of these companies, I have just indicated them by short title as I thought it would save time.

## By Mr. Ward:

Q. These two companies just assemble?-A. Yes, presumably these are assembling companies.

Witness: In connection with these two companies perhaps I should give you the picture a little more fully. The John Deere Manufacturing Company

Limited has three Canadian incorporations; the first is the John Deere Company at Welland, Ontario, the second is the John Deere Company, Winnipeg, and the third is the John Deere Company at Regina. These three companies are the means by which they operate in Canada and I think they are largely re-sale companies. I do not think they manufacture to any extent at all, except that they did for some years at Welland.

## By Mr. Golding:

Q. Was there any reference in the Price Spreads report to the number of employees in the John Deere plant at Welland?-A. Yes, there was.
Q. Have you got that?-A. I might be right and I might be wrong. This report is about 60 pages long, and I will get it in just a minute for you. No, there was no reference. I think it must have been a fairly small plant, otherwise it would have been included. In going through the material I think I did notice that there was a small pay-roll at Welland, but it was so small as not to be worth bothering about so far as this committee is concerned.

Group 4.-Canadian subsidiaries of United States manufacturers: John Deere Manufacturing Company Limited; The Minneapolis-Moline Power Implement Company.

Group 5.-United States Companies selling their products in Canada:
J. I. Case Company, of Racine, Wis.; Oliver Farm Equipment Company.

Group 6.-Catalogue and Mail Order Houses: The T. Eaton Company, Limited; MacLeod's Limited, Winnipeg; D. Ackland \& Son Limited, Winnipeg.
Group 6 indicates principally the mail order houses, chiefly in the binder business. In connection with the Eaton Company there was some evidence that they were using binder canvases as loss leaders for some years.

Group 7 were the jobbers, of which there was only one, P. T. Legare Limited; which I am told has since gone into liquidation.

If you have a copy of report No. 1 of the proceedings of your committee you will find at page 21 the interim report of Mr. Graham. In this report you will find index which may be helpful to you in following this material as I go along.

I shall deal with the subject matter in the sequence and under the captions used by Mr. Graham in his initial report to you of March 27, I suggest that you allow me to proceed to the conclusion of each section before offering questions on points which I have not made clear but I think it will assist in appraising the information I am laying before you if we consider first the introductory section of the auditor's report in relation to the purpose of your committee.

It is pointed out therein that the selling value of farm implement production in Canada was in 1926, 1,178 per cent of the Canadian total whereas in 1932 it had declined to .259 per cent of the Canadian total.

Also that the relative position of production exports and imports for the period 1925 to 1932 summarized briefly is as follows:-

Selling value of production at factories 8 yrs..... $\$ 232,000,000$
Exports . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 102,000,000
Selling value of production available for Canada . . $130,000,000$
Imports (chiefly from the United States) . . . . . 158,000,000
Total available for Canada . . . . . . . . . . . . . . . . . . . . 288,000,000

## By Mr. Thorson:

Q. That is for the period of eight years?-A. Yes.
Q. That would average $\$ 36,000,000$ a year?-A. Yes.
[Mr. Walter J. Macdonald.]

Witness: The three largest companies in the industry, i.e., the MasseyHarris Company, the International Harvester Company of Canada, and the Cockshutt Plow Company with its subsidiary Frost \& Wood, during the period reviewed accounted for approximately 75 per cent of the total sales reported to the auditors. In this respect the International Harvester Company was the predominant factor, accounting for upwards of 40 per cent of the total.

That is referred to on page 4023 of the report of the Royal Commission.

> By Mr. Coldwell:
Q. Mr. Macdonald, you gave the figure of the value of farm implements available in Canada, have you any figures showing the retail price of these implements manufactured in Canada by these companies say in 1929?-A. Yes.
Q. Are you putting that on the record?-A. As a matter of fact that is why I referred to the place where this is shown. It is in the report of the Mass Buying Commission, but I can get it more readily from the report of the auditors.
Q. I do not want it now, all I wanted to know was if it would be coming later.-A. I think you are interested in that, it is quite an essential figure. The production figure was $\$ 40,000,000$, of that amount $\$ 16,000,000$ went for export, leaving $\$ 24,000,000$ for Canadian consumption. And there was $\$ 40,000,000$ imported from the States.
Q. Making a total of?-A. $\$ 64,000,000$.
Q. That is the value at the factory?-A. Yes.
Q. That is not the retail value?-A. No. If you want further information on that you will find it set out in detail in the Mass Buying report.
Q. That would be the factory value. I would like to have the selling price value as well?-A. It is pretty hard to get that because it might not have been sold for three or four years afterwards, particularly referring to 1929. In other words, one of the companies might have been producing heavily in 1929, and then might not have been able to get rid of their stock.

## By Mr. Thorson:

Q. In 1929 the factory price was $\$ 64,000,000$, but the average for the years from 1925 to 1932 was $\$ 36,000,000$ ?--A. Was only $\$ 34,000,000$.
Q. But the $1925-1932$ average was $\$ 36,000,000$ ?-A. The average was $\$ 36,000,000$. In 1929 , that was the peak year of production, it is interesting to note this that the peak year of production was not by any means the peak year of sales. Just to give you an idea, 1928 was the biggest year for sales, and production amounted to only $\$ 55,000,000$. The next year's production amounted to $\$ 65,000,000$ available for sale, but sales were down as compared with 1928. It is obvious there was a trend to over-production in 1929.

## By Mr. Golding:

Q. From what data are you quoting there when you speak of 1929 being the peak?-A. The peak of the period taken under review by the Royal Commission, 1925 to 1932.

## By Mr, McLean:

Q. In what year did you say sales were away down and production was up?A. 1928 was the peak year of sales in practically all of the companies, but 1929 was the peak year of production value.

## By Mr. Golding:

Q. They had a lot left on their hands?-A. Exactly.

Witness: The Massey-Harris Company followed with a production slightly in excess of 20 per cent, and the combined operations of Cockshutt Plow Company and Frost \& Wood accounted for upwards of 12 per cent.

Obviously the International Harvester Company are the largest sellers of farm implements in Canada and it is noted too from the evidence of Mr. C. R. Morrison, president of that company, that it occupies a corresponding position in the United States; the words he used were as follows: "I would not say that they accounted for 50 or 60 per cent but they account for more than any other single company."

On the other hand, only a relatively small proportion of the business of the Massey-Harris company is in the Canadian market, fluctuating from a high in 1928 of 40 per cent of all their sales to a low of 31 per cent in the years 1929 and 1932, or an average of about one-third.

I think perhaps it is desirable for me to stop there just a moment and tell you that I was particularly interested in the evidence of Mr. Bangs. Looking at the North American continent as a whole there are two centres of production in Canada, Toronto, and Hamilton and Brantford; and in the United States the district around Chicago and Racine, with a little in Minneapolis; and the freight rates from Toronto-Hamilton-Brantford to Winnipeg are substantially the same as they are from Chicago-Racine to Winnipeg.

By Mr. Perley:
Q. How about Minneapolis?-A. Minneapolis, of course, would be less. I do not just know about that.

## By Mr. McLean:

Q. Milwaukee would be higher?-A. I am not quite sure about that. It is interesting to see the two fields of production, and their relationship to the Canadian market.

Witness: The interest of the International Harvester Company of Canada Limited, and the Cockshutt-Frost \& Wood in the export market is a much smaller percentage of their total sales than is the case with the Massey-Harris company.

## By Mr. Thorson:

Q. Have you any information as to what the trend has been in the United States?-A. We will have that when we receive the replies to our questionnaires. That information will be given in detail.

The Chatrman: That information will be given in detail when the companies appear before us.

## By Mr. McLean:

Q. Does that include the Massey-Harris importations to this country from 'heir American plant?-A. I would not be prepared to say that, that point was not covered.

Witness: Dealing now with the investments of these three companies in the industry at the close of the 1933 fiscal period it shows the International Harvester Company with approximately $\$ 26,000,000$ invested in their Canadian company while the Massey-Harris company showed $\$ 22,800,000$. The combined investment of the Cockshutt-Frost \& Wood interests on the same date was $\$ 15,700,000$.

The records available to the Price Spreads Commission indicate that the International Harvester company in the United States is a highly integrated organization owing its own coal and iron ore mines, furnaces, steel mills and other allied enterprises.

I come now to the items referred to in Mr. Graham's report to you on March 27, 1936. The first of these is capital. The Royal Commission did not inquire extensively into the capitalization of the companies. It did establish that at the close of the 1933 fiscal period the companies which had replied to its auditors' questionnaire reported a capital investment of $\$ 77,500,000$, in addition to which there existed a bonded debt of $\$ 9,500,000$, the majority of which was indebtedness of the Massey-Harris company.
[Mr. Walter J. Macdonald.]

The commission also investigated such capital reorganizations as had taken place in the industry, the principal companies affected being the Massey-Harris company and the Cockshutt Plow company. From the record it does not appear that there was any evidence produced which would indicate extensive dilution of capital stock values, at least in so far as this might affect the question before your committee. I may say, that I do not think from the evidence submitted that you would say that there was evidence of stock dilution, but we cover that later in our questionnaire.

## By Mr. Coldwell:

Q. I notice the phraseology of the Royal Commission report, in which the words appear, "without receipt of adequate and proper consideration ". Of course, "adequate and proper consideration" may not reveal the undivided profits and so on, factors of that description, entering into the capital structure? -A. That is true. As a matter of fact I think we are coming to that a little later on in the submission.

The Witness: The commission also reported that the companies had increased their investment in the industry in Canada during the years 1927, 1928 and 1929 , by $\$ 30,100,000$ divided approximately as between the three major companies as follows:

Massey-Harris, $\$ 16,500,000$; of which $\$ 14,250,000$ came from the sale of common stock in the year 1929; International Harvester, $\$ 11,300,000$, part of which came from profits and part of which came from increased investment by the American controlling company; and the Cockshutt Plow company, $\$ 2,300,000$, which increased their investment, largely by profits, to that extent.

## By Mr. Thorson:

Q. The increase in capitalization in the three years amounted to over $\$ 30$,000,000 ?-A. Yes. Particulars of these figures will be found in the report of the Royal Commission at page 4020.

By Mr. Donnelly:
Q. In what years did that increase in capitalization take place?-A. In the years, 1927, 1928 and 1929.
Q. Was there any reason for that increase in investment?-A. Of course, they were doing a very big business in those years.
Q. The business was expanding?-A. Yes. There was an obvious expansion of inventories and accounts receivable.

Mr. Thorson: Those were the peak years of production.
The Witness: Another reason is this, which is given in the next paragraph. Under examination the auditors indicated that a part of this increase in investment in the case of the Massey-Harris company was accounted for by acquisition of plants and it is evident from a scrutiny of the balance sheets that the investment of H. V. McKay Massey-Harris Proprietary Limited, the company through which they now operate in Australia, was made in 1930-as a matter of fact, it was made in 1929 although it only appears for the first time in their balance sheet for 1930 -it first appears in the financial statements for the year ending November 30, 1930, at a figure of $\$ 3,212,000$, at which it still stands. That is how they are operating in Australia. That is where $\$ 3,000,000$ of that $\$ 16,500,000$ went to.

The question of capital stock dilution has been raised from time to time in the discussion before your committee and you will find embodied in the questionnaire now in the hands of the companies certain specific requests for further information along these lines.

As I see it, stock dilution in the balance sheet of the company affected will be reflected:-
(a) In increased capitalization on which dividends will be expected, and
(b) In correspondingly enhanced values over normal in the assets acquired.

It might not be inopportune to note at this point some of the effects which any stock dilution disclosed may have on implement prices. These might in-clude:-

1. Increased depreciation rates where plant and machinery may have been taken over at values above normal.
2. Increased interest on mortgage indebtedness if bonds are part of the purchase price. I cannot see any evidence of that in the question before you.
3. While the endeavour to pay dividends on inflated capitalization would also be a factor in the maintenance of unduly high prices. I think that is obvious.

Section VI-B of the questionnaire now with the companies for reply deals with capital and reads in part as follows:-

Answer the questions set forth in schedule J, attached for each constituent corporate unit in your organization using a separate sheet for each unit. This information should be furnished not only for Canadian units but for units controlled by the Canadian Head Office.
Schedule J, reads as follows: (In part)-
(3) Number and value of shares issued for cash: (a) at inceptiongive date, (If prior to 1913, say so) ; (b) since then-give fiscal years.
(4) Number and values of shares issued for other consideration, e.g., for plant, machinery, real estate, goodwill, etc.; (a) at inception-give date (if prior to 1913 say so) ; (b) since then-give fiscal years.
(5) State to whom shares indicated in 4 were issued, in what years and the nature of the consideration given in each case.
(6) Details of any stock dividends paid-give amount and rate;
(7) Details of any offering to shareholders at values below then going market prices and date of such offer-(for instance, the stock might be selling at 50 in the market and it might be offered to shareholders at 40.)
(8) Location of plants operated by this company as at December 31, 1935.
(9) The amount of any bonded, mortgage or other major debt of the company as at last balance sheet date-give interest rates, and how secured.
(11) The names and addresses of any person, firm or individual owning 10 per cent or more of the capital stock of the company.
(12) Does this company control, whether through stock ownership, creditor position or otherwise, any subsidiary or allied companies in this industry or any industries tributary thereto.
(13) Give name of predecessor company or companies or firm or firms if any.
(14) State whether the records of such companies or firms are available for scrutiny.
That is the end of schedule J., attached to section 6 of the questionnaire.
Then, any excess valuations in plant and equipment are dealt with in section V (A), which refers to plant, and reads as follows:-
A. State for each manufacturing plant owned by your company or a subsidiary in Canada;

1. Location-if shut down, indicate since what date.
2. Acreage owned.
3. Acreage unused.
4. -as to Buildings-
(a) Assessed value, latest available date.
[Mr. Walter J. Macdonald.]
(b) Present insured value, and rate.
(c) Gross book value at present and how determined, i.e., at cost, by appraisal or otherwise.
(d) Depreciation reserve at present.
(e) Net present book value after depreciation.
(f) Date of completion or acquisition of each of the present main uits.
(g) If acquired by purchase, state from whom acquired, date, and consideration given.
Then we have asked for information which is set forth in a schedule which asks for an analysis of the asset accounts. This is for each building or main unit of plant, and we ask them to show the opening balance in 1913, when they bought; the amount they paid in each of the years from 1913 to 1935 inclusive; and the amount that they credited or took out of these assets in each of these years. Correspondingly, in regard to depreciation, which is the off-setting item to plant and buildings, we have asked them for the opening balance as of 1913; in column 1 an indication of any deductions from the reserve in each year in which they appear; in column 2 additions made to the reserve (with the rate stated in column 3)-each year separately, and lastly the closing figures as on the last balance date; which will tie in with the last balance sheet which they produce to the Committee.

Then, in section 5-B, we have asked them for similar information to that requested in section 5-A, for each plant owned in countries outside of Canada; and we have added a note: If accurate information is not readily available on foreign points, in Canada, give estimates but indicate that your replies are estimates and that you will later authenticate your estimates from the foreign plant.

## By Mr. Thorson:

Q. That is all relating to capital?-A. That is all relating to capital, yes. Witness: Now the next section is, plant buildings and real estate; and with that I have coupled the section relating to plant equipment and machinery.

Here again there is practically no information available from the report of the Royal Commission.

Section 5 in the questionnaire bears on this phase and has already been explained to you in connection with capitalization.

In addition we have asked the companies whether they anticipate any heavy expenditure in maintenance of plant and/or equipment in the next year. We have also furnished them with two schedules, H. and I. Those are the schedules which I just read to you. Just by way of additional information, the Financial Post issues a very comprehensive statement in regard to Canadian companies, as perhaps you know, and it discloses that the manufacturing plants of the Massey-Harris Company are as follows:
Toronto, Ontario main plant. . ..................
Brantford, Ontario, binder and mower plant. . .. 28 acres 28 acres

By Mr. Thorson:
Q. What is the total acreage of the two plants that were closed?-A. 40 acres.

Witness: I now come to, Inter-relationship of the companies. Practically no information in this regard was obtainable from the records of the Royal Commission. The questionnaire we have issued reads as follows:-
A. State to what extent you make available to companies, other than those affiliated with you:
(1) Results of experimental work.
(2) Improvements in implements.
(3) Improvements in manufacturing processes.
(4) Inventions covered by patent rights.
B. In what respects do the companies in the industry co-operate.
C. Is there any arrangement or agreement betweent your company and any other as to the determination of prices.
In the opinion of counsel the replies to this questionnaire may require to be amplified by examination of representatives of the companies. Also, I may say that there is some information available from the United States inquiry which will perhaps have a bearing on that.

## By Mr. Thorson:

Q. Is the United States inquiry directed to the inter-relationship of companies with a view to ascertaining whether or not there is a combine, or price fixing arrangement?-A. There is some reference to that in the resolution on which their inquiry is based.

Witness: Section V, improvement in implements since 1913: In this respect practically none of the information available through the Royal Commission is of use to your committee. Mr. Graham's report outlines the following avenues of inquiry: (You people have not got the report so I might as well deal with each one as I come to it). It is difficult to cover all of it.

Mr. Thorson: We might have to have the assistance of an engineer to do that.

Witness: There has been some thought of that in the minds of counsel and myself, that certain points might occur where an auditor certainly cannot, and even a barrister cannot, say what are the constituent factors involved.

Mr. Mclean: You mean, we might have to employ a legal gentleman?
Witness: I have just said that a lawyer would not be able to do that.
Mr. Thorson: Mr. Macdonald has just covered that by saying that even barristers could not do it.

Witness: Item A.-factory cost of making improvements claimed. Item A. is difficult to cover by questionnaire and will probably have to be dealt with by visitation of the plants concerned and discussion with responsible officials on the accounting and engineering staffs.

Item B.-poundage value.
As to (c) you have already heard from Dr. Hopkins who has evaluated these improvements in terms of increased utility value to the farmer in 1935 machines as against that of 1913. Similarly a report published by the American Society of Agricultural Engineers in 1933 shows by indices the changes in quality value of farm machines in the period from 1914 to 1933. This report was available to us from the commission.

## By Mr. Thorson:

Q. Is that the Davidson report?-A. That is the so-called Davidson report. The avenue of inquiry outlined in " D " is not such as comes within the purview of my work as auditor. In regard to " E ," it is expected that certain information will be available from the surveys now in process by the provincial governments, the results of which will be available to this committee.
[Mr. Walter J. Macdonald.]

We shall now deal with factory cost. This is probably the most important phase of the inquiry. In order to provide a focal point and to ensure that such remarks as I may make have as direct a bearing as possible on your problem, I have compiled a statement, table X , which is compiled from data printed in the report of the commission. The cost shown may or may not be typical of the trends as between the years indicated (1913 and 1914) but will at least provide a background against which you may visualize the principal constituents in factory cost of any implement. I will not attempt to analyse the reasons for the trends shown except in a very general way. I think table X and the other schedules should be passed around.

By Mr. Senn:
Q. Do you include the cost of material in the factory cost?-A. Yes. Referring to table X you will note that the three principal divisions of factory cost are:-

Materials
Direct labour
Factory overhead
Perhaps it would be just as well to go over that table so that we shall have it clearly in our minds. You notice the figures are given for two companies, one company has an average of six implements and the other an average of nine implements. As I said, I am not sure that these may be typical of trends within the industry because I am doubtful of the accuracy of some of the figures submitted.
Q. Where did you obtain these figures?-A. From the Royal Commission.

## By Mr. Thorson:

Q. You say you doubt the accuracy of some of these figures?-A. I doubt the accuracy of the earlier figures. When you go back to 1913 I doubt them. I questioned the companies in regard to these verbally when I saw them on Tuesday in Toronto, and I said to the officials of one of the companies, "I doubt your 1913 figures;" and he said, "I am afraid I doubt them myself." So that it is only significant of trends. However the charts show you the picture and therefore I do not ask that you attach much value to the figures. I think generally speaking it will show, approximately, the increase. You will notice that the cash price to the consumer has gone up 53 per cent, the agent's commission 46 per cent, freight 52 per cent and the price realized by the company has gone up 55 per cent. The factory cost has gone up 77 per cent, productive labour 105 per cent, prime cost, E plus F which gives you the total in G is up 83 per cent. Other factory expenses, which is often called factory overhead, or "burden" which is another term, have gone up 505 per cent. That is probably because of the decreased volume of 1934 . The total factory cost is up 162 per cent.
Q. The item of productive labour which appears to have increased 105 per cent needs an explanation. Is there any relationship between that item and decreased sales?-A. No; that is per machine.
Q. Per machine?-A. Yes. The factors E and F will not vary substantially per machine during any given year, but they will vary from year to year as the cost of living increases.
Q. They may keep on a number of men?-A. Agreed, but that would not appear here in productive labour.

## By Mr. McLean:

Q. They would go into H?-A. Yes.

## By Mr. Thorson:

Q. Might it not also go into F?-A. No. Again we are anticipating because I have covered that. If I have not covered it in full, as I deal with this, will you come back to it?

## By Mr. Golding:

Q. In productive labour I notice an increase of 105 per cent. How do you account for the inrease there with the improved machines they are using in 1933?-A. That is one of the very questions your committee will have to answer. As I say, this really typifies the problem of this committee and is one of the things you will have to pass on.

## By Mr. Senn:

Q. Is it not a fact that if you had taken the peak year 1929 these percentages would have shown a very small increase?-A. In some respects, yes.
Q. You are taking the year 1933, one of the lowest years in the history of the production of the companies?-A. Yes.
Q. Naturally all these expenses will be high?-A. Agreed.

Mr. Thorson: That is the point I was trying to make.
Mr. McLean: Wages and material were higher in 1929 but the overhead would be the other way around.

Witness: I would like to discuss that from my own angle, but there is this to be said: One of the problems confronting your committee and myself particularly as your auditor, is the question of factory overhead in terms of those direct costs. I had the evidence that was submitted to the Royal Commission which covered principally the years 1929 to 1933, but I do not think they could be considered as typical. In other words you have three low-production years, and one of diminishing production, 1930, and a reasonably good year, 1929. My thought is that the fairer way-and I discussed this with the companies on Tuesday-to do it would be to take the average of the years 1926 to 1935 inclusive. I thought that would be a fair way to judge what is the fair percentage to add to direct costs for factory overhead.

## By Mr. Thorson:

Q. You might even have to take a longer period of time?-A. Agreed.
Q. In order to get a fair average?-A. That brings in another question, the difficulty of establishing for the industry as a whole, reliable figures for a longer period back than ten years.
Q. You have a peak of production and a peak of sales?-A. Agreed.
Q. Somewhere around 1926 and 1927?-A. Agreed; but I am thinking of the difficulty of ascertaining relevant facts from the books of the companies as far back as 1921. Suppose you took a period of 15 years, 1921 to 1935. After all, when you take a period from 1926 to 1935 you have a period of high production admittedly in 1927, 1928 and 1929, but you have also years of exceptionally low production, 1931, 1932 and 1933 with slightly increasing production in 1933 and 1934.
Q. Neither of these two periods combined will give you a fair picture, but if you had gone back to a period during which production is more or less normal, that might help you to arrive at a fair average.

## By the Chairman:

Q. Your reasons for not wishing to accept periods of an earlier date is that you doubt their accuracy?-A. I am doubtful of the ability of the companies to produce accurate figures, figures that I would consider worth while relative to the earlier years.

Mr. Senn: I agree with Mr. Thorson that the years which you have mentioned where there were extremes of high production and low production could hardly be considered as normal. I do not think they will balance.

Witness: I agree with you. Perhaps that is right. But after all your inquiry must be practical and you have to consider the reliable sources of information that are available. I agree with you perfectly; I would prefer to consider two periods.

By Mr. Senn:
Q. I think Mr. Macdonald, factory overhead, particularly certain parts of it, would drop more slowly in normal production periods?-A. Yes.
Q. In anticipation of more work going on than they actually do?-A. That is the problem. That is only the result of my thinking so far.

By Mr. Thorson:
Q. Would it be true the longer the period of time you have the closer you would get to an accurate normal average?-A. Agreed, yes. The difficulty as I see it, is whether or not reliable figures can be obtained.

By $M r$. Senn:
Q. After all, that does not solve the difficulty we are in at the present time.-A. It is a factor, anyhow.

By Mr. Thorson:
Q. I assume we should take a long range view?-A. Yes.

By $M r$. Senn:
Q. We are still suffering from abnormal conditions.-A. Abnormal conditions, yes.

## By Mr. Donnelly:

Q. I do not see how this can be right. I am referring to the cost of productive labour in the International Harvester Company?-A. I doubt the authenticity of these figures.
Q. Take the figures in regard to the machinists' wages. They have gone up 65 per cent, moulders 50 per cent, painters 67 per cent, labourers 75 per cent?-A. Yes.
Q. And the other table shows an increase of 105 per cent?-A. Again I have covered that, and I should like to come back to it if I do not answer it fully in my brief. I should like to show the relationship between the figures shown on the other chart, which we will deal with later.

## By Mr. Thorson:

Q. We had another chart submitted by a witness whose name I forget, a statistical chart showing the wages paid in the industry as a whole.-A. Mr. Losee's figures.
Q. And that seemed to indicate a difference as compared with this one?

## By the Chairman:

Q. Is this table taken from the evidence of the price spreads commission? -A. Yes, not only from the evidence but from the report. If you have the price spreads report you can see it.

## By Mr. Douglas:

Q. Is the large increase in the other factors due to the decrease in the volume of trade, and is it a fact that capital would not decline in proportion to the cost of raw material?-A. I do not get the point.
Q. The great increase in other factory expenses would be due to the decline in the volume of business, but there would not be a corresponding decline in capital?-A. Let me read this here. Table X indicates the wide variation in overhead between 1913 and 1934 and is probably a reasonably good example of the effect of volume on factory overhead. To emphasize the point, the production of ploughs in Canada in 1929 was 75,461 , whereas in 1932 it had dropped to 14,505 . Obviously, factory overhead, including as it does such items as taxes, heating, insurance, repairs, depreciation of plant and machinery, superintendence and engineering staff, watchmen, etc., is more or less constant no matter what the production may be and a factory manufacturing ploughs would have a very high cost per plough for factory overhead in 1932 as compared with 1929. Is that the point you had in mind?
Q. Yes, and also the amount of capital invested is fixed. It does not decline. The amount of capital invested is not reflected in factory costs.-A. Working capital?

Mr. McLean: The capital employed dropped to $\$ 48,000,000$ according to table 2.

Witness: The companies are not paying dividends, nor paying interest. There might be a slight change due to the effect on interest on bank loans, but I cannot see where that would affect the factory cost. Factory cost is the cost of producing goods at the door of the plant.

## By Mr. Douglas:

Q. Is other maintenance taken into consideration?-A.The operating expense of the implement factory.

## By Mr. Thorson:

Q. Just the operating expenses?-A. Just the operating expenses incidental to running this section of the plant. Suppose we undertook to manufacture ploughs in this room and we installed a series of lathes, and other machines, and finally turned out a plough which went out that door. The cost of the plough at that door includes a proportion of all the cost that would be applied to this section of the plant.

## By Mr. Douglas:

Q. A return on the working capital is not included in this item?-A. No.

## By Mr. Thorson:

Q. But you would include the salaries of executives and superintendents? -A. No; superintendents, but not executives.
Q. Not the executives?-A. Not the executives.

## By Mr. Douglas:

Q. Under what item would the salaries of executives come?-A. Under what is called administration expenses. They would come in the accounts with selling or bad debts or distribution, anything of that nature.

## By Mr. Donnelly:

Q. The table you gave us here which shows the price of certain implements came from the Bureau of Statistics?-A. Yes.
Q. You took the same thing in regard to International Harvester and the Massey-Harris Company; but there is something wrong with this?-A. That is it exactly. You are making the point I want to leave with you. In my mind there is a problem there of correlation. You have the point exactly.
[Mr. Walter J. Macdonald.]

By Mr. Thorson:
Q. The figures you have given in the table are difficult to prove?-A. They merit very careful examination in terms of the other information. I will come to that later.
(a) Materials:

The information available from the Royal Commission as to raw material was not comprehensive as it made a comparison of the trend in these costs only in respect of a few implements for five or six individual years between 1913 and 1934. May I make that clear. I do not want to close off discussion, but it is covered later on. The questionnaire sent out by your committee is of necessity much more comprehensive and in it the companies have been asked for the following information:

A statement of the principal raw materials used, e.g., steel, pig iron, red oak, bituminous coal. Now to give you an idea of the relative position of these different constituent commodities in the production picture of the companies there was approximately in $1934 \$ 3,600,000$ worth of materials used. Of that $\$ 3,600,000 \$ 134,000$, a little under 5 per cent, consisted of pig iron; iron castings accounted for $\$ 220,000$ and steel bars accounted for $\$ 788,000$, nearly one quarter. The other things are scrap iron, etc. Generally speaking you can see there was $\$ 407,000$ for pig iron and its derivatives and $\$ 778,000$ for steel bars. That is a big proportion of $\$ 3,600,000$.

By Mr. Senn:
Q. Can you give us the wood?-A. $\$ 363,000$ is wood.

## By Mr. McLean:

Q. Mostly packing cases?-A. No, red oak principally.
Q. What did they do with it, do you know?-A. I don't know. Mr. Rutherford may be able to tell you. Mr. Greenway's figure placed before you the other day, stressed considerably the importance of red oak.

Mr. Senn: It is mostly used for wooden wheels?
Mr. Mitchell: Spokes.
Witness: This may not be true of the big companies. The proportion of their requirements which comprised lumber, may not be large. This may refer more to the wagon companies.
(b) A statement of fluctuations in 1913 and 1934 in the sources of supply of these materials as between (1) Canada, (2) United States, (3) Other countries.
(c) Information as to the principal firms from whom they have bought in the past five years.
(d) Any interest they may have in these companies and the nature of such interest.
(e) Any advantage accruing through such interest and the extent thereof.
(f) And more particularly, a definite breakdown of material costs in each of the principal raw materials used extending from 1913 to 1935 on a schedule form which has been provided. I should like to read you that schedule form because it shows you the factors that have to be considered in the raw material. We have asked them for (1) the invoice price at the point of production, gross amounts, taking any quantity, (2) the trade discount on the date purchased or subsequently. Sometimes these rebates are made over a year by the supplying house or the factory. We have also asked them for the net invoice price exclusive of freight and duty. (3) We have asked them for the freight paid, the duty actually paid and how computed, because it is not always computed on the invoice value. (4) We have asked them for the sales tax actually paid and how computed, and (5) any other items in the laid-down cost, which may
include trucking direct from the track to the factory. (6) We have asked them for the total laid-down cost and (7) if any drawback was obtainable if the goods were used for export, and if so, what amount and how computed. (8) If any drawback was obtainable if the goods were used for domestic trade, and if so, how computed. (9) We have also asked them to state the sources from which the above was compiled.

## By Mr. Thorson:

Q. Will this break-down in material costs disclose the changes in materials used such as substituting steel for oak, and the like?-A. No; that will be disclosed in another section, but it is covered.

## By Mr. Douglas:

Q. I should like to know if there is a typographical error in section J . Should 37 cents be 37 dollars, or is there a figure missing?-A. No.
Q. Is it 37 cents?-A. Yes.

The Chairman: It should be minus 98 per cent.
Witness: It is minus 98 per cent. The gross profit fell from $\$ 23.81$ to 37 cents; obviously it is minus 98 per cent. We have also asked the companies to enumerate the principal fully manufactured parts which they now purchase to be built into implements and farm machinery. For example, ball bearings are now built into the machines where they were not used before. I should now like to show you the correlation along the lines of what Dr. Donnelly was talking about a minute ago. I have here one of the charts submitted to you by Mr. Greenway on Tuesday last.

## By Mr. Thorson:

Q. Which chart are you referring to now?-A. Chart 9, referred to by Mr. Greenway. This chart shows the trend of pig iron prices. As I told you, pig iron is a large constituent item in raw material, and this is the trend of the raw material. As I say, this is a graph of prices of pig iron.
Q. What do you mean by "this"? You mean the heavy blue line?-A. The heavy blue line, and it runs from 1913 to 1935. Now from the price spreads committee we had information on the cost of material contained in an eight foot binder, the direct cost of material. This red line indicates the relationship which the 1913 price, using 1913 as a hundred, bears to the price to-day. It shows you the fluctuations which have taken place.

## By Mr. Donnelly:

Q. Do the machine companies claim they are using steel instead of pig iron? -A. Yes they do.
Q. They are using more steel?-A. Yes.
Q. That would be more expensive?-A. More expensive; of course.
Q. That may be the explanation for the increased cost of material?-A. That is probably a factor. Again that brings in the argument that which was mentioned a few moments ago, and that which Mr. Graham mentioned in his initial summary, as to the failure of increased efficiency to take up these costs.

## By Mr. Bertrand:

Q. What is the difference between steel and pig iron based on a percentage of cost?-A. I could not give you that offhand.
Q. Have you a chart to show you the approximate difference?-A. Yes. I am sorry, I can give it to you. 6,750 tons of pig iron cost $\$ 134,000$.
Q. Is that steel?-A. Pig iron.
[Mr. Walter J. Macdonald.]
Q. Give us the comparative figure for steel.-A. The comparative figure for steel shows that 14,000 tons of steel cost $\$ 778,000$.
Q. What year?-A. The year 1934.
Q. Three to one?-A. That is correct, yes.

By Mr. McLean:
Q. The weight of the material would be reduced if you substituted steel for pig iron, would it not?

## By Mr. Bertrand:

Q. A chart has been given to us which told us the price of the weight of the material in the machine?-A. Yes there is.

The point I should like to make about this chart is to show you the price of the commodity in relation to the cost of material in an eight foot binder. You see there is no very great relationship between them.

## By Mr. Thorson:

Q. That is chart No. 9?-A. Chart No. 9 submitted by Mr. Greenway.

By Mr. Ward:
Q. What do the red lines indicate?-A. They are the index of the material in an eight foot binder, all the material.
Q. The blue line indicates the cost of material?-A. No, the blue line indicates the cost of pig iron on the same terms.
Q. And the red line indicates the cost of the rest of the material?-A. Usually, yes.

Our reason for saying usually is that we only had information for years $1930,1931,1932,1924,1921$ and 1913. There are gaps in the price spreads commission report, and they have to be filled in:

## By Mr. Mitchell:

Q. Before you leave that chart I notice in item C that company No. 1 shows an increase of 52 per cent and company No. 2 shows an increase of 33 per cent in freight. There is a large difference there. Can you explain that in any way?A. The question raised is that in one company the increase is 53 per cent, and in the other company the increase is 33 per cent. Now, if you examine the other section you will see that freight on implements has gone up 53 per cent in the period we are dealing with, although it would appear that company No. 1, which increased its freight by 52 per cent, had supplied substantially the same weight binder in 1933 as in 1913; whereas, company No. 2 has probably decreased the weight of the binder by substituting lighter material.
Q. By using steel in place of castings?-A. Yes, perhaps.

Mr. Johnston (Lake Centre): You mean, by diminishing weight.

## By Mr. Mitchell:

Q. There is a possibility of another explanation too, for the six implements in the one case and the nine in the other, there might be a different freight classification?-A. That is possible.

## By Mr. McLean:

Q. Have you a list of the implements used in each case?-A. Yes, I have.
Q. I am interested in getting that?-A. We have that. It will be available for you.
Q. Is it in the Price Spreads report?-A. It is in the Price Spreads report.

Witness: I would like to deal now with the other report which you have in front of you, which is in connection with raw material. If you notice the first column is material, in the top half of the sheet, and it is showing an increase. I want you to see this, just to give you an idea of the correlation which obtains between the statistical material that has been produced, and the figures which have been produced by the companies themselves. Now, in taking the binder you will notice that in material cost it increased 74 per cent over 1913; that on the 5 -foot mower the increase is 65 per cent, and with the 7 -inch cultivator the increase has been 84 per cent. That is the increased cost of materials in these various implements over 1913.

Now, I want you to go down to the next section, where it gives an indication of the price of pig iron, and I want you to notice that pig iron, which as I said was a large constituent, has only increased 11 per cent. Steel bars have only increased 9 per cent. Coal, which is not a constituent except as a heating medium, shows an increase of 90 per cent. Linseed oil, another constituent, has increased 21 per cent, and oak has increased only 7 per cent. In spite of that fact factory materials have increased 74 per cent, 65 per cent and 84 per cent respectively for the three types of machine shown. If you can find an answer to that you have the answer to an important phase of your inquiry.

## By Mr. Thorson:

Q. There will be information relative to that in the replies to the ques-tionnaires?-A. Yes.

Witness: Now, if you come to the productive labour column: You will notice that productive labour is up 62 per cent, 60 per cent and 83 per cent respectively. Down lower on the page you will see the ratio of increasethese figures may or may not be authentic-I think they are produced by the Bureau of Labour-perhaps they are not representative of the industry as a whole. They are interesting in any event. For instance, blacksmiths are up 74 per cent; machinists are up 73 per cent; pattern-makers are up 86 per cent; moulders are up 63 per cent; painters are up 62 per cent and labourers are up 69 per cent. There is a correlation there, while it does not exist in raw material. Now, in freight you will see that the freight on the 8 -foot binder has gone up 41 per cent; and on the 5 -foot mower it has gone up 53 per cent and on the 7 -foot cultivator it has gone up 45 per cent. Then, down in the left-hand bottom column, freight on implements has increased 53 per cent. So that it would look as if the mower was still practically the same mower that it was in 1913, but that the binder and cultivator are substantially lighter implements than they were then.

## By Mr. Cleaver:

Q. Do not your comments, Mr. Macdonald, almost conclusively prove, for the figures themselves, that the information given is inaccurate?-A. No, I would not be prepared to say that. I think that, pardon me if I say so, I feel that I would not like to leave the impression in the committee that I am attempting to solve the problem, or to give an explanation of these things; I am merely pointing out the correlation between the information made available to you through the Price Spreads Commission and the information placed before you statistically in this committee.

Mr. Thorson: And information that has been secured?
Witness: Yes. I am only leaving the problem with you. I do not wish to draw conclusions.

Mr. McLean: It is too soon for that?
Witness: It is to soon. I think the information that I have is fragmentary at this time.
[Mr. Walter J. Macdonald.]

## By Mr. Cleaver:

Q. I am not asking you to draw conclusions, I am simply suggesting that the actual figures themselves indicate that it is perfectly obvious to anyone that there must be an error somewhere in these figures?-A. I agree. Yes.
Q. These figures show that the materials which enter into machine costs are only up an average of about 10 per cent?-A. Agreed.
Q. The manufacturers come along and say that their material costs are up some 50 per cent. Now, both figures cannot be correct?-A. There is however, a potential explanation there, and it was touched on here a few minutes ago. There is one typical case that has been given, that of a screen on an implement produced in 1913 being of canvas was far more cheaply made than the type of steel screen which is now provided. That would make a substantial increase in the cost of producing that part, because obviously you cannot manufacture a steel screen for the same price as a canvas screen, no matter what the trend of your price indices may be.

## By Mr. Thorson:

Q. That is, you have to weight each item?-A. Exactly if you are manufacturing an implement and you put in a gear which is made out of a high priced steel in place of a cast gear, obviously it is going to increase the price of your article.

Mr. Cleaver: But, is it not also obvious that if your material costs have gone up 58 per cent in the content, as shown by this statement, and the cost of these materials has only gone up 10 per cent, there would have to be four times the difference in order for these figures to be reconciled-you have to account for that difference in increase between 10 per cent and 58 per cent.

Mr. Bertrand: Yes, Mr. Cleaver, but may I point out that labour has a bearing on that; and we were told a moment ago that the relationship there was three to one, in respect to price.

Mr . Cleaver: We were also told that wood has been correspondingly reduced, and that some of the parts are now steel as against iron.

Mr. Bertrand: I am not prepared to accept the statement that it has been correspondingly reduced.

Witness: I think, gentlemen, that you have realized the situation as I anticipated you would, you have reached the conclusion which I thought you would reach; namely that this is a very complex problem. And I have served my purpose, because I wanted to show you the factors that have a bearing on it.

Mr. Donnelly: On the other hand it is true that the weight would not be indicated in this increase of 174 per cent. That is in the cost of materials.

Mr. McLean: The weight is indicated in the freight table, where one company gets the weight down the increase is much less than it is in the other.

Mr. Douglas: Here you have an average increase of 11 per cent in these materials, and here you have an increase of 174 per cent in the materials going into a binder.

Mr. Bertrand: Suppose you made the change from pig iron to steel in that construction, if steel costs three times as much you would increase your cost of production?

Mr. Douglas: That will enter into it, but weight will enter into it too.
The Chairman: I do not think we can settle this particular point right here. I think we should allow Mr. Macdonald to continue.

Mr. McLean: I think perhaps the auditor could be heard better if we had a little less conversation.

Witness: The other factors to be considered in material costs-I am just reading this into the record, we have already covered it-are as follows:-
(1) Freight to factory from point of origin.

Some Hon. Members: Order, order, please.
Witness: Information on this has already been submitted to you by Mr. Bangs.
(2) Tariff: In this respect attention is drawn to the fact that the companies enjoy a 99 per cent drawback on goods imported for use in the manufacture of farm implements subsequently exported. A submission by a qualified official is now, I understand, in course of preparation.
(3) Sales tax and excise tax: Here again a submission is being prepared.

## (b) Wages:

The Royal Commission undertook a very comprehensive survey of certain aspects of the employment situation, particularly as to rates, policies of wage payment, incentive plans, pension schemes, etc.

The auditors examined copies of all pay-rolls for each of the companies for periods in February, 1933, and February, 1934. None of the evidence tended to show the existence of sweated labour in this industry, on the contrary some of the larger companies had reasonably generous pension plans in operation as is evidenced by the fact that in the seven years, 1927 to 1933, they set aside a sum of slightly less than $\$ 2,000,000$ as pension provision.

From a detailed study of rates of pay it appears from the commission's records that in 1933 and 1934 the average hourly rate was as follows:-

1. In industrial centres such as Toronto and Hamilton, in the neighbourhood of 50 cents per hour.
2. In London, 47 cents per hour.
3. In Brantford and Smith's Falls between 40 cents and 43 cents per hour.

Comparing the average hourly rate shown in respect of two of the large companies as between 1913 and 1934 the following comparison may be interesting (page 4093 of the report of the Royal Commission) :-


It may also interest the committee to know the number of employees engaged in the month of February, 1934, as between implement companies.

## By Mr. Coldwell:

Q. It would be very interesting, though, to get the annual earnings of these two companies?-A. Agreed..
Q. Because, in 1930 employment was fairly continuous?-A. And it is on a piece-work basis at the present time.

## By Mr. Cleaver:

Q. Have you also considered for these years the efficiency of labour on account of machines, the speeding up of efficiency of labour?-A. That is what you might call the hidden factor. It is a factor that will probably appear in the trends of the different things.
[Mr. Walter J. Macdonald.]

Witness: It may be of interest to the committee to know some particulars as to the number of employees engaged by all the companies in the industry in February of 1934. I thing it helps to form an opinion as to the relative value of the several plants.

| Massey-Harris Company, Toronto | 524 | 1,209 |
| :---: | :---: | :---: |
| Massey-Harris Company, Brantford | 433 |  |
| Massey-Harris Company, Brantford-Verity | 252 |  |
| Cockshut Plow Company, Brantford | 331 |  |
| Cockshutt Plow Company, Smith's Fals. | 229 | 560 |
| International Harvester Co. of Canada, Hamilton | 944 |  |
| International Harvester Co. of Canada, Chatham | 94 |  |
| Other companies |  | 2,807 |
|  |  | 372 |
| Total |  | 3,179 |

## By Mr. Golding:

Q. The Price Spreads report covered that information pretty fully?-A. Yes.
Q. That includes clerks and everybody else, it takes them all in?-A. I will check back on that at noon and just be sure of it. In any event, I was thinking of it merely in terms of giving you the relative importance of the different companies within the industry.

> By Mr. McLean:
Q. Did you say there were 3,200 employees?-A. Yes, approximately.

## By the Chairman:

Q. For what period is that?-A. That is for February, 1934.

## By Mr. McLean:

Q. That is for just one month?-A. Yes. That must be all employees.

## By Mr. Golding:

Q. The number given in the Price Spreads report for the full years was just over 3,300 , but these were just for the two months, or the one month, was it, in 1934?-A. This 1934 figure is for a typical period. They took a week, or two weeks, depending on the pay-rolls.
Q. They did not give the figures for the whole year, you see?-A. No, that is true.

## By Mr. Thorson:

Q. We have heard a statement to the effect that there were 18,000 persons in the industry?

Mr. Donnelly: That would include their sales agents, collectors and everybody.

Witness: The average number of employees in 1933-1934 is 3,000 for 1933 and 3,700 for 1934, in the blue book gotten out by the Bureau of Statistics.

The Chairman: That is the actual labour in the manufacturing plants.
Mr. Golding: The number indicated in the Price Spreads report for 1933 probably includes the number of agents and everything else.

Witness: Yes, I think it does.
The Chatrman: I think we can proceed, Mr. Macdonald.
Witness: I perhaps left a wrong impression there. The questionnaire sent out on behalf of your committee is not extensive and seeks to establish the rate trend in rate per hour in February, 1935 and February, 1936, as compared with the figures of the Royal Commission above shown. We seek merely to carry on their information, up to date.

In addition your committee are asking the companies for information as to trends in the wage rates from 1913 to 1932, so that a comprehensive picture of that trend over the period 1913 to 1936, may be available.

## (c) Factory Overhead:

No extensive study of factory overhead was made by the Royal Commission, excepting as to a few typical implements in a few individual years. This has been the subject of a comprehensive section of the questionnaire of your committee, reading as follows:-

## Section IV-Manufacturing:

A. Furnish a break down of factory cost (manufacturing account) for the year 1913, and for each of the years 1921 to 1935 inclusive, for each plant in Canada and in the United States where manufacturing or assembly is performed, using the headings indicated hereunder. I might explain that "factory cost" is what in our accounting phraseology is termed "manufacturing account"; although, I notice that the International Harvester Company use a different phraseology, I think they call it "cost of shipments", but that is probably American accounting phraseology.

Now there is:-

1. Direct Materials (this is (e) on Table X) at factory laid down price, as charged to production of implements, machines and parts manufactured for sale.
2. Direct Productive Labour (that is (f) on Table X ) as charged, at cost, to production of implements, parts, and machines manufactured for sale.
3. Inspection-if not included in B.
4. Factory Expense (also called overhead of burden) under the following main headings, providing details of the constituent items thereunder to the fullest extent possible.
Now, these will help to visualize for you the constituent items which go into making up factory expense. They are:
(a) Indirect Labour; e.g., superintendence, foremen, factory trucking, watchmen, sweepers, stores clerks and storemen, receivers, etc., and factory clerks, etc.

Then, there are what are called indirect materials:-
(b) Indirect Materials; e.g., Cleaning materials, wipers, small tools and dies, etc.

Then there is what I have called, factory expense-variable, and I have segregated these into component parts. These are items of factory expense which will vary to an extent in terms of production; for instance, if you are making 1,500 units in a plant in a year and then you step that up to 7,500 units, you may expect these factors to vary more or less directly in relation to production. They are:-
[Mr. Walter J. Macdonald.]
(a) Repairs and renewals to machinery, etc.
(b) Power.
(c) Heat and light and water.
(d) Liability insurance.
(e) Insurance on raw materials and work in process.
(f) Royalties.
(g) Factory office expense.
(h) Pattern expense.

Then, there are the fixed items in factory expense, items which will not vary to any eonsiderable extent with production. They include,
(a) Rental items-

1. Insurance on buildings.
2. Taxes.
3. Building repairs.
(b) Insurance on machinery.

Then we have: (e) Depreciation-
(a) On buildings-state rates \% in each year.
(b) On machinery and equipment-state rates per cent in each year. These are fixed items.
Then there are ( $f$ ) Adjustments, and ( $g$ ) Experimental work; 7 interestif it is part of manufacturing cost. In addition to that I have asked them this:

If any of the expenses enumerated above fluctuate substantially from year to year-that is, between 1913 and 1935-give the reason for the fluctuation.

Now, that is quite a feature, and I am not just sure what we will get from that; but I think it will be very interesting to trace.

Then, you will notice: Subsidiary plants; if any of your raw or partially processed materials come from a subsidiary or controlled plant furnish manufacturing accounts for that plant also.

Foundry: Do you operate your own foundry, if so are foundry casting costs included as raw materials? If so, furnish manufacturing accounts also for foundry.

Some of these companies have different ways of keeping their accounts than others, and so far as possible we want to get them on a comparable basis.

Here is a point about which Mr. Thorson asks: We have asked them to furnish a statement of factory cost for each of the machines listed hereunder, in 1913 and in each of the years 1921 to 1936 inclusive; and we have indicated the forms to use. The machines are as follows:-

2 furrow $14^{\prime \prime}$ gang plough only
$14^{\prime}$ single disc
$9^{\prime}$ Stiff tooth cultivator-duck foot
$8^{\prime}$ binder complete
6 ' mower
cream separator 450 lbs. capacity
tractor 3 ploughs or 4 ploughs
reaper thresher
$10^{\prime \prime}$ walking plough
4 section iron diamond harrow with cross bar
13 run single dise $7^{\prime \prime}$ spring drill
$10^{\prime}$ dump rake.
We also asked them to furnish us with any information they had with respect to the tiller combine, which I am told is also known as a one-way disc.

We have also asked them to outline briefly the factory costing procedure in each plant, particularly as to,
(a) Distribution of burden (factory overhead)
(b) Distribution of indirect labour costs such as Supervision, Superintendence, Inspection (if not considered a direct cost) Watching, Sweepers, etc.
(c) Distribution of indirect material costs such as wiping rags, sweeping materials, small tools, dies, etc.
(d) Treatment of stores labour and clerical expense
(e) Unabsorbed burden and stores overs and unders.

The statement of factory costs will be broken down in the schedule substantially as it is broken down in table X .

## By Mr. Senn:

Q. Before you leave the question of factory costs, did you give any consideration to finding out whether Canadian factories are as efficient as the factories in the United States with which they come into competition; whether their machinery is as up to date, and all that kind of thing?-A. Mr. Senn, I think that is a problem that the committee should consider, and I think that you have got to consider also how that can be detected. I think it is a veryl interesting avenue of inquiry.
Q. Efficiency of machinery has an important bearing on the cost of production?-A. Agreed. It is a pretty hard thing for anyone but a highly qualified production engineer, one specialized in this line of production, to determine.

## By Mr. Mitchell:

Q. Would there be no indication of that in the Davidson report?-A. No.

The Charrman: The Davidson report did not give any information with respect to the machinery in the plants.

Witness: The Davidson report said in effect that a machine worth 100 . in 1913 is now worth 170 . by reason of the quality values which have been built into it.

Mr. Mclean: Will Mr. Macdonald finish before one o'clock?
Witness: No, I will not, but I would like to reach the end of this section, if you don't mind. I am almost at it. I want to comment on certain items in factory cost which will bear careful examination.

Mr. McLean: It would take some time?
Witness: No, I do not think so.
Special Features: As to taxes, we have asked the companies for this information; the municipal taxes for each of their plants for the years 1913 to 1935 inclusive on each of the manufacturing plants owned by each company and/or its subsidiaries in Canada. In this way it should be possible to evaluate the upward trend in municipal taxation rates in the period under review as a factor in cost of production.

Then, depreciation. This feature will require to be carefully considered and it is worthy of note in the Royal Commission record that the three large companies wrote off $\$ 650,000$, approximately, in depreciation in 1930 and only $\$ 400,000$ in 1933.

One of the difficult problems confronting your auditor is the determination of what is a normal factory overhead as a percentage of prime cost in view of the large fluctuations in production volume from year to year and this more particularly in view of the fact that two different systems of distribution of
[Mr. Walter J. Macdonald.]
factory overhead are utilized by the companies with whom I have discussed the matter. One of the companies computes its factory overhead as a percentage of direct labour cost while another distributes its overhead on the basis of labour plus material cost.

I think we have covered that all right and that is a suitable place at which to break off.

## By Mr. Robichaud:

Q. Will you give us the percentage of pig iron and steel used in 1913 and 1935?-A. That is statistical information which would only be available from the Bureau of Statistics.
Q. I think that is very important?-A. I understand that their records are more or less incomplete. Do you think it would be possible to supply that, Mr. Rutherford?

Mr. Rutherford: Our records start with 1919.
Witness: That is where the difficulty is.
The Chairman: If it is agreeable, we will adjourn to resume this afternoon at 3:30 o'elock.

Committee adjourned at 1 o'clock p.m. to meet again at 3:30 o'clock p.m. this day.

## AFTERNOON SESSION

The Committe resumed at $3: 45$ p.m.
The Chairman: We have a quorum, gentlemen, I think. We will have Mr. Macdonald continue his statement. Order, gentlemen, please.

Walter J. Macdonald, Auditor, recalled:
Witness: There was one point asked this morning, that was in connection with the percentage of the Massey Harris company export sales and foreign business to its total sales. It is as follows, for the years 1927 to 1933:

| Year | Per cent | Year | Per cent |
| :---: | :---: | :---: | :---: |
| 1927. | 65 | 1931. | 79 |
| 1928. | 60 | 1932. | 69 |
| 1929. | . 69 | 1933. | 67 |

## By the Chairman:

Q. That is their export sales?-A. That is the proportion of their total business which is done in countries outside of Canada. The wording is: "the percentage of the Massey-Harris company's export sales and foreign business to its total sales."

## By $M r$. Donnelly:

Q. You do not know anything at all about the last couple of years?-A. Nothing yet, Mr. Donnelly. Naturally, it is covered in the questionnaire, but we have no information at the present time as to just whether that ratio continues.

The Chairman: Continue, Mr. Macdonald.

Witness: We finished up with factory costs. There is another matter arising from the discussion of factory costs. It has already been indicated that the International Harvester Company manufactures in Canada only a proportion of the implements and parts which it sells. The remainder are imported from the United States factories and in that respect I draw your attention to that section in the report of the Royal Commission on Price Spreads and Mass Buying in which the following statement is made:-

The Chicago company has made a substantial profit on shipments to its Canadian subsidiaries, the prices which it charged for such shipments being determined by the regulations of the Customs Division of the Department of National Revenue. This should be appreciated when considering the combined figures shown in statement $2-\mathrm{A}$ relating to cost of sales, gross profit and net profit or loss."

The percentage of gross profit to cost of sales in the case of the International Harvester Company of Canada Limited is lower than the similar percentages for the other three companies. One of the reasons for this is that the shipments received from the International Harvester Company, Chicago, are included in the Canadian company's costs at the laid-down values for duty purposes in Canada which have been higher than the cost of manufacture of these products. (This may not apply to the years 1932 and 1933 when costs are said to have been greater than in previous years.)
Under examination in regard to this practice Mr. Morton of the International Harvester Company indicated that the excess charge to the Canadian company by the United States organization by reason of this practice amounted to 10 per cent or 12 per cent of the value at which the product was charged to the International Harvester Company of Canada Limited.

## By Mr. Thorson:

Q. That is, they were charging to the Canadian branch company at cost, plus the increase in valuation for duty purposes?-A. That might be an interpretation to put upon it.

## By Mr. Donnelly:

Q. Were they compelled to do it; was that done by the government or did they do it of their own volition?-A. Naturally, this was the subject of considerable discussion in the Price Spreads inquiry, and the gist of it is this, as I see it: The Customs officials say to the company importing, the duty on that implement should be this, and on that duty rate they are forced to pay duty. If the company charges less than that they have to pay a dumping duty amounting to the difference.

## By Mr. Thorson:

Q. If there had been no duty on agricultural implements these implements would have been charged to the Canadian branch of the International Harvester company at less than the amount at which they were charged?-A. That is what one might infer, yes.
Q. Then they would have been charged to the Canadian Branch company at cost of production?-A. That I cannot tell at the present time.

## By Mr. Donnelly:

Q. Apparently you could give us some idea. You say that what they pay is 10 or 12 per cent higher than the cost of production. If you take that 10 or 12 per cent off that you would get the cost of production.
[Mr. Walter J. Macdonald.]

Mr. Thorson: Yes, if 10 or 12 per cent was added to the cost of production on account of the valuation for duty purposes.

Witness: No. What Mr. Morton said was that the effect of the practice amounted to 10 or 12 per cent of the value at which the product was charged to the International Harvester Company of Canada. That is to say, if the article was charged to the International Harvester company at $\$ 100$, the amount of the up-charge established by reason of the customs practice would be $\$ 12.00$ -from $\$ 10.00$ to $\$ 12.00$; but that does not necessarily infer that $\$ 88.00$ or $\$ 90.00$ is the factory cost of production in the United States where the article originated.

Mr. Thorson: I do not quite understand you.

## By Mr. Needham:

Q. Do I understand from that, that that price is 10 per cent higher than the Canadian cost to manufacture?-A. No. The point is this-I do not know whether I can put it in brief for you or not. In the beginning we said that the International" Harvester Company of Canada purchased from its United States affiliates, or the parent company, 50 per cent of what it sold in Canada. Now, these are apparently machines and parts which they were taking. They were not raw materials. Under normal circumstances they would charge the Canadian company, I would infer from the evidence, $\$ 88.00$, but actually they charged $\$ 100.00$.

## By the Chairman:

Q. Because of the regulations of the Customs Department?-A. Yes, because of the regulations of the Customs Department.

## By Mr. Cleaver:

Q. Do I understand you correctly then that if they did not charge this amount which was in excess of what they would have charged in ordinary business dealings that they would have been subject to a greater duty?-A. Yes, to a dumping duty as well.
Q. So that they actually billed their goods to the Canadian plant at a higher price than they wanted to in order to escape the dumping duty, or in order to get the goods over at the cheapest possible price?-A. Yes, I think it would be fair to say that they charged at more than they normally would.

Mr. Donnelly: That is what I was saying.

## By the Chairman:

Q. As taken from this statement?-A. As taken from this statement.

## By Mr. Donnelly:

Q. If we were to take 10 or 12 per cent of the price which they paid duty on to the government, then we would get what is cost them to produce the article in Chicago.

The Chairman: Does not that bring up the question on which we have heard a good deal of discussion on many occasions, as to whether or not these companies might be selling their goods in countries for export at a lower price than in the country of origin? There may be something of that in this particular point.

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Mr. Thorson: Yes.

\section*{By Mr. Needham:}
Q. Have you taken up with the companies anything in regard to stabilizing replacement cost?-A. I am coming to that.

The Chatrman: I think we should let Mr. Macdonald proceed.
Witness: No information was elicited by the royal commission on the probable effect in dollars and cents per annum of this practice which I have referred to, but it is obvious that the diversion of profits from the Canadian company to the parent organization in Chicago must have been considerable since it is noted that in the years 1929 and 1930 the Canadian company purchased from affiliated companies in the United States goods to the value of \(\$ 10,853,245.51\) and \(\$ 7,359,459.61\) respectively. In subsequent years the purchases were not so considerable.

\section*{By Mr. Thorson:}
Q. One of the causes of the Canadian company not making a profit might have been that the goods were billed to the Canadian branch at this higher rate?-A. Agreed.
Q. And that the American branch of the company would make that extra profit?-A. Exactly
Q. Whereas if it had billed the Canadian company at the lower rate, the Canadian company might have shown a profit?-A. Exactly. It meant that the profit was diverted. Put it this way, that the profits of the company became chargeable for income tax in the United States rather than in Canada. I do not know whether the fact of income tax has any bearing, but that gives you the import of it.
Q. Have you any idea what amount that diverted of profit?-A. Basing it on what Mr. Morton said, in the year 1929, you would have about \(\$ 1,300,000\) diverted; that is on \(\$ 10,853,000\). But taking the period of 1930 with \(\$ 7,359,000\) you would have a little under \(\$ 900,000\). That would be \(\$ 2,200,000\) in the years 1929 and 1930. That has a definite bearing on whether the company is making a profit or loss in terms of the way this committee is approaching the situation. Continuing:

The company is being asked to produce for the committee a statement of the effect in dollars per annum of this practice upon the profits of the Canadian company for the years 1913 to 1935 inclusive.

I am informed that this ruling is not effective on all shipments from the United States affiliate of the Harvester Company, but will endeavour, if possible, to authenticate the reply when submitted, and to place before you at that time more definite information.

Note: As a matter of interest the financial statements of the Canadian Company show extra compensation for officials and employees as follows:

I am obtaining information on that line also.
By Mr. Thorson:
Q. Would that enter into the question of factory overhead?-A. No.

By Mr. Donnelly:
Q. Bonuses?-A. Yes. They would be appropriations of profit.
Q. Bonuses to high officials?-A. That is a matter of conjecture.

\section*{By Mr. Thorson:}
Q. Would that be an appropriation of profit?-A. Appropriations from profit. In other words, suppose that their sales had been \(\$ 1,000,000\), and that
[Mr. Walter J. Macdonald.]
they made \(\$ 100,000\). They might appropriate \(\$ 25,000\) in year-end bonuses, reducing their profits to \(\$ 75,000\). But it has always been treated as a year-end adjustment the same as dividends.
Q. What would they do in the years that they were supposed to have lost?A. They do not do anything of that description.
Q. Nothing of the sort?-A. No.
Q. It is only in the years they made a profit?-A. In the profitable years.

The Charmman: All right. Will you continue, Mr. Macdonald?
Witness: That concludes what might be termed the caption under manufacturing. The next main caption is distribution.

\section*{Distribution}

From table No. 6 of the auditor's report as printed in the proceedings of the royal commission of 1934 , it is adduced that the farmer's dollar spent in the purchase of farm implements was divided somewhat as follows in 1929:-

leaving a balance available for management expense, collection and bad debt expense, experimental work, etc., net of interest received \(12 \cdot 4 \mathrm{c}\).

\section*{By Mr. Thorson:}
Q. \(47 \cdot 7\) cents between factory cost and- -A. And overhead.
Q. -the price that the farmer pays?-A. Administration. Yes, exactly.

From this it will be obvious that the cost of distribution is almost as large a factor in the price of farm implements as is the cost of production at the factory, amounting to \(35 \cdot 3\) cents on the dollar.

I shall deal with the factors of distribution in the order in which they appear in Mr. Graham's report.
I. \(A \& B\).

\section*{COMPARISON BETWEEN THE CANADIAN AND UNITED STATES SYSTEMS OF DISTRIBUTION}

The information available to the Royal Commission on Price Spreads and Mass Buying on this phase is incomplete and the auditors indicate that they have been unable to obtain accurate comparisons between prices north and prices south of the international boundary.

If you wish, I can read the section of the auditors' report in which that is covered. It is pages 31 and 32 of the auditor's report.

\section*{By Mr. Donnelly:}
Q. How do they approach this question? Do they approach it at all?-A. They sought to obtain information. Perhaps if you are interested, it should be read.

\section*{By Mr. McLean:}
Q. Is that from Price Spreads?-A. No. It is from the auditor's report.
Q. Which auditor?-A. The auditors to the Price Spreads Commission.
Q. It will be in the evidence?-A. It is in the evidence, but it is in fragmentary form. You know how it goes, they read a part and somebody interjects a question. I shall read it. Page 31:-

\section*{COMPARISON OF SELLING PRICES IN CANADA AND THE UNITED STATES}

It is impossible to make any accurate comparison of the retail selling prices of particular implements or parts in Canada with those prevailing in the United States, for the following reasons:
1. The method of selling in the two countries is entirely different.
2. With a few exceptions only, the machines sold in Canada are not entirely comparable technically to the machines sold in the United States. This is exclusive of machines manufactured in the United States and exported for sale in Canada.
Generally speaking, in the United States the agricultural implement manufacturers sell their products to dealers who in the past have usually been responsible individuals or companies with some capital. While United States manufacturers prepare a suggested retail price list which their dealers may use as a guide if they so desire they make no actual stipulation as to the retail price to be charged to the farmers. The prices at which implements and parts are sold to the farmers are decided upon by the dealers, and may vary considerably. Dealers within a comparatively short distance of each other may sell the same machine at different prices; one dealer may sell a number of machines at one price and clear the remainder which he has on hand at greatly reduced prices. The retail price of a particular machine cannot therefore be accurately determined.
Mr. Needham: This is not applicable to western Canada, is it?
Mr. Thorson: No. He is speaking of the United States.
Mr. Needham: Of dealers?
Witness: This is the United States dealer. Continuing:-
In Canada, on the other hand, the Canadian manufacturers set the retail price at which implements and parts are sold to the farmers. They expect their agents to comply with the published price lists and state that the vast majority of sales are made in compliance therewith. The officials of some of the United States companies stated that while they too set the retail prices for use in Canada, they do not check their agents to see that the implements are always sold in accordance with these prices, being content if they receive the net amount, after deducting the agents' commissions.

The officials of the United States companies stated that the selling prices in Canada are somewhat higher than the average retail selling prices in the United States for implements manufactured in the United States and sold in both countries. They stated that for purposes of a general comparison the prices for their products shown in the Canadian retail price lists could properly be compared with the prices shown in the suggested retail price lists in the United States, after giving effect to freight adjustments. Comparisons were made of the selling prices at comparable points in Canada and the United States for a number of machines manufactured in the United States using the suggested retail price in the United States and the published retail prices in Canada as a basis, after giving effect to freight adjustments. It is impossible, however, to verify without a considerable amount of research, whether or not the basis of comparison used is a fair one. For this reason the comparisons made are not submitted in this report.

No real comparison can be made of the selling prices in Canada and the United States in the case of machines manufactured in Canada as the Canadian manufacturers sell only a very small percentage, if any, of their output in the United States.

The selling prices of machines manufactured in Canada cannot satisfactorily be compared with the retail selling prices of machines produced by other manufacturers in the United States owing to technical differences in the machines manufactured by different companies. Any such comparison would be valueless for this reason.

Similarly any attempt to compare the retail prices of comparable repair parts in the United States and Canada might lead to incorrect conclusions owing to the fluctuating prices prevailing in the United States.

Your committee has approached this matter from a slightly different angle and this point, I am told, will be dealt with in the information available from surveys now being made by the provincial governments.

They are sending representatives down to investigate this matter on the spot close to the international boundary in certain of the provinces.

\section*{By Mr. Thorson:}
Q. With a view to giving comparable prices?-A. Yes.
Q. On comparable implements?-A. To the farmer in each case.
Q. On each side of the line?-A. Yes.

\section*{By Mr. McLean:}
Q. Do you know how many of the governments are doing that?-A. I am not quite sure. Mr. Graham has full information on that. He has been handling that end himself. I do know that both Manitoba and Saskatchewan have started, and that they are working in conjunction and along similar lines. Continuing:

\section*{I. C. Commissions.}

No extensive inquiry into this phase was conducted by the Royal Commission but it will be observed from table X that the rates of commissions have, increased considerably over those effective in 1913.

Your committee ask the implement companies for a comparative statement of rates of commissions on typical farm implements in the years 1913 to 1935 inclusive, together with some explanation of the varying rates of commission in force from time to time.

\section*{I.C. 2 Credit Policy.}

This phase of distribution was thoroughly covered by the royal commission in that they made a careful study of the relationship between cash prices and term prices. They conclude and it is evident from their figures that the percentage added to cash price for deferred payment contracts is not commensurate with the collection costs and bad debt losses incidental to the credit business.

The report of the auditors shows the following information at page 22:-

\section*{Company No. 1}

Average for ten years 1924 to 1933-
Percentage of collection expense to instalment sales.... \(10 \%\)
Percentage of bad debt loss to instalment sales....... \(9 \%-11 \%\)

Company No. 2.
Average for eight years 1926 to 1933-
Percentage of collection expenses to instalment

The officials of Company No. 1 above estimated the additional reserve which should have been provided at the end of 1933 to adequately provide for the receivables outstanding at that time. If this additional estimate was added to the losses incurred during the period 1924 to 1933, the percentage of the bad debt losses to instalment sales would be increased to \(16.5 \%\).

\section*{By Mr. Donnelly:}
Q. Does it give you anything there as to the increased price of sales as well? There is not only the agents' sales cost. You know if I am agent for example, for the International Harvester in one of these little villages out in the country, and a man wishes to buy a binder or combine, I will get in touch with the head office and they will send a salesman?-A. Yes.
Q. He comes from the company?-A. Yes.
Q. The salesman comes out and stays there probably a day or two?-A. Yes.
Q. To try and sell that combine?-A. Yes.
Q. And that is extra expense for sales?-A. Well, that is selling expense.
Q. That is selling expense?-A. Yes.

\section*{By Mr. Cleaver:}
Q. As I understand you, if the company were to set up their sales price so that they made an equal profit out of cash and time sales, then the selling price of implements sold on time should be 20 per cent plus whatever interest the company loses through being out the money. That is the position, if I read that paragraph correctly?-A. Yes.
Q. It says it was shown that collection expenses and notes written off as uncollectable over a ten year period had each amounted to about ten per cent. That means a total of 20 per cent?-A. Yes.
Q. Clearance?-A. Correct.
Q. For loss from non-collection and collection expenses?-A. Yes. And if they had a reserve at the end of the period, they would run it up to 26.5 per cent.
Q. So that to set both sets of prices on a par, the time price would have to be 20 per cent plus whatever your loss in bank interest was?-A. Yes.
Q. Or borrowed money?-A. Yes, above the cash price, in respect to that portion of sales which was on the deferred basis.
Q. That is what I am referring to.-A. Yes. In other words, here is a binder which is sold for \(\$ 263\) on a down-payment of, we will say, \(\$ 70\). That would mean that on \(\$ 193\) there would have to be a surcharge. The actual amount of that surcharge in the case indicated here is \(\$ 14\). They charge \(\$ 279\), the two-fall price, which is \(\$ 16\) in excess of their cash price; obviously reducing that down, it is less than 5 per cent. But it costs them actually, according to those figures, somewhere well in excess of 20 per cent to extend that credit.
Q. So that they are really subsidizing the time sales by charging the cash buyer too much for the implement?-A. That is true.

Mr. Mclean: That is one of the big troubles in the industry. It has always been that way.
[Mr. Walter J. Macdonald.]

Witness: Those are very important figures, and I am very glad Mr. Cleaver commented on them; because it struck me that it was a salient point in the findings of the Price Spreads Commission.

\section*{By Mr. Donnelly:}
Q. The men who buys for cash never gets consideration in the price?A. No. He does not get as much as he should, in terms of these figures.

Mr. Donnelly: That is so. One of the reasons for those bad debts is that the local agent goes out and says, "Well, I will go and get \(\$ 500\) on this combine I will get a certain amount of commission. This man is probably no good, but I am going to get my commission on the \(\$ 500\). Let the International Harvester collect the other \(\$ 1,000\) or \(\$ 1,500\). If they can collect some of it, I will get some of it. If they do not, all right." He gets the salesman to go out and make a sale, because he knows he is going to get his commission, although he knows the man is no good.

Mr. Neediam: Under the International contract, the agent is liable.
Mr. Donnelly: Buit nine-tenths of the agents are not worth anything. Nine-tenths of them will sign anything.

Mr. McLean: Some companies, of course, accept or reject the purchase immediately. If they reject it, the agent can use his judgment about going on. If they accept it, he can hold them to it, and they have got to pay his commission whether they ever collect or not.

The Chatrman: Will you proceed, Mr. Macdonald?
Witness: Your committee has devoted a section of the questionnaire to the question of bad debts and other collection losses. It is section VII which I will read:-

\section*{Section VII-Bad Debts}

State the following in regard to bad debts as an expense factor:-
A. An analysis of each bad debt, repossession or similar reserve account for each of the years 1926 to 1935 inclusive, broken down as follows-
1. The amount at credit of the reserve at the close of the 1925 fiseal year,
(a) As to Canadian sales,
(b) As to foreign sales.
2. The amounts credited to the reserve as additional provision in each year, 1926 to 1935,
(a) Canadian,
(b) Foreign.
3. The write-offs debited to the reserve, net of recoveries, in each,
(a) Canadian,
(b) Foreign.
4. The amount of credit of the reserve at the close of the 1935 fiscal year,
(a) Canadian,
(b) Foreign.
5. Any other factors in the reserve not above enumerated, give particulars.
B. State where the reserves indicated in A. 2 were provided from, e.g.
1. Profit and loss account,
2. Surplus account,
3. General reserves,
4. Other sources.
C. The amounts written off for bad debts, repossession and similar losses in each of the years 1926 to 1935 but not debited to the reserve accounts indicated in A, where debited in your operating accounts and financial statements, and divided as between Canadian and foreign accounts.
D. Are these reserves (A.4) considered sufficient to take care of all losses in collection of accounts receivable outstanding at the close of the 1935 fiscal year in the ordinary course of business,
(a) By your management,
(b) By your auditors.
E. If these reserves be considered inadequate (or over adequate) for the purpose, state approximate amount by which they should be increased (or decreased).

Note-The information required in A, B and C may perhaps be given in tabular form.

\section*{I.C.3. Servicing.}

The royal commission devoted particular attention to the question of parts sales (pages 27 to 29 auditors report) and established that the percentage of parts sales to total sales in Canada of the two largest companies appeared as follows:

International Harvester Company of Canada-
Low Year 1928 . . . . . . . . . . . . . . . . . . . . . . . . . . \(8.6 \%\)

High Year 1933. . . . . . . . . . . . . . . . . . . . . . . . \(28 \cdot 8 \%\)
Massey-Harris Company, Limited-
Low Year 1929. . . . . . . . . . . . . . . . . . . . . . . . . . 11.4\%
High Year 1932 . . . . . . . . . . . . . . . . . . . . . . . . . . . \(33 \cdot 4 \%\)
It is obvious that in years of low implement sales the sales of repair parts will be correspondingly high.

The maintenance of large repair parts stocks at many points of operation is commented on in page 28 of the auditors report as follows:

\section*{Stocks of Repair Parts.}

Under existing legislation in the provinces of Manitoba, Saskatchewan and Alberta, companies are required to keep at stated places within the province, all necessary repair parts for machines sold by them (subject to minor exceptions) for a period of ten years from the date of the order. In practice many companies maintain stocks or repair parts for considerably longer periods than is required under the legislation referred to. An indication of the number of places where repair part stocks are kept, exclusive of the main factory warehouses, is given in the following table showing the number of places where such stocks are maintained by two large Canadian manufacturers:-

\footnotetext{
[Mr. Walter J. Macdonald.]
}

Table 15.-Number of Repair Part Stocks of Two Manufacturers
Company A. Company B.
\begin{tabular}{|c|c|c|}
\hline Warehouses at branches and transfer points. & 20 & 34 \\
\hline Stocks with agents. . . . . & 1,648 & 2,404 \\
\hline & 1.668 & 2,438 \\
\hline
\end{tabular}

Or slightly in excess of 4,000 places where they keep parts stocks.
The officials of all companies questioned regarding sales of repair parts stated that it was their company's policy to maintain stocks at as many places as possible in order that the farmers should be enabled to obtain any necessary repairs with a minimum of delay. They stated that this policy is expensive as it is necessary to maintain a very large inventory of spare parts which turns over slowly and a considerable amount of clerical work is involved in recording and accounting for the repair parts at the various places where stocks are maintained. Losses due to obsolescence are also considerable.

By Mr. McLean:
Q. Those losses, of course, are charged to their agents to quite an extent?A. For their losses due to obsolescence they would not charge up on top af loss.

Mr. McLean: Oh, yes, they do.
Mr. Needham: They always mark up their parts.
Mr. McLean: They charge up so much every year, do they not?
Witness: In regard to turn over of repair parts the average for the ten years ending 1933 for both of the large companies was similar, amounting to only one-third of the total inventory value of repair parts carried. In other words, the spare parts stocks are only turned over once in every three years. That means if they carry \(\$ 10,000\) of stock at any point, their normal sales would only be about \(\$ 3,300\) a year.

The auditors submitted a table (table 17, page 30 ) in which they compare the selling price of all repair parts for seventeen machines with the selling price of each of the completed machines. From this it is adduced that the average ratio of repair prices to completed machine prices was 7 to 4 ; or to put it in another way, to build a new machine from repair parts would cost \(\$ 175\) for a machine costing in its completed state \(\$ 100\).

It is interesting to note in this connection that in respect of the binder one of the companies charges on a basis of \(\$ 226\) for parts to each \(\$ 100\) in completed machine values.

\section*{By Mr. Donnelly:}
Q. There are certain parts that are used more than anything else?-A. Agreed.

Mr. Donnelly: Those are the ones you find are up in value.
Witness: As the binder part sales comprise a large proportion of total sales, this might be significant.

Mr. Thorson: That does not touch Mr. Donnelly's point.
Witness: I was aware of that point, and it is well made. I do touch on it
In view of the very complete information tabulated by the auditors to the Royal Commission it has not been considered necessary to deal with this phase in the questionnaire submitted on behalf of your committee, but it is intended
in visiting the plants, that some inquiry should be made into the relative selling prices of quick moving as compared with slow moving repair parts and as compared with factory costs thereof.

\section*{II. Interest Rates Charged.}

The following is quoted from the report of the auditors as to interest rates:
\begin{tabular}{|c|c|c|c|}
\hline & Before Maturity & & After Maturity \\
\hline Ontario.. & \(6 \%\) per annum & 7\% & per annum \\
\hline Manitoba. . & 7\% & 8\% & \\
\hline Saskatchewan. . & 7\% " & 7\% & " " \\
\hline Alberta. & 7\% & 8\% & " \\
\hline
\end{tabular}

\section*{III. Freight Rates.}

This point has not been covered by the Royal Commission. You have already heard a submission by Mr. Bangs of the Bureau of Statistics and the statistical information furnished by him must be used by your committee in evaluating the increase in freight as a distribution factor applied to typical implements, having due regard to the difference in weight of the present day machine compared with that of 1913.

\section*{IV. Trade In Problem.}

This matter was not touched upon in the report of the Royal Commission.
It is anticipated that information will be available to your committee from the provincial governments in this regard.

It is difficult to elicit such information by questionnaire.

\section*{V. Retail Prices:}

I have already dealt with retail prices of repair parts in one of the foregoing paragraphs.

The Royal Commission tabulated the prices of certain typical implements, (a) over a five year period between 1929 and 1933 inclusive; and (b) in certain years between 1913 and 1934. Detailed information as to the trend in prices over the whole period 1913 to 1935 is now being requested by questionnaire, and we have had a partial reply at least from one of the companies. It is quite comprehensive.

\section*{VI. Export:}

The Royal Commission confined its activities to the Canadian end of the operations of the companies. Your counsel and I have compiled a questionnaire in regard to this phase of the enquiry and have already received some replies thereto.

That is referred to in section VIII of the questionnaire. I do not think it is worth while reading it to you, unless you are particularly interested.

Then I come to my conclusion: This, gentlemen, concludes the remarks I have to make at this time. I pay tribute to the auditors of the Royal Commission for the very useful tabulations which they have produced and which have a definite value to your committee.

I think it will be obvious to you, that as your auditor, I have a heavy program of work ahead of me in tabulating, digesting, investigating and finally reporting to you on the replies which we shall receive from the implement companies concerned.
[Mr. Walter J. Macdonald.]

\section*{By Mr. Thorson:}
Q. Mr. Macdonald, when will it be reasonable to expect that the replies to the questionnaire will come in, in such form that they can really be proceeded with?-A. On Tuesday I went to Toronto and met the implement companies for the second time. As you have been told at other meetings their representatives came here on the 8 th of April and we had a satisfactory conference at that time at which our needs were thoroughly explained to them. The understanding was that I would go to Toronto and meet them there to discuss certain phases of the questionnaire on which they were not able to give an idea of the reliability or accessibility of the underlying records. That visit took place on Tuesday. There were present eight representatives from the three large companies, and I indicated that the Committee felt that there must be a reasonable amount of speed in obtaining these replies. I asked them as we went through the subject matter which was before us, namely three sections of the questionnaire, to have this thought in the back of their minds and I would like them to tell me at the conclusion of the interview how much of it-and if possible I wanted it all-they could let me have by the 25th of May. The volume of material required is considerable, but with a few compromises (which are only temporary ones) the companies agreed to place in my hands practically all the information that I asked for by the morning of May 25th.
Q. Have the companies had the whole questionnaire now?-A. They have had the whole questionnaire, excepting a few questions which will not involve much work.

\section*{By Mr. Donnelly:}
Q. You said that the provinces were making certain investigations. Have you had any answers from them?-A. Not yet, but there is some information from the provinces indicating that their replies will be available within a reasonably short space of time.

\section*{By Mr. Thorson:}
Q. After you get the replies to the questionnaires can you form any opinion as to the time that will be necessary in order to tabulate, digest, investigate and report on them?-A. Well, that is a very difficult question to answer. It depends entirely on the comparability of the replies that are received.
Q. Yes?-A. I have indicated to you as I went through this material to-day a number of instances where the records of the companies are not comparable. I know that to start with.
Q. Where they are not comparable what would have to be done?-A. You would have to go into their plants and examine their records and endeavour to make them comparable.
Q. Yes?-A. You would have to take this factor out of here and put it up here in order to make a comparable picture. That is probably the most difficult matter ahead of me. Another difficult matter is the correlation of the raw material information with such carts as we have seen here to-day, and the explanation of these very apparent differences-I would almost say absur-dities-when you apply such a yardstick, for instance, to the figures we have in table X .
Q. Then I suppose when you get the replies you would want to test these replies against some other information, statistical or otherwise?-A. That is the point. I frankly feel-it has been said right along, I think in Mr. Graham's initial submission it was mentioned-that I should go into the implement companies and examine their records. Frankly, it is impossible for one man to do that, on account of the mass of records which you will find in a company
of the size of the International Harvester company. And I think in examining them you will probably have to visit both Hamilton and Chicago. The size and volume of records you would find in the Massey-Harris company are beyond my individual powers to examine.
Q. Then, you might have to test them against some statistical information? -A. Yes, from some other sources.
Q. Or some other information that some branch of a department may have?

The Chatrman: Gentlemen, may I suggest that I think the evidence from Mr. Macdonald is now complete. If there are any questions you would like to ask pertaining to his submission you might ask those questions. This other discussion may be taken up later on.

Mr. Ward: Do you not think, following up the question by Mr. Thorson, that if it is made clear to the representatives of the company who will come before this committee as witnesses, it would help if they were told that this committee will expect them to be in possession of all the information with respect to almost anything that this committee may ask? I have in mind the many occasions on which we have found similar witnesses coming before committees and when they got here they had very halting memories, they had excuses, they didn't expect this question to be asked, they did not know, and all sorts of excuses so as not to answer the questions that would be asked by members of the committee. Are these men warned that when they come here they will be expected to answer all questions pertaining to their business? Surely the men who have grown up in the business as executives will be able to answer these questions and to give us information of the type Mr. Thorson has in mind. I do think they should be warned by you, Mr. Macdonald, that they will be expected to be prepared, and this committee will not be satisfied with faulty memories and all the other excuses that we so often find in similar cases where witnesses of this type come before our committees.

The Charman: In reply to that, Mr. Ward, may I say that the implement companies have indicated a very general desire to co-operate with us. We expect that the implement companies will come prepared to lend their full assistance to this inquiry, and to co-operate fully.

\section*{By Mr. Perley:}
Q. You mentioned May 25, do you think it would be possible to call witnesses from the implement companies by that time? What kind of witnesses would you need?-A. I think that is a matter really for counsel to answer. I do not think that I would like to make any reply to that.

Mr. Thorson: For the purpose of analysing this information?
Witness: How long would it take?
Mr. Thorson: Yes, to analyse this information.
The Charman: There is another question, Mr. Perley, it would take some time. I would not hazard a guess at it. I am satisfied it could not be done in less than three weeks.

Mr. Thorson: That is my opinion, too.
The Charman: Before we adjourn may I say that Mr. Rutherford this morning was good enough to hand to me a statement that he prepared on a question that was directed to him the other day. It shows the average wages per hour in the farm implement industry in 1913, and from 1920 to 1935; together with a statement of the number of wage earners and average wages per year in the farm implement and machinery industry from 1920 to 1934. Perhaps the committee would agree to have this included in to-day's evidence?

Some Hon. Members: Agreed.
[Mr. Walter J. Macdonald.]

TABLE I.-AVERAGE WAGES PER HOUR IN THE FARM IMPLEMENT INDUSTRY, 1931, AND 1920 TO 1935
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multirow[b]{2}{*}{Year} & \multicolumn{2}{|l|}{Blacksmiths} & \multicolumn{2}{|l|}{WOOD WORKERS} & \multicolumn{2}{|l|}{Machinists} & \multicolumn{2}{|l|}{Patternmakers} & \multicolumn{2}{|l|}{Moulders} & \multicolumn{2}{|r|}{Painters} & \multicolumn{2}{|l|}{Labourers} \\
\hline & Wages per hour & Relative wages
\[
1913=100
\] & Wages per hour & Relative wages
\[
1913=100
\] & Wages per hour & Relative wages \(1913=100\) & Wages per hour & Relative wages
\[
1913=100
\] & Wages per hour & Relative wages \(1913=100\) & Wages per hour & Relative wages \(1913=100\) & Wages per hour & Relative wages \(1913=100\) \\
\hline & cents & & cents & & cents & & cents & & cents & & cents & & cents & \\
\hline 1913 & 25.0 & 100.0 & 24.0 & 100.0 & 26.0 & 100.0 & 25.5 & 100.0 & 30.0 & 100.0 & 24.0 & 100.0 & 19.5 & 100.0 \\
\hline 1920 & 64.6 & 258.4 & & & 67.1 & 258.1 & 73.7 & 289.0 & 72.5 & 241.7 & 54.0 & 225.0 & 42.7 & 219.0 \\
\hline 1921. & 59.6 & 238.4 & & & 59.1 & 227.3 & 65.8 & 258.0 & 62.7 & 209.0 & 53.7 & 223.8 & 35.6 & 182.6 \\
\hline 1922 & 53.9 & 215.6 & & & 53.7 & 206.5 & 57.6 & 225.9 & 60.9 & 203.0 & 46.1 & 192.1 & 35.0 & 179.5 \\
\hline 1923. & 54.8 & 219.2 & & & 55.8 & 214.6 & 58.8 & 230.6 & 62.1 & 207.0 & 45.7 & 190.4 & 35.1 & 180.0 \\
\hline 1924. & 56.2 & 224.8 & & & 55.8 & 214.6 & 58.8 & 230.6 & 62.0 & 206.7 & 46.6 & 194.2 & 35.1 & 180.0 \\
\hline 1925 & 56.1 & 224.4 & & & 55.6 & 213.8 & 58.8 & 230.6 & 61.6 & 205.3 & 45.7 & 190.4 & 34.6 & 177.4 \\
\hline 1926 & 56.0 & 224.0 & & & 55.6 & 213.8 & 59.2 & 232.2 & 61.6 & 205.3 & 46.6 & 194.2 & 35.0 & 179.5 \\
\hline 1927 & 57.9 & 231.6 & & & 56.5 & 217.3 & 59.2 & 232.2 & 64.4 & 214.7 & 47.0 & 195.8 & 35.5 & 182.0 \\
\hline 1928 & 58.0 & 232.0 & & & 57.0 & 219.2 & 60.0 & 235.3 & 62.0 & 206.7 & 47.0 & 195.8 & 35.5 & 182.0 \\
\hline 1929 & 59.0 & 236.0 & 43.0 & 179.2 & 58.0 & 223.1 & 60.0 & 235.3 & 63.0 & 210.0 & 48.0 & 200.0 & 37.0 & 189.7 \\
\hline 1930 & 59.0 & 236.0 & & & 59.3 & 228.1 & 60.9 & 238.8 & 61.4 & 204.7 & 47.0 & 195.8 & 37.4 & 191.8 \\
\hline 1931 & 53.2 & 212.8 & 43.1 & 179.6 & 54.0 & 207.7 & 58.9 & 231.0 & 52.0 & 173.3 & 42.6 & 177.5 & 35.6 & 182.6 \\
\hline 1932 & 50.8 & 203.2 & 37.5 & 156.3 & 44.8 & 172.3 & 53.4 & 209.4 & 46.0 & 153.3 & 44.5 & 185.4 & 34.9 & 179.0 \\
\hline 1933 & 46.3 & 185.2 & 35.6 & 148.3 & 42.9 & 165.0 & 50.0 & 196.1 & 45.0 & 150.0 & 40.3 & 167.9 & 34.2 & 175.4 \\
\hline 1934 & 44.8 & 179.2 & 37.3 & 155.4 & 43.9 & 168.8 & 47.6 & 186.7 & 48.3 & 161.0 & 39.4 & 164.2 & 33.2 & 170.3 \\
\hline 1935. & 43.5 & 174.0 & 37.0 & 154.2 & 45.0 & 173.1 & 47.5 & 186.3 & 49.0 & 163.3 & 39.0 & 162.5 & 33.0 & 169.2 \\
\hline
\end{tabular}

TABLE 2.-NUMBER OF WAGE EARNERS AND AVERAGE WAGES PER YEAR IN THE FARM IMPLEMENT AND MACHINERY INDUSTRY, 1920 TO 1934


Witness retired.
The Chairman: Shall we adjourn to meet again at the call of the chair? Some Hon. Members: Agreed.

The committee adjourned at 4.45 o'clock p.m., to meet again at the call of the chair.

\section*{HOUSE OF COMMONS}

\section*{STANDING COMMITTEE}

\title{
agriculture and coloniation
}

\section*{MINUTES OF PROCEEDINGS AND EVIDENCE}
(Farm Implement Price Inquiry)
\(\qquad\)

\section*{FRIDAY, MAY 29, 1936}

No. 6

\section*{WITNESSES:}

Mr. V. C. Nauman, Assistant Commissioner of Excise, Department of National Revenue.
Mr. L. E. Allen, Chief of Drawback Branch, Department of National Revenue.
Mr. Edward H. Richards, Dominion Customs Appraiser, Department of National Revenue.
Mr. Lloyd Robert Younger, Reviewing Appraiser, Tariff Division, Department of National Revenue.


\section*{ORDERS OF REFERENCE}

Friday, March 13, 1936.
Ordered,-That the said committee be given leave to print 500 copies in English and 200 copies in French of the minutes of the proceedings and of the evidence before it, together with the papers, documents, and records to be incorporated with such evidence from day to day; and that Standing Order 64 be suspended in relation thereto.

Ordered,-That the said committee be empowered to appoint and employ and pay counsel to assist in the investigation now before it, and also to employ and pay auditors and such experts as may be considered necessary.

Ordered,-That the said committee be given leave to sit while the House is sitting.

Attest.

\author{
ARTHUR BEAUCHESNE, \\ Clerk of the House.
}
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\section*{MINUTES OF PROCEEDINGS}

Friday, May 29, 1936.
The Standing Committee on Agriculture and Colonization met this day at 11 a.m.

The Chairman, Mr. W. G. Weir, presided.
Members present: Messrs. Bertrand (Prescott), Black (ChauteauguayHuntingdon), Bouchard, Cleaver, Coldwell, Davidson, Donnelly, Dubois, Dupuis, Evans, Furniss, Golding, Gosselin, Graydon, Johnson (Lake Centre), Leader, Leclerc, MacRae, McKenzie (Lambton-Kent), Mitchell, Motherwell, Needham, Patterson, Perley (Qu'Appelle), Rennie, Robichaud, Ross, Stirling, Taylor (Norfolk), Tomlinson, Ward, Weir.

In attendance: Mr. R. T. Graham, K.C., counsel for the committee, and Mr. Walter J. Macdonald, C.A., auditor for the committee.

Ordered,-That the tables presented by Mr. R. T. Graham, K.C., in relation to questions asked by the members of the committee at a previous meeting, be printed as Appendix No. 5.

The chairman read into the record letters received from various agricultural implement firms in response to inquiries made by the committee's counsel and auditor.

Mr. V. C. Nauman, Assistant Commissioner of Excise, Department of National Revenue, was called and examined and retired.

Mr. Edward H. Richards, Dominion Customs Appraiser, called, examined (re dumping duty) and retired.

Mr. Lloyd Robert Younger, Reviewing Appraiser, Tariff Division, Department of Customs, was called, examined and retired.

Ordered,-That the submission of Mr. Younger, together with the tables therein, be printed as Appendix No. 6.

The hour being one o'clock, the committee then adjourned to meet again at the call of the chair.

WALTER HILL,
Clerk of the Committee.

\section*{MINUTES OF EVIDENCE}

\author{
House of Commons, Room 231, May 29, 1936.
}

The Select Standing Committee on Agriculture and Colonization appointed to inquire into the prices of agricultural implements met at 11 o'clock, Mr. Weir, the chairman, presided.

Mr. R. T. Graham, K.C., counsel for the committee.
The Chairman: Gentlemen, if you will kindly come to order we shall proceed with our meeting. At the last meeting, Mr. Macdonald, the auditor, in giving his evidence, had two statements in the form of tables to which he referred several times. They were not included in the evidence of that day, and I think we should include them in to-day's proceedings as appendix 5. The title of the tables is " The material cost, productive labour cost, freight, agents' commission and retail price of three specified implements expressed as percentages of the comparative figures for the year 1913;" also "Prices of certain materials used in implement manufacture, freight rates on implements and wages per hour in the implement industry, expressed as percentages of the comparative figures for the year 1913." Then, we have the table which was referred to by Mr. Macdonald as table X.

Mr. Golding: They were not included in the last day's proceedings?
The Chairman: No; they were overlooked. Then there were two or three questions asked by certain members of the committee. I think Mr. Graham has the answers to those questions now, and I think they should be given.

Mr. Graham: Dealing with the question asked by Mr. Evans with regard to the Crowsnest Pass agreement and the comparison of the upturn of prevailing rates on farm implements going west as compared with the Crowsnest, you will remember the answer was the differential was 10 per cent. Mr. Bangs from the Bureau of Statistics drew to my attention certain facts concerning the Crowsnest Pass, and I think the correction should appear in the evidence. I think the safest way to do it would be to read the section,-

That a reduction shall be made in the general rates and tolls of the company as now charged, or as contained in its present freight tariff, whichever rates are now the lowest, for carloads or otherwise, upon the classes of merchandise hereinafter mentioned, westbound from and including Fort William and all points east of Fort William on the company's railway to all points west of Fort William on the company's main line, or any line of railway throughout Canada owned or leased by or operated on account of the company, whether the shipment is by all rail line or by lake and rail, such reduction to be to the extent of the following percentages respectively, namely
Inter alia:
Agricultural implements of all kinds, set up or in parts. . 10 per cent and that no higher rates than such reduced rates or tolls shall be hereafter charged by the company between the points aforesaid: such reductions to take effect on or before the first day of January, 1898.
You will note the importance of this. Mr. Bangs tells me that the agreement provides that a reduction of 10 per cent shall be made in the freight rates then
existing. The agreement provides also that no higher rates than such reduced rates or tolls be charged thereafter. Any increases that have occurred since then would not effect the commodities covered by the Crowsnest Pass agreement, had the agreement remained the law, because these rates are fixed by that particular paragraph. Mr. Bangs tells me also that no rates prior to 1913 are available; that is, it will be difficult to secure rates as far back as 1897. He instructs me further that assuming that in 1918 the prevailing rates in effect approximated the Crowsnest Pass rates, the present prevailing rates would be approximately 40 per cent higher.

The next item to which reference was made is flax prices.
Mr. Leader: 40 per cent would be the prevailing rate now?
Mr. Graham: It would be the differential between the Crowsnest Pass and the prevailing rates. Mr. Donnelly and Mr. McLean asked for certain information about flax prices during the period. Mr. Greenway has secured these data for me. I notice Mr. McLean is not here this morning, but Mr. Donnelly will remember that Mr. McLean asked if the rise in price of linseed oil was justified by the flax price. At that time Mr. Greenway thought that the 1929 prices were higher than the 1936 prices. The reverse is true. I shall file this table and ask that it be included in the evidence. This table will give you the comparative figure for flax as compared with linseed oil.

DOMINION BUREAU OF STATISTICS-INTERNAL TRADE BRANCH
Index Numpers of Wholesale Pryces of Flax No. 1, 1920-March, 1936
\((1929=100)\)
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline - & Jan. & Feb. & Mar. & April & May & June & July & Aug. & Sept. & Oct. & Nov. & Dec. & Year \\
\hline \multicolumn{14}{|l|}{Flax No. 1 C.W., per bushel Fort William and Port Arthur cash basis-} \\
\hline & 80.7 & 86.1 & 87.3 & 85.1 & 86.4 & \(89 \cdot 1\) & 107.0 & 109.7 & \(119 \cdot 3\) & \(122 \cdot 4\) & 114.3 & \(111 \cdot 1\) & \(100 \cdot 0\) \\
\hline 1930 & 80.7
\(105 \cdot 9\)
39.9 & \(105 \cdot 1\)
40.8 & \(102 \cdot 6\)
43 & \(102 \cdot 2\) & \(92 \cdot 2\)
\(44 \cdot 6\) & \(89 \cdot 0\)
45 & \(75 \cdot 2\)
49.7 & \(68 \cdot 3\)
\(43 \cdot 6\) & \(60 \cdot 3\)
\(41 \cdot 0\) & \(54 \cdot 4\)
\(39 \cdot 7\) & \(44 \cdot 3\)
44 & 41.1
41.6 & \(78 \cdot 2\)
\(42 \cdot 1\) \\
\hline 1932 & 41.5 & \(42 \cdot 7\) & 42.7 & \(41 \cdot 5\) & \(35 \cdot 3\) & \(30 \cdot 2\) & \(28 \cdot 6\) & \(30 \cdot 2\) & \(33 \cdot 0\) & 29.8 & \(29 \cdot 3\) & \(29 \cdot 6\) & \(34 \cdot 5\) \\
\hline 1933 & \(32 \cdot 4\) & 32.7 & \(33 \cdot 3\) & \(35 \cdot 3\) & \(46 \cdot 2\) & 57.0 & \(68 \cdot 7\) & \(59 \cdot 3\) & 61.9 & 54.9 & \(58 \cdot 6\) & 59.5 & \(49 \cdot 9\) \\
\hline 1934 & \(62 \cdot 2\) & 63.3 & 62.9 & 63.0 & \(66 \cdot 2\) & 67.8 & \(67 \cdot 2\) & 68.4 & 63.7 & \(56 \cdot 2\) & \(56 \cdot 4\) & 59.0 & 63.0 \\
\hline 1935 & \(60 \cdot 4\) & \(59 \cdot 8\) & 58.2 & \(59 \cdot 3\) & 56.4 & \(51 \cdot 1\) & \(51 \cdot 6\) & \(52 \cdot 1\) & \(57 \cdot 4\) & \(59 \cdot 4\) & \(59 \cdot 4\) & \(61 \cdot 3\) & \(57 \cdot 1\) \\
\hline 1936 & \(67 \cdot 1\) & 66.9 & \(66 \cdot 2\) & & & & & & & & & & \\
\hline
\end{tabular}

May 18, 1936.
Mr. Donnelly: Flax went down and linseed oil went up?
Mr. Graham: Yes. Then there was another item on which Mr. Coldwell, Mr. McLean and several other members wanted information. That was the comparative prices of white pine, fir and oak. Mr. Greenway prepared a comparative table showing the relative prices of Canadian white pine from 1913 to March, 1936, also B.C. fir. I shall file this table and ask that it be included in the evidence.

DOMINION BUREAU OF STATISTICS-INTERNAL TRADE BRANCH
Index Numbers of Wholesate Prices of Canadtan White Pine and B.C. Fir
\[
(1913=100)
\]
\begin{tabular}{|c|c|c|}
\hline & Canadian White Pine & B.C. Fir \\
\hline 1913. & \(100 \cdot 0\) & \(100 \cdot 0\) \\
\hline 1914. & 88.7 & 94.2 \\
\hline 1915. & 81.6 & \(84 \cdot 3\) \\
\hline 1916. & \(93 \cdot 5\) & 88.6 \\
\hline & & \\
\hline 1918. & \(124 \cdot 5\) & \(120 \cdot 2\) \\
\hline 1919. & \(150 \cdot 6\) & 153.9 \\
\hline 1920. & 218.9 & \(142 \cdot 4\) \\
\hline 1921. & 211.1 & \(140 \cdot 1\) \\
\hline 1922. & 184.8 & 126.4 \\
\hline 1923. & 184.6 & \(133 \cdot 3\) \\
\hline 1924. & \(174 \cdot 6\) & \(124 \cdot 2\) \\
\hline 1925. & 167.5 & \(118 \cdot 6\) \\
\hline 1926. & \(165 \cdot 9\) & \(119 \cdot 0\) \\
\hline 1927. & \(167 \cdot 1\) & \(116 \cdot 1\) \\
\hline 1928. & 163.7 & 126.9 \\
\hline 1929. & \(156 \cdot 8\) & 134.0 \\
\hline 1930. & \(156 \cdot 6\) & \(108 \cdot 6\) \\
\hline 1931. & 147.8 & \(86 \cdot 3\) \\
\hline 1932. & \(136 \cdot 4\) & 76.9 \\
\hline 1933. & \(135 \cdot 0\) & \(82 \cdot 6\) \\
\hline 1934. & \(144 \cdot 7\) & 101.4 \\
\hline 1935......... & \(146 \cdot 8\) & \(93 \cdot 3\) \\
\hline 1936-January & \(148 \cdot 6\) & \(106 \cdot 5\) \\
\hline February.
March... & \(149 \cdot 0\)
\(151 \cdot 0\) & 113.5 \\
\hline March & \(151 \cdot 0\) & \(112 \cdot 1\) \\
\hline
\end{tabular}

May 18, 1936.
I asked him to give me the actual price per thousand so that it would give you an indication of the comparative price line in 1913. Oak was \(\$ 70\) per thousand board feet at Toronto in 1913; fir was \(\$ 40.33\) per thousand, and in 1936 (and this oak is red plain), firsts and seconds, this oak was priced at \(\$ 75\) in Toronto. With respect to fir it is now \(\$ 15.50\).

I observe from the answers to our questionnaires that maple is being used in increasing quantities, and in view of the fact that the Bureau of Statistics have no information with respect to maple a comparison is made very difficult.

The figures for oak and fir are as follows:-
DOMINION BUREAU OF STATISTICS-INTERNAL TRADE BRANCH
Prices of OAk and B.C. Fir 1913-March 1936
\begin{tabular}{|c|c|c|c|}
\hline & Oak, red plain firsts and seconds per M bd. ft. at Toronto & Fir, B.C. \(2 \times 4^{\prime \prime} \quad 6-16^{\prime}\) and up per M bd. ft. Toronto & No. 1 common fir dimension S \& E \(2^{\prime \prime} x 4^{\prime \prime}\) \(12^{\prime}-14^{\prime}\) No. 1 Base per M bd. ft. f.o.b. mill carlots \\
\hline & \$ cts. & \$ cts. & \$ cts. \\
\hline 1913 & 7000 & & \\
\hline 1914. & 6500
5800 & 3800
3400 & \\
\hline 1916. & 6092 & 3575 & \\
\hline 1917 & 6767 & 4100 & ............. \\
\hline 1918 & 8083 & 4850 & \\
\hline 1919 & 12375 & 6208 & .......... \\
\hline 1920 & 20708 & 5745 & .......... \\
\hline 1921 & 15292 & 5650 & \\
\hline 1922. & 15083 & 5100 & \\
\hline 1923. & 14417 & 5375 & \\
\hline 1924. & 11750 & 5008 & \\
\hline 1925. & 11000 & 4783 & \\
\hline 1926. & 11042 & 4800 & *14 88 \\
\hline 1927. & 10500 & & 1463 \\
\hline 1928. & 9250 & & 1646 \\
\hline 1929. & 9000 & & 1817 \\
\hline 1930. & 8625 & & 1400 \\
\hline 1931 & 7783 & & 1129 \\
\hline 1932. & 7400 & & 908 \\
\hline 1933. & 7500 & & 929 \\
\hline 1934. & 7500 & & 1300 \\
\hline 1935. & 7500 & & 1204 \\
\hline 1936 January & 7500 & & 1350 \\
\hline February & 7500 & & 1550 \\
\hline March & 7500 & & 1550 \\
\hline
\end{tabular}
*Freight from British Columbia to Toronto approximately \(\$ 30.00\) per M.
Mr. Cleaver: Are those figures being placed in the record?
Mr. Graham: Yes.
Mr. Evans: Are these prices all f.o.b. Toronto?
Mr. Graham: I presume so, because they are using as the basis for their indices the actual price lists as supplied by these companies, and as most of them are in Toronto I think we may take it that these prices are f.o.b. Toronto. Shall I file that, Mr. Chairman?

The Chatrman: You might give that to the reporter.
Gentlemen, you have heard some discussion regarding the price trend on agricultural implements since the budget was brought down on May 1. I think it is only fair to the committee and also to the implement companies that I should read to the committee letters that have been received from the implement companies. I think it is well to have this on our record, both in fairness to the implement companies and for the general information of the committee. The first one is from the International Harvester Company, and it reads as follows:-

Mr. R. T. Graham, K.C., Counsel, Committee on Agriculture and Colonization, 453 Confederation Building, Ottawa, Canada.

\section*{Re-House of Commons Inquiry into Prices of Farm Implements}

Dear Sir,-I am pleased to send you herewith for your information, copy of our letter of May 8 to our branches, accompanied by a long list of imported machines on which we have made price reductions, in view of the recent budget reductions in tariff from \(12 \frac{1}{2}\) per cent to \(7 \frac{1}{2}\) per cent.

These lower prices became effective May 2, but we are also applying them to the stock of imported machines now on hand in Canada, which represents a considerable portion of our 1936 requirements. This stock was brought-in at the higher rates of duty previously in force, but regardless of that fact, we are passing the saving made by the duty reduction along to our customers.

I am sending a copy of this letter, and our list of reduced prices, to Mr. Macdonald for his information also.

Yours faithfully,

> (Signed) F. M. MORTON, Vice-President.

Then follows a copy of a letter addressed to the agencies in the different parts of the country, as follows:-

Hamilton, Ontario,
May 8, 1936.

\section*{Subject: Price Reduction on Account of Changes in Duty}

Changes in the tariff which became effective May 2, 1936, reduced the duty from \(12 \frac{1}{2}\) per cent to \(7 \frac{1}{2}\) per cent on most of the items in our general line which we import into Canada. Goods which are manufactured in Canada are, of course, in no way affected by this change.

We have on hand in Canada a stock of imported goods which represents a considerable part of our 1936 requirements. This stock was brought in at the higher rates of duty previously in force. Regardless of this fact it gives us great pleasure to pass the saving made by the duty reduction along to our customers.

You will, therefore, effective immediately, reduce prices, both wholesale and suggested retail in accordance with the attached list.

We suggest that this information be given to your dealers at once, using the first three paragraphs of this letter as the letter to your dealers.
(Signed) C. W. LOCKARD.

Now, there is appended to this communication a list of the price reductions put into effect by the International Harvester Company. These range from 20 cents to as much as \(\$ 15\). The price list follows:-

PRICE REDUCTIONS, EFFECTIVE IMMEDIATELY


PRICE REDUCTIONS EFFECTIVE IMMEDIATELY-Concluded
\begin{tabular}{|c|c|c|c|}
\hline Tractor dise harrows 10 & \begin{tabular}{l}
\(\$\) ets. \\
350
\end{tabular} & Walking plows P. \& O. Blue Jay, \(8^{\prime \prime}\) & \$ cts. 050 \\
\hline Tractor disc harrows 10-A, \(8^{\prime}\) & 400 & Walking plows P. \& O. Blackland, \(8^{\prime \prime}\). & 050 \\
\hline Orchard tractor plows No. 23 3-F, \(10^{\prime \prime}\) & 500 & Walking plows P. \& O. Blackland, \(10^{\prime \prime}\). & 050 \\
\hline Orchard tractor plows No. 23 3-F, 12" & 500 & No. 49 2-disc 24" tr. plow for F-12. & 400 \\
\hline Orchard tractor plows No. 24 2-F, \(12^{\prime \prime}\) & 400 & \(12^{\prime}\) header w/ elevator. & 1300 \\
\hline Orchard dise harrow No. 7-A, 6 & 450 & \(12^{\prime}\) push harvester. & 1050 \\
\hline Orchard dise harrow No. 7-A & 500 & No. 2 tractor spring tooth harrow- & \\
\hline Walking plows WH-1, \(12^{\prime \prime}\) & 075 & 19 tooth. & \\
\hline Walking plows WH-1, \(14^{\prime \prime}\) & 075 & 25 tooth. & 200 \\
\hline Walking plows, WH-1, 16 & 075 & 28 tooth. & 300 \\
\hline Walking plows No. 210 Hillside & 100 & 37 tooth & 350 \\
\hline Walking plows No. 62. & 025 & & \\
\hline Walking plows No. 43. & 050 & *Soil pulverizer No. 50. & 400 \\
\hline Walking plows No. 53. & 050 & *Soil pulverizer No. 60. & 300 \\
\hline Walking plows No. 84. & 175 & & \\
\hline Walking plows P. \& O Blue Jay, \(7^{\prime \prime}\). & 050 & Increase. & \\
\hline
\end{tabular}

Mr. Leader: Have you made any computation of the amount of the reduction? Does it correspond with the percentage of decrease in the customs duty? What I mean is have we got the full benefit of the 5 per cent reduction in the tariff in the price reductions they have made.

The Chairman: I would say off hand we have not.
Mr . Graham: We have not been able to make any such computation as yet, but we have it in mind to prepare a statement on that basis.

Mr. Mackenzie: The prices you have given just now indicate the reduction per machine.

The Chatrman: Yes. The difficulty in ascertaining what the reduction amounts to is in being able to apply it to the specific machine concerned.

There is a letter here from the Massey-Harris Company dated Toronto, May 20, 1936, and it reads as follows:-

Mr. R. T. Graham, K.C.,
Agricultural and Colonization Committee, 453 Confederation Building, Ottawa, Ontario.

\section*{Dear Sir:}

\section*{Re Inquiry on Price Increases of Farm Implements}

I enclose herewith copy of letter which we sent to all our Canadian branches on the 14th instant setting out the price reductions which we had made on imported machines owing to the reductions in duty.

Our list of imported machines is comparatively small owing to the fact that practically our whole line of implements is manufactured in Canada. We have made these reductions apply to such of these goods on hand as have already been imported, as well as to any imported hereafter.

Yours faithfully,
(Signed) C. H. APPLETON,

To that is attached a copy of an instruction to all Canadian branches, reading as follows:-

Copy
May 14, 1936.

\section*{To All Canadian Branches}

Mr. B. M. Hannigan, General Manager's Dept.
Effective immediately the following price reductions are announced. Will you kindly refer to your 1936 printed list, and where affected make the necessary corrections. We would appreciate your advising promptly all those interested at your branch.

No. 6 Corn Binder, 3 horse
\(\$ 700\)
No. 2 Right Hand Corn Planter.. . .. ... .. 300
Model B. Wheel Guide Cultivator, with stiff teeth, spring release, narrow points.

500
Model D. Wheel Guide Cultivator with spring tooth equipment.

500
No. 8 Ensilage Cutter \(15^{\prime \prime}\), including knife grinder,
one \(8^{\prime}\) length of bottom pipe, 4 extra knives
and deflectors.. .................... 1200
No. 3 Aspinwall Watson Potato Planter, one row, plain without fertilizer attachment, with pole but no trees or yoke.

850
Stalk Cutters-Prices are withdrawn and will be supplied on application.
Please acknowledge receipt of this letter.
BMH/AP.
Then we have a letter from the John Deere Plow Company, of Moline, Illinois:-
May 22, 1936.
Standing Committee on
Agriculture and Colonization,
453 Confederation Building,
Ottawa, Ontario, Canada.
Gentlemen: - Mr. R. T. Graham -
We have your letter of May 18, regarding implement prices.
As a result of the tariff reductions effective May 1, we did authorize our Western Canadian branches to reduce prices on certain implements according to the attached list. Machines not shown on the attached list remain unchanged and take the prices quoted in our printed 1936 Canadian price books.

We manufacture in our plant at Welland some of the principal items which are sold in Western Canada. On these machines the prices were not changed as our prices are as low as we can make them considering our cost, and likewise, the new tariff so far as we see it, does not do anything towards lowering tariff rates or help manufacturers to reduce costs on articles used in the manufacture of them.

Trusting the attached list will give you the desired information, we are

Yours truly,
DEERE \& COMPANY,
(Signed) A. G. U.

To that is attached a copy of an instruction to all Canadian branches, reading as follows:-

Effective May 11, 1936.
PRICE CHANGES IN CANADA-BOTH WHOLESALE AND RETAIL
\begin{tabular}{|c|c|c|c|c|}
\hline & \multicolumn{2}{|l|}{Price Reductions} & \multicolumn{2}{|l|}{Price Increases} \\
\hline & Wholesale & Retail & Wholesale & Retail \\
\hline & \$ cts. & \$ cts. & \$ cts. & \$ cts. \\
\hline \(12^{\prime \prime}\) Deere Grading Plows........... & 200 & 200 & & \\
\hline No. 71 Syr Chilled Walking Plows. & 075 & 075 & & \\
\hline No. 98 " Contractors Plows.....
NA4-GP12N-12" Walking Plows. & 150
100 & 1
1
1 00 & & \\
\hline NA6-GP6N-14 \({ }^{\prime \prime}\), \({ }^{\text {/ }}\) & 100 & 100 & & \\
\hline NA7-GP7N-16" & 100 & 100 & & \\
\hline \(8^{\prime \prime}\) Bantam Plows. & 050 & 050 & & \\
\hline \(10^{\prime \prime} \quad\) " & 050 & 050 & & \\
\hline Two Way Sulky Plows. & 450 & 450 & & \\
\hline No. 2 Two Way Tractor Plows & 900 & 900 & & \\
\hline No. 222 Light Horse Disc Tillers & 700 & 700 & & \\
\hline Ajax Lever Harrows........ & 0.25 per sect & 0.25 per sect & & \\
\hline Ajax Special Lever Harrows & \(0 \cdot 25\) " & 0.25 " & & \\
\hline Flexible Pipe Bar Harrows.. & 0.50 " & 0.50 " & & \\
\hline A316-A318-3 ft. Dise Harrows. & 150 & 150 & & \\
\hline W316 " & 150 & 150 & & \\
\hline RA-Orchard Dise Harrows 4 and 5 ft & 200 & 200 & & \\
\hline LC Tractor Disc Harrows 7-8-10 ft. sizes. & 500 & 500 & & \\
\hline CH1016-Tractor Disc Harrow-10' size only & 900 & 900 & & \\
\hline CH1018 " " & 900 & 900 & & \\
\hline 999 Corn Planter & 300 & 300 & & \\
\hline "KL"' Corn Cultivators & 225 & 225 & & \\
\hline "NF" " " " 2 row. Pin break. & 300 & 300 & & \\
\hline " " " " spring trip. & 350 & 350 & & \\
\hline No. 145-No. 143-One Horse Spring Tooth & 050 & 050 & & \\
\hline No. 320-14th One Horse Cult............. & 025 & 025 & & \\
\hline No. 22-Beet Planter. & 400 & 400 & & \\
\hline No. 12 & 350 & 350 & . & \\
\hline No. 14 & 600 & 600 & ......... & ......... \\
\hline No. 112 & 500 & 500 & & \\
\hline No. 114 " & 900 & 900 & & \\
\hline No. 16 " & 1500 & 1500 & & \\
\hline Fert. Att. for No. \(22 \ldots .\). & 100 & 100 & . & \\
\hline \(\begin{array}{lll}\text { " } & \text { " } & 12-112 \\ & & 14-114\end{array}\) & \(\begin{array}{ll}0 & 50 \\ 0 & 75\end{array}\) & \(\begin{array}{ll}0 & 50 \\ 0 & 75\end{array}\) & & \\
\hline " " 14 16.... & 075
150
150 & 075
150 & & \\
\hline No. 22 Beet Lifters. & 300 & 300 & & \\
\hline No. 23 & 400 & 400 & & \\
\hline No. 312 Row Walking Beet Cultivators & 100 & 100 & & \\
\hline 732 Row Riding Beet Cultivators... & 100 & 100 & & \\
\hline 74-3 2 Row Riding Beet Cultivators. & \({ }_{2}^{2} 00\) & 200 & & \\
\hline \(32-4\) " " \({ }^{\text {c }}\) & 250 & 250 & & \\
\hline No. 1113-23 ft. Tubular Elevator & 800 & 800 & & \\
\hline 1A-One Hole Hand Sheller. & 100 & 100 & & \\
\hline 2A-Two " " & 200 & 200 & & \\
\hline Power Lift Sweep Rake. & 300 & 300 & & \\
\hline Alfalfa P.L. " & 325 & 325 & & \\
\hline Jumbo P.L. & 350 & 350 & & \\
\hline Truss Frame " & 175 & 175 & & \\
\hline No. 1 Hay Stacker. & 450 & 450 & & \\
\hline No. 2 " " & 550 & 550 & & \\
\hline D1619-16-18 Motor Hay Press. & 1500 & 1500 & & \\
\hline 16-7 Press Drills............... & 750 & 750 & & \\
\hline 18-7 " " & 800 & 800 & & \\
\hline 20-6 " " & 850 & 850 & & \\
\hline 7-6 Plow Press Drills. & 300 & 300 & & \\
\hline 8-6 " " & 400 & 400 & & \\
\hline 10-6 " " & 500 & 500 & & \\
\hline No. 802 Steel Farm Truck & 300 & 300 & & \\
\hline No. 130 Letz Roughage Mill. . . . . . . . . & 450 & 450 & & \\
\hline
\end{tabular}

PRICE CHANGES IN CANADA-BOTH WHOLESALE AND RETAIL-Concluded
\begin{tabular}{|c|c|c|c|c|}
\hline & \multicolumn{2}{|l|}{Price Reductions} & \multicolumn{2}{|l|}{Price Increases} \\
\hline & Wholesale & Retail & Wholesale & Retail \\
\hline & \$ cts. & \$ ets. & \$ ets. & \$ cts. \\
\hline \({ }_{344}^{230}\) Letz Roughage Mi & 650
800 & \(\begin{array}{ll}6 & 50 \\ 8 & 00\end{array}\) & & \\
\hline 344 " " & 800
450 & 800
450
4 & & \\
\hline 132 " & 450 & 450 & & \\
\hline 133 & 450 & 450 & & \\
\hline 231 & 650 & 650 & & \\
\hline \(\begin{array}{ll}232 \\ 233 & \text { " } \\ 23\end{array}\) & 650 & 650 & ........ & ....... \\
\hline 233 X " " " & 650
650 & 650
650 & ...... & ........ \\
\hline 231 X " & 650 & 650 & & \\
\hline 232 X & 650 & 650 & ..... & .......... \\
\hline 233 X & 650 & 650 & & \\
\hline 330 & 1100 & 1100 & & ....... \\
\hline 331 " " & 1100 & 1100 & & \\
\hline 333 & 1100 & 1100 & & \\
\hline 345 & 800 & 800 & & \\
\hline 347 & 800 & 800 & & \\
\hline 362 & 1300 & 1300 & & \\
\hline 363 & 1300 & 1300 & & \\
\hline 430 " & 1500 & 1500 & . & \\
\hline 431 " & 1500 & 1500 & , & \\
\hline 433 " & 1500 1500 & 1500 & & ......... \\
\hline Shaker Potato Digger. & 100 & 100 & & \\
\hline Potato Planter.. & 425 & 425 & & \\
\hline \(5 \frac{1}{2} \mathrm{ft}\). Potato Digger w/Extension Elevator. & 350 & 350 & & \\
\hline 3 ft . Potato Digger w/Agt. Rear Rack \& V.T. & 400 & 400 & & \\
\hline 6 " " W/Extension Elevator... & 400 & 400 & & \\
\hline 7 " " w/Agt. Rear Rack \& V.T. & 500
50 & \({ }^{6} 000\) & , & ....... \\
\hline 10 ft . Tractor Binders.................... & 5
1250 & 1250 & & \\
\hline 8 " " & 1250 & 1250 & & \\
\hline Corn Binders. & 650 & 650 & & \\
\hline Power Driven Mowers-For Tractor use & 375 & 375 & & \\
\hline No. 17 Combines.. & 6000 & 6000 & & \\
\hline No. 5A " & 5000 & 5000 & & \\
\hline Windrowers or Swathers & 1500 & 1500 & & \\
\hline Pick up Attachments for Combines. & 400 & 400 & & \\
\hline TT243-TT283 10 ft . Field Cultivators. & 975 & 1175 & & \\
\hline \(243 \mathrm{~A}-283 \mathrm{~A}\) " & 1300 & 1500 & & \\
\hline TT263-TT293 " & 975 & 1175 & & \\
\hline 263A-293A " " & 000 & 200 & & \\
\hline TT264-TT294 11 \(\frac{1}{2} \mathrm{ft}\). Field Cultivators & & & 325 & 325 \\
\hline
\end{tabular}

I may say in explanation of this letter that when the International Harvester Company wrote their unsolicited letter to us we wrote to the John Deere Plow Company and others to see what actions their companies had taken.

Mr. Donnelly: These letters will be printed in the report so that we will be able to have the information as to reductions before us?

The Charmman: Yes, they will be, if that is the wish of the committee.
Mr. Cleaver: These letters indicate that reduction is being made on account of the duty being reduced from \(12 \frac{1}{2}\) per cent to \(7 \frac{1}{2}\) per cent. May I point out that we have also had a reduction from 25 per cent, in connection with the trade treaty, but in respect to that there is nothing to indicate that there has been a corresponding reduction in price. I think that is something which should be investigated.

The Chatrman: May I complete reading these letters? The next letter is from the Oliver Farm Equipment Company, 400 West Madison Street, Chicago, Illịnois:-

May 21, 1936.

> Mr. R. T. Graham, Counsel, Standing Committee on Agriculture and Colonization, 453 Confederation Building, Ottawa, Ontario, Canada.

\begin{abstract}
Dear Sir,-This will acknowledge receipt of your letter of May 18, 1936. Your information is correct that Oliver Farm Equipment Company manufactures implements in the United States for sale in the Canadian market.

The records maintained at this office are not sufficiently detailed to permit the submission of information such as you have requested. A reduction in the price of implements of this Company already imported or to be imported in the future has been made as a result of the reduction in Canadian tariff. The exact amount of that reduction, or whether it applied to all implements or only certain classes, is not known to me. We will get the information you have requested and as soon as it is compiled will forward it to you.

Please be assured of our desire to co-operate with you in every possible way.
\end{abstract}

Very truly yours,
(Signed) A. KING McCORD, Assistant to the President.

There is no additional information with regard to the Oliver Farm Equipment Company.

Mr. Coldwell: I suppose since these letters were received you have not been able to work out the reduction in percentage on these implements?

The Charman: No, we have not; but if we print these lists in the proceedings of to-day, and if you can identify the specific implement to which it applies, you probably will be able to work it out for yourself.

Mr. Donnelly: Did you write to the Moline Plow Company of Minneapolis?

Mr. Graham: Yes, to the Moline Plow Company, and to the John I. Case Company.

Mr. Donnelly: Has there been no word from them?
Mr. Graham: There has been no word from them as yet.
Mr. Johnston: Following up what Mr. Cleaver said, Mr. Chairman, I feel that a further explanation is due this committee from the machine companies. They say, take the International Harvester Company, their letter indicates that this reduction in price has been brought about on account of the reduction in duty in the budget. Well, previous to that there was a reduction in duty of a more substantial amount under the trade agreement, and instead of a reduction in the price of implements the farmers of this country were met with an increase in the cost of these machines. Surely it is a poor rule that does not work the same under the same circumstances, and here we have that position. I think this committee should ask the machine companies for an explanation in that connection.

Mr. Ward: I presume that at a later date we will have an opportunity for questioning representatives of the manufacturers before this committee. I notice there one case which would appear to be an anomaly, a reduction of \(\$ 8.50\) on a single row potato planter and a reduction of over \(\$ 5\) in the price of a cultivator costing between \(\$ 175\) and \(\$ 200\). We should certainly have an explanation as to why they could reduce a \(\$ 40\) potato planter and only make a \(\$ 5\) reduction on a \(\$ 200\) cultivator.

Mr. Tomlinson: You can only find that out by personal questioning.
The Charrman: You mean, of the machine companies?
Mr. Tomlinson: Yes. Will we have that opportunity?
The Chairman: If you can give us some assurance as to when this house will close, and if it does not close too soon, I think you can rest assured that you will have the opportunity of questioning the machine companies.

Mr. Tomlinson: I think we should make sure that we do have that opportunity.

The Chatrman: I merely read those letters to you this morning so that the committee would have full information as to what has happened. They can use that information in whatever way they may see fit.

Hon. Mr. Motherwell: Following up Mr. Johnston's remarks about the reduction on imported farm implements caused by the budget, if I heard aright the same writer took the ground that the tariff had no effect on farm implements made in Canada. Am I right?

The Chatrman: In each letter the statement is that the reduction is on imported farm implements.

Hon. Mr. Motherwell: Do they take the ground that it does not affect Canadian-made goods?

The Chatrman: That position is taken with respect to the International Harvester Company and the Massey-Harris Company.

Hon. Mr. Motherwell: Well, we do not believe that.
Mr. Needham: The Canadian price has always been based on the price of other imports, and there is no reduction. There is no difference between the imported and the manufactured in Canada in the International. They have reduced the imported; why should they not reduce the other?

The Charrman: We attempted to get information from the companies that are doing business or manufacturing in the United States and importing their general line of implements into Canada. That information, as yet, has not been completed for us. We shall have to wait and see what information we get from them before we can tell what the effect on the general price of implements will be.

Mr. Tomlinson: How long are they going to be before they answer the questionnaires sent out by this committee?

The Chatrman: The questionnaires, as a matter of fact, were returned last Monday, not totally complete. Some checking has to be done on them. But they have co-operated well with us in that regard, and met our requests as far as it was possible to do so. Those questionnaires are quite voluminous. Just as soon as we can get them whipped into shape and are in a position to use the information contained in them, they will be brought before this committee.

This morning we wish to have presented to you, more or less, the history of the tariff trend over a considerable period; and we are fortunate in being able to have with us two or three gentlemen from the Customs Department who are prepared to give to the committee that information. I think there are three men who are going to deal with different phases of it.

Mr. Graham: Mr. Nauman first.

The Chatrman: I believe Mr. Nauman is the first man we are going to ask to present the history of the sales tax and the excise tax.

Mr. Perley: Before Mr. Nauman is heard, I should like to ask that the report of this committee be gotten out as soon as possible so we will have these figures to make a study of. Some of our reports have been a little late.

The Clerk: They usually come up the next day.
Mr . Perley: Some of them have not. It will be all right if they do that.
The Chatrman: May I introduce Mr. Nauman. I will ask him to state to you his official title in the department.

\section*{V. C. Nauman, called.}

Witness: Mr. Chairman and gentlemen, I am Assistant Commissioner of Excise in the Department of National Revenue. The division which I represent was asked to prepare, for the use of the committee, a resumé of the application of the sales and excise taxes to farm implements from the inception of the tax in 1920 to the present time. I shall deal first with the sales tax.

This tax became effective on May 19, 1920, and the rate was 1 per cent until June 16, 1920. I shall deal, in so far as the sales tax is concerned, with two phases of the tax. The first was the tax effective from May 19, 1920, until December 31, 1923. That was a pyramiding tax that applied on the sale by the manufacturer and by the supplier as well. It is important to remember this in connection with the purchases of materials by farm implement manufacturers. The raw materials which they purchased, both domestic and imported, as well as lumber, had a rate of 1 per cent from May 19, 1920, until May 9, 1921. The finished implements themselves from May 19, 1920, to June 16, 1920, were subject to 1 per cent; and from June 17, 1920, to May 9, 1921, to 2 per cent. From May 10, 1921, to May 23, 1922, the raw materials, domestic, \(1 \frac{1}{2}\) per cent; imported, \(2 \frac{1}{2}\) per cent; lumber, domestic, 2 per cent; imported, 3 per cent. The finished implements were subject on domestic sale to 3 per cent and imported implements to 4 per cent. From May 24, 1922, to December 31, 1923, domestic raw materials, \(2 \frac{1}{4}\) per cent, imported, \(3 \frac{3}{4}\) per cent; lumber, domestic, 3 per cent; imported, \(4 \frac{1}{2}\) per cent. The finished implements, domestic, \(4 \frac{1}{2}\) per cent and imported, 6 per cent. (For tabulated statement referred to, see conclusion of this witness' evidence).

\section*{By Mr. Graham:}
Q. Mr. Nauman, that last includes more than the finished implement. It includes finished implements or repair parts, does it not?-A. Yes. Where I have referred to implements, it refers to repair parts as well. Effective January 1, 1924, the sales tax changed in that it no longer pyramided and manufacturers were entitled to purchase their raw materials without tax. So that we have after that date no tax on raw materials. I might add in that connection that farm implement companies as from January 1, 1924, received a credit for the tax they had paid on their raw materials and their in-process implements as well as the finished implements in their branches as at that date.

\section*{By Mr. Johnston:}
Q. What date was that?-A. January 1, 1924.

\section*{By Mr. Mitchell:}
Q. How far back did that rebate go?-A. It applied to the goods they had on hand; on hand, whether raw material, in-process or finished materials. From January 1, 1924, to April 10, 1924, the finished implements and repair parts were subject to 6 per cent sales tax, whether domestic sale or imported; and on April 11, 1924, the sales tax was removed from farm implements and from the materials used in their manufacture. It has never been changed.

\section*{By Hon. Mr. Motherwell:}
Q. You mean they were exempted?-A. They were exempted as from that date, April 11, 1924.

\section*{By the Chairman:}
Q. No sales tax has applied on farm implements since that time?-A. No, sir. The special excise tax-and this is applicable to imported goods only-was imposed on June 2, 1931. From that date until April 6, 1932, the rate was 1 per cent from all countries; from April 7, 1932, to April 18, 1934, it was 3 per cent from all countries.

\section*{By Mr. Golding:}
Q. What date was that, the 3 per cent?-A. From April 7, 1932, to April 18, 1934. From April 19, 1934, to March 22, 1935, it was 3 per cent from countries which were other than British countries. The exact wording is: " Imported goods which were entitled to entry under the British Preferential Tariff or under trade agreements between Canada and other British countries were subject to only \(1 \frac{1}{2}\) per cent from April 19, 1934, to March 22, 1935." That is 3 per cent from all countries except British preference countries or countries covered by treaty. From March 23, 1935, to the present the tax remained at 3 per cent except that those British countries and treaty countries were totally exempted.

\section*{By Mr. Graham:}
Q. United States would not be among them?-A. United States was not among those countries, no.

\section*{By Mr. Leader:}
Q. Did that 3 per cent excise tax apply to domestic made machinery?-A. There was no excise tax on domestic machinery.

By Mr. Graham:
Q. Just for the information of the committee, what would that special excise tax be paid on?-A. It would be paid on duty paid value of the implements or parts at the time of importation.

The Charrman: Has anyone any questions he would like to ask Mr . Nauman?

\section*{By Mr. Leader:}
Q. I wonder if Mr. Nauman could tell us whether, when the 6 per cent sales tax was removed from agricultural machinery, we got the full benefit by way of reduction in the price of the machinery at that time?-A. I am sorry; I have no information on that subject.

Mr. Leader: I think it is something that the committee should know, in order to be able to check up whether we got the advantage of it, whether it is passed on to the consumer or whether it just remains in the pockets of the manufacturers, as it were.

The Chatrman: The sales tax was generally indicated on the bill of sale as so much.

Mr. Tomlinson: That is to the retailer.
Witness: That was a requirement until January 1, 1924. Of course, the sales tax only remained about three months after that, so far as farm implements were concerned.
[Mr. V. C. Nauman.]

The Chatman: Yes. The purpose of bringing this information in this morning is in order that we may know the history of this thing. Then we can check back on the price changes that have been made over the period and find out for ourselves definitely what the factors have been that have brought about the changes, or why there have not been changes.

Mr. Leader: I presume we can check back all right. But I thought if Mr. Nauman had the information now, it could appear at the same time as this information and it would be very easy to check up.

The Chatrman: We have not got that information to put in immediately.

\section*{By Mr. Beaubier:}
Q. What is the declaration value of a binder, say, of this year's manufacture for duty purposes?-A. I am sorry, but my division has no information on that. One of the gentlemen who succeeds me on the stand will probably be able to give you that information.

Mr. Robichaud: Would that be exempt from excise tax under the CanadaUnited States Treaty now?

The Chairman: No.
Witness: What is that?
Mr. Robichaud: Would that be exempt from the 3 per cent?
Witness: No, sir. That still applies to imports from United States.
The Chairman: Thank you, Mr. Nauman.
Witness retired.
The statement used by Mr. Nauman in giving his evidence is as follows:-

\section*{RATES OF SALES TAX APPLICABLE TO PURCHASES BY AND SALES OF FARM} IMPLEMENT MANUFACTURERS


Spectal Excise Tax (Applicable to Imported Goods only)-

Mar. 23/35 to present............. 3\% (See Exception)
Exceptron-Imported goods which were entitled to entry under the British Preferential Tariff or under trade agreements between Canada and other British countries were subject to only \(1 \frac{1}{2} \%\) from April 19th, 1934, to March 22nd, 1935; these goods were totally exempted from this tax effective March 23rd, 1935.

Mr. Graham: I think, in order to let the short witnesses get away, I will call Mr. Allen next.

The Charrman: We have Mr. Allen with us from the same department, who is going to give us some information on the application of the drawbacks.

Leonard E. Allen, called.

\section*{By the Chairman:}
Q. Mr. Allen, will you be good enough to give to the committee your full name and position; and then give us the information that you have prepared?A. Mr. Chairman, my name is Leonard E. Allen, and I am Chief of the Drawback Branch of the Department of National Revenue. At the outset, I might say that the drawback on agricultural implements never applies to taxes, sales tax or excise tax. It purely applies to duties on imported materials used in the manufacture of them. My notes pertain to items 1027 and 1057 in the tariff. 1027 was introduced on the 24th of May, 1922, and granted a 30 per cent drawback on materials including all parts not finished when used in the manufacture of goods enumerated in the agricultural implement items in the tariff, such as \(447,448 \mathrm{~b}\) and 591 . You will notice that the drawback is purely on manufacture, of the duties paid on imported materials. That item was amended on the 11 th of April, 1924.

Mr. Graham: What was the drawback?
Witness: 30 per cent. That item was amended on the 11th of April, 1924, to read: "Materials when used by manufacturers of malleable iron castings of steel shafting for use exclusively in the manufacture of such articles, for use in the manufacture of goods enumerated in tariff items, 444, 446, 446b, 447, 448 and 591, all agricultural implement items, 80 per cent drawback."

Mr. Graham: Did you say April 11, 1934, or 1924 ?
Witness: 1924. That item was again amended on the 2nd of May, 1930, to read: "Materials when used by manufacturers of malleable iron castings of steel shafting for use exclusively in the manufacture of such articles for use in the manufacture of goods enumerated in tariff items \(409 \mathrm{a}, 409 \mathrm{~b}, 409 \mathrm{c}, 409 \mathrm{~d}, 409 \mathrm{e}\), \(409 \mathrm{f}, 409 \mathrm{~g}, 409 \mathrm{j}, 409 \mathrm{o}\), and 439 c , all agricultural implement items, 80 per cent drawback."

The amounts paid in drawbacks during the past two fiscal years amounted in 1934-35 to \(\$ 1,818\) and in \(1935-36\) to \(\$ 2,699.67\). That item is still in effect.

Tariff item No. 1057: this item was first introduced as order in council P.C. 1345, 5th of August, \(1924-80\) per cent drawback; and in the Customs Tariff Act amendment of 1927 was inserted in the tariff reading as follows: "Materials when used in the manufacture of articles entitled to entry under tariff item 442 , when such articles are sold to manufacturers to be used as specified in the said item, 80 per cent drawback." The drawback paid under this item the last two fiscal years, \(1934-35-\$ 1,580.65 ; 1935-36-\$ 1,609.58\).

\section*{By Mr. Perley:}
Q. You gave us the date of that coming in force as 1924?-A. Yes.
Q. Can you give us the amount of the drawback?-A. In 1924?
Q. 1925-26?-A. No, I have not got those figures compiled.

Mr. Graham: Could you get them?
Witness: Yes.
By Mr. Perley:
Q. Have you got the figures for the previous items, 409a, etc?-A. That is the import item?
Q. Yes.-A. No. We do not touch anything but drawbacks. That would be the amount imported under those items.
Q. Have you got the drawbacks there?-A. For 1924?
Q. Yes.-A. No. That would have to be made up.

\section*{By Mr. Bertrand:}
Q. That could be made up and supplied to the committee, could it not?A. We could supply you with the figures. Now, of course, there is another drawback of 99 per cent of the duties paid on export; that is a manufacturer importing materials into agricultural implements, as any other industry, and exporting to foreign countries outside of Canada, obtains a 99 per cent drawback of the duties paid on the imported materials when used in the Canadian manufacture and exported.

\section*{By Mr. Donnelly:}
Q. Have you got any figures at all in regard to that?-A. The 99 per cent drawback?
Q. Yes.-A. Possibly. 1921-22 to 1928, I have here in my notebookapproximately in 1921-22, \$416,000.

Mr. Ward: Was that the amount paid to manufacturers or repaid?
Witness: Paid to manufacturers.
Mr. Dupuis: That is for raw materials.
Witness: For raw materials.
Mr. Johnston: What was it in 1928?
Witness: In 1928 it was \(\$ 138,000\).
Mr. Graham: I suggest that Mr. Allen should read the years.
Witness: 1921-22, \(\$ 416,697.65\); 1922-23, \(\$ 371,272.46\); 1923-24, \$225,248.37; \(1924-25, \quad \$ 184,269.82\); 1925-26, \(\$ 204,114.87\); 1926-27, \(\$ 74,533.77\); 1927-28, \$138,586.56.

Mr. Bertrand: What was paid after 1928?
Witness: The figures are not made up.
The Charman: These drawbacks, of course, are on specific items in the tariff schedule? They do not apply, generally, except on the raw materials that might be used on implements or might be re-exported; but the prevailing rate of duty on imports of raw material is roughly from 6 to 7 per cent. Now, on certain items as specified in the tariff there is a drawback duty of the different figures you have indicated there-some 30 per cent and some 80 per cent; is that right?

Witness: 30 per cent has been amended; the 80 per cent drawback is now prevalent on both items 1027 and 1057.

The Charman: Could you tell me what is involved in these two items?
Witness: Well, it really is any materials that are used to manufacture the articles enumerated in all those tariff items I read you-that is a mower, a binder, a seeder, a plough and so on.

Mr. Golding: Have you got the figures for the drawback on item 442 for later use?

Witness: Tariff item 442 is an import item. It lists a number of agricultural implements that may be imported under certain rates of duty under tariff 442. Now, to manufacture that from Canadian material, plus material imported, we grant a drawback of 80 per cent.

Mr. Cleaver: Would you care to express a reason as to why the drawback is greater for re-export than it is for our domestic trade?

Witness: Export drawback, of course, is to put the manufacturer on a par with his competitor in foreign countries. The re-export drawback is to help the manufacturer. The drawback on domestic trade is to help the consumer.

Mr. Ward: That does not apply to the goods consumed at home.
Mr. Cleaver: Yes, the drawback on the domestic does, but on the re-export it does not, and it is higher on re-export. We are, apparently, more interested in our manufacturers than we are in our consumers.

Witness: Of course, the 99 per cent drawback applies to any manufacturer in Canada.

Mr. Cleaver: But for re-export only.
Witness: Yes.
Mr. Cleaver: It is not a drawback where the article is sold in Canada.
Witness: No, but it does not specify agricultural implements; it is a general regulation.

\section*{By Mr. Graham:}
Q. When did that 99 per cent provision come in, do you remember?-A. As far back as 1878.
Q. Away back?-A. Yes. It was revised in 1904.

The Charman: We can now dispense with Mr. Allen. We thank you for your information, and should we require more information at any time I suppose you will be available to give it to us.

Witness: At any time.
The Chairman: I will now call Mr. Younger.
Mr. Graham: Mr. Younger has a fairly long brief, while Mr. Richards has a comparatively short one. Probably we had better hear Mr. Richards first.

The Charrman: We will ask Mr. Richards to give us some information on the application of the dumping duty.

Edward H. Richards, called.

\section*{By the Chairman:}
Q. Mr. Richards, you have some information to give the committee on the dumping duty?-A. Yes.

\section*{By Mr. Graham:}
Q. What is your position, Mr. Richards?-A. Dominion Customs appraiser of values.
Q. How long have you been in the National Revenue Department?-A. Twenty-four years.
Q. The information I want you to give the committee has to do with the agricultural implement industry over the period you have been in this particular work, particularly from 1913 up to the present time. What has been the application of section 6 of the Customs Act under the Fair Market Value section-that is the section that deals with the fair market value, is it not?-A. Yes.
Q. And what is the other section?-A. Section 6 of the Customs Tariff is the dumping clause, and then there are certain sections of the Customs Act which determine the value for duty purposes, or the fair market value.
Q. Will you give to the committee the application of those sections in the importation of implements or parts of implements into this country during that period?-A. The present section 35 of the Customs Act, as it now stands has gone under various numbers throughout this period. It is the one that says that the value at which any ad valorem duty shall be levied is the fair market value of the product as sold for home consumption in the usual ordinary course of trade in the particular markets of the country from which the goods were exported to Canada. I am not quoting now, I am paraphrasing. Then, there have been other provisions that have come into the Acts in later years, such as
[Mr. Edward H. Richards.]
the present section 36, subsection 2 of the Customs Act which provides in some cases that the value for duty purposes shall not be less than the actual cost of production plus advances as provided for in the act, reasonable advances for selling expenses and profit.
Q. Does that section cover farm implements?-A. It does; it covers all importations. After the value is determined-and throughout most of this period the only section with which we were working was the present section 35 -by examination of the sales record of the various exporters, then the dumping clause comes into the picture. This clause provides that if the selling price to the purchaser in Canada is lower than the fair market value as determined under the provision of the Customs Act, this special duty is to be applied.

\section*{By Mr. Johnston:}
Q. Who determines the fair market value?-A. The department, and the appraisers.
Q. How do they go about it?-A. By first of all investigations of the sales records of the exporter to determine the regular selling price in the markets of the country of export.

\section*{By Mr. Donnelly:}
Q. You go into those countries?-A. Certainly; we have officers stationed in those countries. For instance their headquarters are in Chicago, which would be the nearest to the agricultural industry in the United States.

\section*{By Mr. Graham:}
Q. What section were you referring to in your last statement, Mr. Richards? -A. The dumping clause?
Q. Yes.-A. Section 6 of the customs tariffs.

\section*{By Mr. Dupuis:}
Q. Would you give us an example? Let us say that a mower is sold by an American manufacturer on which your department imposes an additional tax called dumping- - A. The fair market value is determined primarily and generally from the selling price to dealers; that is, there is only one general class of trade purchases in the United States. I presume you are thinking of the United States?
Q. Yes.-A. There has been only one general class of buyers, trade buyers in the United States, namely, the dealer.
Q. The Canadian?-A. No, I am speaking of the States.

\section*{By Mr. Evans:}
Q. You base your value on invoice prices?-A. No. The Act says that the true value has to be determined, any invoices to the contrary notwithstanding; so that the invoice is not the governing factor.
Q. In those selling prices?-A. No; the fair market value as sold for home consumption in the country of export is what governs.

\section*{By Mr. Ross:}
Q. The list price?-A. Yes, the list price less any discounts provided for.

\section*{By Mr. Graham:}
Q. In the period under review from 1913 until this present parliament what was the actual basis of fixing the fair market value of implements for import into this country?-A. The regular price to the dealer was subject to a discount of \(12 \frac{1}{2}\) per cent approximately to arrive at what would be a jobbing level.
Q. That is on the assumption, Mr. Richards, that there is no jobber class in the implement business over here?-A. There were not.
Q. The governing factor is a reduction from the distributor's price?-A. Dealer's price.
Q. \(12 \frac{1}{2}\) per cent? And you consider that as a reasonable jobber's price? A. And that level prevailed for all exporters with very slight variations all throughout this whole period until recently.
Q. Now what change has taken place recently?

\section*{By Mr. Ward:}
Q. What class of people do you call dealers?-A. The dealer is the trade representative or the first buyer from a manufacturer, as a rule. He is the local dealer in a district that buys usually from the warehouse or the district office of the manufacturer.

\section*{By Mr. McKenzie:}
Q. The recognized dealer of the manufacturer?-A. Recognized in a local district.

> By Mr. Mitchell:
Q. We call him an agent in this country.-A. Maybe so.

\section*{By Mr. Graham:}
Q. To make it clear, all through this period, from 1913 until recently- A. Yes?
Q. -it was on the dealer price less \(12 \frac{1}{2}\) per cent?-A. Yes.
Q. That the department fixed as the fair market value?-A. Yes.

\section*{By Mr. Cleaver:}
Q. How did you arrive at \(12 \frac{1}{2}\) per cent?-A. That was a matter beyond my memory. It was the level that was determined after careful investigation likely of any local trade buyers there were, sometimes jobbers in unorganized territory of the manufacturers, and others. The price to those jobbers may have been a factor in determining that level. I cannot explain to you how it was done because I was not in the department at the time.

\section*{By Mr. Graham:}
Q. What change has been made recently?-A. Somewhat recently there has come into the administration of the department the practice of allowing lower grades of trade buyers than that of the jobber, and that is now provided for in Bill No. 11 before the house in the amendment to section 41 of the Customs Act, which gives the minister the power to provide for any class of trade buyer suitable to the circumstances of each case.
Q. That is to say it might be that dealer's price or it might be the distributor's price or any discount for any of those prices?-A. Yes. The practical effect of that would be to permit the allowing of the distributor even a higher discount than the jobber, because the distributor in Canada might be under the necessity of distributing to the jobber in Canada.

\section*{By Mr. Ward:}
Q. Are we to understand that a Canadian importer buying implements in the United States does not buy from the manufacturers direct?-A. Oh, surely, yes.

\section*{By Mr. Dupuis:}
Q. Buys from the dealer?-A. No.
[Mr. Edward H. Richards.]

\section*{By Mr. Ward:}
Q. Mr. Richards, you have been using the term dealer all along, as though our importers were purchasing from the dealer.

The Chairman: He was using the term dealer in order to establish the price in the United States that we might pay for an implement imported.

Mr. Ward: Mr. Chairman that is exactly the point. The Canadian consumer is placed at a disadvantage if the dump duty is applied not on the cost of the goods as purchased from a manufacturer, but on the price charged by the dealers, because the impost continues all throughout the whole process of the distribution of those goods in Canada.

The Charman: Of course it is not Mr . Richards' purpose to say the rights or the wrongs of the principle of the dumping duty. What we have asked him to do is to tell us how the dumping duty operates and the principle used in establishing prices.

\section*{Mr. Ward: I want to bring that out-}

Witness: I might just explain that a little further. It was the endeavour to explain that the level of the value for import purposes on the assumption that the importer in Canada was a jobber because he was, he was the branch house usually of the exporting manufacturer, and he was permitted to import at the dealer level less a discount of \(12 \frac{1}{2}\) per cent, as if he were a jobber.

\section*{By Mr. Cleaver:}
Q. Before you leave that, I should like to ask a question. I may be stupid, but I would like to be sure. Do I understand that in fixing the arbitrary value the department only allow \(12 \frac{1}{2}\) per cent between the normal selling price of the goods in the States?-A. To the dealer.
Q. Yes, to anybody. Call him whatever you like?-A. No, the dealer.
Q. What was the gross amount allowed to take care of the selling commission, the cost of collection of time sales, and everything? What was the gross amount allowed for the normal selling price in the States for fixing the import duty value?

The Chatrman: Pardon me. I do not know that we have this picture completely correct. Let us take Winnipeg as a point, as the International Harvester Company have an office there. In purchasing machinery from their Chicago plant they would purchase it from the manufacturing centre; it is merely a transfer.

Mr. Cleaver: How much is this duty for value below the normal selling price in the United States?

The Chatrman: What I am coming to is this: the Customs department, it appears to me, treats that Winnipeg branch office the same as it treats the branch office or distributor in the United States, and allows them a discount of \(12 \frac{1}{2}\) per cent.

Witness: From the price that was paid in the home market by the dealer.
Mr. Cleaver: Can you tell me the spread between the consumer's price in fixing the value for duty? How much in percentage is that below the consumer's price in the United States?

The Charman: May I ask Mr. Macdonald to say a word here as he has followed this rather closely?

Mr. Macdonald: This matter has a very distinct bearing on the matter I touched on at the committee here some days ago; that is the price at which one of the large companies imports into Canada in relation to the large profit earned by that company. As I see the point it is this: I spoke to the International Harvester Company last Saturday in Winnipeg. Suppose a binder is selling in Winnipeg for \(\$ 270\); that would include the price, freight and agent's commission.

The net realization to the company would be \(\$ 220\). As I understand it from the evidence submitted, the dealer's price in relation to the \(\$ 270\) would be less the agent's commission, which would be 17 per cent on \(\$ 270\) in round figures, so that as I see it, applying that to the typical implement, the importer from the States would have to pay duty on \(\$ 270\) less the 17 per cent which is the normal dealer's commission, less 12 per cent which means that so far as the implement company is concerned, the John Deer company, the Canadian agency of the John Deer company is being allowed \(12 \frac{1}{2}\) per cent for distribution on the basis that has been laid down by the witness.

Mr. Dupurs: Where does the dumping duty come in?
Mr. Macdonald: As I understand it, that is simply fixing the value for duty purposes, and if it falls below that-for instance, assuming that your implement is selling to the dealer less commission for \(\$ 100\).

\section*{By Mr. Donnelly:}
Q. Suppose a farmer in my district goes across the line and buys from an implement dealer from the other side, the binder we are talking about, at \(\$ 270\). He pays \(\$ 250\) for it and comes across the line, do you make him pay duty on \(\$ 250\) or \(\$ 270\) ?-A. He would have to pay the difference between his purchase price and the fair market value as sold to a user in the home market.
Q. But this is the user. The importer in Regina gets a discount off that \(\$ 270\) of \(17 \frac{1}{2}\) per cent, and with that discount off he pays \(12 \frac{1}{2}\) per cent duty. Now, if a local man, a farmer living near the line, goes across the line and buys a binder over there which normally sells in Regina for \(\$ 270\), suppose he pays \(\$ 250\) and has an invoice showing that he paid \(\$ 250\), do you work the duty out on the \(\$ 250\) or do you make him pay on the \(\$ 270\) ?-A. The fair market value in Regina has nothing to do with the value for duty at all. It is the fair market value as sold for home consumption in like quantity and under similar conditions in the country of export-the United States.
Q. Not to the agent or to anybody else?-A. If the importer is the user his value will be the price as sold to the user in the United States.
Q. In other words, you make him pay a duty of \(17 \frac{1}{2}\) per cent, and the \(12 \frac{1}{2}\) per cent which you give to the company does not go to the consumer?-A. That is quite so.

\section*{By Mr. Cleaver:}
Q. Would you mind trying to answer my question? The value for duty purposes is as I understand it determined by the fair market value in the country of origin. How much below the fair market value in the country of origin would you fix the value for duty purposes?-A. Not at all. It is the fair market value.
Q. Well then, how much is it below what the consumer pays in the country of origin?-A. The various discounts which prevail in that country.
Q. Could you explain to the committee then about an error of about 100 per cent which did actually occur in your department in regard to farm implements; that is, evidence before the Price Spreads Commission tells us that as a result of your value for duty purposes Canadian branches of American concerns have to pay from 10 to 15 per cent more than they would have paid if that ruling had not been there.

Witness: Mr. Chairman, I think I should see that evidence. I do not understand this very well. I am not familiar with the statement referred to.

Mr. Graham: Perhaps I could help to clear that up.

\section*{By Mr. Graham:}
Q. What would be the result if the Canadian importer did not purchase goods over there at less than the fair market value fixed by your department;
[Mr. Edward H. Richards.]
what would be the result; what penalty would he have to pay?-A. He would have to pay the difference between his purchase price and the fair market value.

\section*{By the Chairman:}
Q. And if he did not do that you would apply the dumping duty?-A. Yes. It is only when the price is less than the fair market value that the dumping duty applies.
Q. It is only when the price is below what you determine as the fair market value that you apply what you term your dumping duty?-A. Certainly.

In that case the benefit of the increased cost of the implement would go to the parent company; whereas the dumping duty if applied would go to the benefit of the Canadian Department of National Revenue.

\section*{By Mr. Mackenzie:}
Q. Is there very much dumping duty applied? What percentage would it be?-A. I do not expect there was any, hardly, for the simple reason that the importers were usually branch houses of the exporter and they would no doubt pay to the exporter the value as fixed by the department. Now, we do not know, there is no way of ascertaining the amount for the simple reason that dumping duty is not kept in a separate account, or not distributed in statistical returns.

\section*{By Mr. Donnelly:}
Q. As I understand witness the duty is calculated on the value placed on the article in the country of origin, and that determines the amount to be paid by the person importing it?-A. Yes.
Q. If the consumer is importing he pays duty on the retail price; if the agent is importing it he pays duty on the wholesale or special price that is given out; in other words, they make a distinction?-A. The inescapable requirements of section 35 .
Q. But, you make a distinction, the man who is a dealer or retailer gets a special privilege and he is allowed to pay a smaller rate of duty than the man who is the consumer, and who has to pay the full amount.

\section*{By \(M r\). Graham:}
Q. So long, Mr. Richards, as the American exporter knows the regulations of the department which are used as the measuring stick to fix the fair market value, he invoices to the importer at that price so that the department never hears about it at all; isn't that right? Has that measuring stick which you have set up always been the same over the 1913-1936 period?-A. In relation to the basic American factory price paid, yes; there has been no change at all.
Q. Now, with respect to that provision-I do not know just how old the provision is-which permits the minister to fix or regulate the fair market value for duty purposes, an arbitrary price, if he thinks there is a chaotic condition or some other conditions which justifies it, has that ever applied to farm implements during this period?-A. No.
Q. There has been nothing except the fair market value rule-A. No.
Q. Has dumping duty ever applied to farm implements?-A. No.

Mr. Graham: That is the explanation of your point, Mr. Cleaver.
Mr. Cleaver: That explains it, but I would like the witness to tell us if he can how this error occurred, which obviously did occur, as a result of the ruling of the department, when the parent concern billed the Canadian branches for implements at a much higher price than that at which they wanted to bill them simply to save themselves from the payment of this dumping duty, with the result that the Canadian farmer was gypped.

Mr. Graham: May I say that Mr. Richards is a government employee and naturally he would not care to pass an opinion on the wiseness or other-wiseness of these acts or of interpretations placed upon them. I merely point that out in fairness to this witness, who is here for the purpose of trying to help us lay our foundation of facts.

The Charman: Naturally Mr. Richards would not have any specific information on the case you have in mind.

Mr. Cleaver: They have a rule in their department under which that error was made. The gentleman before us is from that department and he should know about it.

The Chatrman: From what Mr. Richards stated a moment ago, granting for the moment that your observations are correct, it is quite possible that neither Mr . Richards nor the department would have any reason for recognizing it at all, for the simple reason that the companies themselves, realizing the policy of the department with regard to establishing values for duty purposes on the basis of fair market values, invoiced their products at what they knew to be the fair market value, or the value for duty purposes.

Mr. Golding: Mr. Chairman, just a moment, until we try to get this thing straight. Now, Dr. Donnelly has cited a case where perhaps the farmer himself would go across the line and purchase an implement in the United States from some company there. Now, if those companies have agencies established in Canada do they sell direct to the farmer from the company itself or do they sell to the agency. In any case, would the farmer be able to go to the United States and buy direct from the company with an agency right near him in Canada?

Mr. Donnelly: Sure. There are lots of places where a man could go across the line and when he gets down there the dealer doesn't ask him where he comes from, he doesn't know but what he comes from some place in Minnesota or Montana, he doesn't ask him whether he came from Manitoba or Saskatchewan. As a matter of fact he may cut the price if you have the cash to pay him with.

The Chairman: Order, gentlemen, let us keep in line here.
Mr. Golding: You find cases where that has happened.
Mr. Needham: I do not think that applies. I know of case after case where a customer has gone down to Ontario-I know of a case where a man went down to Toronto and bought a buggy. He expected to get it at a tremendous cut rate, but when he got there he was quoted just the same price as if he had bought it at home, and the first thing I knew about it was when we got a cheque for the commission. That was bought in Toronto.

Mr. Evans: That was bought across the line.
Mr. Needham: The same thing would apply. The companies protect their agents.

The Chairman: The case you cite is hardly comparable with a case where a purchase is made in the United States.

Are there any further questions which the committee would like to direct to this witness?

\section*{By Mr. Dupuis:}
Q. I would like to have a case explained. A person goes to the United States and buys a mower from a dealer there. Let us say that the fair market value of that mower in the United States is \(\$ 75\), and the manufacturer for the purpose of exporting it into Canada would \({ }^{\circ}\) reduce that price to \(\$ 60\). I understand that your department would investigate to find out what would be the ordinary
price in the United States, and that you would fix your duty on that fair market value for that article in the United States?-A. If \(\$ 60\) were the published priceand it usually is a published price-to the dealer or representative, then the exporting manufacturer may show that on his invoice, and further the discount of \(12 \frac{1}{2}\) per cent to his branch or jobbing organization in Canada, and that would be acceptable for duty purposes.
Q. And the dumping duty would be imposed on the full price, or only on the difference between \(\$ 60\) and the \(\$ 75\) ?-A. It would be on the difference between the \(\$ 60\) and the actual selling price to the purchaser in Canada.

The Chairman: Well, are there any further questions for Mr. Richards?
Mr. Needham: You said my illustration did not apply. I can give you an exact case of a car bought in Flint. The man could not get delivery of his car until he gave full information about himself-it applies in these two cases, one out in the west and the other in Ontario.

The Chairman: I quite agree with you on your point, Mr. Needham. I do not doubt that that is what happened in your case, but the situation of buying a buggy in Toronto and having it delivered in western Canada is not to be compared with the purchase of an implement in the United States for importation into Canada, particularly having in mind the applications not only of the regular tariff but of the dumping duty as well. I do not think the situations are comparable at all.

Mr. Needham: My point is that no matter whether they are in the United States or in eastern Canada the manufacturers protect their agents.

The Chairman: That may quite be.
Mr. Donnelly: The point is that you do not import them from the United States because you can't. By the time you pay the duty the price is higher than it would be if you were to buy the implement in Canada.

Mr. Golding: If the practice is prevalent of people going over there to buy their implements without the agents knowing it and without the customs people knowing it the matter is one which should be investigated.

Mr. Donnelly: The customs people do know it.
Mr. Ward: Perhaps the witness makes his statement without knowing what takes place in some of the country customs offices. I was called in to a customs office at a country point not long ago by one of my constituents. He had received a box of cigars from the United States. I had purchased exactly the same kind of cigars not long before, in the United States, and I knew what the retail price of them was. The customs officer at that point imposed a duty on exactly double the price I had paid for the same cigars retail over the counter at a point in the United States, and the cigars were returned to him. The case I cite is only the matter of a box of cigars, but it shows a serious situation exists with respect to the fixing of value for duty purposes-the price was double the retail price. I merely bring it to attention because it might apply to farm implements or anything else.

The Chatrman: I think we will have to take that up in the house when we have the minister before us.

Mr. Ward: I do feel that now we are discussing the fixing of duties that the point raised is quite relevant to the discussion.

The Chatrman: I think the matter is one which would more properly be a subject for discussion in the house when we have the minister before us, and that we should stick more closely to the terms of our order of reference.

If that is all, let me thank you Mr. Richards, personally and on behalf of the committee, for the information which you have brought to us this morning.

May we proceed then to call our next witness, Mr. Younger.

Lloyd Robert Younger, called.

\section*{By the Chairman:}
Q. Would you be good enough to give the committee your full name and the position that you fill in the department?-A. Mr. Chairman, my name is Lloyd Robert Younger. I am reviewing appraiser, tariff section, customs division.
Q. Will you go ahead and give us the material that you have prepared?A. Our department was asked to prepare a statement in two ways; one, relative to the rates of customs duty applicable to a certain selected list of agricultural implements and machinery; and in addition to indicate the history of the parts used in the manufacture of such implements in Canada. We were requested to go back to 1913 and follow through. I have prepared a statement which is rather voluminous, but it is necessary on account of the extent of the inquiry. The implements and machinery that were chosen were cultivators, harrows, seed-drills, horse-rakes, manure-spreaders, farm wagons, traction engines, and so on. I think I can bulk most of them. As in effect in 1913, the rate of duty on these articles imported from United States-although the other tariffs are outlined here too-was 20 per cent, with the odd article like ensilage cutters, farm sleighs and farm wagons at 25 .

By Mr. Graham:
Q. What about cream separators?-A. Well, I think I will pick those up afterwards, if you do not mind.
Q. That will be fine.-A. On April 7, 1914, mowing machines and harvesters were selected to take a lower rate of duty, namely \(12 \frac{1}{2}\) per cent. On June 6, 1919, some of the articles such as cultivators, harrows, seed drills and so on were reduced to 15 per cent; some were still left at 20 ; some were made \(17 \frac{1}{2}\). On May 24,1922 , there were substantial reductions-no, I possibly should not say substantial. There were reductions from the 15 per cent rates to \(12 \frac{1}{2}\) per cent; some were reduced to 20 per cent. Farm wagons were reduced to 20 .

\section*{By Mr. Graham:}
Q. What was your statement before that to the effect that some were reduced?-A. Some reduced to \(12 \frac{1}{2}\) per cent.
Q. Oh, yes.-A. Those items that were carrying 15 per cent, namely cultivators, harrows, seed drills, horse rakes and manure spreaders, were reduced to \(12 \frac{1}{2}\) per cent. Mowing machines and harvesters were reduced to 10 per cent; ensilage cutters and ploughs to 15 ; combines and threshing machines to 15 . Then on April 11, 1924, the rates were again reduced, ranging from 6 per cent on harvesters and mowing machines, \(7 \frac{1}{2}\) per cent on cultivators, harrows and so on, to a maximum of 10 per cent on threshing machines, combines, farm wagons and so on. Those rates were not changed in the subsequent tariff changesthat is, of 1925 and 1929 -with the exception that in 1929 the combines were reduced to 6 per cent. The next change was on May 2, 1930. There was no change in the rates of duty on the top half of the list I have, but in the lower half that is, ensilage cutters, ploughs, farm wagons, threshing machines, combines and so on-the rate was not reduced under the general tariff but the British preference was made free. That left the rates substantially the same as they were in 1924 from the United States. On September 17, 1930, the British preferential was not changed; the intermediate was made 15 per cent all along the line; and the general rate was made 25 per cent.

\section*{By Mr. Dupuis:}
Q. What was it before?-A. The general rates ranged from 6 per cent up to 10 per cent.
Q. Before the reduction?-A. Before September 17, 1930. On January 1, 1936, the Canada-United States trade agreement was introduced which lowered
[Mr. Lloyd Robert Younger.]
those rates of duty to \(12 \frac{1}{2}\) per cent. On May 2, 1936, the budget resolutions were introduced reducing the rate to \(7 \frac{1}{2}\) per cent.

\section*{By Mr. Graham:}
Q. Up until that Canada-United States treaty, United States was always under the general tariff?-A. The general tariff, yes. Now, I shall go back to cream separators. Cream separators were in the tariff of 1906 free of duty. They followed through free of duty up to October 13, 1932 when, as a result of the Imperial Economic Conference, an intermediate and general tariff rate of 25 per cent was placed on cream separators, which rate is still in effect from the United States, in view of the fact that although United States gets most favoured nation treatment-that is, other than most favoured foreign nation treatment-the intermediate tariff rate is the same as the general, so there is no reduction.

\section*{By Mr. Graydon:}
Q. Is there any extensive manufacturing of cream separators in Canada? -A. I do not know whether I can answer that it is extensive; but there are manufacturing operations, I understand. I do not know whether it is necessary to go into detail, but I believe they are manufactured in Hamilton. I believe they have been manufactured or were manufactured for years up the line some place; at Renfrew, I think it was. Offhand I cannot say definitely; but that is the extent of my knowledge of it.

\section*{By Mr. Tomlinson:}
Q. Are cream separators still on the intermediate tariff?-A. Yes.
Q. 25 per cent?-A. 25 per cent.

\section*{By Mr. Graham:}
Q. Were any of the implements and machinery in the list that you have there subject to the Ottawa agreement with the exception of cream separators? -A. None of them were subject to that.
Q. It was the only one?-A. The cream separator was.
Q. And as a result of section 9 of the Ottawa Agreement, so far as changes in the differential are concerned-have you section 9 with you?-A. I have it in my brief case.
Q. Give us briefly the result of it?-A. The result is that the British were guaranteed a certain spread over a period of years which, I believe, cannot be touched until the time of that agreement runs out. The agreement came into effect in 1932, for five years. The five years are up next October.

\section*{By Mr. Dupuis:}
Q. That is the cream separator. Have you anything as to barbed wire?A. No, I have not got barbed wire. I was just asked to prepare certain information, and that is what I have.

\section*{By Mr. Ward:}
Q. Do we import cream separators from Great Britain?-A. I cannot say.

The Chatrman: The importations have not been large, as yet, from Great Britain. The point, I believe, about cream separators is that in the Ottawa agreement of 1932 a certain differential between the general and the intermediate tariff was to be maintained.

Witness: That is correct.
Mr. Tombinson: It could not be altered.

The Chatrman: It could not be altered; and these items were the same.
Mr. Golding: Certain articles were fixed for a term of years in that agreement.

The Chairman: And the agreement being for five years, it fixed this duty for five years.

Mr. Golding: Quite so.
The Chatrman: Will you proceed, Mr. Younger?
Mr. Graham: May I interject here that the witness has not, if you will notice, dealt with each individual item. Could we put this in as an exhibit?

The Chairman: I think this statement should be printed right in the record because it contains very valuable information. It gives the changes that have been made from year to year in the tariff back to 1913.

Mr. Leader: That will be fine.
Witness: Shall I go ahead?
The Chairman: Yes, if you please.
Witness: Traction engines were 20 per cent in 1913. In 1918 farm tractors valued at not more than \(\$ 1,400\) were made free, leaving the other tractors at the 20 per cent rate-that is, those costing over \(\$ 1,400\), for farm purposes. That rate on the highest priced tractors was reduced to \(17 \frac{1}{2}\) per cent in 1919. The lower priced tractors valued at not more than \(\$ 1,400\) ran right through free of duty up to the present time.

\section*{By Hon. Mr. Motherwell:}
Q. Is that excise of 3 per cent levied on that price?-A. Yes.
Q. That is levied on everything?-A. On practically everything. That is an import tax.
Q. It is levied on all imports?-A. Practically all. There are some exceptions. The highest priced tractor engines remained at \(17 \frac{1}{2}\) per cent until May 2, 1930, when they were reduced to 15 per cent. On September 17, 1930, they were increased to 25 per cent. Under the Canada-United States trade agreement all internal combustion traction engines were made free. In the budget resolution all traction engines are free from all countries-internal combustion traction engines.

\section*{By the Chairman:}
Q. Are all tractors free of duty now entering Canada from any country?A. From any country, under the budget resolutions.
Q. Which budget resolutions?-A. Of May 2, 1936; that is, the present budget resolutions. That, of course, does not affect United States because they were free from January 1, anyway, under the Canada-United States trade agreement.

\section*{By Mr. Leader:}
Q. I was just wondering whether that did not mean portables. Traction engines do not come in duty free. I thought that only applied to portables?A. No. It reads "Internal combustion traction engines." It would take in Fordson or Caterpillar and so on, either large or small, as long as it was engine operated; that is, Diesel, gasoline and so on.

\section*{By Mr. Dupuis:}
Q. Only for farm use?-A. No, for all uses now. It was restricted to farm use up until the Canada-United States trade agreement; that is, on lower priced traction engines not costing more than \(\$ 1,400\).
[Mr. Lloyd Robert Younger.]

Then I have gone into the question of repair parts and I have worded it this way: "In general repair parts for the above-mentioned implements and machinery were provided for at the same rate as the articles of which they were complete parts, up to the 17 th September, 1930, when the rates were increased to 25 per cent, when tariff item 409q was placed in the tariff providing a continuation of the old rate on complete parts for repairs, with the following exceptions." That is, although the general items suggest that cultivators and so on had a provision for complete parts in them at 25 per cent, an item was inserted in the tariff called 409 q which continued the old rates of duty, the rates that applied prior to September 17, 1930.

\section*{By the Chairman:}
Q. That is with respect to repair parts?-A. Repair parts for those implements.
Q. Those repairs that you referred to there continued at the lower rate of duty, but they were repairs that were manufactured by the same company that manufactured the original implement. Is it not restricted to that?-A. Well, within this period here (indicating) ; that is, between the period of May 25 and, I think it was, October 13, that restriction was in force under regulations prescribed by the minister.

\section*{By Mr. Dupuis:}
Q. October 13, 1930-A. 1932. There was a period in between May and October when item 409q was interpreted as including "parts the product or manufacture of the agricultural implement manufacturer who manufactured the implement for which the parts are imported for use as repairs."

\section*{By the Chairman:}
Q. In other words, during that period repair parts such as ploughs, binders, canvass extension guards, and things of that character that were made by jobbers in the United States or other countries and imported into Canada would have to carry duty of 25 per cent, or carry a duty of 25 per cent during that period?-A. Yes.

\section*{By Mr. Dupuis:}
Q. What is it now?-A. The rates of duty now under the budget resolutions are mainly \(7 \frac{1}{2}\) per cent, following the implement of which they are complete parts.
Q. That is according to the Ottawa agreements?-A. No. It is in accordance with tariff changes that were introduced in the house on the 1st of May, 1936. In the Ottawa agreements the rates were reduced to \(12 \frac{1}{2}\) pretty well all the way through. The parts still went in at the old rate of duty in accordance with 409q, because 409q was not cancelled until the 1st of May, 1936.
Q. Are there manufacturers of implement parts in Canada?-A. Of course, I would say that the agricultural implement manufacturers themselves would be the manufacturers of the parts. That is in a general way.
Q. Is there any manufacturer of tractors in Canada?-A. No. I will come to that later. That is, we have never ruled internal combustion engines as of a elass made in Canada. I should say never. They are not ruled by the department as a class made in Canada. Now, the exceptions to that general rule are with respect to cream separators. During the time cream separators were free from duty--that is from the inception of the present tariff in 1906 up to the 13th of October, 1932-there was a provision in the cream separator item for steel bolts, but no provision for parts of cream separators as such, and they went according to the regular requirements of the tariff depending upon the rate of
duty in effect at the time. If they were machine parts they were rated under the general machinery item; if they were not machine parts they were rated according to the material of which they were manufactured, and, in some case, finished.

\section*{By Mr. Ross:}
Q. During that period were cream separators manufactured in Canada?-A. I would not think so.

\section*{By Mr. McKenzie:}
Q. What did you say the duty imposed in 1932 was?-A. On cream separators, 25 per cent.

The Charman: That is the general tariff, free from Great Britain.

\section*{By Mr. Tomlinson:}
Q. And they are bound until the expiration of the British agreements? A. Yes.
Q. Next year?-A. Yes. Then I have mentioned the other exception, namely, the traction engine. That is those costing over \(\$ 1,400\). When the general rate of duty was increased on the higher priced internal combustion traction engines there was a provision made in 409 q continuing the old rate at 15 per cent for repair parts. Tariff item 409 q -the repair part item-is cancelled from the 2nd of May of this year, the parts going back to the items.

Mr . Evans: When that 25 per cent duty was put on cream separators in October, 1932, was there an increase in price of cream separators?

Witness: I cannot say. I am prepared to answer any questions with regard to what happened in rates of duty applicable on goods, but I would not attempt to predicate the effect.

\section*{By Mr. McKenzie:}
Q. You would be in a position to say where these were imported from, would you not?-A. I suppose the information could be obtained.
Q. But you could not say offhand?-A. No.

Mr. Johaston: It is almost 1 o'clock, and if Mr. Younger is going into another phase of his work we had better adjourn.

Mr. Bertrand: How long would it take Mr. Younger?
The Chatrman : Quite a little while.
Witness: Of course, most of the parts for manufacture are covered by one item. But there are other items that have to be mentioned.

The Chairman: Perhaps we should let Mr. Younger proceed and make a digest of the items he is referring to here.

Witness: I might be able to get through in short order.
The Chatrman: Proceed.
Witness: In regard to the manufacture of agricultural implements from a tariff viewpoint, tariff item 442 is the item under which the bulk of materials and parts for the manufacture of the said articles are imported, and is quoted in part hereunder, with the names of certain specified implements and machinery bracketted following the tariff item number under which they themselves are provided for. It has been consistently ruled since the inception of this tariff item and former tariff item 442a that, in addition to the materials entering into the manufacture of the products, the item includes tools and machinery and other articles of plant equipment and other goods actually used in the process of manufacture of the goods provided for in the item, when imported by manufacturers of such goods for use exclusively in the manufacture thereof, but that
[Mr. Lloyd Robert Younger.]
the item does not include the plant buildings nor materials therefor, nor equipment of buildings such as plumbing fixtures, fire fighting apparatus and heating or lighting equipment, nor office supplies. You will also note from the proviso that the goods which are entitled to free entry or to a lower rate of duty than is mentioned in this item shall not be entered at the rate specified in the item. Tariff item 442 replaced on the 2nd May, 1930, former tariff item 445a which was placed in the tariff on the 17 th April, 1924, and which is also quoted in part hereunder, with the addition of the names of the implements and machines as previously mentioned. Prior to the inception of tariff item 445a there was no general item of this nature in the tariff and, aside from the special items which will be mentioned later, the goods for the purpose stated were subject to the regular rates of duty.

If you are bringing in rough lumber and rough lumber were free you would use the free item, being lower than the duty on the general item.

This item 442 reads:-
Articles which enter into the cost of manufacture of the goods enumerated in tariff items 409b (cultivators, harrows, seed drills, horserakes, manure spreaders), 409c (ploughs), 409d (mowing machines, harvesters, either self binding or without binders, harvesters, in combination with threshing machine separators), 409 f (ensilage cutters), 409j (threshing machine separators), 439c (farm wagons, farm sleds), when imported by manufacturers for use exclusively in the manufacture in their own factories of the goods enumerated in tariff items above.
British Preferential Tariff. . . . .. . . . . . . . . . . . . ... . . . .
Intermediate Tariff..
5 per cent.
That is 6 per cent from the United States and 5 per cent from Great Britain. The item which it replaced and which came into effect on the 11th of April, 1924, was substantially the same and carried the same rates of duty-that is \(5,6,6\), have been carried through since 1924.

Mr. Graham: And continued to the present time?
Witness: Continued to the present time. There are a few special items which are outlined here and which I do not think I need read-that is pig iron rolled iron or rolled steel in bars and so on. I have outlined the history.

Malleable sprocket chain which was in the tariff from 1914, and is used by manufacturers of agricultural implements, and which was free of duty, continued free up to the 13 th of October, 1932 -that is the conference again-when a 10 per cent rate of duty was placed on it.

Mr. Evans: There was an increase.
Witness: From free to 10 per cent.
Mr. Tomlinson: That is still bound.
Witness: Yes, the same way as with the cream separator. I also have a general list of materials handed to me by counsel. I have shown the history of these articles:-

Rough lumber not further manufactured than sawn or split and lumber not further manufactured than dressed on one side only. duty free.
all the way through right up to the present time; and lumber further manufactured than as above- 25 per cent ad valorem, and so on. I have gone into cotton duck, foundry coke, coal and other articles.

Mr. Evans: Is that on all classes of lumber or just hard wood?
Witness: All classes not further manufactured as outlined in the item-that is not further manufactured than sawn or split.

The Chairman: Perhaps you had better read those items.
Witness: Most of those goods were incorporated in that 6 per cent itemold 445a-when it came into effect in 1924. That is, prior to 1924 they took the regular requirements of the tariff, but once the special item came in they took the 6 per cent rate.

Then, with reference to cream separators, I have articles for the manufacture of cream separators when cream separators were free up to the period already mentioned and there were, we might say, compensating items for the manufacture of cream separators. One read:-

Materials which enter into the construction and form part of cream separators, when imported by manufacturers of cream separators to be used in their own factories for the manufacture of cream separators.
The item was free. There was a correponding item for the parts manufactured for cream separators, and those items are still in effect; that is, they are general production items, substantially the same as the 442 item for the manufacture of agricultural implements.

Although there is a special item in the tariff for articles for use in the manufacture of traction engines, I do not believe you are interested in same for the reason that the department's file indicates that internal combustion traction engines are not ruled as of a class made in Canada. Therefore, it is logical to conclude that if they are not making them they will not use the item. That is the consensus of what I have here.

\section*{By the Chairman:}
Q. Generally speaking, what percentage does the tariff rate amount to on these raw materials?-A. 6 per cent for agricultural implements-that is the bulk item.
Q. The bulk item is that there is a 6 per cent duty on the raw material used in the manufacture of agricultural implements?-A. And including plant equipment:-

Articles which enter into the cost of manufacture of the goods enumerated in tariff items 409b-
and so on under certain conditions.
By Hon. Mr. Motherwell:
Q. You spoke of cream separators. The 25 per cent duty was put on under the terms of the Ottawa agreements?-A. Yes.
Q. But it does not apply to empire countries?-A. No, it is still free.
Q. It does not apply to separators coming from empire countries?-A. No.
Q. Do any come from there?-A. I could not say. I think the trade returns would probaly show.
(Statement re tariff history of certain agricultural implements and machinery from 1913 to 1936 , together with memorandum on articles and materials for the manufacture of farm implements and machinery in question other than cream separators and traction engines appear in appendix 6 of to-day's evidence.)

The Chatrman: What about a further meeting? We have Mr. Rutherford with us this morning who is prepared to give us additional information which he has worked out. It will probably take twenty minutes to half an hour.

Mr. Tomlinson: I move we adjourn to the call of the chair.
Committee adjourned at one o'clock, to meet again at the call of the chair.

THE MATERIAL COST, PRODUCTIVE LABOUR COST, FREIGHT, AGENTS' COMMISSION AND RETAIL PRICE OF THREE SPECIFIED IMPLEMENTS EXPRESSED AS PERCENTAGES OF THE COMPARATIVE FIGURES FOR THE YEAR 1913.

8-foot Binder
\begin{tabular}{|c|c|c|c|c|c|}
\hline Year & Material & \begin{tabular}{l}
Pro- \\
ductive \\
Labour
\end{tabular} & Freight & Agent's Commission & Price \\
\hline 1913. & \(100 \cdot 0\) & \(100 \cdot 0\) & \(100 \cdot 0\) & \(100 \cdot 0\) & \(100 \cdot 0\) \\
\hline 1921. & \(245 \cdot 9\) & 263.5 & 153.9 & & \\
\hline 1924. & 186.6
167.9 & 184.9
195.4 & \(146 \cdot 8\)
\(148 \cdot 2\) & \(132 \cdot 3\)
\(150 \cdot 0\) & 181.2
163.5 \\
\hline 1931. & 179.2 & \(211 \cdot 1\) & & \(150 \cdot 0\) & 163.5 \\
\hline 1932. & \(191 \cdot 4\) & \(208 \cdot 7\) & & \(150 \cdot 0\) & \\
\hline 1933. & \(174 \cdot 5\) & \(162 \cdot 4\) & \(141 \cdot 2\) & \(143 \cdot 5\) & 149.3 \\
\hline
\end{tabular}

5-foot Mower
\begin{tabular}{|c|c|c|c|c|c|}
\hline 1913. & \(100 \cdot 0\) & \(100 \cdot 0\) & \(100 \cdot 0\) & \(100 \cdot 0\) & \(100 \cdot 0\) \\
\hline 1921. & \(234 \cdot 1\) & 296.6 & 174.9 & 123.6 & \(210 \cdot 0\) \\
\hline 1924. & \(187 \cdot 1\) & 201.4 & \(162 \cdot 6\) & 133.1 & 213.3 \\
\hline 1930. & \(164 \cdot 8\) & 193.7 & \(158 \cdot 1\) & \(156 \cdot 4\) & 188.3 \\
\hline 1931. & \(172 \cdot 3\) & 198.0 & & \(150 \cdot 2\) & \\
\hline 1932. & & & & & \\
\hline 1933. & & \(160 \cdot 0\) & \(153 \cdot 5\) & \(149 \cdot 1\) & \(163 \cdot 6\) \\
\hline
\end{tabular}

7-foot Cultivator
\begin{tabular}{|c|c|c|c|c|c|}
\hline 1913. & \(100 \cdot 0\) & \(100 \cdot 0\) & \(100 \cdot 0\) & \(100 \cdot 0\) & \(100 \cdot 0\) \\
\hline 1921. & \(275 \cdot 3\) & 238.0 & \(153 \cdot 7\) & \(142 \cdot 1\) & 195.8 \\
\hline 1924. & \(192 \cdot 0\) & \(166 \cdot 0\) & \(146 \cdot 5\) & \(173 \cdot 7\) & 188.2 \\
\hline 1930. & \(181 \cdot 7\) & 208.8 & \(149 \cdot 2\) & 184.2 & \(169 \cdot 7\) \\
\hline 1931. & \(213 \cdot 1\) & 212.0 & & \(184 \cdot 2\) & \\
\hline 1932. & \(227 \cdot 2\) & 201.3 & & \(184 \cdot 2\) & \\
\hline 1933. & 184.7 & 183.2 & \(145 \cdot 6\) & 178.9 & 157.3 \\
\hline
\end{tabular}

PRICES OF CERTAIN MATERIALS USED IN IMPLEMENT MANUFACTURE, FREIGHT RATES ON IMPLEMENTS, AND WAGES PER HOUR IN THE IMPLEMENT INDUSTRY EXPRESSED AS PERCENTAGES OF THE COMPARATIVE FIGURES FOR THE YEAR 1913.

Materials
\begin{tabular}{|c|c|c|c|c|c|}
\hline & Pig Iron & Steel Bars & Coal & \[
\begin{aligned}
& \text { Linseed } \\
& \text { Oil }
\end{aligned}
\] & Oak \\
\hline 1913. & \(100 \cdot 0\) & \(100 \cdot 0\) & \(100 \cdot 0\) & \(100 \cdot 0\) & \(100 \cdot 0\) \\
\hline 1921 & 175.7 & 169.0 & & \(154 \cdot 3\) & 218.5 \\
\hline 1924. & 143.8 & 151.6
113.5 & \(227 \cdot 3\)
218.1 & 199.8
173.8 & 167.9 \\
\hline 1930 & \(120 \cdot 1\) & \begin{tabular}{l}
\(113 \cdot 5\) \\
109.0 \\
\hline
\end{tabular} & \(218 \cdot 1\)
218.1 & 173.8
110.7 & \(123 \cdot 2\)
111.8 \\
\hline 1932 & \(120 \cdot 1\) & 109.0 & 211.5 & \(93 \cdot 1\) & \(105 \cdot 7\) \\
\hline 1933 & 111.4 & \(109 \cdot 0\) & \(190 \cdot 9\) & 112.0 & \(107 \cdot 1\) \\
\hline 1934. & 111.1 & 109.0 & \(190 \cdot 9\) & \(130 \cdot 8\) & 107.1 \\
\hline 1935. & 111.4 & \(109 \cdot 0\) & \(190 \cdot 9\) & 121.8 & \(107 \cdot 1\) \\
\hline
\end{tabular}

Whaes
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline & Freight on Implements & Blacksmiths & Machinists & \begin{tabular}{l}
Pattern \\
Makers
\end{tabular} & Moulders & Painters & Labourers \\
\hline 1913 & \(100 \cdot 0\) & \(100 \cdot 0\) & \(100 \cdot 0\) & \(100 \cdot 0\) & \(100 \cdot 0\) & 100.0 & \(100 \cdot 0\) \\
\hline 1921. & 166.9 & 238.4 & 227.3 & 258.0 & 209.0 & 223.8 & \(182 \cdot 6\) \\
\hline 1924. & 153.9 & 224.8 & \(214 \cdot 6\) & \(230 \cdot 6\) & \(206 \cdot 7\) & 194.2 & 180.0 \\
\hline 1930. & 153.9 & 236.0 & 228.1 & 238.8 & \(204 \cdot 7\) & \(195 \cdot 8\) & 191.8 \\
\hline 1931. & \(153 \cdot 9\) & \(212 \cdot 0\) & 207.7 & 231.0 & \(173 \cdot 3\) & 177.5 & \(182 \cdot 6\) \\
\hline 1932. & 153.9 & 203.2 & \(172 \cdot 3\) & \(209 \cdot 4\) & \(153 \cdot 3\) & 185.4 & 179.0 \\
\hline 1933. & 153.9 & 185.2 & 165.0 & \(196 \cdot 1\) & \(150 \cdot 0\) & 167.9 & \(175 \cdot 4\) \\
\hline 1934. & 153.9 & 179.2 & 168.8 & 186.7 & 161.0 & \(164 \cdot 2\) & \(170 \cdot 3\) \\
\hline 1935. & 153.9 & \(174 \cdot 0\) & \(173 \cdot 1\) & \(186 \cdot 3\) & \(163 \cdot 3\) & \(162 \cdot 5\) & \(169 \cdot 2\) \\
\hline
\end{tabular}

TABLE X
Company No. 1
Company No. 2
INTERNATIONAL HARVESTER MASSEY-HARRIS CO. COMPANY OF CANADA

LIMITED
Average of 6 Implements
Average of 9 Implements
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & 1913 & 1933 & Increase, per cent & 1913 & 1934 & Increase, per cent \\
\hline \begin{tabular}{l}
Sales Realization- \\
A Cash price to consumer at Regina.
\end{tabular} & \$ ets. 8304 & \begin{tabular}{l}
\$ ets. \\
12724
\end{tabular} & 53 & \begin{tabular}{l}
\$ ets. \\
8639
\end{tabular} & \begin{tabular}{l}
\$ cts. \\
13000
\end{tabular} & 50 \\
\hline \begin{tabular}{l}
B Agents commission \\
C Freight.
\end{tabular} & 1584
898 & \[
\begin{aligned}
& 2316 \\
& 1363
\end{aligned}
\] & 46
52 & 994
1243 & \[
\begin{aligned}
& 2092 \\
& 1658
\end{aligned}
\] & 110
33 \\
\hline D Net price realized \(A-(B+C)\) & 5822 & 9045 & 55 & 6502 & 9250 & 42 \\
\hline \multirow[t]{4}{*}{\begin{tabular}{l}
Factory Cost- \\
E Material. \\
F Productive labour. \(\qquad\) \\
G Prime cost (E+F) \(\qquad\) \\
H Other factory expense. \(\qquad\) \\
I Total factory cost \((\mathrm{G}+\mathrm{H})\). \(\qquad\) \\
J (1) Gross Profit (D-I) before admiristration, selling expense, etc. \(\qquad\)
\end{tabular}} & 2241
558 & 3978
1146 & 77
105 & 2554
497
4 & 4208
633 & 64
27 \\
\hline & 2799
642 & 5124
3884 & 83
505 & 30
7
7
61 & 48
2641
\(42^{*}\) & 58
247 \\
\hline & 3441 & 9008 & \multirow[t]{3}{*}{162

decrease} & 3814 & 7483 & 96 \\
\hline & 2381 & 037 & & & & \\
\hline J (2) Gross Profit (D-I) before selling expense, etc., but deducting administration. & & & & 2688 & 1767 & decrease \\
\hline
\end{tabular}
*Includes figures for factory overhead and administrative expense.

The dates shown indicate when the various tariff changes took place
\begin{tabular}{|c|c|c|c|c|c|}
\hline Goods & In effect in 1913 & \[
\begin{gathered}
\text { April 7, } \\
1914
\end{gathered}
\] & \[
\begin{gathered}
\text { Feb. } 7, \\
1918
\end{gathered}
\] & June 6, 1919 & \[
\begin{gathered}
\text { May } 24, \\
1922
\end{gathered}
\] \\
\hline Cultivator & \(12 \frac{1}{2} \% 17 \frac{1}{2} \% 20 \%\) & & & \(10 \% 15 \% 15 \%\) & \(10 \% 12 \frac{1}{2} \% 12 \frac{1}{2} \%\) \\
\hline Harrows.. & \(12 \frac{1}{2} \% 17 \frac{1}{2} \% 20 \%\) & & & \(10 \% 15 \% 15 \%\) & \(10 \% 12 \%\) \% \(12 \frac{1}{2} \%\) \\
\hline \begin{tabular}{l}
Seed-drills \\
Horse-rake
\end{tabular} & \begin{tabular}{l}
\(12 \%\) \\
\(12 \%\) \\
\(12 \%\) \\
\hline
\end{tabular} \(17 \frac{172}{2} \% 20 \%\) & & & \begin{tabular}{llll}
10 & \(\%\) & 15 & \(\%\) \\
10 & \% & \(15 \%\) \\
\hline
\end{tabular} & \(\begin{array}{llll}10 & \% & 12 \frac{1}{2} \% & 12 \frac{1}{2} \% \\ 10 & \% & 12 \frac{1}{2} \% & 12\end{array}\) \\
\hline Manure Spread & \(12 \%\) 1712\% 20\% & & & \(10 \% 15 \% 15 \%\) &  \\
\hline Mowing Machine & \(12 \frac{1}{2} \% 17 \frac{1}{2} \% 20 \%\) & \(12 \frac{1}{2} \% 121\) \% \(12 \frac{1}{3} \%\) & & & \(7 \frac{1}{2} \% 10 \% 10 \%\) \\
\hline Harvesters... & \(12 \frac{12}{15}\) \% \(17 \frac{1}{2} \% 20 \%\) & 121\% \(12 \frac{1}{2} \% 12 \frac{1}{2} \%\) & & & \\
\hline Engilage Cutt Ploughs. & \(\begin{array}{llll}15 \% & 221 \% & 25 \% \\ 121\end{array}\) & & & \(\begin{array}{llll}12 \frac{1}{2} \% & 20 \% & 20 \% \\ 12 & \frac{1}{2} \% & 17 \frac{1}{2} \% & 17 \frac{1}{2} \%\end{array}\) & \(\begin{array}{llllllll}10 & \% & 15 & \% & 15 & \% \\ 10 & \% & 15 & \% & 15\end{array}\) \\
\hline Cream Separa & Free Free Free & & & 122\% 172\% 172\% & 10 \% \(15 \% 15 \%\) \\
\hline Farm Sleighs & \(17 \frac{1}{2} \% 22 \frac{1}{2} \%\) 25\% & & & \(15 \% 20 \% 20 \%\) & \(10 \% 15 \% 17 \frac{1}{2} \%\) \\
\hline Farm Wagons & \(17 \frac{1}{2} \%\)
\(15 \%\)
22 & & & \(15 \% 20 \% 20 \%\) & \(10 \%\) 15 \% 17⿺辶 \\
\hline Threshing Combines. & \(15 \%\)
\(15 \%\) & & &  &  \\
\hline Traction Engines, n.o.p. & \(15 \% 17 \frac{1}{2} \% 20 \%\) & & & \(12 \frac{1}{2} \% 17 \frac{1}{2} \% 17 \frac{1}{2} \%\) & \\
\hline Traction Engines at under \$1,400. &  & & Feer Free Free & & \\
\hline
\end{tabular}

\section*{Note:-}

In general Repata Parts for the above-mentioned implements and machinery were provided for at the same rate as the articles of which they were complete parts, up to the 17th September, 1930, when the rates were increased on the implements and machines when tariff item 409 q was placed in the Tariff, providing a continuation of the old rates on complete parts for repairs, with the following exceptions:
(a) Cream Separators-Aside from steel bowls, repair parts for cream separators were subject to duty, ranging from approximately \(25 \%\) ad valorem to \(45 \%\) ad valorem, under the General Tariff, in view of the fact that the cream separator item contained no provision for parts up to the 13th October, 1932, when provision was made in the item for complete parts.

The three rates shown in each case are British Preferential, Intermediate and General

(b) Traction Engines-Integral parts or complete parts were provided for the same as the engine of which they were complete parts up to the present time, except for farm tractors, n.o.p., which were provided for in tariff item 409q from the 17th September, 1930, at the old rates.
(c) Tariff Item 409q repealed from 2nd May, 1936.

\section*{Note:-}

In accordance with the Caniada-United States Tpade Ageeement, effective from the 1st January, 1936, all internal combustion traction engines and complete parts thereof are free of duty and the remaining articles outlined above are dutiable at \(12 \frac{1}{2} \%\) ad valorem, with the exception of the cream separators and complete parts thereof, which remain dutiable the same as formerly, and the farm wagons and farm sleighs, which are dutiable at \(15 \%\) ad valorem, Intermediate Tariff.

\section*{ARTICLES AND MATERIALS}

\section*{For the Manufacture of the Farm Implements and Machinery in Question Other Than Cream Separators and Traction Engines}

Tariff item 442 is the item under which the bulk of materials and parts for the manufacture of the said articles are imported and is quoted in part hereunder, with the names of certain specified implements and machinery bracketed following the tariff item number under which they themselves are provided for. It has been consistently ruled since the inception of this tariff item and former tariff item 445 a that, in addition to the materials entering into the manufacture of the products, the item includes tools and machinery and other articles of plant equipment and other goods actually used in the process of manufacture of the goods provided for in the item, when imported by manufacturers of such goods for use exclusively in the manufacture thereof, but that the item does not include the plant buildings nor materials therefor, nor equipment of buildings such as plumbing fixtures, fire fighting apparatus and heating or lighting equipment, nor office supplies. You will also note from the proviso that the goods which are entitled to free entry or to a lower rate of duty than is mentioned in this item shall not be entered at the rate specified in the item. Tariff item 442 replaced on the 2nd May, 1930, former tariff item 445a, which was placed in the tariff on the 17 th April, 1924, and which is also quoted in part hereunder, with the addition of the names of the implements and machines as previously mentioned. Prior to the inception of tariff item 445a there was no general item of this nature in the tariff and, aside from the special items which will be mentioned later, the goods for purpose stated were subject to the regular rates of duty.

\section*{Tariff Item 442-}

Articles which enter into the cost of manufacture of the goods enumerated in tariff items 409b (cultivators, harrows, seed-drills, horserakes, manure spreaders), 409e (ploughs), 409d (mowing machines, harvesters, either self-binding or without binders, harvesters, in combination with threshing machine separators), 409 f (ensilage cutters), 409j (threshing machine separators), 439c (farm wagons, farm sleds), when imported by manufacturers for use exclusively in the manufacture in their own factories of the goods enumerated in tariff items above.

British preferential tariff. .
Intermediate tariff. . . . . . . . . . . . . . . . . . . . . . . . 5 5 p.c.
Provided that goods which are entitled to free entry or to a lower rate of duty than is mentioned' in this item shall not be entered at the rate specified in this item.
Tariff Item 445a-(April 11, 1924)
Articles which enter into the cost of the manufacture of goods enumerated in tariff items 445 (mowing machines, harvesters, self-binding or without binders), 446 (cultivators, harrows, horse-rakes, seed-drills, manure spreaders), 446b (ploughs), 447 b (threshing machine separators), 591 (farm wagons), 448 (ensilage cutters).
British preferential tariff. . . . . . . . . . . . . . . . . . . .
Intermediate tariff.. . \(\quad .\).

Malleable iron castings, when imported by manufacturers for use exclusively in their own factories in the manufacture of mowing machines, harvesters, binding attachments and reapers, were dutiable from the 7th April, 1914, to the 11th April, 1924, at \(17 \frac{1}{2}\) per cent ad valorem, under the general tariff. Prior to
the 7th April, 1914, such malleable iron castings were dutiable at \(27 \frac{1}{2}\) per cent ad valorem, general tariff.

Rolled or drawn square tubing of iron or steel adapted for use in the manufacture of agricultural implements was admissible from the 30th November, 1906, up to the 2nd May, 1930, free, British preferential, and 5 per cent ad valorem, intermediate and general tariffs, under tariff item 396. This item was cancelled from the 2nd May, 1930, when the goods specified therein became dutiable under tariff item 442, when complying with the provisions of that tariff item.

The rates of duty with respect to pig iron and bars or rods of iron or steel, hot rolled, are outlined hereunder in chronological order of tariff changes.
Tariff Item 375 (In effect in 1913)
Iron in pigs-
\[
\text { British preferential tariff. . . . . . . . . . . . . . . . } \$ 150
\]
Intermediate tariff ..... 225
General tariff ..... 250
Rolled iron or rolled steel in bars-
British preferential tariff ..... 425
Intermediate tariff ..... 600
General tariff ..... 700
(April 7, 1914)Pig iron.
British Preferential Tariff ..... \$ 150
Intermediate Tariff ..... 250
General Tariff ..... 250
Rolled iron or rolled steel in bars.
British Pereferential Tariff. ..... \(\$ 425\)
Intermediate Tariff. ..... 600
General Tariff. ..... 700
Tariff Item \(445 b\) (April 11, 1924)

Rolled iron, rolled steel and pig iron when imported for use exclusively by the manufacturers in their own factories in the manufacture of goods enumerated in tariff items 445 (mowing machines, harvesters, selfbinding or without binders), 446 (Cultivators, harrows, horse-rakes, seeddrills, manure spreaders), 446b (ploughs), 447 b (threshing machine separators), 591 (farm wagons).
\[
\begin{aligned}
& \text { British Preferential Tariff . . . . . . . . . . . . . . . . . . } \\
& \text { Intermediate Tariff. . . . . . . . . . . . . . . . . . . . . . . } \\
& \text { Geee } \\
& \text { General Tariff. . . . . . . . . . . . . . . . . }
\end{aligned}
\]

\section*{Tariff Item \(442 a\) (May 2, 1930)}

Pig iron or hot rolled iron or steel, when imported by manufacturers for use exclusively in the manufacture in their own factories, of the goods enumerated in tariff items 409b (Cultivators, harrows, seed-drills, horserakes, manure spreaders), 409c (ploughs), 409d (mowing machines, harvesters, either self-binding or without binders, harvesters in combination with threshing machine separators), 409 f (ensilage cutters), 409 j (threshing machine separators), 439c (farm wagons, farm sleds).
British Preferential Tariff. . ... .. . . . . . . .. . . .
Intermediate Tariff. . . . . . . . . . . . . . . . . . .
Free
General Tariff. . . . . . . . . . . . . . . . . . . . .

\section*{Tariff Item \(442 a\) (Sept. 17, 1930)}

Notwithstanding the provisions of tariff item 442, materials or commodities as hereunder defined or described, when imported by manufacturers for use exclusively in the manufacture, in their own factories, of the goods enumerated in tariff items 409b (Cultivators, harrows, seeddrills, horse-rakes, manure spreaders), 409c (ploughs), 409d (mowing machines, harvesters, either self-binding or without binders, harvesters in combination with threshing machine separators), 409f (ensilage cutters), 409j (threshing machine separators), 439c (farm wagons, farm sleds).
(1) Pig iron \(\quad\) British Preferential Tariff. . . . . . . . ... .. . . \(\$ 0\) per ton 75

Intermediate Tariff.. .. .. .. .. .. .. .. .. 125
General Tariff. . . . . . . . . . . . . . . . . . . . . . . . 125
(2) Bars or rods, of iron or steel, hot rolled per ton

British preferential Tariff. . . . . . . . . . . . . . . . \$ \(212 \frac{1}{2}\)
Intermediate Tariff. . . . . . . . . . . . . . . . . . . . 350
General Tariff. . . . . . . . . .. .. . . . . .. .. 350
Tariff item 386 (c) and former tariff item 444, in effect from the 30 th November, 1906, and which tariff item 386 (c) replaced on the 2nd May, 1930, are also quoted hereunder.

Tariff Item 386 (c) (May 2, 1930)
Sheets, plates, hoop, band or strip, hot rolled, being mould boards, shares, plough plates, land sides or dise circles, when such rectangles, circles or sketches are cut to shape but not moulded, punched, polished or otherwise manufactured, when imported by manufacturers of agricultural implements for use exclusively in the manufacture of agricultural implements, in their own factories.
British Preferential Tariff..
Intermediate Tariff. . . . . . . . . . . . . . . . . . . . . . . . . . . . . .
Free
General Tariff. . . . . . . . . . . . . . . . . . . . . .

Tariff Item 444 (Nov. 30, 1906)
Mould boards or shares, or plough plates, land sides, and other plates for agricultural implements, when cut to shape from rolled plates of steel, but not moulded, punched, polished or otherwise manufactured.
British Preferential Tariff. . . . . . . . . . . . . . . . . . Free
Intermediate Tariff. . . . . . . . . . . . . . . . . . . Free
General Tariff. . . . . . . . . . . . . . . . . .

Present tariff item 408 and the former tariff items covering the goods provided for therein are quoted hereunder.

Tariff Item 411 (April 7, 1914)
Malleable sprocket chain, and link belting chain of steel, when imported by manufacturers of agricultural implements for use in the manufacture of such implements in their own factories.

British Preferential Tariff. . .. .. .. .. . . .. .. Free
Intermediate Tariff.. .. .. .. .. .. .. .. .. Free
General Tariff. . . . . . . . . .. .. .. .. .. .. Free

\section*{Tariff Item 408 (May 2, 1930)}

Malleable sprocket chain and link belting chain, of iron or steel, including roller chain of all kinds for operating on steel sprockets or gears, when imported by manufacturers of agricultural implements for use
exclusively in the manufacture of agricultural implements, in their own factories, under regulations prescribed by the Minister.
\[
\begin{aligned}
& \text { British Preferential Tariff. . .. .. .. .. .. .. .. } \\
& \text { Intermediate Tariff. Free } \\
& \text { General Tariff. . .. ... .. .. .................. } \\
& \text { Free } \\
& \text { Gree .. .. }
\end{aligned}
\]

Tariff Item 408 (October 13, 1932)
Malleable sprocket chain and link belting chain of iron or steel, including roller chain of all kinds for operating on steel sprockets or gears, when imported by manufacturers of agricultural implements for use exclusively in the manufacture of agricultural implements, in their own factories, under regulations prescribed by the Minister.
\[
\begin{aligned}
& \text { British Preferential Tariff. . . . . . . . . . . . . . . Free } \\
& \text { Intermediate Tariff. . .. .. .. .. .. .. .. .. } 10 \text { per cent } \\
& \text { General Tariff. . . . . . . . . . . .. . . . . . . . . .. } 10 \text { per cent }
\end{aligned}
\]

This material was also free of duty under all Tariffs prior to the 7th April, 1914.

\section*{TARIFF STATUS OF SPECIFIED MATERIALS}

Lumber not further manufactured than sawn or split and lumber not further manufactured than dressed on one side only-duty free from 1906 to date.

Lumber further manufactured than as above- 25 per cent ad valorem, General Tariff, up to the 11th April, 1924, when it became admissible under former tariff item 445a.

Cotton duck weighing over eight ounces per square yard- 20 per cent ad valorem, General Tariff, from 1907 to the 11th April, 1924, when former tariff item 445 a became effective.

Foundry coke for manufacture of agricultural implements in Ontario-duty free from 1906 to date, as being coke of a kind owing to transportation costs is not available in this province.

Bituminous slack coal such as would pass through a \(\frac{3}{4}\)-inch sereen- 14 cents per ton up to 11th April, 1924, and bituminous coal, n.o.p.- 53 cents per ton up to 11th April, 1924, when former tariff item 445a was placed in the Tariff.

Red paste, if paint, 30 per cent ad valorem, General Tariff, from 1906 up to 11th April, 1924, when former tariff item 445a applied.

Linseed oil, raw or boiled, \(\$ 1.65\) per one hundred pounds, General Tariff, from 1906 up to 11th April, 1924, when former tariff item 445 a applied.

Dry white lead, 30 per cent ad valorem, General Tariff, from 1906 up to 11th April, 1924, when former tariff item 445a applied.

Fuel oil, probably \(\frac{1}{2}\) cent per gallon, General Tariff, from 1906 up to 11th April, 1924, when former tariff item 445a became effective.

Rolled iron or steel sheets, 5 per cent ad valorem, General Tariff, up to 6 th June, 1919, when they became dutiable at \(12 \frac{1}{2}\) per cent ad valorem, General Tariff, and so remained up to 11th April, 1924, when former tariff item 445a applied.

The iron or steel bars, pig iron and castings are covered by the first part of the statement.

\section*{MATERIALS FOR THE MANUFACTURE OF CREAM SEPARATORS}

Former tariff item 472 as in effect up to the 2nd May, 1930, and tariff items 442 b and 442 c , as in effect from the 2nd May, 1930, to date, are quoted hereunder.

\section*{Tariff Item 472}

Materials which enter into the construction and form part of cream separators, when imported by manufacturers of cream separators to be used in their own factories for the manufacture of cream separators.
British Preferential Tariff. . . . . . . . .. . . . . . . . Free
Intermediate Tariff.. . . . . . . . . . . .. .. . . Free
General Tariff

Tariff Item 4426 (May 2, 1930)
Materials which enter into the construction and form part of cream separators when imported by manufacturers of cream separators for use exclusively in the manufacture of cream separators, in their own factories, under regulations prescribed by the Minister.

British Preferential Tariff. . . . . . . . . . . . . . . . Free
Intermediate Tariff. . . . . . . . . . . . . . . . . . Free
General Tariff. . . . . . . . . . . . . . . . . . . . . Free
Tariff Item 442c (May 2, 1930)
Articles of metal when imported by manufacturers of cream separator parts for use exclusively in the manufacture of cream separator parts, in their own factories, under regulations prescribed by the Minister.
\[
\begin{aligned}
& \text { British Preferential Tariff. . . . . . . . . . . . . . . . } \\
& \text { Intermediate Tariff. . . . . . . . . . . . . . . . . Free } \\
& \text { General Tariff. . . . . . . . . . . .. .. . . . . . . Free }
\end{aligned}
\]

Although there is a special item in the Tariff for articles for use in the manufacture of traction engines, I do not believe you are interested in same for the reason that the Department's file indicates that internal combustion traction engines are not ruled as of a class made in Canada.

\section*{STANDING COMMITTEE}

ON

\section*{agriculture and colonization}

\section*{MINUTES OF PROCEEDINGS AND EVIDENCE (Farm Implement Price Inquiry)}

FRIDAY, JUNE 5, 1936
No. 7

WITNESSES:
Mr. J. B. Rutherford, Agricultural Statistician, Dominion Bureau of Statistics.

Mr. William Gilchrist, Chief of Foreign Trade Division, Department of Trade and Commerce.
Mr. W. A. Warne, External Trade Branch, Dominion Bureau of Statistics.

\section*{EXHIBITS FILED}

No. 3-Tariff rates applicable in foreign countries in relation to U.S.A. and Canada.

No. 4 -Canada's domestic exports of farm implements and machinery and parts, fiscal years 1913-1924.

No. 5-Canada's imports of materials for the manufacture of farm implements, fiscal years 1913-1924.

No. 6-Canada's imports of farm implements and machinery and parts, fiscal years 1913-1924.

No. 7-Canada's domestic exports of farm implements and machinery and parts to U.S.A. by months, April 1, 1935, to March 31, 1936.

No. 8 -How the Saskatchewan farmer spent his dollar-years 1925-1933. (Based on farm surveys by the Department of Farm Management, University of Saskatchewan.)

\section*{MINUTES OF PROCEEDINGS}

Friday, June 5, 1936.
The Standing Committee on Agriculture and Colonization met this day at 11 a.m. The chairman, Mr. W. G. Weir, presided.

Members present: Messrs. Bertrand (Prescott), Bouchard, Donnelly, Douglas, Dubois, Evans, Fafard, Fontaine, Furniss, Golding, Gosselin, Graydon, Leclerc, MacKinnon (Edmonton West), MacRae, McKenzie (Lambton-Kent), McLean (Melfort), Motherwell, Needham, Patterson, Perley (Qu'Appelle), Robichaud, Ross (Middlesex East), Senn, Spence, Taylor (Norfolk), Thorson, Thompson, Tomlinson, Turner, Ward, Weir.

In attendance: Mr. R. T. Graham, K.C., counsel for the committee.
Mr. J. B. Rutherford, Agricultural Statistician, Dominion Bureau of Statistics, was recalled, heard and retired.

Mr. William Gilchrist, Chief of Foreign Trade Division, Department of Trade and Commerce, called. Witness retired.

Mr. W. A. Warne, External Trade Branch, Dominion Bureau of Statistics, called, heard and retired.
On motion of Mr. Thorson:
Ordered that the first page of each presentation of Mr. W. A. Warne's tables be printed in the record and that the tables be filed for the use of the committee. On motion of Mr. McLean (Melfort):

Ordered that the Clerk do summon Professor A. E. Hardy of the University of Saskatchewan to appear before the committee on Tuesday, June 9, at 11 a.m. On motion of Mr. Thorson:

Pursuant to Order of Reference of March 13, 1936, empowering the committee to employ such experts as may be considered necessary, the committee hereby ratifies the employment, until their services are no longer required, of the following:-
T. W. O'Neill-Legal Secretary.

From March 21, 1936, at \(\$ 5\) per day.
F. J. Tibbs-Chartered Accountant "Auditor."

From May 23, 1936, at \(\$ 25\) per day and expenses of \(\$ 6\) per day.
J. Tooley-Assistant Accountant "Auditor."

From May 23, 1936, at \(\$ 10\) per day and expenses of \(\$ 6\) per day.
T. R. Russell-Auditors' Assistant.

From May 11 to May 16 and from May 27 to June 1, 1936, inclusive and as required, at \(\$ 1\) per hour.
Miss V. M. Fisher-Expert Stenographer.
From May 13 to May 16 and from June 1 to June 2, inclusive and as required, at 75 cents per hour.

That the Chairman be authorized to recommend payment of such additional assistance as may be necessary.

The committee then adjourned to meet again on Tuesday, June 9, at 11 a.m.

> WALTER HILL, Clerk of the Committee.

\title{
MINUTES OF EVIDENCE
}

House of Commons, Room 231, June 5, 1936.

The Select Standing Committee on Agriculture and Colonization appointed to inquire into the prices of agricultural implements met at 11 o'clock. Mr. Weir, the chairman, presided.

\section*{Mr. R. T. Graham, K.C., Counsel for the committee.}

The Chairman: Gentlemen, if you will kindly come to order, we shall proceed. We have three witnesses this morning from departmental branches. Mr . Graham also has some statements which, I think, it would be well to have read into the record, as well as some answers to questions that were raised here some days ago. May I also just say that I should like the committee to remain after the witnesses have completed their statement. There are two or three things that I think we should deal with. I might say that the auditors and our counsel feel that they are in a position now, with the information that they have received, to examine the implement companies. The implement companies have been approached and they are willing to appear next week. So if you will keep that in mind, I think we will deal with the formality of that after we discharge the witnesses who are going to give evidence here this morning. If it is agreeable to the committee, I would like to call on Mr. Graham, our counsel, to clear up some of the matters that were raised a while ago, and also to place on record some information that has come to the committee, but which we do not feel it is necessary to call witnesses upon. Is that agreeable to the committee?

Some Hon. Members: Agreed.
The Charmman: Then I will call on Mr. Graham.
Mr. Graham: There were certain questions put to Mr. Losee, you will remember, when he was giving his evidence before the committee. The subject of the discussion was the difference in the capital spent and the number of men employed in 1924 and 1925. At page 90 there was a question asked by Mr. McLean:-
Q. Let us look at the other figures. They employ a little less capital and nearly one thousand men more, and nearly \(\$ 1,000,000\) paid out in larger salaries and wages, and more money for fuel and electricity, and less for material, and yet there is a difference of one and three-quarter millions in the value of their output?
The following statement answers this inquiry:-
In 1924 there were 63 plants operating. Three new plants reported for the year 1925, making a total of 66 plants to be accounted for in this year.

Employees: Of these, 36 (including the 3 new plants) showed an increase over 1924 of 1,176 employees; 23 (including 5 that went out of business) showed a decrease of 317 employees, and 7 plants showed no change. Net gain in employees was 859.

Production: Forty-one plants (which includes 3 new plants in 1925) showed an increase in production over 1924 of \(\$ 3,386,475 ; 25\) plants (which includes 5 plants retired from business) showed a decrease of \(\$ 5,063,430\). Net loss in production was \(\$ 1,676,955\).

The net decrease in number of plants was 2. Total plants reporting in 1925 was 61.

The majority of plants showed an increase in value of production when compared with the preceding year; but the drop in production of a few large firms more than offset this gain.

I think this is possibly the most important statement.
Several of the larger firms showed a marked increase in the number employed towards the end of 1925.
The explanation is not completely clear, Mr. McLean; but without a detailed examination, Mr. Losee tells me it is the only information that he can give.

Mr. McLean: I think it is quite clear.
Mr. Graham: The second question is on page 101, dealing with the volume of implement production as opposed to the dollar value of implement production in the year:-

> Mr. McLean: That is not what I mean. I am talking of volume as you would talk of the volume of wheat in bushels rather than dollars. I should like to have the volume of machinery the same way. It would not be very hard to do; it is not beyond the powers of the bureau. They could enumerate so many ploughs, mowers, and so on and give an index figure.

In answer to Mr. McLean's question, the following index of the volume of implement production in Canada has been prepared:-


These index numbers were constructed from a list of twenty-three farm implements (see list below) which constitute the major items of production in the Farm Implements Industry in Canada. The indexes have been plotted on the accompanying chart.

List of implements from which the index of volume of production was made:-

Disc plough
Single walking plough
Gang walking plough
Single sulky plough
Gang sulky plough
Gang tractor plough
Hillside plough
Disc harrow
Spring tooth harrow
Cultivators
Land rollers
Seed drills

Scufflers
Corn planters
Grain binders
Threshers
Hay loaders
Hay rakes
Hay rakes (side delivery and tedder combined)
Mowers
Manure spreaders
Cream separators (hand and belted)
Cream separators (electric)

These, he says, constitute the major items of production in the farm implement industry in Canada. The indexes have been secured and a chart made, but I do not think it is necessary to put the chart in because the same graph line is contained in a chart which Mr. Rutherford put in, if you will recall. That completes that answer to Mr. McLean's question.

Then there was a question by Mr. McKenzie on page 102:-
Q. The number of plants gradually decreased from 1920 to 1935 ; did the number of firms decrease likewise? Or do you know how many firms are making agricultural implements?
The following statement answers this inquiry:-
NUMBER OF FIRMS AND CORRESPONDING NUMBER OF PLANTS INCLUDED
IN THE AGRICULTURAL IMPLEMENT INDUSTRY, 1920-1934


Then, Mr. Chairman, with regard to this other material, it might be well for me to wait until Mr. Warne is called.

The Chairnan: Very well. Shall I call Mr. Rutherford.
Mr. Graham: Yes, Mr. Rutherford.
The Charman: The next witness is the one that we had ready last day the committee was sitting but whose evidence we did not get to. You will remember that Mr. Rutherford was before the committee some days ago. We have asked him to prepare some additional information for the committee which he has available this morning. I would like to call on Mr. Rutherford now, if it is agreeable to the committee.

Some Hon. Members: Agreed.

\section*{J. B. Rutherford recalled.}

The Charman: Perhaps I might indicate what Mr. Rutherford has been asked to prepare for the committee. He has been asked to prepare a chart and memorandum showing the "barrier" and the effect of the tariff, the sales tax, special excise tax and exchange on imports of farm implements over the period under review from United States; the 1934 and 1935 dollar value of the products of the field by provinces and particularly information re percentage of farmers' dollar spent for farm implements and repairs. Mr. Rutherford was good enough to look into these matters which have been particularly drawn to the attention of the committee from time to time. Mr. Rutherford, we will be very glad if you will proceed.

Witness: The first subject is re tariffs, sales taxes, special excise taxes and exchange rates. In order to bring together material respecting tariffs, sales taxes and excise taxes as presented to this committee at the last meeting, Mr. Graham suggested that charts be prepared to set forth the information in visual form. At his request, the information respecting exchange rates was added.

To simplify the presentation, two tariff classifications were taken from the lists pertaining to the importation of agricultural implements. The tariffs used in the classification are those that applied to importations of agricultural implements from the United States over the period 1913 to 1936. The implements included in each classification are enumerated in the titles of the charts. As a basis for calculating the relative costs involved in importing these machines, a "Fair Market Value" of \(\$ 100\) was used throughout.

That is, this heavy black base line (indicating) represents \(\$ 100\). The total on this chart is the approximate cost per \(\$ 100\) of the fair market value in the United States of bringing mowing machines and harvesters into Canada, exclusive of freight.

Using this value of \(\$ 100\) as a base line, an importing firm or an individual buying the machines specified, would be called upon to pay the tariffs as shown in the charts. The white area here (indicating) represents the tariffs. In addition United States funds would have to be purchased, and the cost of these per \(\$ 100\) appears next. This hatched line represents the exchange (indicating).

\section*{By Mr. Thorson:}
Q. Which?-A. The hatched line, the cross-hatched line.

\section*{By Mr. McLean:}
Q. That is the amount of money?-A. Yes. At certain periods, this cost has been appreciable. The dip in the base line in 1934 was brought about through a premium for Canadian funds of one dollar per \(\$ 100\).

\section*{By Mr. Graham:}
Q. Where is that?-A. That is this dip here (indicating) in the base line. The differential in the sales tax as applied to foreign and to domestic goods is shown as the next element of cost. A differential was only in effect during the period May 10, 1921, to December 31, 1923-that is, these spots here (indicating) black and white. Since June 2, 1931, a special excise tax on imported goods has been imposed, which is an additional cost being borne at present. The solid black space represents the special excise tax. Thus the approximate total costs per \(\$ 100\) of "Fair Market Value" of importing the machines described are indicated by the height of the top line of the charts. That is, this top line here (indicating) represents the total cost of bringing these machine in.

\section*{By Mr. Senn:}
Q. Those figures to the left are percentages, are they?-A. No. Those are dollars. They would be percentages because they are dollars per hundred dollars of fair market value.
Q. The value on a hundred?-A. Yes. It will be observed that freight has been omitted. The freight differential as between bringing implements from Chicago to Winnipeg and from Hamilton, Ontario, to Winnipeg, is negligible as compared with the factors just discussed. The all-rail rate from Chicago to Winnipeg is 105 cents per 100 pounds and from Hamilton to Winnipeg it is 101 cents per 100 pounds. On an 8 foot binder the differential would be about 75 cents.

It is necessary to point out that this presentation does not answer the question of the incidence of the tariff, sales tax, excise taxes and cost of exchange. This question is a subject for a much wider study. Material must be gathered which will give comparable price quotations for comparable implements in Canada and United States, and costs of freight from factories in the United States to Canadian assembly points. The effect of any of the factors discussed may be subject to a considerable lag in time, and therefore comparable prices must be secured for a fairly long period. It is anticipated that this information will be secured and it is hoped to have a report at a later date.

\section*{By Mr. Graham:}
Q. Perhaps, Mr. Rutherford, in order to identify that in the record we will give this a number. This deals with mowing machines and harvesters?-A. Yes.
Q. We will call that chart No. 1 then?-A. I have some tables here that are numbered. That will be No 2 .
[Mr. J. B. Rutherford.]
Q. This will be chart No 2?-A. Yes, to follow the tables.
Q. Before we get through with that, just to complete the examination of that chart-will you just hold up the edge-at present this is the total of the barrier that is set up against any person importing?-A. Yes.
Q. \(\$ 100\) worth of fair market value?

Mr. Thorson: What do you mean by "this"? You said "this."
Mr. Donnelly: About \(\$ 10.50\), is it?
Mr. Graham: Yes.
Witness: I can give you the exact amount. After May 1st, 1936, it is \(\$ 10.72\) on \(\$ 100\).

\section*{By Mr. Senn:}
Q. May I ask one question there before you leave that chart. Hold that chart up, please. I cannot understand the difference in the sales tax between Canadian and American products. Will you explain how the sales tax is larger on Canadian-American importation than it is on Canadian production?-A. You are referring to this value (indicating)?
Q. To the black.-A. To this (indicating)?
Q. Yes.-A. That is special excise tax. That is levied on all importations.
Q. Then the other was sales tax?

Mr. Donnelly: There is no sales tax.

\section*{By Mr. Thorson:}
Q. There is no reference to sales tax in that chart.-A. Yes, there is.
Q. Oh, yes.-A. After May 10, 1921, goods imported from foreign countries were subject to a sales tax of one per cent higher than the Canadian sales tax on domestic goods. After May 23, 1922, foreign goods imported were subject to a sales tax of \(\$ 1.50\) higher than the sales tax on domestic goods. That was dropped in December 31, 1923.

Mr. Graham: That would coincide with the passing out of the picture of this sales tax.

\section*{By Mr. McLean:}
Q. What is the sales tax on these goods now?-A. There is not any.
Q. There is none at all?-A. No.

\section*{By Mr. Thorson:}
Q. There is no sales tax at all on these implements now?-A. No. There is no sales tax.
Q. Since what time has there been no sales tax?-A. Since April 10, 1924.

\section*{By Mr. Graham:}
Q. What is this chart? This chart will be chart No. 1?-A. Yes, this is chart No. 1. It contains the same information for cultivators, harrows, seed drills, horse rakes and manure spreaders. That is the customs classification.
Q. That supplies the same information pursuant to those things you have enumerated as chart No. 2 does for the others?-A. Yes.

\section*{By \(M r\). Thorson:}
Q. One chart is for mowers and harvesters. That is chart No. 2.-A. Chart No. 2.
Q. And chart No. 1 is for what?-A. Cultivators, harrows, seed drills, horse rakes and manure spreaders.

Mr. Thorson: Will these charts be printed in the record?

Mr. Graham: We hope so. Mr. Rutherford instructs me that they can reduce these charts. Will you just complete your memorandum on that, Mr. Rutherford?

\section*{By Mr. Graham:}
Q. Have you the dollar relationship?-A. Yes, I can give you that. I have two tables here.
Q. Yes, could you read those to the committee?-A. Yes. I will just read one of them in connection with the chart. I have two tables containing the information on which these charts were based. Mr. Graham would like me to read to you the dates and total cost. Table one is as follows:-

Table 1
APPROXIMATE COST PER \(\$ 100.00\) OF FAIR MARKET VALUE IN THE UNITED STATES OF BRINGING CULTIVATORS, HARROWS, SEED DRILLS, HORSE RAKES AND MANURE SPREADERS INTO CANADA. (EXCLUSIVE OF FREIGHT.)
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline & & Fair Market Value in the United States & Tariff & Cost of \(\$ 100.00\) United States Funds & Additional Sales Tax on imported goods & \begin{tabular}{l}
Special \\
Excise Act
\end{tabular} & Total \\
\hline & & \$ & 8 & \$ & \$ & \$ & \$ \\
\hline & 1913
1914 & 100
100
100 & \[
\begin{array}{ll}
20 & 00 \\
20 & 00
\end{array}
\] & & & & 12000
120 \\
\hline & 1915 & 10000 & 2000 & 039 & & & 12039 \\
\hline & 1916 & 10000 & 2000 & 030 & & & 12030 \\
\hline & 1917 & 10000 & 2000 & 019 & & & 12019 \\
\hline & 1918 & 10000 & 2000 & 172 & & & 12172 \\
\hline To June 6.. & 1919 & 10000 & 2000 & 234 & & & 12234 \\
\hline & 1919
1920 & 10000
100 & 1500
1500 & 485
1234 & & & 11985
12734 \\
\hline To May 10 & 1921 & 10000 & 1500 & 1339 & & & 12839 \\
\hline After May 10 & 1921 & 10000 & 1500 & 1073 & 100 & & 12673 \\
\hline To May 23.. & 1922 & 10000 & 1500 & 303 & 100 & & 11903 \\
\hline After May 23. & 1922 & 10000 & 1250 & 321 & 150 & & 11721 \\
\hline To April 10 & 1924 & 10000 & 1250 & 269 & & & 11519 \\
\hline After April 10 & 1924 & 10000 & 750 & 061 & & & 10811 \\
\hline & 1925 & 10000 & 750 & & . ..... & & 10750 \\
\hline & 1926 & 10000
10000 & 750
750 & & . & & 10750 \\
\hline & 1928 & 10000 & 750 & & & & 10750 \\
\hline & 1929 & 10000 & 750 & 076 & & & 10826 \\
\hline To Sept. 17. & 1930 & 10000 & 750 & 022 & & & 10772 \\
\hline After Sept. 17. & 1930 & 10000 & 2500 & 000 & & & 12500 \\
\hline To June 2. & 1931 & 10000 & 2500 & 007 & & & 12507 \\
\hline After June 2 & 1931 & 10000 & 2500 & 728 & & 125 & 13353 \\
\hline To April 6. & 1932 & 10000 & 2500 & 1455 & & 125 & 14080 \\
\hline After April 6. & 1932 & 10000 & 2500 & 1326 & & 375 & 14201 \\
\hline & 1933 & 10000 & 2500 & 920 & & 375 & 13795 \\
\hline & 1934 & 10000 & 2500 & \(-100 *\) & & 375 & 12775 \\
\hline & 1935 & 10000 & 2500 & 050 & & 375 & 12925 \\
\hline To May 1. & 1936 & 10000 & 1250 & 012 & & 338 & 11600 \\
\hline After May 1 & 1936 & 10000 & 750 & & & 322 & 11072 \\
\hline
\end{tabular}
*Canadian dollar at \(1 \%\) premium.

\section*{By Mr. Perley:}
Q. What is the inference to be taken from that?-A. Well, I am not drawing any inferences.

Mr. Graham: My reason for asking for that information was this, that for the period under review it indicates not only the barrier of the tariff in such a way that the committee could recognize it, but also brings out the other incidental barriers which have been raised during the period such as sales tax, special excise tax and the cost of United States funds; and the usefulness of it is this, that there are some substantial companies who manufacture the
[Mr. J. B. Rutherford.]
machinery which they market in Canada wholly in the United States and bring it in, and they have of course to surmount whatever barrier there happens to be at the time when they bring it in. It seems to me it is a constructive chart which will be useful when we come to consider the price lists of these importing companies, and to consider just what barriers from time to time they have been up against.

\section*{By Mr. Senn:}
Q. Well, Mr. Rutherford, you say that that chart is based on the fair market value in the United States?-A. Yes.
Q. How do you arrive at that?-A. Well, that is something the customs people arrive at.
Q. You took the customs valuation as being fair market value, did you?A. For the purposes of this chart it does not matter how the customs value the machine or article. I assume throughout that the \(\$ 100\) is fair market value in the United States.

Mr. Senn: I cannot understand if it does not matter why you answer it. How does the fair market value in the United States compare with the fair market value in Canada? Would there be any difference in the results had you taken the fair market value in Canada as the basis?

Mr. Graham: Might I ask Mr. Rutherford a question to bring that out? You assume that the Canadian importer goes down to the United States and buys \(\$ 100\) worth of farm implements as enumerated at the fair market value?

Witness: Yes.
Mr. Graham: That is the point, you see.
Mr. Senn: That is the fair market value in the United States?
Mr. Graham: For the purposes of this chart Mr. Rutherford assumes that purchases were made at a fair market value.

Mr. Senn: Fair market value, would that be the selling price, retail, or would it be the wholesale price?

Mr. McLean: That would be the retail price.
Mr. Graham: Mr. Rutherford merely stated that he assumed that the importer who goes down there to buy \(\$ 100\) worth of these implements buys them at the fair market value. In any event, whether the purchases were made at fair market value or not, it would not affect the chart in any way in my opinion.

Mr. Senn: I do not see that. It seems to me that that is the basis of the whole computation.

Mr. Donnelly: You simply say that they buy implements to a value of \(\$ 100\) in the United States, and that when they come to bring them into Canada they have to pay a \(7 \frac{1}{2}\). per cent duty, 4 per cent sales tax, and so on; and that at the present time brings the total up to \(\$ 110.72\).

Witness: Yes.
Mr. Thorson: And that if you did not pay the fair market value in the United States you might have to pay an extra dumping duty here.

Mr. Donnelly: He does not say anything about that.
Mr. McLean: The chart would be very much more illuminating if the dumping duty were included, if it were possible to superimpose such a situation on to the information already given with respect to purchases at fair market value.

Mr. Thorson: If it were purchased at less than the fair market value then the price to the buyer in Canada would be higher than it is shown in the chart, because there would be superimposed upon that cost the additional charge with respect to dumping duty.

The Chatrman: As I understand this chart it really has nothing to do with the fair market value at all, it merely shows the history of the tariff over a period of years as between Canada and the United States in so far as the importation of farm implements is concerned.

\section*{By Mr. Thorson:}
Q. This is superimposed on the fair market value in the United States, is that it?-A. Yes.
Q. You used the fair market value in the United States as your basis?A. I have taken four variables: the tariff, the sales tax, the cost of United States funds and the special excise tax, and I am concerned with the major effect of these four variables and not with the effect of the fair market value.
Q. Over the fair market value, whatever the fair market value has been?A. Yes.

Mr. Mclean: That is material. It was the duty of the customs to set the fair market value.

Witness: Yes.
Mr. Thorson: That is what you mean when you say you did not take into account in your chart the actual amount of the fair market value in the United States. These amounts are superimposed on the fair market value in the United States.

Mr. Graham: I suppose you might have taken a specific article priced at approximately \(\$ 100\) when valued at a fair market value. Fair market value really has no significance as applied to this chart.

Mr. Senn: That is all I wanted to get at.
Mr. Thorson: I do not think it is accurate to say it has no significance; in this case the fair market value, whatever it is, is assumed to be \(\$ 100\).

Mr. Graham: That is it.
Mr. Thorson: And superimposed over that fair market value are these other four variable items of tariff, sales tax, excise and exchange.

Mr. Graham: That is it.
Mr. Thorson: And that table shows the extent to which the superimposition has changed from time to time on account of the changes in these variable factors which have been added to the top of whatever has been taken as the fair market value.

\section*{By Mr. Tomlinson:}
Q. In other words, that chart could have been prepared from any one implement imported from the United States?-A. Yes, except for the fact that the tariff classification varies.

Mr. Donnelly: Have you taken into account the full extent of fluctuations in exchange rates?

\section*{Mr. Tomlinson: Yes?}

Witness: Exchange rates were fairly steady for certain periods while at other times there were changes, and for each year an average has been determined.

\section*{By Mr. Donnelly:}
Q. In 1932 it was as much as 15 or 20 per cent, have you taken that into consideration?-A. We have used an average rate for 1932. To April 6, 1932, the cost of exchange was \(\$ 14.55\). After April 6 to the end of the year the cost of exchange was \(\$ 13.26\).

\section*{By Mr. Perley:}
Q. Will you hold that first chart up again, please? What did the reduction in the barrier during the period 1931 to 1936 amount to? What is it at present,
[Mr. J. B. Rutherford.]
in dollars and cents?-A. The highest barrier was after April 6, 1932, to December 31, 1932-\$42.01.
Q. What is it in 1936 ?-A. \(\$ 10.72\).

Mr. Perley: How does that reduction in the barrier compare with reductions we have had in prices?

Mr. Graham: That is a matter we are studying, and we are unable as yet to give you an answer to that.

By Mr. Senn:
Q. Can you tell us the percentage of reduction due to the reduction in tariff, exchange, and the other items involved?-A. Yes. In April, 1932, the tariff was \(\$ 25\) on \(\$ 100\), the cost of United States funds was \(\$ 14.55\), the special excise tax was \(\$ 1.25\), a total of \(\$ 40.80\). After April 6, 1932, to December 31, 1932, the tariff was \(\$ 25\), the cost of United States funds was \(\$ 13.26\), the special excise tax was \(\$ 3.75\), a total of \(\$ 42.01\).

By Mr. Tomlinson:
Q. How is our exchange to-day, pretty near even?-A. Exchange is about par.

> By Mr. Senn:
Q. Give us the information you have there for 1936, as it is now?-A. At the present time, after May 1, the tariff is \(\$ 7.50\) and the special excise tax \(\$ 3.22\); a total of \(\$ 10.72\). Before May 1, 1936: tariff, \(\$ 12.50\); cost of American funds, \(\$ 0.12\); special excise tax \(\$ 3.38\); a total of \(\$ 16\).

Mr. Perley: Can you give us the price of these implements in 1932, these are the duties, and for May of this year, which you have there?

Mr. Graham: No, we have not got the prices.
Mr. Mclean: Haven't we got the prices from some of these companies?
Mr. Graham: We have them from one of the companies but we are waiting to receive it from them all.

Mr. Thorson: You are referring to a table, will that table go in the record?
Mr. Graham: Yes, and it is No. 2.
Wirness: Table No. 1 was the first one I read.
Mr. Thorson: And that relates to chart No. 1. Table No. 2 relates to chart No. 2, does it?

Witness: Yes.

Table 2
APPROXIMATE COST PER \(\$ 100.00\) OF FAIR MARKET VALUE IN THE UNITED STATES OF BRINGING MOWING MACHINES AND HARVESTERS INTO CANADA. (EXCLUSIVE OF FREIGHT.)
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline & - & \begin{tabular}{l}
Fair \\
Market Vafue in the United States
\end{tabular} & Tariff & Cost of \(\$ 100.00\) United States Funds & Additional Sales Tax on imported goods & Special Excise Act & Total \\
\hline & & \% cts. & \$ cts. & \$ cts. & \$ cts. & \$ cts. & \$ ets. \\
\hline \multirow{7}{*}{To April 7 After April 7} & 1913 & 10000
10000 & 2000
2000 & & & & 12000
12000 \\
\hline & 1914 & 10000 & 1250 & & & & 11250 \\
\hline & 1915 & 10000 & 1250 & 039 & & & 11289 \\
\hline & 1916 & 10000 & 1250 & 030 & & & 11280 \\
\hline & 1917
1918 & 10000
100 & 1250 & 019 & & & 11269 \\
\hline & 1919 & 10000. & 1250 & 355 & & & 11422
11605 \\
\hline & 1920 & 100,00 & 1250 & 1234 & & & 12484 \\
\hline To May 10. & 1921 & 10000 & 1250 & 1339 & & & 12589 \\
\hline After May 10 & 1921 & 10000 & 1250 & 1073 & 100 & & 12423 \\
\hline To May 23. & 1922 & 10000 & 1250 & 303 & 100 & & 11653 \\
\hline After May 23. & 1922 & 10000 & 1000 & \(\begin{array}{ll}3 & 21 \\ 1\end{array}\) & 150 & & 11471 \\
\hline \multirow{8}{*}{To April \(10 .\).
After April 10.} & 1923 & 10000 & 1000 & 131 & 150 & & 11281 \\
\hline & 1924 & 10000 & 1000 & 269 & & & 11269 \\
\hline & 1924 & 10000 & 600 & 061 & & & 10661 \\
\hline & 1925 & 10000 & 600 & & & & 10600 \\
\hline & 1926 & 10000 & 600 & & & & 10600 \\
\hline & 1927 & 10000 & 600 & & & & 10600 \\
\hline & 1928 & 10000 & 600 & & & & 10600 \\
\hline & 1929 & 10000 & 600 & 076 & & & 10676 \\
\hline To Sept. 17. & 1930 & 10000 & 600 & 022 & & & 10622 \\
\hline After Sept. 17. & 1930 & 10000 & 2500 & 000 & & & 12500 \\
\hline To June 2. & 1931 & 10000 & 2500 & 007 & & & 12507 \\
\hline After June 2 & 1931 & 10000 & 2500 & 728 & & 125 & 13353 \\
\hline To April 6. & 1932 & 10000 & 2500 & 1455 & & 125 & 14080 \\
\hline \multirow[t]{4}{*}{After April} & 1932 & 10000 & 2500 & 1326 & & 375 & 14201 \\
\hline & 1933 & 10000 & 2500 & 920 & & 375 & 13795 \\
\hline & 1934 & 10000 & 2500 & -100* & & 375 & 12775 \\
\hline & 1935 & 10000 & 2500 & 050 & & 375 & 12925 \\
\hline To May 1. & 1936 & 10000 & 1250 & 012 & & 338 & 11600 \\
\hline After May 1 & 1936 & 10000 & 750 & & & 322 & 11072 \\
\hline
\end{tabular}
*Canadian dollar at \(1 \%\) premium.
The Chairman: May I say to the committee that I anticipated questions in the minds of a good many members as to how the relationship of prices of many of the implements has responded during this period. That information is being studied, but we had to get this information in and on the record so that we would have it before us when we come to deal with these things with respect to which it has been very difficult to get detailed information.

Mr. Senn: Possibly Mr. Rutherford can answer a question which I have in mind at the moment. I understood Mr. Graham to say that the chart produced was based on the fair market value in the United States. Now, is there any variation between the fair market value in the first year shown by the chart and the final year, and has any variation in the fair market value taken place during the intervening interval covered by the chart?

Witness: I think Mr. Richards discussed that.
Mr. Graham: The difficulty with regard to that, Mr. Senn, is this: You remember that Mr. Richards gave us that for the whole period we had under review. Until recently it was \(12 \frac{1}{2}\) per cent off the published price in the United States. Unfortunately, we will not be able to establish that until we get the companies here before us. We should then be able to correlate the price lists and get that information. That should show us how it actually affected the
[Mr. J. B. Rutherford.]
dollar price-what they could actually have bought it at there if the fair market value rule had not applied.

Mr. Senn: Do I understand that price changes would not affect that \(\$ 100\) line?

Mr. Graham: That represents \(\$ 100\) worth of goods.
Mr. Senn: Whether the price in the United States went up or down, or not?
Mr. Graham: It would not matter, this is \(\$ 100\) worth of goods.
The Chairman: I do not see that the base line on that chart has anything to do with price changes which may have taken place in the United States. It represents a purchase of \(\$ 100\) worth of implements in the United States, not the price at which they are sold.

Mr. Ward: After all, Mr. Chairman, the objective of this committee is to determine why the price of machinery went up recently; and I think we all hope that we will be able to determine whether there is an understanding between the American and Canadian manufacturers in respect to the price of machinery; so that there is a lot in this discussion which I suggest is entirely irrelevant to the real issue which is before the committee.

The Chairman: It is what?
Mr. Ward: Entirely irrelevant to the real issue which is before the committee, all this discussion as to whether the tariff has much to do with the thing at the moment-with the rise and fall of prices of machinery.

Mr. Thorson: Of course it is relevant.
The Charman: I think this information is pertinent and particularly to the point.

Mr. Thorson: It is highly relevant to it.
The Chairman: I think this information will be very useful when we come to examine the actual price changes that have taken place.

Have you more information for us, Mr. Rutherford?
Witness: Yes. The next point: Mr. Graham asked me to get the value of field crop production by provinces. I have a table here giving the value in 1934 and 1935.

Mr. Graham: Mr. Chairman, I might suggest to the committee that the reason I asked for this was because you will remember that in the Trade Journals they did not stress the point but they indicated that one of the reasons for the price increase in 1936 was due to the comparatively better position of the farmer in 1935 over 1934, so I wanted to get the dollar production.

Mr. Tomlinson: They supposed that themselves?
Mr. McLean: Yes, they wanted to get it.
Wirness: The table reads as follows:-

\section*{VALUE OF PRODUCTION OF FIELD CROPS BY PROVINCES 1934 and 1935}
Total Value

\section*{By Mr. Thorson:}
Q. There is a drop in every province except two -

Mr. Tomlinson: And a drop in 1935.
Witness: In the value of field crop production, of all field crops produced in 1935.

\section*{By Mr. Tomlinson:}
Q. There was a drop in every province except two?-A. A drop in every province except two.

\section*{By Mr. McLean:}
Q. Did Alberta drop as well?-A. Alberta is down.

Mr. Donnelly: All except Saskatchewan and British Columbia.
By Mr. Senn:
Q. Can you say whether that drop was due to lower prices or to smaller yields?-A. In some areas it was due to lower prices and in some areas to smaller yields. In areas where forage crops are important it was due to low prices; in the west the yield of wheat was about the same but the grade was very low.

Mr. Graham: Perhaps it should be noted that these are field crops only, they do not include all farm products.

The Chatrman: All right, Mr. Rutherford.

\section*{Witness:}

\section*{Farmers' Expenditure for Machinery and Repairs to Machinery}

Mr. Graham asked me to examine and report upon a sheet purporting to show how the Western Canadian Farmer spends his dollar. This sheet contains a chart showing the percentage distribution of expenditure, and on the back of the sheet, an estimate of the amount in dollars which farmers will spend for various items in 1936. The statement preceding the itemizing of the amounts reads as follows:-

The Dominion Bureau of Statistics estimated the Agricultural revenue of the four Western Provinces in 1934 to be \(\$ 384,000,000\).

It is believed that in view of increased production and values the total revenue is 1935 will amount to over \(\$ 100,000,000\) in excess of 1934 , or a total of approximately \(\$ 500,000,000\).
Unfortunately the optimism of the above statement was not borne out, for figures released in March of 1936, show a gross agricultural revenue of \(\$ 391,000,000\) for the four Western Provinces. However, the error arising from the failure to anticipate the gross agricultural revenue is not as important as the fact that the figures do not mean as they are used in this pamphlet, cash income. They are merely gross value of production, in which the value of grains, of livestock produced, of livestock products, of forage crops, etc., are added together. No figure of net agricultural revenue or of cash income is calculated for the four Western Provinces.

We may observe the "error" or difference in using such a figure for cash income, by nothing that the gross agricultural revenue of Saskatchewan for 1935 was about \(\$ 155,000,000\), but actual cash received by Saskatchewan farmers was only slightly over \(\$ 95,000,000\). Therefore the estimate of \(\$ 500,000,000\) should have been reduced by at least 40 per cent, to represent cash to be spent by Western farmers.

\section*{By Mr. Donnelly:}
Q. Just a moment; when you say "gross revenue" do you mean now for example that you take into account all the grain that a man produces, and then [Mr. J. B. Rutherford.]
the hogs that he produces from that grain as well?-A. That is what the figures of "Gross Agriculture Revenue" produced by the Bureau of Statistics mean.
Q. You have taken hog products at so much, grain at so much-you have duplicated it?-A. Yes.

Mr. McLean: In the case of gross production you have taken the value of all products?

Mr. Donnelly: It does not mean anything that way.
Witness: We publish two figures; one is the gross agricultural revenue which is calculated by adding together the value of field crops and the value of animal products, plus poultry products etc.

\section*{By Mr. Thorson:}
Q. Have you any figures showing the net value of agricultural production?A. Yes.

> By Mr. McLean:
Q. I think you should let Mr. Rutherford finish the answer he was giving. Will you do that?-A. There is another figure, net agricultural revenue. There is one figure published for the whole of the Dominion, which in 1935 was approximately \(\$ 609,000,000\).
By Mr. Perley:
Q. You gave the actual gross revenue for 1935 as being \(\$ 391,000,000\), was that for the four western provinces?-A. For the four western provinces the gross agricultural revenue was \(\$ 391,000,000\).
Q. What was it for the whole Dominion?-A. I have not got that figure right here, I can get it.
Q. I thought you had that information on the table which is before you?A. The statement which is before me shows the net agricultural revenue.
Q. Have you got that information for the four western provinces?-A. We do not publish the figure of net agricultural revenue for any province individually, but only one for the Dominion as a whole.
Q. Just give us the net revenue then?-A. For the Dominion as a whole approximately \(\$ 609,000,000\) in 1935.

\section*{By Mr. Thorson:}
Q. And that would be the figure equal to the cash income would it?-A. Yes, very close to it.

\section*{By Mr. McLean:}
Q. If I caught witness right he said Saskatchewan last year produced \(\$ 155,000,000\) gross revenue, and that \(\$ 95,000,000\) was the net or cash income figure?-A. Yes, sir.
Q. I would like to know just what is involved in the difference between these two figures?-A. The gross agricultural revenue of Saskatchewan was obtained by adding together the total amount of wheat produced at the farm price; the total amount of all grains, all live stock, all live stock products and honey produced on the farm; all the products of the farm, the total value of farm production for the year. In getting the cash income figure, the second figure I quoted- \(\$ 95,000,000\) - you take the actual amount of wheat sold by the farmer off the farm, the actual amount of cattle sold, the value of eggs, poultry and all other products sold for which cash was received.
Q. \(\$ 155,000,000\) then is the gross production?-A. That is what it is.
Q. It is not revenue at all?-A. No, that is a misnomer.

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By Mr. Senn:
Q. Don't you think that in investigating net income you should take into account the amount used on the farm for living purposes?-A. Yes, sir.
Q. Are dairy products used on the farm included in your statement?-A. No, not in the \(\$ 95,000,000\); they are in the \(\$ 155,000,000\).
Q. That is really income isn't it?-A. Well, it is; and a strictly accurate statement of farm income should include the value of the products consumed by the farmer, his family and labour employed on the farm.

Mr. Senn: I should think so. That would amount to a considerable sum for a population of approximately one million people.

\section*{By Mr. Thorson:}
Q. So that the net production would be somewhat in excess of \(\$ 95,000,000\) ? -A. The net income of agriculture.
Q. Yes, the net income would be somewhat in excess of the cash actually received; and the difference between would be what the farmer has used him-self?-A. Yes. My purpose in discussing this here is in connection with this pamphlet.
Q. What pamphlet do you refer to?-A. One which Mr. Graham handed to me.

Mr. Thorson: It should be identified.
Mr. Graham: This is a pamphlet published by The Nor-West Farmer, pioneer rural magazine of western Canada, and refers to the 1935 dollar of the western farmer, and it indicates how the western Canadian farmer spends his dollar. It is based on a United States statistical survey-down here it states, "according to the U.S. Department of Agriculture," and in addition to that, sales information secured "by our research department." It is a computation or chart very often referred to by the implement companies, as you will have noticed, in dealing with these particular prices.

Mr. Thorson: If Mr. Rutherford is going to comment upon it the chart itself should be identified in some way for record purposes.

Mr. Graham: We will have it entered in our proceedings as chart A.

\section*{How the Western Canadian Farmer Spends His Dollar}

This chart is based on Dominion Government Census Figures (1931) together with sales information secured by our Research Department.
Divided into three main groups, farm dollars are spent as follows:

Living Expen. . \(391 / 2\) Farm Expen. . \(321 / 2\) General Expen. 28
Total . . \(\$ 1.00\)


How the United States Farmer spends his
A detalled analysia of each division is shown in the above chart and the total amounts spent are listed on the other side of this page. dollar, according to the U.S.A. Department

\section*{IIFI HORWEST EARMER}

Head Omico Head Omee
WINNIPEG, CANADA

\section*{How the Western Canadian Farmer Spends His Dollar}

The Dominion Bureau of Statistics estimated the agricultural revenue of the four Western Provinces in 1934 to be \(\$ 384,000,000\).

It is believed that in view of increased production and values the total revenue in 1935 will amount to over \(\$ 100,000,000\) in excess of 1934 , or a total of approximately \(\$ 500,000,000\).

On the basis represented by the chart on the other side of the page, Western Canadian farmers will spend the following amounts on the different items listed below:-


Whether you are interested in the distribution of food products or in the placing of insurance; whether you are a manufacturer or a salesman, the obvious question that presents itself is: "Am I laying a foundation that will ensure an equitable flow of farmers' dollars to my business in 1936?""

Much of the farmers' buying in 1936 will be influenced through advertising that comes to them through The Nor'-West Farmer, the magazine which has served rural Western Canada for more than half a century. If you take fulI advantage of this able-to-buy prairie market, The Nor'-West Farmer should be the foundation publication on which to build your campaign.

Witness: My purpose in mentioning this figure \(\$ 500,000,000\) was to show that the total expenditures in the year could not be \(\$ 500,000,000\) when the cash received by the farmers, the actual cash coming in to their pockets, was at least 40 per cent less than that. And it is important to this whole statement to bring that out.

In order to examine the estimated expenditures, we find a guide in some studies of farm expense recently made. Over 500 Alberta farmers, and these were better than average farmers, reported an expenditure for food in 1934 of \(\$ 163\) per farm. These farms contained an average of \(5 \cdot 3\) persons per household as compared with a census return of 3.8 persons for Alberta. Therefore, reducing the expenditure for food to \(\$ 150\) per farm-

\section*{By Mr. Graham:}
Q. From what?-A. From \(\$ 163\), the Alberta estimate-and multiplying by 314,000 farms, the number of farms in Manitoba, Saskatchewan, Alberta and British Columbia, we arrive at a figure of about \(\$ 47,000,000\) for food as compared with \(\$ 95,000,000\) estimated in this pamphlet. The average expenditure per farm in Saskatchewan for food in the same year was \(\$ 159\), and these were also considerably larger than average farms. The Alberta farmers reported a clothing expenditure of \(\$ 141\) per farm, Saskatchewan \(\$ 119\) per farm. Using a figure of \(\$ 140\) per farm we arrive at a total of about \(\$ 44,000,000\) as compared with the estimate of \(\$ 80,000,000\) for clothing as given in this pamphlet.

According to the 1931 census, farmers of the four western provinces spent over \(\$ 55,000,000\) for labour, including board. But the estimate of food costs [Mr. J. B. Rutherford.]
includes board for labour, and accordingly the \(\$ 55,000,000\) must be scaled down somewhat. Costs of labour and board as reported by farmers to the Bureau of Statistics show that the value of food furnished just about equals the wages. Assuming wages to be the same in 1936 as they were in 1930, the total expenditure for labour should be in the neighbourhood of \(\$ 30,000,000\) or at least \(\$ 10,000,000\) less than the estimate in the pamphlet.

The reason these discrepancies have been discussed is to show that when certain of the expenditures are over-estimated, the amount spent for implements is minimized as a percentage of the total. The estimate of \(\$ 15,000,000\) as 1936 expenditures for implements-

\section*{By Mr. Graham:}
Q. 1935?-A. That is 1936.
Q. No, 1935.-A. It says " on the basis represented by the chart on the other side of the page, western Canadian farmers will spend the following amounts on the different items listed below." This came in, in 1936.
Q. Yes, I know. But it is an estimate of how the Canadian farmer spent his dollar in 1935.-A.'I see. All right, 1935. The estimate of \(\$ 15,000,000\) for implements and repairs is conservative, but certainly represents more than 3 per cent of the total expenditures as is represented in the pamphlet.

A better and more reliable guide as to the relative importance of expenditures for machinery and repairs by farmers is furnished by data collected by the Farm Management Department of the University of Saskatchewan. These data were collected in various years and in various parts of the province. They have been re-arranged to conform with the arrangement in the pamphlet, and the tables are appended, to be entered as an exhibit. I have several tables here. The following figures represent the percentage spent for machinery and repairs of the total amount spent by farmers in the various districts and years as specified.


It will be noted that in 1931 the expenditures reported for new machinery and repairs in three of the areas fell to \(3 \cdot 9,4 \cdot 8\) and 1.7 per cent of the total. In these areas there was an almost complete crop failure but in the Rosemount and Reford municipalities for the same year, where the crop was normal, nearly 12 per cent of the total expense was directed to purchase of repairs and new machinery. The important point to be noticed is that in all the years reviewed and under conditions of low prices and poor crops, expenditures for farm machinery and repairs fell below 3 per cent in only one district and in most districts have been over 10 per cent. This would lead one to conclude that a conservative estimate of the percentage spent by Saskatchewan and Alberta farmers for new machinery and repairs would be at least 10 per cent of the total expenditure, and in Manitoba, while the percentage may not be quite as high, it is probably closer to 10 per cent than to three per cent.

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\section*{By Mr. Senn:}
Q. Before you leave that, the chart which the farm paper put out was for the whole Dominion of Canada rather than for the three prairie provinces, was it not?-A. The title at the top is "How the Western Canadian Farmer Spends His Dollar."
Q. The western Canadian farmer?-A. Yes.

Mr. Tomlinson: You have not any report for the eastern Canadian farmer.
Mr. Thorson: That table should be on the record so that you can have a comparison.

Mr. Grahan: Yes. Do you think it should be printed?
The Chatrman: Yes.
Mr. Thorson: Yes, it should be printed so that we can have a comparison. Who prepared this chart that you have been referring to?

Mr. Graham: The Nor'West Farmer is the only source that we know of; and they state that they have prepared it from Dominion Government census figures, 1931, together with sales information secured by our Research Department.

Mr. THorson: Where did that chart come from? Where did we get it?
Mr. Graham: I got it in Saskatchewan, this particular chart. It was printed by the Nor'West Farmer.

Mr. Thorson: You say that is the chart that has been referred to by the implement companies?

Mr. Graham: Quite frequently.
The Chatrman: This chart has been referred to to quite an extent in different places in the country. I think the Farm Implements Magazine used it, I suppose as a method of advertising. We felt that it was particularly interesting and of sufficient importance to have it checked. So we asked Mr. Rutherford to prepare the information which he has given you this morning.

Mr. Thorson: I think we ought to have it, then.
The Chatrman: It is merely a contrast between the two methods of arriving at a conclusion which is not quite the same.

Mr. Senn: After all, Mr. Chairman, I suppose Mr. Rutherford's estimate of this thing is purely an estimate.

Mr. Tomlinson: A close estimate.
Mr. Senn: It is based upon a valuation of the income of the farmer which, to a certain extent, is problematical, is it not?

\section*{By Mr. Thorson:}
Q. It is based upon actual reports, is it not?-A. Yes. I may read a note to one of these tables, "Based on farm surveys made by the Department of Farm Management, University of Saskatchewan."
Q. These are actual farm surveys?-A. "These surveys are based on the method of random sampling, no attempt being made to select farms. The data are collected by carefully trained and supervised enumerators."

\section*{By \(M r\). Senn:}
Q. Within what percentage would you say those estimates, on the whole, are correct?-A. Within about three per cent.
Q. Within about three per cent?-A. Yes. Some are closer than that. It depends on what the estimate is, but most of our estimates of cash income and expenditure in Saskatchewan surveys are within about three per cent accuracy.
[Mr. J. B. Rutherford.]

\section*{By Mr. Tomlinson:}
Q. Just there I should like to know about the products used on the farm. When you get your report, it is only one report at a certain period of the year, is it not, given to your department by this certain farmer?-A. Which report do you refer to?
Q. For the purpose of obtaining your classifications there?-A. Well, I have so many classifications here-
Q. Refer to, say, the net income of the farmer. You get that report from every farmer at a certain period of the year, do you not?-A. Are you referring to the surveys now?
Q. No, the net income of the farmer.-A. That figure is published in March each year, yes, the net agricultural revenue of Canada. We do not publish the figure of net income. It might be called net income, but there are some other adjustments that have to be made.
Q. You have no report of the percentage that the farmers in eastern Ontario spend on implements?-A. No.

Mr. Graham: The reason for that is, as you will notice, they have referred to the western farmer; so we were simply going on that.

Mr. Thorson: You were just checking that chart?
Mr. Graham: That is all.

\section*{By Mr. Senn:}
Q. The estimate you have given of percentages there is based on actual income exclusive of farm goods that are consumed on the farm or should be consumed as part of income?-A. Well, the estimate that was made here is based on the actual expenditures of Saskatchewan farmers for the various items that are listed.
Q. But their dollar is computed exclusive of the goods that are consumed on the farm of the farm product?-A. Yes.
Q. Whether that is considered as income or otherwise?-A. Their statement assumes, in the first place, that the western farmers will get \(\$ 500,000,000\) revenue which I take to be in the form of cash, because they show that revenue spent on taxes, interest, repairs to machinery, and a large number of items which are all cash items, payments on debts, and so on. The figures that I have here that I read to you were based on actual expenditures by the farmer made in the years given.
Q. I understand that.

\section*{By Mr. Thorson:}
Q. That is, you have used the same basis as the people who have made the chart?-A. Yes. They assumed that the revenue represented cash income, that the farmer would spend \(\$ 500,000,000\).
Q. In other words, the chart leaves out what the farmer uses himself?-A. Yes.
Q. And you are doing the same?-A. Yes.

\section*{By Mr. Senn:}
Q. Your estimate leaves that out.-A. I am estimating, trying to arrive at a conclusion as to what percentage of the total amount spent by the farmers, the total cash spent in the year, is the amount spent on machinery and repairs.
Q. I suppose you could call it that. It is practically the same whether it is spent or whether it is consumed, is it not?-A. No, it is not the same.
Q. I would say that is part of the income. If a man consumes on his farm, say, \(\$ 50\) worth of eggs and \(\$ 25\) worth of butter which he produces himself, and so much meat that he produces himself, that surely should be considered as part of his income. If you leave that out of your amount of income
that the farmer gets, then I think your basis is not correct.-A. I am not concerned with what income the farmer gets. What I am concerned with in this discussion here is how much he spends out of his dollar on different items during the year.
Q. You mean the actual dollars that he gets?-A. Yes.
Q. I do not think it is fair.-A. All the dollars he gets.

Mr. McLean: His field machinery has nothing to do with the dairy produce except in the production of grain to feed the stock.

Mr. Senn: That is part of his income.
Mr. Thorson: Just a minute. Let us clear that point up. You are checking the accuracy or otherwise of that.

The Chatrman: Order, gentlemen. One at a time.
Mr. Senn: Where there are three people they would consume \(\$ 200\) or \(\$ 300\), perhaps \(\$ 400\) that is no cost of the farm.

By Mr. Thorson:
Q. Just a minute. Let us clear up that point. You are checking the accuracy of that chart. That chart shows three per cent of the cash actually received by the farmer spent for implements. Is that correct?-A. Yes.

Mr. Perley: There is a great deal more.

\section*{By Mr. Thorson:}
Q. What does the chart say?-A. I will read the statement that is on here. The title is, " 'How the Western Canadian Farmer Spends His Dollar.' The Nor'West Farmer, pioneer rural magazine of western Canada. A detailed analysis of each division is shown in the above chart and the total amounts spent are listed on the other side of the page."

\section*{By Mr. McLean:}
Q. Compiled by the Nor'West Farmer?-A. Yes.

Mr. Perley: The statistical department.
Mr. Thorson: What does it say?
Mr. Ward: Just a minute. Mr. Chairman, we are taking up a whole lot of time discussing a thing that has nothing whatsoever to do with the issue which is before this committee. The end of this session is going to come soon.

Mr. Mclean: We do not know. We hope so.
Mr. Ward: And we will not have reached any conclusion whatsoever. What has this got to do with the question that is before this committee? Absolutely nothing.

The Chatrman: I hope you are right about the end of the session coming pretty soon. This chart has been referred to in the house.

Mr. Thorson: Yes.
The Chairman: And it has been referred to in several other places.
Mr. Thorson: Absolutely.
The Chairman: And has been used, I would judge, as a method to assist in advertising. I thought it was very valuable information to check. I agree with the gentleman here in attempting to get at a comparable basis so far as the information that is contained in the chart is concerned. Mr. Rutherford has the basis on which the chart was prepared, and he prepared his information along the same lines.

Mr. Ward: It is very interesting information, but has nothing to do with the question.

Mr. Thorson: Let us get on.
[Mr. J. B. Rutherford.]

The Chairman: I think you will find that this information is going to be of material assistance, when you have an opportunity of getting the additional information which you want from the machine companies.

Mr. Tomlinson: Also to rebut any assertion made by the machine companies that the farmer only spends three per cent of his income.

\section*{By Mr. Thorson:}
Q. What does the chart say the farmer spends out of his dollar?-A. I am going to read the back of this chart.
Q. All right, read it?-A. It is headed, "How the Western Canadian Farmer Spends His Dollar" and is as follows:-

The Dominion Bureau of Statistics estimated the agricultural revenue of the four western provinces in 1934 to be \(\$ 384,000,000\).

It is believed that in view of increased production and values the total revenue in 1935 will amount to over \(\$ 100,000,000\) in excess of 1934 , or a total of approximately \(\$ 500,000,000\).

On the basis, represented by the chart on the other side of the page, western Canadian farmers will spend the following amounts on the different items listed below:-


Whether you are interested in the distribution of food products or in the placing of insurance; whether you are a manufacturer or a salesman, the obvious question that presents itself is: "Am I laying a foundation that will ensure an equitable flow of farmers' dollars to my business in 1936?"
Q. In other words, according to the table the percentage that the farmer pays out of his dollar for farm implements and repairs is 3 per cent.-A. Three per cent, cash expenditure.
Q. And your calculations, based upon actual returns from farmers, show that the farmer pays 10 per cent?-A. Approximately.
Q. Approximately 10 per cent?-A. Yes.
Q. Out of the dollar that he gets?-A. Out of the dollar that he gets.

Mr. Senn: Mr. Chairman, I do not want to pursue this matter any further, but I will just say that I believe the 3 per cent, three cents out of the dollar, is a low estimate. On the other hand, I think that your basis of computation is not accurate either, for the reason, as I said before, that when a farmer consumes a certain amount of his production on the farm, I think that should be included as income. If the farmer makes an income tax return, he has to put down how much he receives from the sale of wheat, cattle, hogs, and all the rest of it. In addition to that, he has to put down on that income tax return the value of the goods that are consumed on his farm by the family for food purposes. I think that should be included in your estimate when you arrive at your percentage.

Mr. Tomlinson: I do not think so.
Mr. Senn: That is my final word on it.

Witness: The statement is an expense statement, how he spends the money that he gets. If he gets income, real income in the form of goods, from his live stock and from his garden, and uses that in his household, he cannot spend it very well.

Mr. Senn: No, he cannot spend it; but he is spending it just the same. He is using it.

Mr. Tomlinson: He is not spending it on machinery.
Mr. McLean: The whole thing has not anything to do with expenditure on farm machinery, because he does not use farm machinery in producing his poultry income. The poultry man consumes poultry products. The gardener consumes agricultural products. The farmer pays for his farm implements. There are three or four different occupations.

The Chairman: I think it can be said that the basis upon which each presentation was compared is comparable.

Mr. Thorson: Yes, absolutely.
The Chatrman: Mr. Senn may be quite right in what he says with regard to the total net income of the farmer. That is not referred to in this chart here. I might say that, when it was drawn to my attention that the farmer only spent 3 per cent of his income for the purchase of farm implements and repairs, I just could not accept it; that is all.

Mr. Thorson: Everybody knew it was not so.
Mr. Tomlinson: These facts bear it out.
Mr. Thorson: Everybody in western Canada knew it was not so.
Mr. Senn: I have stated quite frankly that I think 3 per cent is a low estimate.

The Chatrman: I thought so too. And personally, I thought I would like to have it checked up, and that the committee would appreciate having that information.

Mr. Tomlinson: Absolutely.
The Chairman: That is all the evidence that Mr. Rutherford has this morning.

Mr. Thorson: Will these tables and statements go on the record?
Mr. McLean: Yes.
The Chairman: I am sure the committee is very grateful to Mr. Rutherford, and I would like to express our appreciation to him.

Witness retired.
Mr. Graham: I was of the opinion that the synopsis gave the vital points.
Mr. Thorson: Is there enough on the record to show a comparison between this chart and what Mr. Rutherford has said?

The Chatrman: I think there is. I think Mr. Rutherford's statement not only deals with the chart that will go on the record, but also clears up the other information as well.

Mr. Thorson: If we are going to have on record a refutation of this chart, the chart should be on the record, the refutation should be on the record and all the necessary tables that will show that should be on the record.

Mr. Graham: That is purely a matter for the committee. I felt that Mr. Rutherford had so elaborately and specifically dealt with it in his statement that it was not necessary.

Mr. Thorson: If you are satisfied, all right.
Mr. Graham: If you care to have it in, it is up to you.

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[Mr. J. B. Rutherford.]
}

Mr. Senn: Just before you finish this matter, would it not be of interest to the committee if we had a similar estimate of how much of the farmer's dollar in eastern Canada was spent in this way?

Mr. Graham: May I point out that I asked Mr. Rutherford about that. Of course, we are not trying to feature the west at all. This is based on Dr. Allen's survey. I think I am correct in saying that your department has no other provincial survey available, am I not?

Mr. Rutherford: There is some information, but it is pretty scanty.
Mr. Thorson: You actually have a provincial survey?
Mr. Graham: Yes.
Mr. Thorson: In Saskatchewan?
Mr. Graham: Yes.
Mr. Thorson: Done on the ground?
Mr. Graham: Done on the ground.
Mr. Senn: I would think there is a difference between eastern and western Canada.

The Chatrman: I might say that at the beginning when we considered this question, we had hoped to get a statement for all Canada, and then for eastern and western Canada separately.

Mr. Graham: Yes.
Mr. Senn: You are hoping to?
The Charmman: We did hope. I do not know whether we will get it completed.

Mr. Thorson: We have found that there is not any provincial survey made on the ground in respect of any of the provinces of eastern Canada.

The Chatrman: Not that we are aware of. Probably they do not sell as much farm machinery.

Mr. Tombinson: We do not get as much money in the east.
The Chatrman: The next witness we have this morning is Mr. Gilchrist. He has a statement dealing with the foreign tariff on implements that are exported from Canada and from United States.

William Guchrist, called.

\section*{By Mr. Graham:}
Q. Mr. Gilchrist, what is your official position?-A. Chief of the Foreign Tariff Division, Department of Trade and Commerce.
Q. The material that you are presenting this morning is a statement of the tariff in certain countries of export?-A. Yes.
Q. And the tariff rates applicable to Canada and United States comparatively over a period from 1913 to 1936?-A. That is right.
Q. You have a list. What export countries are you prepared to deal with?-A. I prepared a statement respecting 25 countries. These are: United Kingdom, the Irish Free State, Australia, New Zealand, Union of South Africa, Newfoundland, British India. Those are all British. The rest are foreign countries: United States, Mexico, Argentina, Brazil, Chile, Uruguay, Germany, France, Algeria, Spain, Belgium, Switzerland, Netherlands, Norway, Sweden, Denmark, Morocco, Tunis, Portuguese Africa.
Q. I notice in your material that you have dealt with implements. What implements?-A. Well, I have dealt with the implements which mainly were exported from Canada to those countries; and, secondly, took into account a list of implements that you submitted to me as -
Q. Typical?-A. -typical ones which we should keep in mind.
Q. I should be glad if you would go over your material, and where in one country there is no distinction throughout the whole period as between the tariff duties imposed by that particular country against Canada and the United States, would state that is so; and when you come to a country where there is or has been during that period a tariff differential, would you kindly elaborate on that?

\section*{By Mr. Senn:}
Q. May I ask a question for the purpose of clarification. Do we export to any of those countries that are enumerated?-A. We do. The period dates back to 1913, and more or less during that period we exported to those countries. Did you wish me to read that data?

\section*{By Mr. Graham:}
Q. No. Just go over the material that you have, and where there is no difference, state that there is no difference, as between the tariff against Canada and the United States?-A. Well, the countries of this group which have the same tariff against Canada and the United States would be Union of South Africa, except of course, carts and wagons. That is the only exception I will make.
Q. Except what?-A. Carts and wagons. I mention that because mainly agricultural implements are treated the same there. Newfoundland, British India, Mexico, Argentina, Brazil, Chile, Uruguay, Germany, Spain, Switzerland, Netherlands, Norway, Sweden, Denmark, Morocco, Tunis, Portuguese Africa.
Q. Is Tunis sometimes called French Africa?-A. Yes, it is part of French Africa.
Q. You state that the duty is the same as against a company in the United States and one in this country?-A. Yes.
Q. And has been throughout that whole period?-A. Yes, and has been.
Q. Throughout that whole period?-A. Yes.
Q. All right, pass on to the preference. Take the United Kingdom first.A. Now, the countries where Canada has during some part of that time enjoyed a preference over United States, and in the main does yet, are: United Kingdom, Irish Free State, Australia, New Zealand. Preferences do not necessarily apply on absolutely every agricultural implement. There is a great deal of detail involved in making a complete statement about preferences. But in the United Kingdom there is a preference of either 10 per cent or 15 per cent ad valorum on any agricultural implements that go there. Sometimes there is an absence of preference due to the fact that the farm implements enter free from any source into these countries, so that while we might have a preference on our exports in the main, it would develop that articles free of duty from anywhere would, of course, benefit by no margin. There are two countries in which the United States has had an advantage over the United States.

\section*{By the Chairman:}
Q. Over which?-A. The United States has a preference over Canada. You see, I am dealing with the larger countries. These preferences, however, are not in existence now. In one instance, that is France, between June 16, 1932, and June 10, 1933, Canada was under the general tariff of France, while United States was under the minimum tariff.

\section*{By Mr. Graham:}
Q. What was the differential?-A. Well, the general tariff is four times the minimum. I do not know whether we exported during that period; likely not. In the detailed data I have prepared I showed the rates obtained in all those times.

\section*{By \(M\) r. Thorson:}
Q. What is the situation now?-A. The situation now is that both Canada and United States have a minimum tariff in France.

\section*{By Mr. Graham:}
Q. And it had them for how long?-A. Since June 10, 1933. Then, of course, before June 16, 1932, the position was the same. The minimum tariff ranges from about \(\$ 1.80\) to \(\$ 3\) per hundred pounds of agricultural implements in general.
Q. From \(\$ 1.80\) to \(\$ 3\) per?-A. Per hundred pounds.
Q. Weight?-A. Weight, yes. That is, the duty is actually in their currency, but I have converted it at the current rate.
Q. Yes?-A. Now in Belgium there was a sales tax against Canadasometimes called a turnover tax-of 5 per cent more than what is levied against the United States from the period August 1, 1932, until June 1, 1936; that is, it has just been accorded to us. From now on we are the same.

\section*{By Mr. Thorson:}
Q. That is in Belgium?-A. In Belgium.
Q. Was that correction made recently?-A. Recently, yes.
By Mr. McLean:
Q. June 1, you said?-A. Just very recently, in fact discussions were going on about it all the time, but they were brought to a conclusion just the other day.

\section*{By Mr. Thorson:}
Q. That change is effective as from June 1 of this year?-A. Yes. Then, of course, we were the same in Belgium up to August 1, 1932.

\section*{By Mr. Graham:}
Q. That completes your list there?-A. Yes, sir.
Q. I thought you had three countries?-A. You might make it three, Algeria is an extension of France.
Q. Now then, give us the history, please, of the tariff of the United States on farm implements over the period, just briefly-as against Canada?A. I have just gone back one period further with the United States, from 1909 to 1913 there was a duty on agricultural implements entering the Únited States of'15 per cent ad valorem on some, 45 on some others, but 15 per cent was the rate applicable to the principal kinds. Well then, since 1930 agricultural implements have entered the United States free of duty with the exception of cream separators.
Q. Since when?-A. Since 1930.

\section*{By Mr. Donnelly:}
Q. From Canada?-A. From anywhere.
Q. From anywhere?-A. From Canada included, of course.

\section*{By Mr. Graham:}
Q. What happened as to cream separators?-A. Cream separators valued up to \(\$ 50\) each have been exempted from duty, are still exempt; cream separators valued at more than \(\$ 50\) each are 25 per cent ad valorem.

\section*{By Mr. Thorson:}
Q. Since when?-A. Since 1913. The value line changed a little they were free up to \(\$ 75\) under that 1913 tariff and then in 1922 they made the dividing line \(\$ 50\). In consequence of a treaty just concluded between the United States and Finland this 25 per cent rate has been cut in two. It is not in force yet but when it does come into force it will apply to Canada.
Q. And then that rate will be reduced so far as Canada is concerned?A. Yes.

\section*{By Mr. Graham:}
Q. Under the "most favoured mation" clause?-A. Yes.
Q. Now then, Mr. Gilchrist, you wrote me a letter dealing with Spain; will you just let us have the information you have with respect to Spain?A. Oh, yes. In that data we had prepared on Spain reference was made to the possibility of getting agricultural implements in free of duty under an old law of 1868 , but we have since learned that that law is obsolete so that the rates heretofore in existence prevail.

Mr. Graham: Mr. Chairman, perhaps the committee will decide this: This material gives in detail the tariff of 1913 to 1926 inclusive on the separate implements. Should that be printed in the record?

Mr. Thorson: No, file it as an exhibit.
Mr. Mclean: It would be better to print it in the record.
The Chairman: I have seen this information and I think it would be better for it to be filed with the committee.

Mr. Thorson: It is very bulky.
Mr. Mclean: How would it get to the members of the committee or the people in the country if it is only filed? It might as well be with the Bureau of Statistics if it is simply filed.

The Chamman: Quite true, but Mr. Gilchrist's general statement which will appear in the record covers the whole material.

Mr. Thorson: I think it is sufficient to file the material. It is very bulky.

\section*{By Mr. McLean:}
Q. What is the situation with respect to cream separators, with which you were dealing a moment ago, as between Canada and the United States. What is it entering into Canada? You have told us what it was going into the United States?-A. I have not got the information as to that with me.

Mr. Graham: Mr. Younger gave that.
Mr. Mclean: That was the day on which I was away.
Mr. Thorson: They come in free from Great Britain.
Witness: Yes, that is it.
Mr. Thorson: Coming from anywhere else there is a duty of at least 25 per cent.

Witness: I have not got the figures before me but that is my recollection.
Mr. Thorson: Due to the Ottawa agreements there is a margin of preference given to Great Britain of 25 per cent on cream separators,

Witness: I think that is correct.
Mr. Graham: The value of this information in my opinion is that it shows clearly what our Canadian companies have to meet by way of tariffs in doing their export business, and I presume also with respect to meeting the competition of other companies in the United States.

That is all, thank you, Mr. Gilchrist.
The Charrman: Thank you very much, Mr. Gilchrist.
Witness retired.
The Charman: Now, we have with us Mr. Warne, of the external trade branch of the Dominion Bureau of Statistics.
W. A. Warne, External Trade Branch, Bureau of Statistics, Department of Trade and Commerce, called.
[Mr. William Gilchrist.]

Mr. Graham: Mr. Chairman, before Mr. Warne proceeds perhaps I had better present for the record some very carefully prepared statistical material with respect to exports and imports of farm implements.

The Chatrman: Yes.
Mr. Graham: You will note here (indicating), Mr. Chairman and gentlemen, very excellent and very carefully prepared statistical information-actual information, as a matter of fact-gathered together for the use of the committee by Mr. Warne of the external trade branch of the Dominion Bureau of Statistics. It is very very voluminous, and it is very complete. It deals with Canada's domestic exports of farm implements and machinery and parts from 1913 to 1936 in one section; with Canada's imports of materials for the manufacture of farm implements, with the duty collected thereon, and the average rate of duty, and also imports from the United Kingdom and the United States for the fiscal years 1913 to 1936 in the next section; and with Canada's imports of farm implements and machinery and parts with duty collected thereon and average rate of duty, and also imports from the United States for the same fiscal period.

After consultation with your chairman my suggestion is that a digest of the detailed information be read into the record and that the detailed information on which that is based-that is, these large sheets-be filed as an exhibit, and that mention of them be made in the reported record so that any person interested will know that it is on file with the committee. It would perhaps be well to state that the detailed information includes practically all implements, including cream separators, harvesters, binders, mowers, hay-rakes, etc. The committee might decide just what they wish to have done with this material.

The Chairman: Mr. Graham, if you will read those general statements to which you referred it might afford the committee a better opportunity for reaching a decision.

\section*{Mr. Graham: If you will go ahead, Mr. Warne, and read your statement.}

Witness: Gentlemen, with reference to the imports and the duties collected thereon, there were very radical changes in the duties on agricultural implements as from February, 1918, when tractors costing in the country of production not more than \(\$ 1,400\), and parts thereof, were placed on the free list. In 1918, on total imports the average ad valorem rate of duty amounted to \(17 \cdot 5\) per cent, but in 1919 as a result of a radical change the average rate was 6.5 per cent. On April 11, 1924, there were also a number of changes made in the rate of duty which were downward, and as a result of these the dutiable imports in 1925 were \(9 \cdot 8\) per cent average as against 14.3 per cent in 1924 . I state also that the imports from agricultural implements into Canada in 1928 amounted to \(\$ 16,000,000\), mostly farm tractors costing not more than around \(\$ 1,400\) in the country of production. The result of that was that the average ad valorem rate was only \(4 \cdot 1\) per cent. I might point out, however, that the average ad valorem rate on dutiable imports from 1925 to 1931 ranged around about \(9 \cdot 5\) per cent. Also on September 17, 1930, there were radical changes in the duties on farm implements increasing the duties as from that date. As a result of these changes we find that the average ad valorem rate on dutiable imports as of 1931 was \(9 \cdot 71\), and in \(193215 \cdot 5\), in \(1933 \quad 17 \cdot 9\), and so on. There has been, however, a very serious decline in Canada's imports of farm implements since 1930-31, as also in production and in exports. There was also a very serious decline in the production of farm implements and machinery in Canada as from 1930-31, to date, indicating that the depression beginning about 1929 had a very serious effect on the purchasing power on the farmers of the Dominion. It would be noted that in 1930, Canada's imports of farm implements and machinery were valued at \(\$ 30,000,000\) and her exports at \(\$ 18,000,000\), while production in that year totalled around \(\$ 40,000,000\). In 1931 the production had dropped to \(\$ 27,000,000\) and imports to \(\$ 16,000,000\), and exports to \(\$ 7,000,000\); in 1932 imports were a trifle over \(\$ 3,000,000\), exports were about \(\$ 2,500,000\), while production had
fallen to about \(\$ 11,000,000\). In 1933 , however, imports were \(\$ 2,200,000\), exports were \(\$ 1,300,000\), while production had dropped to about \(\$ 5,500,000\).

Mr. Graham: Dealing now with these detailed statements, the summary of the first one, relating to Canada's domestic export, is as follows:-

\section*{Dominion Bureau of Statistics-External Trade Branch}

Memorandum showing:
CANADA'S DOMESTIC EXPORTS OF FARM IMPLEMENTS AND MACHINERY AND PARTS
(Fiscal Years, 1913 to 1936)
\begin{tabular}{|c|c|c|c|c|c|}
\hline Years ended March 31- & Total Exports & To British Empire & To Foreign Countries & To United Kingdom & To United States \\
\hline & 8 & \$ & \$ & \$ & \$ \\
\hline 1913 & 6,365, 824 & 2, 138, 123 & 4,227,701 & 437,006 & 54, 087 \\
\hline 1914 & 7,948,880 & 2,545, 174 & 5, 403,706 & 488,367 & 99,007 \\
\hline 1915 & 3,718,908 & 2,200,420 & 1,518,488 & 357, 134 & 559,945 \\
\hline 1916 & 3,899,235 & 2,376,347 & 1,522,888 & 961,074 & 309,964 \\
\hline 1917 & 4,122, 108 & 2, 544, 114 & 1,577,994 & 594,942 & 287,568 \\
\hline 1918 & 5,183,799 & 3,500,447 & 1,683,352 & 1,837,904 & 354,325 \\
\hline 1919 & 8,831, 803 & 5,814,923 & 3,016,880 & 3,306,516 & 272,927 \\
\hline 1920 & 11, 614,400 & 3, 166,397 & 8,448,003 & 1,193,641 & 3,281,988 \\
\hline 1921 & 12,527,373 & 4,376,243 & 8,151, 130 & 1,183,076 & 3,439,149 \\
\hline 1922 & 5,345,308 & 2,524,713 & 2, 820,595 & 371,642 & 583,005 \\
\hline 1923. & 6,066,893 & 1,745, 818 & 4,321, 075 & 290,981 & 1,346,840 \\
\hline 1924. & 9,339,519 & 2,582,493 & \(6,757,026\) & 659, 679 & 812,290 \\
\hline 1925 & 11,342, 712 & 3,279,976 & \(8,062,736\) & 346,328 & 1,365, 175 \\
\hline 1926 & 13, 628,341 & 4,031,281 & 9,597, 060 & 679,955 & 2,535,992 \\
\hline 1927 & 17,412,947 & 4,004,775 & 13,408, 172 & 673,945 & 4, 204,581 \\
\hline 1928 & 15,643,381 & 4, 052, 165 & 11,591, 216 & 638,584 & 3,522,603 \\
\hline 1929 & 15,870,918 & 3,573, 817 & 12,297, 101 & 448,376 & 4,367,408 \\
\hline 1930 & 18,396,688 & 3, 183,181 & 15,213,507 & 459, 143 & 4, 118,842 \\
\hline 1931 & 7,188,078 & 1,566,052 & 5,622,026 & 332,893 & 2,030,436 \\
\hline 1932 & 2,484,965 & 893,284 & 1,591,681 & 315, 136 & 794,012 \\
\hline 1933 & 1,324,776 & 753,435 & 571,341 & 217,495 & 220,794 \\
\hline 1934 & 1,819,826 & 1,035,735 & 784,091 & 292,816 & 322,519 \\
\hline 1935. & 3,567,253 & 1,956,991 & 1,610,262 & 593,915 & 603,040 \\
\hline 1936 & 6,344,437 & 2,348,897 & 3,995, 540 & 774,526 & 2,467,203 \\
\hline
\end{tabular}

Mr. Thorson: Are you going to print that table?
Mr. Graham: Yes.
Mr. Thorson: And the detailed statement from which it is prepared will be filed as an exhibit?

Mr. Graham: Yes. Now, the next summary deals with Canada's imports of materials. It is as follows:-

\section*{Dominion Bureau of Statistics-External Trade Branch}

Memorandum showing:

\section*{CANADA'S IMPORTS OF MATERIALS FOR THE MANUFACTURE OF FARM IMPLEMENTS, WITH DUTY COLLECTED THEREON, AND AVERAGE RATE OF DUTY; ALSO IMPORTS FROM THE UNITED KINGDOM AND UNITED STATES.}
(Fiscal Years, 1913 to 1936)
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline \multirow[b]{2}{*}{Years ended March 31:} & \multirow[b]{2}{*}{Total Imports} & \multirow[b]{2}{*}{Dutiable Imports} & \multirow[b]{2}{*}{Free Imports} & \multirow[t]{2}{*}{Duty Collected} & \multicolumn{2}{|l|}{Average Rate of Duty on} & \multirow[t]{2}{*}{Imports from United Kingdom} & \multirow[t]{2}{*}{Imports from United States} \\
\hline & & & & & Total Imports & Dutiable Imports & & \\
\hline & \$ & \$ & \$ & \$ & \% & \% & \$ & \$ \\
\hline 1913 & 965, 027 & 20,089 & 944, 938 & 1,004 & \(0 \cdot 1\) & \(5 \cdot 0\) & 8,303 & 950,208 \\
\hline 1914 & 850, 403 & 5,866 & 844,537 & 293 & \(0 \cdot 03\) & \(5 \cdot 0\) & 8,364 & 837,314 \\
\hline 1915 & 533,520 & 95, 792 & 437,728 & 16,415 & \(3 \cdot 1\) & \(17 \cdot 1\) & 3,406 & 527,547 \\
\hline 1916 & 786, 719 & 161,468 & 625,251 & 28,211 & \(3 \cdot 6\) & 17.5 & 644 & 783,04 \\
\hline 1917 & 1,244,507 & 173,215 & 1,071,292 & 29, 193 & \(2 \cdot 3\) & 16.9 & & 1,235,904 \\
\hline 1918 & 2,156,264 & 290,029 & 1,866,235 & 49,760 & \(2 \cdot 3\) & \(17 \cdot 2\) & 774 & 2,147, 024 \\
\hline 1919 & 2,544,248 & 303,239 & 2, 241,009 & 50,967 & \(2 \cdot 0\) & \(16 \cdot 8\) & 319 & 2,520,614 \\
\hline 1920 & 1,681,298 & 282,788 & 1,398,510 & 48,836 & \(3 \cdot 0\) & \(17 \cdot 3\) & 3,454 & 1,677, 763 \\
\hline 1921. & 2, 927,446 & 478, 824 & 2,448,622 & 83, 433 & \(2 \cdot 9\) & \(17 \cdot 4\) & 11,707 & 2,915, 739 \\
\hline 1922 & 729,203 & 57, 815 & 671,388 & 9,461 & \(1 \cdot 3\) & \(16 \cdot 4\) & 825 & 726, 634 \\
\hline 1923. & 691,965 & 96, 254 & 595,711 & 16,803 & \(2 \cdot 4\) & \(17 \cdot 5\) & 26 & 681,736 \\
\hline 1924 & 1,002,558 & 107, 756 & 892,802 & 18,728 & \(1 \cdot 9\) & \(17 \cdot 4\) & 33,441 & 965,31 \\
\hline 1925 & 2,464,747 & 1,027,316 & 1,437,431 & 61,167 & \(2 \cdot 5\) & \(6 \cdot 0\) & 72, 625 & 2,388,791 \\
\hline 192 & 5,861,886 & 2, 540, 489 & 3, 321, 397 & 151, 678 & \(2 \cdot 6\) & \(6 \cdot 0\) & 104,457 & 5,719,393 \\
\hline 1927 & 7, 205, 369 & 3,552, 666 & 3, 652, 703 & 212, 517 & \(2 \cdot 9\) & \(6 \cdot 0\) & 129,021 & 6, 969,908 \\
\hline 1928 & 6,030,768 & 3, 001,522 & 3,029,246 & 179, 616 & \(3 \cdot 0\) & \(6 \cdot 0\) & 35,852 & 5,954,797 \\
\hline 1929. & 8,963,931 & 4,668, 062 & 4, 295, 869 & 279,460 & \(3 \cdot 1\) & \(6 \cdot 0\) & 111,601 & 8,814, 005 \\
\hline 1931 & 6,011,970 & 3,379,570 & 2,632,400 & 202,071 & 4.4 & \(6 \cdot 1\) & 110,331
43,943 & 5,855,625 \\
\hline 1932 & 1,800,705 & \(1,384,492\)
528,217 & +85,560 & 32,028 & \(5 \cdot 2\) & \(6 \cdot 1\) & 7,842 & 1,332, 562 \\
\hline 1933 & 506,459 & 416,292 & 90,167 & 25, 238 & \(5 \cdot 0\) & \(6 \cdot 1\) & 17,592 & 464,64 \\
\hline 1934 & 805,796 & 693,985 & 111,811 & 43,362 & \(5 \cdot 4\) & \(6 \cdot 2\) & 14,274 & 784,42 \\
\hline 1935 & 1,531,179 & 1,263,683 & 267,496 & 79,238 & \(5 \cdot 2\) & \(6 \cdot 3\) & 25,880 & 1,491,054 \\
\hline 1936 & 2,393,672 & 2,018,556 & 375, 116 & 127,544 & \(5 \cdot 3\) & \(6 \cdot 3\) & 41,988 & 2,306,993 \\
\hline
\end{tabular}

The next statement, or summary, deals with Canada's imports of farm implements, machinery and parts:-

\section*{Dominion Bureau of Statistics-External Trade Branch}

\section*{Memorandum showing:}

CANADA'S IMPORTS OF FARM IMPLEMENTS AND MACHINERY AND PARTS, WITH DUTY COLLECTED THEREON AND AVERAGE RATE OF DUTY; ALSO IMPORTS FROM THE UNITED STATES.
(Fiscal Years, 1913 to 1936)
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline \multirow[b]{2}{*}{Years ended March 31:} & \multirow[b]{2}{*}{Total Imports} & \multirow[b]{2}{*}{\begin{tabular}{l}
Dutiable \\
Imports
\end{tabular}} & \multirow[b]{2}{*}{Free Imports} & \multirow[t]{2}{*}{Duty Collected} & \multicolumn{2}{|l|}{Average Rate of Duty on} & \multirow[t]{2}{*}{Imports from United States} \\
\hline & & & & & Total Imports & Dutiable Imports & \\
\hline & 8 & \$ & \$ & \$ & \% & \% & \$ \\
\hline 1913 & 14,955,996 & 14,488, 147 & 467,849 & 2,887,930 & \(19 \cdot 3\) & 19.9 & 14,703,897 \\
\hline 1914 & 7,540,923 & 7,077,869 & 463, 054 & 1,407,596 & 18.7 & 19.9 & 7,318,853 \\
\hline 1915 & 3,370,117 & 2,882,647 & 487,470 & 565, 487 & 16.8 & \(19 \cdot 6\) & 3,171,212 \\
\hline 1916 & 4,262,245 & 3,957,842 & 304,403 & 748,034 & 17.5 & 18.9 & 4,199,480 \\
\hline 1917 & 8,805,777 & 8,471,321 & 334,456 & 1, 619,234 & 18.4 & \(19 \cdot 1\) & 8,748,336 \\
\hline 1918 & 15, 380,743 & 14,902,863 & 477,880 & 2, 687, 714 & 17.5 & 18.0 & 15,359,471 \\
\hline 1919 & 24,051,825 & 7,997,300 & 16,054,525 & 1,557,710 & 6.5 & \(19 \cdot 5\) & 23,981,925 \\
\hline 1920 & 14,578,106 & 6,380, 448 & 8,197,658 & 1,114,102 & \(7 \cdot 6\) & 17.5 & 14,494, 226 \\
\hline 1921 & 24,458,834 & 11,366,740 & 13,092,094 & 1,898,219 & 7.8 & 16.7 & 24,134,783 \\
\hline 1922 & 7,718,032 & 5, 216,371 & 2,501,661 & 889,168 & 11.5 & 17.0 & 7,546,472 \\
\hline 1923. & 8,423,995 & 4, 571, 378 & 3,852,617 & 680,028 & \(8 \cdot 1\) & 14.9 & 8,352,071 \\
\hline 1924. & 11,766,285 & 6,961,270 & 4, 805,015 & 999, 219 & \(8 \cdot 5\) & \(14 \cdot 3\) & 11,570,014 \\
\hline 1925 & 6,494,986 & 4,015,509 & 2,479,477 & 392,314 & \(6 \cdot 0\) & \(9 \cdot 8\) & 6,270,141 \\
\hline 1926 & 13,336,650 & 6,546,255 & 6,790,395 & 633,221 & 4.7 & \(9 \cdot 7\) & 13,051,503 \\
\hline & 18,946,288 & 9,868,440 & 9,077,848 & 944,593 & \(5 \cdot 0\) & \(9 \cdot 6\) & 18,493, 857 \\
\hline & 29,636,449 & 12,809,305 & 16,827,144 & 1,229,494 & \(4 \cdot 1\) & \(9 \cdot 6\) & 29,132,852 \\
\hline 1929 & 40,292,899 & 18,545, 535 & 21, 747,364 & 1,773,610 & 4.4 & \(9 \cdot 6\) & 39,826, 254 \\
\hline 1930 & 30,075,453 & 14,294,477 & 15,788,976 & 1,224,369 & \(4 \cdot 1\) & \(8 \cdot 6\) & 29,338, 753 \\
\hline 1931 & 16,495, 217 & 8,935, 023 & 7,560, 194 & 865,250 & \(5 \cdot 2\) & \(9 \cdot 7\) & 15,408, 492 \\
\hline 1932 & 3,315,542 & 1,909,945 & 1,405,597 & 295, 712 & \(8 \cdot 9\) & 15.5 & 3,049,102 \\
\hline 193 & 2,208,028 & 1,224,281 & 983, 747 & 218,550 & \(9 \cdot 9\) & 17.9 & 1,997,286 \\
\hline 193 & 2,283,771 & 1,444, 174 & 839,597 & 275,808 & \(12 \cdot 1\) & \(19 \cdot 1\) & 2,017,558 \\
\hline 1935 & 3,716,319 & 1,869,252 & 1,847, 067 & 349, 686 & \(9 \cdot 4\) & \(18 \cdot 7\) & 3,341, 370 \\
\hline 1936 & 6,182,218 & 2,253,517 & 3,928,701 & 372,359 & \(6 \cdot 0\) & 16.5 & 5,712,752 \\
\hline
\end{tabular}

The Chatrman: Now, gentlemen, would it be agreeable to the committee to have these summary statements which Mr. Graham has just presented printed in our record, and to have the larger detailed statements filed?

Some Hon. Members: Yes.
Mr. Thorson: I would move accordingly.
The Chatrman: It has been moved by Mr. Thorson, seconded by Mr. Tomlinson, that these summary statements be entered into the record and that the material from which they were prepared be filed with the committee. Is that agreeable?

Motion agreed to.
The Chatrman: That completes the information that we are to receive this morning. Mr. Warne, we are very grateful to you for the information you have gathered for us.

The committee went into executive session at 12.40 o'clock p.m.

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and MANURE SPREADERS
CANADA


\section*{HOUSE OF COMMONS}

\section*{STANDING COMMITTEE}

ON

\title{
agriculture and colonization
}

\section*{MINUTES OF PROCEEDINGS AND EVIDENCE (Farm Implement Price Inquiry)}

\section*{TUESDAY, JUNE 9, 1936}

No. 8

\section*{WITNESSES:}

Professor E. A. Hardy, Agricultural Engineer, University of Saskatchewan. Hon. J. G. Taggart, B.S.A., Minister of Agriculture, Province of Saskatchewan.

\section*{EXHIBITS FILED}

No. 9.-Table No. 4. Canadian and United States Prices for the John Deere Co, Ltd.
Table No. 5. Saskatchewan Prices for the International Harvester Co. Ltd.
Table No. 6. Saskatchewan Prices for the Massey-Harris Co. Ltd.
Table No. 7. Saskatchewan Prices for the Cockshutt Plow Co.
Table No. 8. Saskatchewan Prices for the J. I. Case Co. Ltd.
Table No. 9. Zone B. Prices of the International Harvester Co. Ltd., from 1924-36.

\section*{MINUTES OF PROCEEDINGS}

Tuesday, June 9, 1936.
The Standing Committee on Agriculture and Colonization met this day at 11 a.m.

The Chairman, Mr. W. G. Weir, presided.
Members present: Messrs. Beaubier, Bertrand (Prescott), Cleaver, Donnelly, Douglas, Dubois, Evans, Fontaine, Furniss, Gardiner, Golding, Gosselin, Graydon, Johnson (Lake Centre), Lalonde, Leader, Leclerc, MacLean (Prince), MacRae, McLean (Melfort), McNevin, Mitchell, Motherwell, Needham, Perley (Qu'Appelle), Rheaume, Robichaud, Ross (Middlesex East), Senn, Spence, Taylor (Norfolk), Thorson, Thompson, Tomlinson, Turner, Ward, Weir.

In attendance: Mr. R. T. Graham, K.C., Counsel for the Committee.
Professor E. A. Hardy, Agriculture Engineer, University of Saskatchewan, called, heard, examined and retired until 4 p.m.

Professor Hardy also presented a Brief prepared by Dr. Allen, Head of Farm Management Department of University of Saskatchewan.

Ordered that the presentation be printed.
Ordered that Tables No. 1 and 2,3,10,11, 12, 13 and 14 be printed, also Chart showing estimated farm price of Wheat, estimated value of Wheat sales per farm and average cost of a group of six standard Farm Implements, in Saskatchewan.

The hour being 1 o'clock, the Committee adjourned to meet again at 4 p.m. this day.

\section*{AFTERNOON SESSION}

The Committee resumed at 4 o'clock, the Chairman presiding.
Members present: Messrs. Bertrand (Prescott), Cleaver, Donnelly, Dupuis, Evans, Fafard, Furniss, Gardiner, Golding, Johnson (Lake Centre), Lennard, McLean (Melfort), Needham, Perley (Qu'Appelle), Senn, Spence, Taylor (Norfolk), Thorson, Thompson, Turner, Ward, Weir.

In attendance: Mr. R. T. Graham, K.C., Counsel for the Committee.
Professor E. A. Hardy continued his evidence unfinished at the morning sitting.

Witness retired.
Hon. J. G. Taggart, B.S.A., Minister of Agriculture for the Province of Saskatchewan, was called and heard on the subject matter of the Order of Reference.

Witness retired.

On motion of Mr. Bertrand (Prescott), -
Resolved, That the thanks of the Committee be tendered to the Hon. Mr. Taggart, and Professor Hardy, for their contribution to the problem before the Committee.

The Chairman expressed the thanks of the Committee to both of the witnesses.

The Committee then adjourned to meet again on Wednesday, June 9, at 11 a.m.

WALTER HILL, Clerk of the Committee.

\section*{MINUTES OF EVIDENCE}

\author{
House of Commons, Room 268,
}

June 9, 1936.
The Select Standing Committee on Agriculture and Colonization appointed to inquire into the prices of agricultural implements met at 11 o'clock. Mr. Weir, the chairman, presided.

Mr. R. T. Graham, K.C., counsel for the committee.
The Charman: Gentlemen, will you come to order, please? The witness we have this morning is Professor E. A. Hardy of the engineering department of the University of Sáskatchewan. The committee will recall that some days ago, or at the early part of the session, it was indicated that we should try to secure the co-operation of the provincial departments of agriculture in securing certain information with regard to conditions on each side of the CanadaUnited States boundary line, particularly with respect to sales policy, prices, and things of that character. All the provincial departments were communicated with. It so happens that the province of Saskatchewan, and I think probably I could say Manitoba, have probably made greater progress in collecting this information than the other provinces have. We all realize that there is uncertainty as to when the House will close, and it is difficult to say whether we will be able to hear representatives from the other provinces or not. However, you will appreciate that the last time we discussed this matter in the committee it was felt that at least some representation should be made by the provincial departments which had gone to a good deal of effort in collecting this information. The province of Saskatchewan was particularly well equipped to gather this information. You will remember that in one of the committee meetings reference was made to the work done at the Swift Current experimental farm both from the standpoint of the farmers and from the standpoint of the machine companies there. The engineering department at the University of Saskatchewan has also conducted a good deal of experimental work and collected a lot of information, so that that province is particularly well equipped to give evidence to-day. Moreover, the province of Saskatchewan, I presume, is the largest purchaser of farm implements of any province in the Dominion of Canada. Naturally its interest is probably a little greater for that reason.

So we have with us to-day Professor Hardy of the University of Saskatchewan. I might also say to the committee now that Honourable Mr. Taggart, Minister of Agriculture for Saskatchewan, who was formerly superintendent of the Swift Current experimental farm to which reference has already been made, is in Ottawa. He says he would like to be heard before the committee. So if it is agreeable to the committee, following Professor Hardy's presentation to-day I think we should hear Mr. Taggart as well. I think that is all I need say preliminary to this morning's meeting. I now have pleasure in calling upon Professor Hardy.

Professor E. A. Hardy, called.

> By Mr. Graham:
Q. Professor Hardy, you might give to the committee your professional standing, or at least your particular branch of academic training.-A. My name is Professor E. A. Hardy. I am professor of agricultural engineering at the University of Saskatchewan.
Q. And have been for how long?-A. I came to the University of Saskatchewan in 1917. I am in my twentieth year there.
Q. I notice, incidentally, that you must at some time have collaborated with Dr. Davidson of Iowa State University in making a survey of the state of Iowa in regard to farm implements?-A. During my undergraduate work at Iowa State College at Ames, Iowa, I was associated with Dr. Davidson and carried on some research work with regard to the depreciation of farm machinery at that time.
Q. Will you kindly proceed with your presentation, Professor Hardy?A. Yes.

Mr. Chairman and gentlemen, this survey has been conducted in order to obtain local information with regard to implement prices, the quality and type of implements sold in the United States as compared with Canada, the distribution of the implements from the factory to the wholesale distributing point and to the farmer, the credit policy of the dealer, as well as the condition of the machines and the quality of work being done by the farmer, as outlined by Mr. R. T. Graham, K.C., counsel for the committee on agriculture and colonization.

The Honourable Mr. T. G. Taggart, Minister of Agriculture for Saskatchewan, and myself visited southeastern Saskatchewan and northwestern North Dakota, obtaining prices from the International Harvester and John Deere Companies at Minot, North Dakota. We found that Minot, North Dakota, was the western distributing point in this area for most of the implement companies, and that the Minot block extended west to Malta, Montana-Malta, Montana, is half-way between Wolf Point and Havre, a point about there (indicating) -which is practically three-quarters of the width of Saskatchewan. The territory west of Malta is in the Great Falls block, in which prices are comparable with those in the extreme western part of Saskatchewan. We visited typical farmers throughout all of the areas through which we travelled to examine the machines which they were using, and to obtain experiences from them which would have a direct bearing upon prices of implements and repairs.

After completing the study along the border, it was thought advisable to study a portion of northern Saskatchewan in order to observe whether the prices of implements, repairs and the policy of distribution were uniform throughout Saskatchewan. Consequently, I studied the Swift Current, Rosetown, Saskatoon, Prince Albert, Melfort, Nipawin, Canora and Yorkton areas with this in view. Nipawin runs off Prince Albert, Melfort, Nipawin, Canora, Melville and then back into the Regina areas (indicating on map).

With regard to the retail price of farm implements in North Dakota, Montana, and Saskatchewan, the International Harvester Company bases all prices on the Chicago list, plus freight to the different points west. Tables have been prepared showing the increase in implement prices from Minot, North Dakota, to Crosby, North Dakota, Wolf Point, Montana, and Havre, Montana; Havre, Montana, being in the Great Falls block. Prices of typical repair parts have also been obtained and tabulated. It is rather interesting to note that repair parts prices are practically uniform throughout the area studied. In some instances freight is added to non-competitive repair parts. The cost of repairs in Saskatchewan is the same throughout the province. The prices are apparently set so that by pooling the freight the item is taken care of. There have been some instances of dealers adding freight and express to repair parts before the days of good roads and automobiles. However, at the present time the farmers will drive a considerable distance in order to save a few cents on repairs; consequently, the agents have found from experience that one price throughout the entire province is more profitable to them. In the case of emergency repairs where extra telephone calls are made and extra charges for express shipments are incurred, the farmer is frequently asked to pay all extra
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charges. This practice varies, however, with different dealers and in different areas. In some instances the dealers absorbs a part of these extra charges. It was found in North Dakota, with implements sold at Minot prices to a distance of approximately one hundred miles west of Minot, particularly where it was possible for the farmer to drive to Minot with trucks and take delivery of the machinery, even though the freight rate was considerably higher, the agents absorbed the freight in order to obtain the business. At Crosby, North Dakota, the first increase over Minot prices was in evidence. Since Minot prices extend west to some point between Kenmare and Crosby they are comparable with eastern Saskatchewan prices. Crosby, North Dakota, is here on the map (indicating) ; and we are comparing Crosby, North Dakota, with Weyburn in Saskatchewan, as I will indicate.

By Mr. Senn:
Q. You are talking about parts now, are you?-A. No. Parts were practically the same. I am talking about machinery.
Q. You are talking machinery?-A. Yes. I might just say about parts that parts were the same throughout this area (indicating), and parts are the same throughout Saskatchewan. Apparently the freight is pooled.

\section*{By Mr. McLean:}
Q. Are they the same in both areas?-A. With very little exception. The tables will show very, very little difference.

Saskatchewan is generally divided into two zones as far as implement prices are concerned: the B eastern and the C western and northern zones. The attached map shows quite clearly the zoning of the province. The B eastern zone extends north from a point just east of Regina up to the north railway line which is just south of Melfort. Then the B zone extends along between the north Melfort Hudson Bay line and between the Quill Lake line, the Canadian National going to Winnipeg. That zone is practically the same for all companies. The freight being higher, this section (indicating) is included in the C zone along with the rest of the western section of the province. The International Harvester, John Deere and Cockshutt Plow Companies follow this same zoning, while the Massey-Harris Company follows it generally in practice, but varies somewhat in the south and in the northeast from this practice. A list of the Massey-Harris blocks is attached to the Massey-Harris price list found in table 6. The J. I. Case Company do not follow the zoning system, but ship f.o.b. branch houses, which in the north are Saskatoon, Rosetown, Melfort, Humboldt and Prince Albert, and in the south, Regina, Weyburn, Assiniboia, Eastend and Swift Current. The Minneapolis Moline and Oliver Hart Parr Companies ship f.o.b. Regina and Saskatoon to the various parts of the province. The International Harvester Company have 6 branches in the province: Regina, Weyburn and Yorkton in zone B (indicating) and Saskatoon, North Battleford and Swift Current in zone C.

\section*{By Mr. Graham:}
Q. Just to make that clearer, I think you said that there were just two zones in Saskatchewan?-A. Zone B and zone C.
Q. There is no zone A?-A. No. Zone A is in Manitoba. Zone A and AA are in Manitoba.
Q. That is right.-A. So Saskatchewan is zone B and zone C.
Q. Yes. Will you continue?-A. Yes. Continuing: They have a number of intermediate wholesale transfer houses at intermediate points in both zones. The John Deere Plough Company has the head office at Regina, with branches at Saskatoon, North Battleford, Melfort, Weyburn and Swift Current. The

Cockshutt Plough Company have two main branches at Regina and Saskatoon, with sub-branches at Swift Current, North Battleford and Melfort, and with a number of wholesale transfer points throughout the various territories. A small portion of the Yorkton district and a small portion of the Alameda district is in Winnipeg territory. Yorkton district is here (indicating) and that is the Cockshutt Plough Company. There is a small portion here (indicating) in the Winnipeg territory and a small portion of this south line in the Winnipeg territory which is serviced more adequately from the standpoint of railway accommodation than from Regina. The Massey-Harris Company have two main branches, Regina and Saskatoon, with two large sub-branches at Yorkton and Swift Current, a combination agency and transfer point at North Battleford and Rosetown, and a number of wholesale transfer points distributed throughout the different zones to facilitate distribution. You will note in the map the relation between the points compared in North Dakota and Montana with the B and C zones in Saskatchewan. The prices of machines compared are listed according to B and C zones. The prices are increased in the C zone to offset extra freight and handling charges. In North Dakota prices are quoted in the tables at Minot, Crosby, Wolf Point, and Havre. Wolf Point and Havre prices compare with eastern C zone and Western C zone-and in Saskatchewan that is all the same price-while Crosby and Minot prices compare with B zone prices in Saskatchewan, and they are listed in that way in the table. So that when we are thinking of prices from Regina or east in the United States we must think of prices from Crosby or Minot; and when we are thinking of prices from Saskatoon, Swift Current, North Battleford or west, we must think of prices from Wolf Point and Havre, to get a reasonable comparison. For instance, an 8 foot binder at Weyburn, Saskatchewan, is sold by the International Harvester Company on the one payment credit plan for \(\$ 289\). This price is the same throughout the B zone. The International Harvester Company sells the same binder in the C zone for \(\$ 293\), or an increase of \(\$ 4\). The same 8 foot binder at Minot, North Dakota, costs the farmer \(\$ 257.20\) and at Crosby, North Dakota, \(\$ 257.60\), a difference of 40 cents in freight between those two points, or in cost. These two prices would be comparable to the B zone prices in Saskatchewan, with the binder approximately \(\$ 31.80\) cheaper in North Dakota than in Saskatchewan. This same binder at Wolf Point, Montana, cost \$266, an increase of \(\$ 8.80\) for freight and handling as it is taken west. At Assiniboia, Saskatchewan, directly north of Wolf Point, the same binder costs the Saskatchewan farmer \(\$ 293\), or \(\$ 27\) more than the Montana farmer. At Havre, Montana, the same binder costs \(\$ 276.90\), which is \(\$ 10.90\) more than at Wolf Point, an increase apparently to offset freight and handling charges. Farmers in the Maple Creek or Consul, Saskatchewan, area which is down here (indicating) pay the same price for the binder as those in the Assiniboia area-that is, throughout this entire C zone (indicating) - \(\$ 293\), which is \(\$ 16.10\) more than the farmers in the Havre, Montana, district pay. There seems to be a greater spread in price for freight and handling charges east and west in North Dakota and Montana than in Saskatchewan. The Montana dealer, however, does not calculate the freight accurately.

For instance, at Havre, Montana, the freight rate from Chicago to Havre is \(\$ 1.57\) per hundred, while the prices of implements quoted me were calculated at \(\$ 2\) per hundred, the difference being used for handling charges at Havre. The same comparison is provided for a comprehensive list of implements in table form in the appendix of this report, showing the prices for the John Deere Plow Company. At Wolf Point, Montana, I obtained prices on implements from the John Deere agent, and also the freight rates which he paid, and found that when calculating the remainder of the prices which I required from the 1936 price list put out by Deere and Webber Company, Minneapolis, Minnesota, that his custom of pricing was based upon competition with other companies, and not
particularly based upon the price list plus freight rates. Consequently there is a discrepancy between the figures in the table showing the prices of implements sold by the John Deere Plow Company and the comparative table to Canadian and United States implement prices for Wolf Point, Montana. You will note that the same general increases takes place from Minot to Havre with regard to the implements sold by the John Deere Plow Company, and that the difference in the B and C lists for Saskatchewan is considerably less, and yet the general prices of machines, such as the 8 foot binder, are higher in Saskatchewan than in the United States in approximately the same proportion as those quoted by the International Harvester Company.

Mr. SENN: Would you prefer that we ask no questions until the professor has finished?

The Chatrman: I think perhaps it would be better to deal with our questions then. I am afraid our examination will take too long otherwise. You might just write them down, if you will, Mr. Senn.

Witness: The prices of machinery through the different zones in Saskatchewan vary somewhat from the retail list price with the different companies. The Massey-Harris Company ship all implements to their local agents from either Regina, Saskatoon or some of their sub-branches or wholesale distributing points prepaid, consequently a farmer purchases any of the common farm implements from his local dealer at the list price for the zone while he may be asked to pay freight from the nearest wholesale distributing point when purchasing from the other companies.

I might just say that this is an important point in the distribution of farm machinery in Saskatchewan in that the companies have two methods; MasseyHarris, as I say, will send implements to all agencies all over the province prepaid.

\section*{The Charrman: Freight prepaid.}

Wirness: Freight prepaid-while the other companies in order to meet this competition have an intricate system of wholesale terminal division from which the agent must transport the machines either by truck or by l.c.l. freight or by express and absorb that cost either through their commission or charge it to the farmer.

For instance, the International Harvester Company have instructed through their local agents in the retail price list as follows:-

With the exception of hay presses, ensilage cutters, engines and attachments, all prices named are the regular retail prices obtained in your territory, and you are not warranted in making any reduction therefrom; on the other hand, where increased freight costs are incurred, prices should be increased in proportion. Hay presses, ensilage cutters, engines and attachments are priced on the basis of f.o.b. branch house. Always add freight or have purchaser pay freight branch house to place of delivery.
The same is true with the John Deere Plow Company, as outlined in their retail price list for 1936 as follows:-

Important: Retail prices herein given are made on the basis of f.o.b. branch house and the agent must protect himself as against freight or express charges. Always add freight or have purchaser pay freight from branch house to place of deliverey.
The other companies such as the J. I. Case Company, the Minneapolis Moline and Oliver Hart Parr all follow the same policy of selling machinery f.o.b. the nearest branch house. The companies have, however, increased the number of wholesale transfer points throughout the province in an endeavour to reduce the local freight charges and also to distribute implements more
widely throughout the province with somewhat less freight cost to their local agents. During the past few years when conditions have been difficult, the local agents have found that the farmer would not pay the extra freight charge, with the result that practically all local agents are absorbing the freight or trucking charge and selling at the retail list.

I do not know whether the commission to the Massey agent is less than that paid to agents of other companies in order to absorb the freight charges for distribution. Consequently as far as the farmer is concerned, the farmer at Assiniboia pays the same price for an 8 foot binder as the farmer at North Battleford, Prince Albert or Nipawin. In other words, the farmer at Assiniboia down here in the south (indicating) pays the same price for an 8 foot binder as the farmer in North Battleford (indicating), or the farmer in Prince Albert (indicating), or the farmer in Nipawin. That is what we wanted to find out, whether this comparison is uniformly true throughout the northern section of the province, and we found that it was.

\section*{By Mr. Senn:}
Q. That is for the Massey-Harris Company?-A. That is for all of them.

Witness: This is not true, however, in the case of tractors and heavy goods. The freight from the nearest branch is practically always added to the list price. There are local exceptions, and where the dealer has a truck and is very anxious to make a sale he frequently delivers the tractor to the farmer's yard at the list price. This, however, is at the discretion of the local dealer.

With regard to the implements which are being sold in North Dakota, Montana and Saskatchewan, in many instances the same numbers are being used in the United States and in Canada. Generally the design, weight and quality of the implements are comparable.

Now, gentlemen, the question was this: As we are comparing these implements, or where the same implement in the United States is compared with the same implement in Canada, is there any definite difference in weight, design, material and quality of machine; and this section tends to deal with that operation.

\section*{By the Chairman:}
Q. What do you mean by the same number?-A. The factory list number, and they were listed in the catalogues using the same number.

Witness: However, in the case of the heavy four furrow dise plow, the plows quoted on in the United States by the John Deere Plow Company weigh 2,326 pounds as compared to 2,292 pounds in Canada. The dise plow quoted upon by the International Harvester Company weighed 1,890 pounds in the United States and 1,983 in Canada, as far as I can see the plows are practically identical. The disc plow, however, has not been sold in this area in North Dakota since the soil is a chocolate loam type being plowed with a mouldboard plow. In other words, I asked for dise plow quotations and they gave me dise plow quotations while they have never sold a plow of that type in that area. So far as this plow goes it was not typical. With regard to drills, the drill in the United States weighed 1,706 pounds as compared with 1,828 pounds in Saskatchewan, this difference apparently is in weight of material rather than any general change in design and is not of any great consequence. However, with the exception of some little variation in width of machine in the case of the one-way disc and in the case of the cultivator, the machines compared are quite the same.

The repair parts are also listed according to the same number-again I mean the entire list - and are in many instances identical. In the case of mowing machine knife heads, the forged knife head was being sold in the United States

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}
by the International Harvester Company while the malleable cast knife head was being sold in Canada. And that is the reason why \(\$ 1.10\), and 75 cents in some instances, is the price in the United States as compared with 45 cents and 50 cents in Canada.

With regard to binder canvasses it was found that competition in Canada has caused the lower price than in the United States.

\section*{By Mr. Graham:}
Q. That competition would come from where, Professor?-A. That competition would come from the mail order houses-Great West Saddlery, McLeod's, Eatons, etc., throughout western Canada.

Witness: In examining competitive canvasses it was found that the canvass apparently was of the same weight of duck but was not quite as long, was fitted with ash slats rather than oak, the buckles were caste rather than pressed steel; the straps were webbing of a lower grade than the standard canvass sold by the implement companies, but quite useable. The webbing ends were dipped. In discussing the use of competitive canvasses with a number of Saskatchewan farmers I found that experiences varied. A number considered them equally satisfactory, while a few have been disappointed and had replaced the competitive canvasses with the regular. Now, in discussing the matter with the different companies, in order to meet competition they have reduced the commission to their agents on canvasses from 25 per cent to 15 per cent, and have reduced prices from \(\$ 8.25\), as you found in the United States throughout this entire area, to \(\$ 7.50\), as you found in Canada, to meet that competition.

With regard to the sources of supply. The International Harvester Company in North Dakota and Montana obtain implements from Chicago, Millwaukee and Minneapolis. Apparently some implements are shipped from Hamilton through Minneapolis, such as the large drills and field cultivators. The John Deere Plow Company ship implements from Minneapolis through the Deere Webber Company, and also from factories in Moline, Illinois; Waterloo, Iowa, Horicon, Wisconsin; and Syracuse, New York. Generally the implements are based on Minneapolis prices.

Where implements are shipped from factories the freight rate varies somewhat as follows:-
(Note: There is a 4 cents per hundred emergency freight rate added to all shipments in Minnesota which is included in the freight rates following.)

Minneapolis to Minot-
70 cents per hundred for drills.
76 cents per hundred for engines.
\(\$ 1.00\) per hundred for tractors, binders, spreaders, harrows, plows, etc.
The freight rate at Crosby it \(\$ 1\) per hundred for all implements; also at Williston, North Dakota.

The agent at Wolf Point insisted that the freight rate on tillage machinery was 85 cents per hundred, and tractors 90 cents per hundred. This rate seems out of line with other rates obtained, and I find generally in enquiring at the freight offices for tariffs that at most North Dakota and Montana points the agent did not have the tariff and had to wire in for the tariff, so that I could not get confirmation between the implement company's figures and the railway company's figures in many instances.

\section*{By Mr. McLean:}
Q. Did the railway agents not have the tariffs?-A. At some of these points such as Havre and Minot the agent had wired for tariffs for the implement company, and they had these tariffs and gave them to me at that time, but I
got all sorts of irregular figures from the agents at other points. On the whole they seemed to have nothing other than the l.c.l. rate, through rates are dealt with at Chicago and Mineapolis.

By Mr. Senn:
Q. There would be a difference between the rate on carload lots and the l.c.l. rate?-A. Yes.

Witness: The freight rate at Havre, Montana, was \(\$ 1.11\) per hundred for all implements except tractors, and \(\$ 1.37\) per hundred for tractors. A somewhat similar freight rate exists for the International Harvester Company: 76 cents per hundred from Minneapolis to Minot on tillage machinery; \$1 per hundred on drills and haying and harvesting machinery from Chicago and 96 cents per hundred on tractors, combines, and threshers. At Crosby, North Dakota, \(\$ 1\) per hundred is the rate taken on all machinery; at Williston, North Dakota, \(\$ 1.30\); at Wolf Point, \(\$ 1.45\), and at Havre, \(\$ 1.57\). However, the agent at Havre uses \(\$ 2\) as the freight charge on all implements.

With regard to the source of implements for Saskatchewan, the International Harvester Company manufacture practically all of their tillage and harvesting machinery at their Hamilton, Ontario, works, manufacturing tractors at the Chicago and Milwaukee works. The Regina branch manager advised me that the John Deere Plow Company manufacture practically all of their tillage and harvesting machinery at the Welland, Ontario, works, manufacturing their tractors at the Waterloo, Iowa, works. The J. I. Case Company manufacture the tillage and harvesting machinery at Rockford, Illinois, and tractors, threshers and combines at Racine, Wisconsin. The Massey-Harris Company manufacture their tillage machinery at Brantford, Ontario, their harvesting and general machinery at Toronto, and their tractors at Racine, Wisconsin. The Cockshutt Plow Company manufacture their tillage implements at Brantford and Smith Falls factories.

With regard to Saskatchewan, freight rates are as follows:-
The Charman: Are these carload lots.
Witness: Carload lots, yes.


The freight rate for the C list-

\section*{By Mr. Graham:}
Q. That would be the all rail rate?-A. With regard to the International Harvester Company from Hamilton I understand there is a combination ratewater and rail.
Q. But your figure is what?-A. My figure is the net cost to the agent at Regina irrespective of what way it is shipped, and it must be the same. He has no all rail rate or all water rate-I mean, combination rate. I may say, gentlemen, the reason for taking these freight rates was to see whether or not a reasonable comparison for the North Dakota and Montanna area could be considered in relation to Regina and Saskatoon, or B and C rates. We find this whole list of freight rates tends to substantiate this point, that the rate to Montana from Chicago as a source is less than Regina, but the rate to Wolf Point is practically the same and the rate to Havre is practically the same as obtained in the north. Now, that was the reason for obtaining freight rates,
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because the freight rate to Havre, Montana, is \(\$ 1.57\)-or \(\$ 2\) according to the agent's practice-while the freight rate from Waterloo to Saskatoon is \(\$ 1.40\) which is reasonably quite comparable; and the freight rate from Brantford, Ontario, to Saskatoon is \(\$ 1.39 \frac{1}{2}\), and the freight rate from Racine to Saskatoon is \(\$ 1.49\), and from the same point to Havre is \(\$ 1.57\), which really gets within the same range as far as freight rates are concerned. Freight rates apparently are reasonably comparable from manufacturers to their main wholesale distributing point, freight rates in northern and southern Saskatchewan compared with those to Havre, Montana.

The freight rate for the C list in Saskatchewan is as follows:-


Now, there is a point that I have not been able to straighten out. It is apparently a competitive rate between the Canadian National and the Canadian Pacific Railway on this new line from Saskatoon to Melfort, which is considerably less than the same distance direct from Saskatoon to the south.

\section*{By Mr. Donnelly:}
Q. What distance is it?-A. It is 180 some odd miles by rail here (indicating), and 100 some odd miles by rail here (indicating).

Mr. McLean: It is 26 miles from Melfort and 46 miles from Prince Albert.
Witness: Yes, 26 miles from Melfort.
Mr. Donnelly: It is more pronounced between Assiniboia and Weyburn.
Witness: That is right, Weyburn in only 56 miles and that is more than 100 miles. As I started this I was handicapped, I got into something that I could not finish, and it is merely suggested that the l.c.l. rates concerned there must be subject to some explanation. There is apparently a competitive l.c.l. rate.

However, the freight rates apparently are reasonably comparable from the manufacturers to the main wholesale distributing points; freight rates in northern Saskatchewan compare quite with those for the Havre, Montana, district.

Where the l.c.l. freight rate is added to the list price of the implement, the prices of heavy machinery and tractors are frequently increased from \(\$ 10\) to \(\$ 40\) depending upon the length of the haul. L.c.l. rates on hauls which are frequently made in distribution are as follows:-


There is apparently a competitive l.c.l. freight rate and a competitive express rate in some parts of Saskatchewan where both the Canadian National and Canadian Pacific Railway lines are in the territory which gives the farmers
somewhat of an advantage over farmers in other districts. In a number of instances the express rate is the same as the l.c.l. rate. All farm machinery except engines is being carried second class, l.c.l. rate.

Mr. Chairman, I found at Nipawin, for instance, that the express rate was the same as the l.c.l. freight rate, and the express freight rate from Saskatoon to Nipawin was considerably less than the express rate from Yorkton which is here (indicating) to Nipawin. The normal distribution was from Yorkton to Nipawin until this competitive rate came in, and it is very diffcult just to know how to explan it.

\section*{By Mr. McLean:}
Q. What was the rate to Nipawin, have you got that off hand?-A. The express rate was \(\$ 1.80\) from Saskatoon to Nipawin and \(\$ 2.45\) from Yorkton to Nipawin, just as I remember from my notes.
Q. You have not the 1.c.l. rate?-A. No, that was competitive express, where they would haul heavy goods express at the l.c.l. rate.
Q. And yet there is no direct connection between the two points?-A. Oh, yes, reasonably - since that new line from Saskatoon to Melfort and Tisdale and \(u p\) to Nipawin was built.
Q. One is the C.P.R. and the other C.N. There is no direct connection?A. No. The C.N. runs up through Armlee.
Q. Yes, that is where the competition comes in?-A. Yes.
Q. But the C.P.R. line takes that express almost down to Yorkton and back again on the same line that takes the Yorkton express and for which they charge a higher price?-A. Yes, they take it away down to Sheeho and back up again.

Wimness: With regard to the wholesale price from the manufacturer, we are not able to obtain this data from them. The Massey-Harris and Cockshut Plow companies post the information in their price lists under the item "Factory Number" in the case of the Massey-Harris Company, and "Spd" abbreviation for "spread" in the case of the Cockshutt Plow Company. Consequently we did not have sufficient data for comment.

With regard to sales tax, it is our understanding in Saskatchewan that no federal or provincial tax is levied on farm implements. The same is true in Montana. There is, however, a 2 per cent tax levied on implements in North Dakota and also an emergency 4 cents per hundred freight rate in Minnesota, added to all freight rates. This item has been included in the freight rates listed.

\section*{By Mr. Graham:}
Q. In quoting the North Dakota prices you have taken that into considera-tion?-A. Yes, in the North Dakota prices we have added the 2 per cent.
Q. Your quotation is actual- -A. Our quotation is actual, with the 2 per cent added.

With regard to the efficiency of the comparative systems in the matter of servicing and availability of repairs and replacements. The policy of the companies in North Dakota and Montana is to have experts available at Minot, Williston and Great Falls for general troubles which arise during the various seasons. They are endeavouring to develop a local expert service from their local branches so that it will not be necessary to have experts travelling all over the country to meet the difficulties experienced with their machines. This has not as yet been realized. There is less need for experts with the present day equipment and the advanced knowledge of the farmer of to-day than there was a number of years ago. In Saskatchewan there is a very complete system of expert servicemen available from practically all of the implement companies. These men are available for trouble work and in some cases for overhauling tractors and power equipment. The International Harvester Company in par-- ticular maintain a tool service throughout all territories at the local distribut-
ing points where tools may be had for overhauling purposes. There is a tendency on the part of implement companies to develop expert repairmen throughout the country so that in Saskatchewan it will not be necessary to maintain a travelling expert service of this type.

With regard to distribution and availability of repairs, apparently there are large stocks of repairs distributed east and west in North Dakota and Montana available at the local agent's. Where parts are not available at the local agent's the railway service and bus service makes delivery possible in a very short time from the wholesale distributing points. In Saskatchewan the larger machine companies have repairs distributed quite completely throughout the province into all local agent's hands.

There are two classes of repairs; cash repairs and consignment repairs, some belonging to the local agent and some to the companies. This arrangement has made possible the more complete distribution than where repairs are distributed entirely on a cash basis. In some localities, however, where the local agent is on a c.o.d. basis with the company, this is not true. The farmer, however, can practically always obtain repairs for emergency breakdowns with a minimum of time delay. Some of the implement companies who have recently merged have not as yet a complete distribution system for repairs, but have, through the railways and bus lines, prompt delivery from Regina and Saskatoon to the different parts of the province.
(7) With regard to the credit policy found in the different areas, there is a 5 per cent discount below Chicago or Minneapolis list prices for cash in North Dakota and in Montana. A number of years ago the implements were sold outright by the American companies to their agents, leaving the whole matter of credit in the hands of the agents. However, during the past number of years conditions in North Dakota and Montana have been such that the agents could not continue in this way: consequently the implement companies have been handling the credit for their agents, and have practically operated on a consignment system. A great many of the agents could not carry stocks of machines at their agencies if they had to pay cash for them. In the event of time sales, the agent obtains a statement from the customer and submits it to the nearest branch office for approval, after which the transaction is practically concluded by the branch office.

Where implements are being purchased on time the list price on Chicago or Minneapolis is used plus the common accepted freight rate. The first payment at the time of delivery for the John Deere Plow Company is one-half cash. The policy varies apparently for the International Harvester Company from onehalf cash to one-third cash according to the agents in the different localities. The International Harvester Company charge an interest rate of 6 per cent, on the unpaid balance for the first ten months, and an additional 5 per cent penalty on overdue accounts, while the John Deere Plow Company charge an interest rate of 7 per cent on all unpaid balances.

In Saskatchewan the credit arrangements vary for the different companies. The International Harvester Company have a cash price; one-half cash on delivery and the balance October 1; one-half cash on delivery and the balance in two equal payments, October 1. You will note that all prices quoted in the implement price tables attached, are classified according to the credit policy of the company. In the case of some areas where difficulty has been experienced in collection, such as the Assiniboia area, the International Harvester Company have ruled " all cash " with no credit.

The John Deere Plow Company have two policies, one for general implements, and one for tractors, threshers, combines, as follows:--
(1) Tractors, threshers, combines.

\section*{1. Fall Pay-}

One-third of purchase price to be paid in cash at time of delivery. Balance of purchase price to be paid October 1, 1936.

This is quoting from their 1936 book.
2. Falls' Pay-

One-third of purchase price to be paid in cash at time of delivery.
Balance-one half due October 1, 1936. One half due October 1, 1937.
3. Falls' Pay-

One-third of purchase price to be paid in cash at time of delivery.
Balance-One third due October 1, 1936. One third due October 1, 1937. One third due October 1, 1938.

Note.-Combine settlements in Regina, Weyburn, Swift Current, Saskatoon, and North Battleford territories shall be made to mature on September 1, in place of October 1.
The terms of sale for the Cockshutt Plow Company are quite similar, cash sales and time sales.

Time sales: Where 40 per cent of the purchase price is less than \(\$ 20\), the minimum cash payment is to be not less than \(\$ 20\) on delivery of the article to the purchaser.

On time sales, 40 per cent cash must be paid on delivery of the implement to the purchased, balance October 1, 1936 (except on items otherwise provided for in list) with interest at 7 per cent per annum from date of sale to maturity and 8 per cent per annum after maturity until paid in Manitoba and 7 per cent per annum before and after maturity in Saskatchewan.

Three fall pay terms may be granted on all items having a retail value of \(\$ 300\) or more on the one fall pay price by adding 3 per cent to the listed two fall pay price.

Notes maturing beyond the dates specified will, if accepted, be discounted for such extended time at the rate of one per cent per month.

\section*{By Mr. Senn:}
Q. You did not say whether the implements were sold in Saskatchewan on consignment or not; at least if you said it, I did not so understand it. Are they sold on consignment to the agent?-A. Yes, they are. Possibly I did not put that in. With regard to the arrangements between the wholesale companies and the agents in Saskatchewan the implements are sold on consignment; so that the cash outlay by the local agent, except in the case of the Massey-Harris would be the freight charges from the distributing point to his local point, and then settlement is made after the implement is sold.
Q. Is the same true of parts?-A. Parts are on a cash basis, with this exception, that agents in good standing with the companies have credit on spring parts up to June, and up to September on summer parts, and harvesting parts. But to all intents and purposes, parts are cash.
Q. Are agents required to keep a stock of parts?-A. No, the agents are not required to keep a stock of parts, but the companies, by law, are required to do so.
Q. You have depots?-A. Yes.

Massey-Harris company have a cash on delivery price, and have time, one third cash on delivery and the balance in one payment, October 1st, or the balance in two equal payments, October 1st for each year. For tractors, combines, threshers, and power goods there is an all cash price, and half cash on delivery with the balance in one payment, one-third cash on delivery and two approximately equal payments, and one-third cash on delivery with three approximately equal payments; interest at the rate of 7 per cent.

The prices are increased by all of the companies for time payment over that of all cash, approximately five, seven and nine per cent.
[Professor E. A. Hardy.]

\section*{By Mr. McLean:}
Q. That is not a discount?-A. No-well it might be considered a discount for cash.
Q. A discount would be smaller than 5, 7 and 9?-A. Yes.

\section*{By Hon. Mr. Motherwell:}
Q. That has always prevailed?-A. Yes; but it appears in this way there are three prices, and they are all listed in the tables that are attached. First of all there is the cash price, and then half cash and one pay time. One pay time is approximately 5 per cent higher, listed, and two pay is approximately 7 per cent higher, and three pay is approximately 11 per cent higher on the list.

\section*{By Mr. McLean:}
Q. Is it 11 or \(9 ?-A\). Nine. And then there is interest on the unpaid balance.
Q. That would mean discount is really less than 5,7 and 9 ?-A. Yes.

The Minneapolis Moline is on an all cash basis. The Oliver Hart Parr is selling goods one-half cash with credit only extended where there is adequate collateral to pay the balance. All repairs are cash, both in the United States and Canada.
(8) With regard to the fluctuation of prices during the past number of years, we found it very difficult to obtain prices in the United States from the local agents because of the orders which they have received from head office to destroy all old price lists and to use only the price list for the year in which they are doing business. However, we were discussing this matter with one agent who had been in business for a number of years and who happened to have a 1930 price list.
(Note: The following prices are according to Minneapolis list prices, less freight.)
\begin{tabular}{|c|c|c|c|}
\hline & 1923 & 1930 & 1936 \\
\hline 8 foot binder with 4 H.H. & \$210 00 & \(\$ 23500\) & \$245 00 \\
\hline 20 rum double dise drill with 4 H.H. & & 21800 & 24675 \\
\hline hitch. & & 32900 & 37175 \\
\hline
\end{tabular}

\section*{By the Chairman:}
Q. These are Minneapolis prices?-A. These are Minneapolis list prices.
Q. To which freight has to be added?-A. To which freight has to be added to make them applicable to any point.

With regard to prices in Saskatchewan for the past number of years, prices have been obtained on a group of implements which are common to most Saskatchewan farmers from the International Harvester Company, the John Deere Plow Company, the Cockshutt Plow Company, and the Massey-Harris Company, and are tabulated in the appendix. Prices were complete from 1924 to date on:-

2 Furrow 14 inch gang plow with 4 horses evener.
20 Run double dise drill with power lift and 4 horse hitch.
14 foot wide dise harrow with 6 horse hitch.
\(8 \frac{1}{2}\) or 9 foot stiff tooth cultivator with \(11 \frac{1}{2}\) inch with shovels and 6 horse hitch.

5 foot heavy mowing machine.
8 foot binder with carrier and tongue truck.
These were grouped as typical machines to be compared throughout the years 1924 to 1936 inclusive. The cost of the machines for each year was tabled, and the average cost of the machines from the Cockshutt Plow, the

John Deere and International Harvester Companies were averaged to obtain the average cost of the implements in Saskatchewan. The index was obtained by using the average of all of the years as the basis rather than for any one year. The data, Mr. Chairman and gentlemen-

\section*{By Mr. Graham:}
Q. What do you call that?-A. It is chart No. 1.
Q. Is it marked as such?-A. It is not.
Q. You might mark it chart No. 1.-A. Mr. Chairman and gentlemen, this is the only chart submitted. Taking the average of the prices throughout this period as zero or 100, you find prices dropped from 1924 to 1925, and then ran along up to 1929 practically parallel, and then dropped gradually to 1933 and 1934. Mr. Chairman, in comparing this list with the chart presented by Dr. Booth on the first day, I find that the curve agrees exactly with his last plotted point in 1934, but we have two points since 1934, one in 1935 which showed an increase in prices, and one in 1936 which also shows an increase in prices, which brings the price of 1936 very nearly to the average price throughout the entire period under study, which is being used as a base point. The prices in 1934 were the same, after which they have gradually increased. There are also a number of improvements for the various machines listed in the tables which tend to substantiate the claim that the general quality of farm machinery has been improved during the past number of years. In discussing the price variation during the past four or five years with implement companies they indicated that in 1929 and 1930 they found themselves with enormous inventories in the west and since that time have been endeavouring to sell the machinery. Shipments from the factories have been very light. A great variety of bargain sales have been offered throughout all of Saskatchewan during these years in order to reduce the stocks on hand. It will be noted, however, from the curves that not only the low farm prices have reduced the buying power of the farmer, but also the results of drought and rust in Saskatchewan have reduced the value of wheat sales per farm to such a point that it has been impossible for the farmer to maintain his machinery replacements and repairs to an efficient point. That is brought out generally by the relation of those two group curves, farm machinery prices through here, the average farm price per bushel of wheat in Saskatchewan, and then the value of wheat sales per farm in Saskatchewan, showing the years when crop failures and rust limited the volume of sales, along with the low prices, making a very, very low net return to the farmer, and making the enormous spread between the cost of machinery and the buying power of the farmer.

With regard to the condition of farm equipment on the farm to-day, and the quality of the work being done by the farmers, generally speaking farmers in North Dakota and Montana and in Saskatchewan are trying to do their best with what they have on hand, and the majority of the farmers are reasonably content to make the best of their opportunities. The farmers in North Dakota and Montana have received considerable aid from the A.A.A. during 1933, 1934 and 1935, and are anticipating some assistance in 1936.

With regard to the soil conservation scheme in the two states, revenues which they have had from these sources are undoubtedly in evidence in not only the condition of the machines observed in the field but by the presence of some new machinery. The area northwest of Minot has been hard hit over a period of years with drought and rust, and the farmers in this area are not in good condition financially, and yet most of them are optimistic as to the future. The younger men generally are more optimistic than their fathers. Practically all of these men have had help from the government to obtain their seed, and in some
[Professor A. E. Hardy.]
cases feed and fuel. Only one man whom we interviewed in this area had been raising crops and paying his way. This is probably due to his superior management and vigour, but is indicative of the type of farmer, not only in North Dakota but throughout Montana and Saskatchewan, who in some small measure points the way toward permanent agriculture.

In this area a few new tractors have been sold on a half-cash basis, but generally speaking the machinery was old-and I am speaking generally of the area in Northwestern North Dakota-being purchased from 8 to 20 years ago, and was not in particularly good repair. The quality of the work being done varied with the ability of the operator to adjust and operate the machines efficiently. On the whole the texture of the soil in this area-the soil being a chocolate clay loam-was particularly well conditioned for the use if implements which were in none too good repair. The quality of the work appeared to be reasonably good.

In Montana it was rather difficult to observe the work being done. The large wheat farmers in the Brockton area were continuing about as usual. They provide repairs, and usually have a well equipped shop for welding equipment so that all minor repairing can be done on the farm. Their machinery was in good shape, and was being operated efficiently. This area, however, was practically all hailed out last year, and was suffering from the loss so incurred. However, in the smaller sections which were not hailed out some new equipment had been purchased.

The wheat area around Scobie, Montana, south to the Indian Reserve, compared quite favourably with the area immediately north in Saskatchewan. That would be from Assiniboia south. I drove right through that area, all the way to Wolf point, and had a splendid opportunity to check over the different equipment. There apparently was no more new equipment, and the machinery used was in no better condition than I found in the Weyburn and Assiniboia districts.

The farming along the irrigated sections of the Milk River was smaller and tended to be mixed so that accurate comparisons cannot be made. However, north of Havre a large wheat growing area extends to the Canadian border. That would be in the district between Havre and Maple Creek. I was informed by the agents at Havre that practically no new implement business was done in this area. In driving through the area I found that drills and tractors varied from 6 to 10 years old. The farmers indicated that they had not had a good crop for years, the crop being practically dried out in that section in 1935. They were, however, preparing for the 1936 crop with anticipation, and had prepared the seed bed and were seeding in the best way possible to put in the crop efficiently.

In the southwest portion of the province of Saskatchewan from Govanlock to Consul and Vidora the land is a heavy clay soil requiring considerable power for tillage. However the seed beds were well prepared. The machinery was generally old and in none too good repair, but was being used in the best way possible to put in the crop. From Swift Current to Rosetown there seemed to be more new machinery, which was accounted for by the fact that a reasonably good crop was had in this area in 1935. There were, however, a great many old machines in use. A great many of the farmers have purchased no new machinery since 1928, and feel that they will soon be forced to replace equipment which is beginning to be badly worn. The heavy clay soil in this area demands the application of more power and also machinery in better than average condition in order to do anywhere near satisfactory work.

In the northern part of the province through the area from Saskatoon to Prince Albert and Melfort where generally crops have been consistent, there seemed to be about the same reluctance on the part of the farmers in purchasing new equipment. In discussing the matter with them they felt that new machinery was too high for the returns which they could obtain for their products, and that they would be forced to use machinery which was in poor condition. There are a great many drills from 10 to 15 years old in this area in operation. These drills are in a fairly good state of repair. The binder is generally old but it has been maintained in a reasonable state of repair so that the grain will be properly cut and tied. The binders in Saskatchewan cut a large acreage annually per binder. The life of a binder should not be calculated in years but to acres; this differs some with other machinery. With regard to the comparison of a binder we have felt that a comparison per acre rather than a comparison per year is a fair comparison, because our binders have to cut such an enormous number of acres.

\section*{By Mr. Perley:}
Q. Would not that apply to any implement?-A. It would not apply to haying machines because our haying areas are less. You can compare east and west haying machinery quite satisfactorily.

\section*{By Mr. Thompson:}
Q. Would it rot apply to a very great extent to the care that was taken of the machinery during the rest of the year?-A. Yes.
Q. Machines rust and rot away due to exposure more than from work?A. There is a certain amount of truth in that; but in all of the surveys I have made, I have found this, particularly in Saskatchewan, that a great deal of the trouble with the binder in the things that wear out are materially caused by poor lubrication, dirt and grit rather than use; but the things that have to be replaced in the plough and the dise are worn out-
Q. Through lack of oiling?-A. Lack of oiling, but it is not altogether the farmers' fault as much as it is the inability properly to lubricate. I might say, Mr . Chairman, generally with regard to lubrication in some of these machines such as the binder and the drill, the Alemite pressure lubrication will undoubtedly reveal itself in the years to come in longer life of some of these parts.

\section*{By Mr. Ward:}
Q. Is it not true that dry years cause machinery to wear out much more rapidly than in more moist years, as there is more dust flying around?-A. Yes, the dust itself is a direct result of the dry weather.

\section*{By Mr. Donnelly:}
Q. With a binder you are cutting lower?-A. Yes; you are trying to get everything; you are taking dirt, and stone, and other things along with it. In discussing the matter of repairs with farmers using combines, most of the farmers indicated that the repairs required to keep the machines in operation had not been excessive but in general repairs were considered high in price.

Farmers in the Nipawin and Canora districts are operating smaller areas, land which has recently been cleaned from bush and broken, and which is particularly severe on implements. The implements generally were not in to good condition in this area. Farmers complained that they had not had the usual good crops and did not have money for replacements or for repairs.

In the Yorkton district the rust was particularly severe in 1935, reducing the revenue from the wheat crop to nothing. The farmers in that area have
[Professor A. E. Hardy.]
purchased only the minimum of repairs this year in order to operate the machinery required to put in the crop. The quality of the work done throughout this area seemed to be good, and yet upon examination of the machines they were invariably worn and in none too good adjustment.

The farmers in the Regina district south of Weyburn are also suffering from the loss of the crop in 1935, and from a series of dry years preceding 1935. There has been very little new machinery purchased in this area. I examined drills which have been in use since 1914, and which were still being used because of the inability to purchase new drills. The majority of the equipment in this area was purchased from 1926 to 1930 , and has been used ever since. The heavy clay soil of this area is again the type which demands power and machines in reasonably good condition to be operated efficiently. The farmers, while hopeful of a crop, cannot see where they would be able to purchase new equipment or repairs with the probable prices for the 1936 crop.

Dr. William Allen, head of the Farm Management Department of the University of Saskatchewan has prepared a brief on the economic aspects of the situation relating to farm machinery and equipment in Saskatchewan which deals quite definitely with the ability of the farmer to pay the farm machinery indebtedness which has accumulated during the past number of years, and to repair and replace his machinery up to an efficient operating standard.

I wish, Mr. Chairman, to refer to Dr. Allen's brief and read a few sections which will bring that point out to substantiate the points which I made. I may say, Mr. Chairman, that his entire brief with tables is being included as a part of this presentation, and will be included in the record for your reference. However, rather than read the entire brief, I shall take sections and read them:-

The significance of machinery and equipment to Saskatchewan farmers.

The extensive nature of the agriculture of the province of Saskatchewan calls for considerable machinery and equipment for field operations. The census reports contain estimates of the values of these forms of farm capital for each census year, which have been presented in table 2. During the 20 years from 1911 to 1931, the farm machinery and equipment of the province more than trebled in value, and the value per farm increased from \(\$ 606\) to \(\$ 1,359\). On the basis of the acre of improved land, this increase in value was from \(\$ 4.85\) in 1911 to \(\$ 7.06\) in 1921, then dropping to \(\$ 5.53\) in 1931. On the basis of machinery and equipment value per acre of wheat, the value in 1911 was \(\$ 10.95\) and increased to \(\$ 12.34\) in 1931. In 1911, the value of machinery and equipment was 6.9 per cent of the total farm capital, whereas in 1931 the proportion was increased to \(14 \cdot 6\) per cent.

The observations made regarding the condition of farm equipment of all kinds in Saskatchewan by investigators from the University, indicate the heavy deterioration of the past five years. There are some Saskatchewan farms on which farm buildings and equipment have been well maintained, but these are all too few, and are by no means representative. It would appear from this research that at least 13 per cent of the value of farm equipment and machinery must be invested on the average per year to keep farm equipment in a satisfactory working condition, and provide for replacements as they are needed. Since 1929, our records indicate expenditures amounting to only 6 per cent per year. On the basis of these estimates, there has been a cumulative deterioration of about 49 per cent of the value of the machinery and equipment as of 1929. If we assume the machinery and equipment represented by the estimate reported in the census of 1931 to be adequate and appropriate for Saskatchewan farms, the cumulative deficiency since that date would
amount to about 35 per cent of the 1931 value of 186 millions of dollars. On this basis, the amount required for expenditures to bring farm equipment and machinery back to the 1931 standard, would be approximately 65 millions of dollars, or about \(\$ 475\) per farm. Whether or not it be assumed that this amount is necessary to put farm machinery and equipment into satisfactory workable shape, it is quite apparent to all informed persons that such investments are far from possible, for revenues of most Saskatchewan farmers have been inadequate to cover operating expenses for the last five years, debts have increased, and nearly all forms of farm capital have suffered heavy deterioration.

Dr. Allen comments on farm indebtedness as follows:-
No statement relating to the economics of Saskatchewan farming would be complete without reference to the indebtedness of farmers, and the increase in the burden of debt during recent years. Studies of 1,364 farm business reports representing nine different areas and types were made in 1932, 1933 and 1934 in a program investigating farm indebtedness and financial progress of farmers. On these farms were over seven hundred thousand acres of land, of which about four hundred and eighty thousand were improved and used for crops and fallow. The average indebtedness of the farm operators per acre of improved land for all classes of farms at the time of the interviews was \(\$ 14.85\). The debt per farm averaged \(\$ 5,252\). About 70 per cent of this debt related to farm real estate, either as mortgages or on agreements of sale, and about 6 per cent to farm machinery and equipment. During the two years preceding the studies, the average indebtedness had increased by amounts ranging from about 10 to 20 per cent per year. Taxes have remained unpaid and relief has been provided on a large scale over an extensive area to permit farming operations to continue. These conditions have been so much in evidence that no detailed reports are necessary in this connection.

Since 1930 detailed information concerning classes of debts has been collected on all farm business surveys made by the University of Saskatchewan. Data from reports have been assembled to indicate the situation of the province in this respect. The indebtedness reported in each area relates to the time of the study.

No significant reductions have been made in this class of debt since 1930, and the amounts shown may be considered as rather below the actual debt now outstanding. Concessions of many kinds have been made by creditors to encourage payments of obligations, but lack of revenues have made such offers generally ineffective.

To show the seriousness of the situation even under normal conditions, the average farm price of wheat from 1925 to 1935 has been taken for the province, and also the average sales of wheat per acre from 1910 to 1935 , to indicate what would be required in bushels of wheat and in acres of wheat to take care of this class of debt. This information appears in table 6, page 14 .

With averages as indicated, and indebtedness for machinery as presented at the times of the survey, the amount of wheat required to settle this debt in 371 bushels per farm, or 27 acres of wheat. Unfortunately for Saskatchewan and Canada generally, the farm price of wheat has barely exceeded sixty cents per bushel for any crop since 1930, and for 1930 to 1934, has been considerably less, and during these years, there has been relatively little wheat for sale, consequently the actual requirements in terms of bushels of wheat and acres of wheat would be much greater than these figures indicate.

It was from Dr. Allen's figures that we plotted the farm revenues as to the farmers' ability to pay.

In conclusion the condition of agriculture in the Prairie Provinces is one of the most important factors in the economic life of Canada, and vitally associated with the welfare of the Dominion as a whole. The prosperity of agriculture in western Canada is dependent on the wheat crop, its physical production, and the amount for which it sells at the local shipping points. Because of the magnitude of the difficulties confronting Saskatchewan agriculture, the return of prosperity will come slowly, and any additional burdens will seriously impair the chances of recovery and make current problems more difficult. That the problem of recovery of Saskatchewan agriculture is made more difficult by the increased prices of farm machinery and equipment is beyond question. Poor equipment is necessarily associated with inferior work and inefficient operations, which in turn, are associated with low yields and high costs of production per unit. These conditions are reflected in reductions in the amounts available for expenditure by farmers for all classes of goods and services.

The purpose of this discussion is to present important current facts about Saskatchewan agriculture, with which the Department of Farm Management of the University of Saskatchewan is definitely and intimately associated, rather than review the economics of the production and distribution of farm machinery and equipment, which may be considered more expertly by those having adequate qualifications for the task. The products of our Canadian plants may or may not be produced efficiently from the point of view of the industry, but it is felt that they have not been too well adapted to the conditions of western Canadian agriculture. It is respectfully suggested that profitable examination might be made of the questions of machine design, construction, distribution, servicing, sales policy, both domestic and export, credit and collection from the point of view of meeting better the needs of the Canadian farmers to be served by the industry. The history of the prices of machinery and equipment is being presented by others, and does not form part of this presentation. From this survey of agricultural conditions, and recognizing the very high levels of prices which have long been maintained for farm machinery and equipment, it seems extremely difficult to justify a business policy which raises these prices still higher at such an inopportune time.
Mr. Graham: Before you sit down, I would like you and the chairman to consider the tables which accompany the statement of Dr. Hardy. There are certain tables concerning Canadian and United States implement prices based on specified prices which the committee has selected and also prices with regard to repairs. There are a number of tables giving the John Deere Plow company, the International Harvester company, the Massey-Harris company and the Cockshutt Plow company. I suggest that the committee might consider putting into the records a digest of the comparative prices in tables 1,2 and 3 , and having the more detailed tables filed for the purpose of being part of the records of the committee.

The Chairman: If you have looked over them and think they are sufficient to have in this digest, very well.

Mr. Graham: Perhaps Professor Hardy might give a resume or digest for the benefit of the committee, and the committee can decide whether it wants all the information included.

Witness: In that connection, undoubtedly we have prepared a greater list than is necessary in order to make a reasonable comparison of prices. We have two lists. One list was suggested to us through your counsel, Mr. Graham, and it includes a large number of machines of various types, and it makes up a very voluminous report.

Mr. Graham: I notice, Dr. Hardy, in your detailed list that you give a very comprehensive description of the equipment of the implement itself.

Witness: Yes; and in the detailed list, in order to place before you the comparativeness of the machine, we have taken the list of equipment and the detailed description of the machine in both cases-the machine in Canada and the machine in the United States without observing what the machine can be judged from the specifications. In the other list, which we use for more abbreviated use, while the machines are comparable the specifications are not listed in the table, and we have the prices of those machines carried through in the two tables for Saskatchewan at the different points and for Montana and North Dakota. We have placed the repair prices on one sheet-the repair prices from the four companies being considered generally in Saskatchewan and the International and John Deere companies in the United States, and the machine house at Minot.

Statement of Dr. Allen follows.

\section*{ECONOMIC ASPECTS OF THE SITUATION RELATING TO FARM MACHINERY AND EQUIPMENT IN SASKATCHEWAN}

Statement Prepared by the Farm Management Department of the University of Saskatchewan for the Minister of Agriculture of the Province

\section*{Introduction}

The settlement of the agricultural area of Saskatchewan proceeded rapidly following the opening of the present century, and wheat production soon became the most important farm enterprise. Approximately two-thirds of all the improved land in farms is used for wheat and summerfallow each year. From sales of wheat have come most of the revenues obtained since settlement, and it is from wheat growing that the bulk of the farm revenues must be derived for many years to come.

Since 1911 the population of the province has practically doubled, as has the area in occupied farms, although the number of farms increased by only 44 per sent. Farms have increased in size, in the amount of improved land they contained and in the average acreage used for wheat production.

Livestock increased with the development of the province, but the average numbers per farm of the important classes of farm animals have shown relatively little change since 1916. With the increase in the acreage of improved land per farm, the numbers of horses per 100 acres cultivated have decreased somewhat, and the same tendency appears to be indicated for cattle by the reports of the Federal Census. Other classes of animals have minor importance, and are kept primarily for household requirements, but do furnish supplementary revenues from sales of surpluses.

Data from the report of 1931 Census of Saskatchewan have been assembled in Table 1 to summarize developments in agriculture since 1911.

Table 1.-Statistics Relating to the Development of Saskatchewan Agriculture-1911-1931
\begin{tabular}{|c|c|c|c|c|}
\hline & 1911 & 1921 & 1926 & 1931 \\
\hline 1. Population. & & & & \\
\hline 2. Per cent rural. & 43.3 & \[
71: 1
\] & 70.4 & 928.4 \\
\hline 3. Farms occupied & 95, 013 & 119,451 & 117,781 & 136,472 \\
\hline 4. Area in farms (000's acres) & 28,099 & 44,023 & 45,945 & 55, 673 \\
\hline 5. Area improved (000's acres) & 11,872 & 25.037 & 27,714 & 33,549 \\
\hline 6. Acreage of crops ( 000 's acres) & 9,137 & 17,822 & 19,559 & 22,126 \\
\hline 7. Wheat ( \(000{ }^{\text {'s }}\) a acres), ....... & 5,256 & 11,684
5
5 908 & 13,558
5,678 & 15,026
7,275 \\
\hline Averages per Farm & & & & \\
\hline 9. Total area (acres) & 296 & 368 & 390 & 408 \\
\hline 10. Improved (acres). & 125 & 210 & 235 & 246 \\
\hline 11. Field crops (acres) & 95 & 149 & 166 & 162 \\
\hline 12. Wheat (acres).... & 54 & 98
49 & 115
48 & 110 \\
\hline 14. Horses, number & & \(9 \cdot 2\) & 9.5 & 7.4 \\
\hline 15. Cattle, number & \(6 \cdot 7\) & 11.0 & 10.1 & 8.8 \\
\hline 16. Swine, number. & \(3 \cdot 0\) & \(3 \cdot 6\) & \(5 \cdot 1\) & \(7 \cdot 0\) \\
\hline Averages per 100 Acres of Improved Land & & & & \\
\hline 17. Field crops, acres & 77.0 & \(71 \cdot 2\) & \(70 \cdot 6\) & \(66 \cdot 0\) \\
\hline 18. Wheat, acres.. & \(44 \cdot 3\) & \(46 \cdot 7\) & \(48 \cdot 9\) & \(44 \cdot 8\) \\
\hline 19. Summerfallow, acres & & \(23 \cdot 3\) & \(20 \cdot 4\) & 21.5 \\
\hline 20. Horses, number... & \(4 \cdot 3\) & \(4 \cdot 4\) & \(4 \cdot 1\) & \(3 \cdot 0\) \\
\hline 21. Cattle, number. & \(5 \cdot 3\) & \(5 \cdot 2\) & \(4 \cdot 3\) & -3.6 \\
\hline 22. Swine, number. & \(2 \cdot 4\) & 1.7 & \(2 \cdot 2\) & 2.9 \\
\hline 23. Sheep, number. & \(1 \cdot 0\) & 0.8 & \(0 \cdot 6\) & 0.8 \\
\hline
\end{tabular}

Lines 1 to 5, Census of Saskatchewan, 1931, P. XI, Table I.
Lines 6 and 7, Census of Saskatchewan, 1931, P. 8, Table 7.
Lines 8, 13 and 19, Reports of Secretary of Statistics of Saskatchewan.
Lines 9 and 10, Census of Saskatchewan, 1931, P. XI, Table I.
Lines 11 and 12, Census of Saskatchewan, 1931, P. XXVII, Table XXVI.
Lines 14 to 16, Census of Saskatchewan, 1931, P. XLI, Table XLV.
Lines 17 and 18, Census of Saskatchewan, 1931, P. XXVIII, Table XXVII.
Lines 20 to 23, Census of Saskatchewan, 1931, P. XLI, Table XLVII.

\section*{The Significance of Machinery and Equipment to Saskatchewan Farmers}

The extensive nature of the agriculture of the Province of Saskatchewan calls for considerable machinery and equipment for field operations. The census reports contain estimates of the values of these forms of farm capital for each census year, which have been presented in Table 2. During the 20 years from 1911 to 1931, the farm machinery and equipment of the province more than trebled in value, and the value per farm increased from \(\$ 606\) to \(\$ 1,359\). On the basis of the acre of improved land, this increase in value was from \(\$ 4.85\) in 1911 to \(\$ 7.06\) in 1921, then dropping to \(\$ 5.53\) in 1931 . On the basis of machinery and equipment value per acre of wheat, the value in 1911 was \(\$ 10.95\), and increased to \(\$ 12.34\) in 1931. In 1911, the value of machinery and equipment was 6.9 per cent of the total farm capital, whereas in 1931 the proportion was increased to \(14 \cdot 6\) per cent.

Table 2*-Value of Implements and Machinery on Saskatchewan Farms, 1901-1931
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline Census year & No. of occupied farms & Total for Saskatchewan in millions of dollars & \[
\begin{gathered}
\text { Average } \\
\text { per } \\
\text { farm }
\end{gathered}
\] & Average per acre in farms & Average per acre of improved land & Average per acre of wheat & Total farm capital in millions of dollars & Implements and machinery as a percentage of total capital \\
\hline & & \$ cts. & \$ & \$ cts. & \$ cts. & \$ cts. & \$ cts. & \\
\hline 1901 & 13,445 & 388 & 289 & 101 & 346 & 797 & 4446 & \(8 \cdot 7\) \\
\hline 1911 & 95,013 & 5754 & 606 & 205 & 485 & 1095 & 83281 & 6.9 \\
\hline 1916. & 104,006 & 8894 & 855 & 242 & 453 & 985 & 1,105 47 & \(8 \cdot 0\) \\
\hline 1921. & 119,451 & 17668 & 1,479 & 401 & 706 & 1512 & 1,650 07 & \(10 \cdot 7\) \\
\hline 1926. & 117, 781 & 16953 & 1,439 & 369 & 611 & 1250 & 1,343 36 & \(12 \cdot 6\) \\
\hline 1931. & 136,472 & 18551 & 1,359 & 333 & 553 & 1234 & 1,272 66 & \(14 \cdot 6\) \\
\hline
\end{tabular}
*Data taken from 1931 Census of Saskatchewan, chiefly from P. 7, Table 5.

\section*{Recent Aspects of the Significance of Farm Machinery and Equipment for Saskatchewan Farms}

The farm business studies of the Department of Farm Management of the University of Saskatchewan have provided considerable information relating to the place of farm machinery and equipment on Saskatchewan farms. The areas included in these studies have been selected to provide data which may be considered representative of the agriculture of the province. Extracts have been taken from the reports of these investigations to furnish the summaries presented in this section of the discussion.

\section*{Farm Organization and Revenues from Farm Products}

The first summary of the farm management studies relates to farm organization, and revenues from farm products. From the 19 group of farms studied during the last ten years, which included about 2,500 businesses of all types and in all seasons, 78 per cent of the total farm revenue obtained from sales of farm crops, animals and animal products, came from wheat, 9 per cent from other cereals, and the remaining 13 per cent from animals and animal products. Some farmers derive additional revenue from threshing operations and work away from the farm of miscellaneous character, but much of this is paid for by other farmers and the net effect for the group is not significant. When Saskatchewan wheat crops fail, it is not usual for other crops to be more successful in physical production, or in financial returns.

Table 3, page 5, summarizes information relating to the revenues from sales of farm products on farms of the studies conducted by the Farm Management Department of the University of Saskatchewan.

\section*{Outlays on Farm Machinery and Equipment}
- Accurate information relating to the expenditures made by Saskatchewan farmers for machinery and equipment is not readily available. Few farmers keep satisfactory records of their business transactions, and when asked for estimates of outlays for repairs for any year, are inclined to underestimate the amounts. In the studies of Saskatchewan farm business, estimates of the costs of machinery and equipment purchased and of the outlays for repairs have been obtained. The values of the machinery and equipment at the time of the study were also reported. These items have been assembled in Table 4, page 7, and related to the total farm acreage, the acreage of improved land used for crops and summer-follow, and the acreage of wheat.
[Professor E. A. Hardy.]

Table 3.-Revenues of Farmers from Sales of Farm Products Averages per Farm
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline Location & Year of study & Total area acres & Acres improved & Acres of wheat & Value of wheat sales & Value of other crops sold & Animals sold & Animal products sold & Mise. farm revenues & Total receipts from sales of farm products & Total all sources \\
\hline & & & & & \$ & \$ & \$ & \$ & \$ & \$ & \$ \\
\hline Belbeck & 1926 & 487 & 448 & 207 & 6,805 & 318 & 265 & 124 & 10 & 7,522 & 7,739 \\
\hline Melfort. & 1926 & 465 & 320 & 157 & 5,346 & 656 & 378 & 109 & 16 & 6,505 & 6,752 \\
\hline Alameda. & 1927 & 563 & 417 & 136 & 3,651 & 1,239 & 501 & 202 & 27 & 5,620 & 5,978 \\
\hline Swift Current (Sandy Soils) & 1928 & 713 & 541 & 284 & 6,951 & 1,066 & 320 & 402 & 1 & 8,740 & 9,348 \\
\hline Swift Current (Loan Soils).. & 1928 & 772 & 596 & 320 & 8,003 & 224 & 282 & 72 & 12 & 8,593 & 9,099 \\
\hline Davidson....... . . . . . . . . . & 1931 & 741 & 652 & 305 & 385 & 49 & 331 & 147 & 14 & , 926 & 1,230 \\
\hline Maple Creek & 1931 & 847 & 436 & 164 & 672 & 188 & 313 & 133 & 22 & 1,328 & 1,682 \\
\hline Richmound. & 1931 & 663 & 465 & 270 & 1,462 & 37 & 117 & 36 & 15 & 1,667 & 2,099 \\
\hline Turtleford.. & 1930 & 427 & 202 & 112 & 1,055 & 174 & 266 & 146 & 25 & 1,666 & 1,915 \\
\hline Kindersley... & 1930 & 553 & 451 & 207 & 2,105 & 280 & 202 & 91 & 15 & 2,693 & 3,126 \\
\hline Rosemount-Reford & 1932 & 525 & 394 & 195 & - 1,134 & 211 & 121 & 86 & 18 & 1,570 & 1,730 \\
\hline R.M. of Scott..... & 1932 & 641 & 572 & 257 & 41 & 80 & 82 & 47 & 2 & 252 & 320 \\
\hline R.M. of Wellington & 1932 & 569 & 435 & 207 & \[
4
\] & 3 & 94 & 44 & 5 & 150 & 198 \\
\hline R.M. of Brokensell. & 1932 & 568 & 344 & 158 & 9 & 12 & 88 & 54 & 7 & 170 & , 271 \\
\hline Balcarres-Indian Head. & 1933 & 569 & 470 & 206 & 782 & 74 & 101 & 118 & 11 & 1,086 & 1,163 \\
\hline Grenfell-Wolseley....... & 1933 & 506 & 344 & 131 & 374 & 53 & 98 & 183 & 23 & 1,731 & -813 \\
\hline Lemberg-Neudorf & 1933 & 471 & 268 & 100 & 477 & 69 & 59 & 75 & 10 & 690 & -757 \\
\hline Humboldt (Loan Soils) & 1934 & 485 & 271 & 117 & 676 & 120 & 201 & 115 & 13 & 1,125 & 1,269 \\
\hline Humboldt (Sandy Loam Soils) & 1934 & 438 & 221 & 103 & 395 & 40 & 116 & 86 & 6 & 643 & 747 \\
\hline
\end{tabular}

The values of the machinery and equipment and the expenditures made for repairs and replacements vary markedly with the district and the year of the study. For the various studies made from 1926 to 1934 , inclusive, the simple average of the estimated values of farm machinery by districts for the 19 studies was \(\$ 2,161\) per farm, \(\$ 5.23\) per acre of cropland, and \(\$ 11.29\) per acre of wheat. The estimates for 1931 appearing in the census reports, presented on page 3 of this discussion, are \(\$ 1,359\) per farm, \(\$ 5.53\) per acre of improved land, and \(\$ 12.34\) per acre of wheat. For 1926 the estimates presented by the census are somewhat higher. As farmers of Saskatchewan had been running into financial difficulties from 1928 on, it is not unreasonable to assume that machinery and equipment on the farms in 1931 when the census was taken did not exceed the actual requirements of the farmers of the province.

There are several ways of appraising the needs of farmers for machinery and equipment, but probably the most satisfactory way is to investigate what the farmers themselves have decided to acquire and consider that their collective opinion represents a fair approximation of what is necessary. Methods of farming are being modified as knowledge increases and as conditions change, consequently the kinds of machines and equipment on farms will also be changed to fit the conditions which prevail. The function of farm machinery is to co-operate with all the other factors of production to produce efficiently the farm products for which the areas are adapted naturally and economically. Obstacles to the use of effective machinery and equipment constitute a handicap to those suffering the restriction and favour those competing with them who can utilize such aids.

Table 4．－Summary of Values of Farm Machinery and Equipment and of Expenditures made for Purchases and Repairs for Farms of the Surveys made by the Department of Farm Management of the University of Saskatchewan．


On the basis of the experience of the farmers included in the 54 studies of the University of Saskatchewan from 1926 to 1934, the unweighted average value of the machinery and equipment of the districts studied is \(\$ 2,161\) per farm. The expenditures for purchasing machinery and equipment for each year of study averaged \(\$ 219\) per farm, and for repairs, \(\$ 60\) per farm. For the whole period, about 13 per cent of the estimated value of the machinery and equipment went for replacements and maintenance per year. For groups included in the studies prior to 1931, expenditures for replacements and repairs during the average twelve-month period amounted to \(17 \cdot 1\) per cent of the total value of machinery and equipment. For studies from 1932 to 1934 inclusive, expenditures for repairs and replacements have been very limited and amount to only \(5 \cdot 9\) per cent of the total value of this class of farm capital per year.

\section*{Condition of Farm Machinery and Equipment}

The observations made regarding the condition of farm equipment of all kinds in Saskatchewan by investigators from the university indicate the heavy deterioration of the past five years. There are some Saskatchewan farms on which farm buildings and equipment have been well maintained, but these are all too few, and are by no means representative. It would appear from this research that at least 13 per cent of the value of farm equipment and machinery must be invested on the average per year to keep farm equipment in a satisfactory working condition and provide for replacements as they are needed. Since 1929 our records indicate expenditures amounting to only 6 per cent per year. On the basis of these estimates there has been a cumulative deterioration of about 49 per cent of the value of the machinery and equipment as of 1929. If we assume the machinery and equipment represented by the estimate reported in the census of 1931 to be adequate and appropriate for Saskatchewan farms, the cumulative deficiency since that date would amount to about 35 per cent of the 1931 value of 186 millions of dollars. On this basis the amount required for expenditures to bring farm equipment and machinery back to the 1931 standard would be approximately 65 millions of dollars, or about \(\$ 475\) per farm. Whether or not it be assumed that this amount is necessary to put farm machinery and equipment into satisfactory workable shape, it is quite apparent to all informed persons that such investments are far from possible, for revenues of most Saskatchewan farmers have been inadequate to cover operating expenses for the last five years, debts have increased, and nearly all forms of farm capital have suffered heavy deterioration.

\section*{Revenues of Saskatchewan Farmers}

One of the quickest methods of studying the situation of the Saskatchewan farmer is the examination of official statistics relating to the production and value of the wheat crop. In table 5, page 10 , summaries are presented for 5 -year periods from 1918 to 1932 showing the average acreages, yields and farm values of the wheat crops for Canada as a whole, for the Prairie Provinces, and for each of the provinces. In addition, corresponding figures are presented for the average of the three years 1933 to 1935.

Table 5.-Summary of Statistics of Wheat Production in Canada
Five-year Averages (Thousands)
\begin{tabular}{r|r|r|r|r|r|r|r|r|r}
\hline \hline
\end{tabular}

Data taken from Official Sources-Canada Year Books and Monthly Bulletins of Agricultural Statisties.

These figures need little comment. Since 1928, returns from sales of wheat per acre for Saskatchewan have averaged about \(\$ 6.35\). From 1932 to 1935 the average receipts from wheat sales averaged only \(\$ 4.28\) per acre. In many areas, no crops have been available for sale for three or more years in succession. The condition in Saskatchewan has been more critical than in the neighbouring provinces.

\section*{Farm Indebtedness}

No statement relating to the economics of Saskatchewan farming would be complete without reference to the indebtedness of farmers, and the increase in the burden of debt during recent years. Studies of 1,364 farm business reports representing 9 different areas and types were made in 1932, 1933 and 1934 in a program investigating farm indebtedness and financial progress of farmers. On these farms were over seven hundred thousand acres of land, of which about four hundred and eighty thousand were improved and used for crops and fallow. The average indebtedness of the farm operators per acre of improved land for all classes of farms at the time of the interviews was \(\$ 14.85\). The debt per farm averaged \(\$ 5,252\). About 70 per cent of this debt related to farm real estate, either as mortgages or on agreements of sale, and about 6 per cent to farm machinery and equipment. During the two years preceding the studies, the average indebtedness had increased by amounts ranging from about 10 to 20 per cent per year. Taxes have remained unpaid and relief has been provided on a large scale over an extensive area to permit farming operations to continue. These conditions have been so much in evidence that no detailed reports are necessary in this connection.

\section*{Indebtedness Related to Farm Machinery and Equipment}

Since 1930 detailed information concerning classes of debts has been collected on all farm business surveys made by the University of Saskatchewan. Data from reports have been assembled to indicate the situation of the province in this respect. The indebtedness reported in each area relates to the time of the study. No significant reductions have been made in this class of debt since 1930, and the amounts shown may be considered as rather below the actual debt now outstanding. Concessions of many kinds have been made by creditors to encourage payments of obligations, but lack of revenues have made such offers generally ineffective.

To show the seriousness of the situation even under normal conditions, the average farm price of wheat from 1925 to 1935 has been taken for the province, and also the average sales of wheat per acre from 1910 to 1935, to indicate what would be required in bushels of wheat and in acres of wheat to take care of this class of debt. This information appears in Table 6, Page 14.

With averages as indicated, and indebtedness for machinery as presented at the times of the survey, the amount of wheat required to settle this debt is 371 bushels per farm, or 27 acres of wheat. Unfortunately for Saskatchewan and Canada generally, the farm price of wheat has barely exceeded sixty cents per bushel for any crop since 1930, and for 1930 to 1934, has been considerably less, and during these years, there has been relatively little wheat for sale, consequently the actual requirements in terms of bushels of wheat and acres of wheat would be much greater than these figures indicate.

Table 6.-Statement of Average Farm Indebtedness for Machinery and Equipment at times of Surveys, and Calculations of this Debt per Acre of Cropland and per acre of wheat and (1) bushels of wheat, and (2) Acres of wheat required to meet this Debt.
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{} & \multirow[b]{2}{*}{\[
\begin{gathered}
\text { Year } \\
\text { of } \\
\text { Survey }
\end{gathered}
\]} & \multirow[t]{2}{*}{Acres of Cropland per farm} & \multirow[t]{2}{*}{Acres of Wheat per farm} & \multirow[t]{2}{*}{Average debt per farm on equipment} & \multirow[t]{2}{*}{Machinery debt per acre of cropland} & \multirow[t]{2}{*}{Machinery debt per acre of wheat} & \multicolumn{2}{|l|}{Required to meet machinery debt} \\
\hline & & & & & & & \[
\left|\begin{array}{c}
\text { Bushels } \\
\text { of } \\
\text { wheat }
\end{array}\right|
\] & Acres of wheat \\
\hline & & & & \$ & \$ cts. & \$ cts. & & \\
\hline Turtleford. & 1930
1930 & 202 & 112
207 & 183
355 & \(\begin{array}{ll}0 & 91 \\ 0 & 79\end{array}\) & 163
1 & 229
445 & 16.74
\(32 \cdot 48\) \\
\hline Kindersley & 1930 & 451 & 207 & 355 & 079 & 171 & 445 & \(32 \cdot 48\) \\
\hline Davidson.
Maple Creek & 1931 & 652
436 & 305
164 & 239
178 & \(\begin{array}{ll}0 & 37 \\ 0 & 41\end{array}\) & 078
109 & 299
223 & \(21 \cdot 87\)
\(16 \cdot 29\) \\
\hline Michmond.. & 1931 & 435 & 164 & 178 & \({ }_{0} 044\) & & 430 & \\
\hline Rosemount-Reford. & 1932 & 394 & 195 & 369 & 094 & 189 & 462 & \(33 \cdot 76\) \\
\hline Scott... & 1932 & 572 & 257 & 406 & 071 & 158 & 509 & 37.15 \\
\hline Wellington. & 1932 & 435 & 207 & 596 & 137 & 288 & 747 & 54.53 \\
\hline Brokenshell. & 1932 & 344 & 158 & 308 & 090 & 195 & 386 & \(28 \cdot 18\) \\
\hline Balcarres-Indian Head. & 1933 & 470 & 206 & 236 & 050 & & & 21.59 \\
\hline Grenfell-Wolseley..... & 1933 & 344 & 131 & 221 & 064 & 169 & 277 & 20.22 \\
\hline Lemberg-Neudorf..... & 1933 & 268 & 100 & 296 & 110 & 296 & & 27.08 \\
\hline Humboldt- & & & & & & & & \\
\hline (a) Loam Soils. & \[
1934
\] & 271 & 117 & 241 & 089 & 206 & 302 & 22.05 \\
\hline (b) Sandy Loam Soils... & \[
1934
\] & 221 & 103 & 178 & 081 & 173 & 223 & 1629 \\
\hline Average-All Surveys & & 395 & 181 & 296 & 075 & 164 & 371 & 27.08 \\
\hline
\end{tabular}
(1) Average Farm Price (Saskatchewan) 1925 to \(1935-\$ 0 \cdot 798\).
(2) Average yearly returns from sales of wheat per acre, based on average yields from 1910-1935 and prices in (1). ( \(\$ 0.798\) per bushel).

\section*{The Present Situation Respecting the Condition of Farm Machinery and Equipment, and the Present Indebtedness Associated with it}

In previous sections, the condition of the farm machinery and equipment has been discussed, and comments made regarding the expenditures necessary to bring back the condition of this class of capital to a satisfactory state, e.g. as of 1931. The preceding section dealt with the indebtedness outstanding in connection with these items. The present section combines these discussions and indicates what may be considered necessary to take care of present obligations and effect replacements. Table 7, page 16, contains this summary, and relates these items to the conditions of selected years.

Table 7.-Relationships of Farm Prices of Wheat and Revenues from Wheat Sales to Purchases and Maintenance of Farm Machinery and Equipment
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline & \multirow[t]{2}{*}{Average farm price per bushel of wheat} & \multirow[t]{2}{*}{Average yield per acre of wheat} & \multirow[t]{2}{*}{\begin{tabular}{l}
(2) \\
Average number of bushels sold peracre
\end{tabular}} & \multirow[t]{2}{*}{Receipts per acre from wheat sales} & \multirow[t]{2}{*}{Average value of machinery ete., per farm} & \multicolumn{3}{|l|}{(1) Estimated outlays necessary for repairs and replacements} \\
\hline & & & & & & & Bushels of wheat & Acres of wheat \\
\hline & & Bushels & & \$ ets. & & \$ & & \\
\hline 1911 & 058 & \(20 \cdot 8\) & \(19 \cdot 3\) & 1119 & 603 & 79 & 136 & 7.0 \\
\hline 1916. & 128 & \(16 \cdot 3\) & \(14 \cdot 8\) & 1894 & 855 & 111 & 87 & \(5 \cdot 9\) \\
\hline 1921. & 076 & \(13 \cdot 8\) & \(12 \cdot 3\) & 935 & 1,479 & 192 & 253 & \(20 \cdot 6\) \\
\hline 1926. & 108 & \(16 \cdot 2\) & \(14 \cdot 7\) & 1588 & 1,439 & 187 & 173 & 11.8 \\
\hline 1927. & 097 & \(19 \cdot 5\) & \(18 \cdot 0\) & 1746 & *1,423 & 185 & 191 & \(10 \cdot 6\) \\
\hline 1928. & 077 & \(23 \cdot 3\) & \(21 \cdot 8\) & 1679 & *1,407 & 183 & 238 & \(10 \cdot 9\) \\
\hline 1929. & 103 & \(11 \cdot 1\) & 9.6 & 989 & *1,391 & 181 & 176 & \(18 \cdot 3\) \\
\hline 1930. & 047 & 14.4 & 12.9 & 606 & *1,375 & 179 & 380 & \(29 \cdot 5\) \\
\hline 1931. & 038 & \(8 \cdot 8\) & 7.3 & 277 & 1,359 & 177 & 465 & \(63 \cdot 8\) \\
\hline 1932. & 035 & \(13 \cdot 6\) & \(12 \cdot 1\) & 424 & *1,246 & 162 & 463 & \(38 \cdot 2\) \\
\hline 1933 & 047 & \(8 \cdot 7\) & \(7 \cdot 2\) & 338 & *1,132 & 147 & 313 & \(43 \cdot 5\) \\
\hline 1934 & 061 & \(8 \cdot 6\) & \(7 \cdot 1\) & 433 & *1,019 & 132 & 217 & \(30 \cdot 6\) \\
\hline 1935. & 060 & \(10 \cdot 2\) & 8.7 & 522 & (3) 906 & 118 & 196 & \(22 \cdot 6\) \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline \multicolumn{2}{|l|}{\multirow[b]{3}{*}{}} & \\
\hline & & 118 \\
\hline & & 453 \\
\hline & \$ & 571 \\
\hline Debt per acre of cropland (from surveys) for machinery and equipment & 75 & \\
\hline Acres of Cropland in Saskatchewan (1931) & 33.5 & \\
\hline Estimated total debt for machinery and equipment. & 25 & \\
\hline Estimated debt per farm for machinery and equipment. & 184 \$ & 184 \\
\hline
\end{tabular}

Total outlays necessary to bring back to 1931 standard, to maintain, and to pay debt..\$ 755
(1) Calculated on basis of 13 per cent of machinery value.
(2) One and a half bushels deducted for farm seed, etc.
(3) Calculated on basis of one-third reduction in 1931 value.
*Machinery values interpolated.
Table 7 indicates something of the difficulties facing Saskatchewan farmers with respect to machinery and equipment. To clear off the indebtedness against this class of capital, and to restore it to the 1931 standard, would have required about \(\$ 755\) per farm in 1935,-or the proceeds from the sales of about 145 acres of the crop of that year. Some of these expenditures were actually made in 1935 to enable farm operations to continue, probably about \(\$ 55\) per farm, leaving around \(\$ 700\) per farm still needed to restore machinery and equipment to the 1931 condition.

Other forms of farm capital have also suffered impairment. Buildings, and fences, and in many areas even the lands used for cultivation, have shown considerable deterioration during recent years. Feeds and supplies have been
heavily depleted, and much is needed to make up for the drains of the years of poor crops. In the farm homes, household equipment, furnishings and clothing, bear pathetic testimony to the depleted revenues, and many persons on the farms carry unmistakable evidence that attention from physicians, opticians and dentists has been needed, but not obtained. Such are the unavoidable results of the prolonged period of distress through which Saskatchewan has passed and from which recovery is being attemepted.

\section*{Conclusion.}

The condition of agriculture in the Prairie Provinces is one of the most important factors in the economic life of Canada, and vitally associated with the welfare of the Dominion as a whole. The prosperity of agriculture in western Canada is dependent on the wheat crop, its physical production, and the amount for which it sells at the local shipping points. Because of the magnitude of the difficulties confronting Saskatchewan agriculture, the return of prosperity will come slowly, and any additional burdens will seriously impair the chances of recovery and make current problems more difficult. That the problem of recovery of Saskatchewan agriculture is made more difficult by the increased prices of farm machinery and equipment is beyond question. Poor equipment is necessarily associated with inferior work and inefficient operations, which in turn, are associated with low yields and high costs of production per unit. These conditions are reflected in reductions in the amounts available for expenditures by farmers for all classes of goods and services.

The purpose of this discussion is to present important current facts about Saskatchewan agriculture, with which the Department of Farm Management of the University of Saskatchewan is definitely and intimately associated, rather than review the economics of the production and distribution of farm machinery and equipment, which may be considered more expertly by those having adequate qualifications for the task. The products of our Canadian plants may or may not be produced efficiently from the point of view of the industry, but it is felt that they have not been too well adapted to the conditions of Western Canadian agriculture. It is respectfully suggested that profitable examination might be made of the questions of machine design, construction, distribution, servicing, sales policy, both domestic and export, credit and collection from the point of view of meeting better the needs of the Canadian farmers to be served by the industry. The history of the prices of machinery and equipment is being presented by others, and does not form part of this presentation. From this survey of agricultural conditions, and recognizing the very high levels of prices which have long been maintained for farm machinery and equipment, it seems extremely difficult to justify a business policy which raises these prices still higher at such an inopportune time.

These, as you will note through observation, are quite uniform throughout, and will only tend to substantiate the statement that there is no great variation in repair prices. This table, however, I might say, does not say or does not intimate that repair prices are low or are high. It intimates what they are as compared with those in the United States and in Canada. In answer to Mr. Graham's statement, tables 4, 5, 6, 7 and 8 could probably be filed equally well for reference. Then tables 10,11 and 12 , which show the range of prices throughout the period of years, probably should be included in the printed report with the other tables.
Q. You are referring to tables 10,11 and 12?-A. Yes, tables 10,11 and 12. Then tables 13 and 14 are the ones showing the basis of the chart, which probably should be included. I think, undoubtedly, Mr. Chairman, this section (indicating) could be filed for reference.

Mr. Graham: Would you deal with that, Mr. Chairman? There are one or two questions I wish to ask.
[Professor E. A. Hardy.]

The Chatrman: It would appear to me, from casual observation, that we should have statements 1,2 and 3 in . They show comparative prices on both sides of the line for different implements for the different implement companies. In addition, this other table deals with prices back to 1920 . I would think those two should be tabled, and probably if it would be satisfactory to the committee, the other information could be filed. It appears to be the details setting out the specifications for each implement, as for example, an 8 foot binder with fore-carriage and bundle carrier and so forth, whereas the other table sets it out as an 8 foot binder.

Mr. Senn: Is the table showing the prices from 1920 on a very lengthy table?

Witness: You have four tables on that.
Mr. Senn: It seems to me it would be very interesting information to have.
The Chatrman: Yes. There are about six or eight implements. I think it should be printed in the record.

Mr. Senn: Yes.
The Chairman: Is that agreed?
Mr. McLean: Agreed.
Mr. Graham: Then we will have tables 1, 2 and 3,10, 11 and 12 and 13 and 14.

The Charrman: Very well.

\section*{By Mr. Graham:}
Q. On table No. 1 I notice one or two items there. You do not propose to read that?-A. No.
Q. I notice a 17 -tooth spring-tooth cultivator, hand lift, 4-horse hitch. You will notice that there is a marked difference between the Massey-Harris retail price at Weyburn and the I.H.C. and John Deere price. Is there any special explanation of that particular item?-A. Yes. With regard to the spring-tooth cultivator, there is a considerable difference in those two implements. The John Deere and International implements are quite comparable. Their No. 6 field cultivator with spring-tooth attachment in the United States and Canada is the same implement, giving us quite an accurate comparison there. The MasseyHarris implement is a lighter machine, and would compare more favourably with the International Harvester Company No. 3 field cultivator which is sold in the States but is not sold at all in Canada. Consequently, there is no Canadian price, and the Massey-Harris is there by itself, \(\$ 109.50\) as compared with \(\$ 150\) or \(\$ 149\), or in the case of John Deere, \(\$ 170\) in some instances. So we should make a note there that one cultivator is not comparable with the other.
Q. Would you say that the rest of the implements listed are reasonably comparable?-A. Yes. In my brief, Mr. Chairman, I commented on that, that there are some minor differences in width of one-way dises and in width of cultivators, and some minor differences in weight. But, generally speaking, all the others are comparable.
Q. I noticed when you were making your presentation, Professor Hardy, you said that in North Dakota, I think, Montana and Saskatchewan, the prices were fixed by the Chicago list price plus freight. Is that true of Saskatchewan? -A. No. It should not be North Dakota, Montana and Saskatchewan. Where is that?
Q. On page 2, "with regard to the retail price of farm implements in North Dakota, Montana and Saskatchewan, the International Harvester Company bases all prices on the Chicago list, plus freight, to the different points west." Should that be corrected?-A. Yes; it should have "and Saskatchewan" deleted.
Q. You say "and Saskatchewan" should be deleted?-A. Yes.

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}

Mr. McLean: Before you leave that, could that note that Professor Hardy suggested be inserted immediately after the word "cultivator"?

Mr. Graham: Yes. I have it on mine, and I think it is on the one you are filing.

Witness: Yes. I will put it on there.

\section*{By Mr. Graham:}
Q. Professor Hardy, did you happen to visit the village or hamlet of Oswego in Montana?-A. Yes. Oswego is seven miles west of Wolf Point.
Q. It is a suitable comparative point?-A. No. At Oswego there is one general store, a garage, and a blacksmith shop. The Olivers have an agency there. There is no International agency and no John Deere agency. All of the agents, apparently, who serve that country are located at Wolf Point. That is the reason I used Wolf Point as a typical comparative point south of Assiniboia.
Q. You mentioned bargain sales throughout the last two years in Saskatche-wan?-A. Yes.
Q. Did you consider or form any conclusion as to whether those bargain sale prices induced many sales of that more or less dead inventory?-A. Well, Mr . Chairman and gentlemen, the bargain sales that have been conducted throughout the last two or three years certainly reduced the inventory.
Q. Considerably?-A. Well, from my discussing the matter with the managers of different implement companies, I would say yes, it brought the inventories down materially. That same thing is referred to in Dr. Allen's comments on concessions. We found in certain areas where no crops had been had for years, that the effect was not material. But in other areas where crops had been experienced, we found that quite extensive sales had been made which materially reduced the prices.
Q. I should like to ask a further question, Professor Hardy. So far as you surveyed the American system of distribution as compared with the Saskatchewan system of distribution on the part of the manufacturer, is there any essential difference as you found it between the American and Canadian system, so far as the load that the companies are carrying is concerned?-A. Well, Mr . Chairman, no, I think not. On paper the American companies are still supposed to be selling outright to their agents.
Q. Yes?-A. But in actual working out, the agents are no longer financially able to take care of the paper or the credit, and the head office or the main company is carrying that load.
Q. And taking the farmers' notes instead?-A. Yes, and taking the farmers' notes.

\section*{By Mr. Senn:}
Q. Is that practice general or is it just in restricted areas?-A. Well, it is general in Montana and North Dakota throughout the area that we visited.
Q. I should like to ask another question there. Has that had any effect on the prices; that is, the change from the straight sale to consignment? A. The only way I could answer that would be that if the recent increases over the last two years in the United States have been smaller because of that practice, it might be considered so.
Q. You could not say whether the prices are higher in the areas where the change has been made to consignment than they are where they are still selling by the former method?-A. No, I do not think that is true; from observing the data which Professor Shanks obtained, I would not think so. I do not think that is local. You mean are prices in that area higher?
Q. Yes.-A. No.
[Professor E. A. Hardy.]

\section*{By Mr. Golding:}
Q. How long is it since this change has taken place?-A. I do not know exactly when, but it is since the period of low prices and poor crops in the Dakotas and Montana.

\section*{By Mr. Senn:}
Q. I suppose where an agent buys the machinery outright and is selling it again, he can use some discretion about the price he charges for it?-A. Yes.
Q. The price would be less uniform in areas of that kind than they would be in areas where they are selling on consignment?-A. Yes. That is even true to-day. That is, if a dealer has any notion that you have any money and want to buy a machine, he does not particularly adhere to any schedule at all. He can cut his commission down to anything he wishes, as long as it stays above the wholesale price.
Q. But he cannot do that on consignment?-A. Well, I presume he can.

\section*{By Mr. Graham:}
Q. On trade-ins?-A. On trade-ins, and other ways in Saskatchewan, so there is very little difference.
Q. That is the human element, I presume, in the implement business?A. Yes.
Q. In the matter of repairs, is there any legislation that you know of in those states which you visited, requiring implement companies to maintain large stocks of repair parts?-A. Not that I know of, Mr. Graham.
Q. Are you able to pass an opinion on the comparative quantity of repairs held by the machine companies in Saskatchewan to service farmers as compared with the quantities held in those states which you visited?-A. Mr. Chairman and gentlemen, we visited implement compaines and their agents, for instance at Kenmare, North Dakota. The agent pointed out to us large stacks of repair stocks on hand. I said, "Who do those belong to?" He said, "they belong to me." That is, the American agent. He bought those repairs and maintained this service. At Wolf Point I visited agents and found large stocks of repairs. At intermediate small points there would not be very much. Then at Glasgow there were fairly large stocks of repairs, and at Havre there were fairly large stocks of repairs. I would say, generally speaking, that repairs were quite available.
Q. In both?-A. In both places. And in Saskatchewan there are enormous stocks of repairs distributed throughout the province, not only at the wholesale depots for immediate distribution but in the local agent's hands.
Q. But in the general picture each has sufficient?-A. Yes.
Q. I notice in your material that you were unable to secure prices to other than dealer except the one 1930 comparative price that you gave. Did you form any opinion as to the result of what was known as the N.R.A. legislation on implement prices in the United States in recent years?-A. Well, Mr. Chairman, we discussed the matter of different legislative variations with the different agents and during the past number of years I visited different areas in the United States and all indications I could see were that where conditions were more or less dictated to the company there was a natural reflection in higher prices.
Q. In higher prices?-A. But the agents are only surmising; that is, at a distance from the manufacturing point there is very little actual definite data as to the reason for increases.

Mr. Graham: Mr. Chairman, I have two or three other points particularly that I want to ask Professor Hardy, and I presume members of the committee have also. It is one o'clock.

The Chairman: What is the pleasure of the committee? I think it should meet this afternoon in any event to hear Mr. Taggart.

Mr. Perley: I do not think we should meet this afternoon, Mr. Chairman. There is an important bill before the house.

Mr. McLean: What is it, the bank bill?
Mr. Perley: Yes, the Bank of Canada Act.
Mr. Mclean: We could meet at 4 o'clock. There are some other committees meeting.

Mr. Perley: I think the estimates of the Minister of Agriculture are coming up, too.

Hon. Mr. Gardiner: Mine are pretty near all through, I do not think they will be up to-day.

Mr. Ward: How long would it take, Mr. Chairman?
The Chairman : There is another witness we could put on immediately, and we are ready to go on with additional witnesses to-morrow.

Mr. Ward: How long would it take to hear the additional witness we have to-day?

The Charmman: I should say upwards probably of an hour.
Mr. Perley: Are representatives of the implement companies coming to-morrow?

The Chatrman: Yes.
Mr. McLean: I think we should hear the other witness and complete our questioning of Professor Hardy so that that information will be available to us before the others come to-morrow.

The Chairman: Would it be agreeable to the committee to meet this afternoon at 4 o'clock.

Some Hon. Members: Agreed.
The Chairman: All right. Professor Hardy, we will be glad to hear you again at 4 o'clock.

The committee adjourned at 1.05 o'clock p.m. to meet again at 4 o'clock p.m. this day.

Table No. 1.-CANADIAN AND UNITED STATES FARM IMPLEMENT PRICES-ONE PAYMENT
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline Implement & I.H.C. suggested List Price Crosby, N.D. & \begin{tabular}{l}
I.H.C. \\
Retail Price \\
Weyburn, Sask., and East
\end{tabular} & John Deere suggested List Price Crosby, N.D. & \begin{tabular}{l}
John \\
Deere \\
Retail \\
Price \\
Weyburn, Sask., and East
\end{tabular} & \begin{tabular}{l}
I.H.C. \\
suggested \\
List \\
Price \\
Minot, \\
North \\
Dak.
\end{tabular} & \begin{tabular}{l}
John \\
Deere suggested List Price Minot, North Dak.
\end{tabular} & MasseyHarris Retail Price Weyburn, and East & Cockshutt Plow Co., Retail Price Weyburn, Sask., and East \\
\hline & \(\$\) ets. & \$ ets. & \$ cts. & \$ ets. & \$ cts. & \$ ets. & \$ ets. & \$ ets \\
\hline 8 ft . Binder 4 H. Hitch Fore-carriage and Sheaf Carrier. & 25760 & 28900 & 26480 & 29000 & 25720 & -26480 & 28800 & 28850 \\
\hline 20 Double Disc Drill Hand Lift 4 H.H.... & 25631 & 25650 & 26304 & 25850 & 25631 & 25815 & 25750 & 25850 \\
\hline 5 ft . Mower Oil Bath. & 10085 & 11800 & 10151 & 11950 & 10085 & 10151 & 11900 & 11600 \\
\hline 10 ft . Hay Rake.. & 5255 & 6105 & 5682 & 6200 & 5255 & 5682 & 6100 & 6050 \\
\hline \(8-8_{2}^{\frac{1}{2}}-9 \mathrm{ft}\). Stiff Tooth Cult. 11 Tooth Power Lift Tractor H & 13625 & 14300 & 14464 & 14650 & 13355 & 14152 & \(14500 \quad\left(9^{\prime}\right)\) & 15450 \\
\hline \begin{tabular}{l}
\(8-8 \frac{1}{2}-9 \mathrm{ft} .17\) tooth Spring Tooth Cultivator \\
Hand Lift 4 Horse Hitch. .
\end{tabular} & 15950 & 14600 & 14486 & 14800 & 15638 & 14145 & 10750 & \\
\hline 17 Tooth Spring Tooth Harrow & 3089 & 3700 & 2847 & & 3025 & 2773 & 3700 & 3675 \\
\hline \(8^{\prime} 16^{\prime \prime}\) Out-Throw Disc Harrow 4 H . & 6990 & 7750 & 7246 & 8150 & 6846 & 7246 & 7650 & 7650 \\
\hline 10 ft . Tractor Tandem Disc. H. Harrow.... & 14665 & 17600 & 16984 & 28800 & 14331 & 16984 & 17800 & 19500 \\
\hline Harrow Plow, One Way Disc. \(8^{\frac{1}{2}}{ }^{\prime} 20^{\prime \prime}\) Disc. Disc Tiller & 26570 & \(30250{ }^{\left(7 \frac{1}{2}^{\prime}\right)}\) & \(\begin{array}{ccc}319 & 10 & \left(7 \frac{1}{2}\right. \\ 351 & 50 & \left(9^{\prime}\right)\end{array}\) & 320
351
35 & \[
26013^{\left(7 \frac{1}{2}^{\prime}\right)}
\] & \(\begin{array}{lll}319 & 10 \\ 351 & 50 & \left(8 \frac{1}{2}\right)\end{array}\) & 320.25 & \\
\hline Manure Spreader & 19970 & 20400 & 17108 & 20900 & 19970 & 17108 & 19600 & 20200 \\
\hline \begin{tabular}{l}
4 Furrow Heavy Power Lift Tractor Disc. \\
Plow 24 Dises...
\end{tabular} & 25662 & 23300 & 31201 & 26850 & 25210 & 31201 & 23450 & 26750 \\
\hline 14 ft . Wide Dise Harrow Tractor Harrow & 15010 & 15250 & 15231 & 14975 & 14756 & 15231 & 15550 (16') & 18550 \\
\hline
\end{tabular}

Table No. 2.-CANADIAN AND UNITED STATES IMPLEMENT PRICES-ONE PAYMENT
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline Machine & I.H.C. suggested List Price at Wolfe Point, Montana & \begin{tabular}{l}
I.H.C. \\
suggested List Price at Havre, Montana
\end{tabular} & John Deere suggested List Price at Wolfe Point, Montana & John Deere suggested List Price at Havre, Montana & \begin{tabular}{l}
I.H.C. \\
Retail \\
Prices, Assiniboia, Sask, and West
\end{tabular} & John Deere Retail Prices, Assiniboia, Sask. and West & \begin{tabular}{l}
Massey- \\
Harris Retail Prices, Assiniboia, Sask. and West
\end{tabular} & Cockshutt Retail Prices, Assiniboia, Sask, and West \\
\hline & \$ ets. & \$ cts. & \$ cts. & \$ cts. & \$ cts. & \$ cts. & \$ cts. & \$ cts, \\
\hline 8 ft . Binder 4-H. Forecarriage with sheaf carrier & 26600
263 & \(\begin{array}{r}27690 \\ 273 \\ \hline 10\end{array}\) & 27000 & 26692
264
83 & 29300 & 29400 & 29100 & 29350 \\
\hline 20 Double Disc Drill Hand Lift 4-H... & 26398
10460 & 27337
10920 & \begin{tabular}{l}
28500 \\
110 \\
\hline 00
\end{tabular} & 26483
10239 & 260
120
120 & 26200
12150 & 26100
12100 & 26250
11800 \\
\hline 10 ft . Hay Rake.... & 5597 & 5710 & 6000 & 4735 & 6250 & 6300 & 6200 & 6150 \\
\hline \(8-8 \frac{1}{2}-9 \mathrm{ft}\). Stiff Tooth Cultivater 11 T. Tractor Hitch, Power Lift & 14031 & 14750 & 17000 & 14750 & 14550 & 14925 & 14775 & 15700 \\
\hline 8-812-9 Spring Tooth Cultivator 17 T. Hand Lift, 4-Horse.. & 16390 & 17250 & 17000 & 14800 & 14900 & 15050 & 10950 & \\
\hline 17 Tooth Spring Tooth Harrow Fev. Teeth & 3210 & 3353 & 3000 & 2875 & 3800 & & 3750 & 3675 \\
\hline 8 ft . 16 in . Out-Throw Disc Harrow, 4-H.. & 7250 & 7576 & 7500 & 7310 & 7900 & 8300 & 7800 & 7750 \\
\hline 10 ft . Tractor Tandem Dise Harrow & 15275 & 16055 & 17500 & 17130 & 18000 & (71) 18600 & 18200 & 19900 \\
\hline Harrow Plow or one Way Dise \(8 \frac{1}{2} \mathrm{ft} .20 \mathrm{in}\). Dise No. 7. & 27600 & 28890 & 37000 & 32450 & 30800 & 32625 & 32600 & 35600 \\
\hline Manure Spreader & 18687 & 19563 & 18000 & & & 21100 & & \\
\hline 4 Furrow Heavy Power Lift Tractor Disc Plow 24 in. Dise & 25510 & 27544 & 32500 & 31465 & 23800 & 27200 & 23950 & \(\begin{array}{r}20500 \\ 27250 \\ \hline 1580\end{array}\) \\
\hline 14 ft . wide Disc Harrow with Tractor Hitch............... & 15480 & 16070 & 16500 & 15350 & 15500 & 15225. & 15800 & (12) 15800 \\
\hline
\end{tabular}

Table No. 3.-CANÁDIAN AND UNITED STATES IMPLEMENT REPAIR PRICES
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multirow[b]{2}{*}{Parts} & \multicolumn{4}{|c|}{Saskatchewan} & \multicolumn{3}{|c|}{Minot, N.D.} & \multicolumn{2}{|l|}{Wolf Point, Mont.} & \multicolumn{2}{|l|}{Havre, Mont.} \\
\hline & \[
\begin{aligned}
& \text { Int. } \\
& \text { Har. Co. }
\end{aligned}
\] & \begin{tabular}{l}
John \\
Deere
\end{tabular} & Cockshutt & Massey Harris & \[
\begin{aligned}
& \text { Int. } \\
& \text { Har. Co. }
\end{aligned}
\] & \begin{tabular}{l}
John \\
Deere
\end{tabular} & Massey Harris & \begin{tabular}{l}
Int. \\
Har. Co.
\end{tabular} & John Deere & \[
\begin{aligned}
& \text { Int. } \\
& \text { Har. Co. }
\end{aligned}
\] & \begin{tabular}{l}
John \\
Deere
\end{tabular} \\
\hline & \$ ets. & \$ cts. & \$ ets. & \$ cts. & 8 cts. & § cts. & \$ cts. & S cts. & \$ ets. & \$ cts. & \$ cts. \\
\hline 8 ft . Binder Canvas Table & 725 & 725 & 750 & 740 & 885 & 885 & : 835 & 885 & 885 & 885 & 885 \\
\hline Reel Slat or paddle. & 040
0 & 040
050 & 030
0
45 & 0
0
0
50 & 040
0 & 040
0
0 & - 040 & 040
065 & 040
060 & 040
065 & \begin{tabular}{l}
045 \\
0 \\
\hline
\end{tabular} \\
\hline Binder Knife. & 335 & 340 & 335 & 350 & 365 & 365 & 390 & 365 & 375 & 365 & 400 \\
\hline Plows: Front Wheel Bearing. & 110 & 120 & 090 & 100 & 110 & 110 & 120 & 110 & 110 & 110 & 120 \\
\hline Front axel and Standard & +300 & 295 & 190 & 275 & 275 & 300 & & 275 & 325 & 275 & 130 \\
\hline \(14-\mathrm{in}\). Soft Centre plow Sh & **4 70 & 475 & 470 & 400 & 425 & 425 & 425 & 425 & 425 & 425 & 425 \\
\hline Field Cultivators; 61-in. Shovel. & 070 & 075 & 055 & 060 & 070 & 072 & 075 & 070 & 075 & 070 & 080 \\
\hline , \(11 \frac{1}{2}\)-in Shovel. & 080 & 075 & 080 & 085 & 080 & 072 & 110 & 080 & 085 & 080 & 080 \\
\hline Seed Drill; Inside scraper or spreader & 015 & 020 & 010 & 020 & 015 & 020 & 020 & 015 & 020 & 015 & 025 \\
\hline Mower; Pitman Boxing...... & 055 & 065 & 080 & *145 & 055 & 055 & 070 & 055 & 060 & 055 & 060 \\
\hline Knife Head. & 045 & 050 & 040 & *1 10 & *0 75 & 045 & 060 & * 075 & 045 & *0 75 & 050 \\
\hline Guard Complete & 030 & 030 & 030 & 030 & 030 & 030 & 035 & 035 & 030 & 030 & 035 \\
\hline Tractor; Exhaust Valve. & 210 & 240 & & 200 & 210 & 225 & 175 & 215 & 225 & 210 & 250 \\
\hline New Cylinder Assembly & 3575 & 5675 & & 4350 & 3575 & 5250 & 4860 & 3800 & 5400 & 3800 & 5500 \\
\hline Piston Pins............. & incl. & 215 & & incl. & incl. & 200 & incl. & incl. & 200 & incl. & 220 \\
\hline Piston Pin Bushings & incl. & 140 & & incl. & incl. & 130 & incl. & incl. & 130 & incl. & 145 \\
\hline 28-in. Thresher, Cylinder teeth & 017 & 016 & & 011 & 017 & 015 & 011 & 017 & 015 & 017 & 020 \\
\hline
\end{tabular}

\footnotetext{
*Forging.
**Soft Centre Plow Shares Special \(\$ 2.95\).
}

\section*{JOHN DEERE}

CASH "B" RETAIL PRICES F.O.B. REGINA FOR YEARS 1920 TO 1936 AND DUTY RATES APPLICABLE TO EACH OF THESE YEARS
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline & 1920 & 1921 & 1922 & 1923 & 1924 & 1925 & 1926 & 1927 & 1928 \\
\hline & \$ cts. & \$ cts. & \$ ets. & \$ ets. & \$ cts. & \$ ets. & \$ ets. & \$ cts. & \$ ets. \\
\hline NA \(214-14^{\prime \prime}\) Gang Plow w/No. 66 4-horse Eveners 20-run Double Disc Drill w/ 4-horse hitch. . & 173
258
250 & \[
\begin{aligned}
& 20475 \\
& 30775
\end{aligned}
\] & 15750
23950 & \[
\begin{array}{r}
16000 \\
24750
\end{array}
\] & \[
\begin{aligned}
& 17200 \\
& 27600
\end{aligned}
\] & \[
\begin{array}{r}
\text { Duty } 10 \% \\
15950 \\
25200
\end{array}
\] & \[
\begin{array}{r}
\text { Duty } 10 \% \\
15900 \\
24800
\end{array}
\] & \[
\begin{array}{r}
\text { Duty } 10 \% \\
1590 \\
25050
\end{array}
\] & \[
\begin{array}{r}
\text { Duty } 10 \% \\
15700 \\
25175
\end{array}
\] \\
\hline 14 ft . Outthrow Bissell Dise Harrow w/ cut-out and 6 -horse eveners. & \[
\begin{aligned}
& \text { No Duty } \\
& 17400
\end{aligned}
\] & \[
\begin{aligned}
& \text { No Duty } \\
& 19225
\end{aligned}
\] & No Duty
\[
15150
\] & No Duty & No Duty & No Duty 16400 & No Duty 16200 & No Duty 17000 & No Duty 17200 \\
\hline No. \(242-8 \frac{1}{2} \mathrm{ft}\). Stiff Tooth Cultivator w/ \(11 \frac{1}{2}\)-in. Shovels and 6 -horse nitch.. & 14000 & 16450 & 13900 & 13800 & 14750 & \[
\begin{array}{r}
\text { Duty } 7 \frac{73}{2} \% \\
13975
\end{array}
\] & \[
\begin{array}{r}
\text { Duty } 7 \frac{1}{2} \% \\
13900
\end{array}
\] & Duty \(7 \frac{7}{2} \%\) 13150 & \[
\begin{array}{r}
\text { Duty } 7 \frac{1}{2} \% \\
13600
\end{array}
\] \\
\hline 5 ft . Mowers & 10000 & 12000 & 10000 & 9550 & 11250 & Duty 6\% 10400 & Duty 6\% 10400 & Duty 6\% 10400 & Duty 6\% 10400 \\
\hline 8 ft . Binders w/ Tongue Truck and 4-horse Eveners. & 27950 & 33350 & 27200 & 27900 & 31050 & Duty \(6 \%\) 28650 & \[
\begin{array}{r}
\text { Duty } 6 \% \\
28500
\end{array}
\] & Duty 6\% 28500 & Duty 6\% 28500 \\
\hline Totals & 1,125 50 & 1,322 75 & 1,059 50 & 1,080 00 & 1,199 50 & 1,105 75 & 1,097 00 & 1,100 00 & 1,105 75 \\
\hline Model D. Tractor w/ \(5^{\prime \prime}\) Spade Lugs & & & & & & Duty Free 1,135 00 & Duty Free
1,17500 & Duty Free 1,170 00 & Duty Free 1,170 00 \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline & 1929 & 1930 & 1931 & 1932 & 1933 & 1934 & 1935 & 1936 \\
\hline NA 214 - 14 " Gang Plow w/ No. 664 -horse Eveners. & \[
\begin{array}{r}
\$ \text { cts } \\
\text { Duty } 10 \% \\
15400
\end{array}
\] & \[
\begin{gathered}
\$ \text { cts. } \\
\text { Duty } 10 \% \\
14900
\end{gathered}
\] & \begin{tabular}{l}
\(\$ \mathrm{cts}\). \\
Duty 25\% 15000
\end{tabular} & \begin{tabular}{l}
\$ cts. \\
Duty \(25 \%\) 14500
\end{tabular} & \begin{tabular}{l}
\$ cts. \\
Duty 25\% 13650
\end{tabular} & § ets.
Duty \(25 \%\)
13650 & \[
\begin{gathered}
\text { \$ cts. } \\
\text { Duty } 25 \% \\
13650
\end{gathered}
\] & \begin{tabular}{l}
\(\$ \mathrm{cts}\). \\
Duty \(7 \frac{1}{2} \%\)
\[
13650
\]
\end{tabular} \\
\hline 20-run Double Dise Drill w/ 4-horse hitch & Duty \(7 \frac{1}{2} \%\) 25150 & \[
\begin{aligned}
& \text { Duty } 7 \frac{71}{2} \% \\
& 249 \\
& \hline
\end{aligned}
\] & \[
\begin{array}{r}
\text { Duty } 25 \% \\
22950
\end{array}
\] & \[
\begin{array}{r}
\text { Duty } 25 \% \\
21150
\end{array}
\] & \[
\begin{array}{r}
\text { Duty } 25 \% \\
21750
\end{array}
\] & Duty \(25 \%\) 21750 & Duty \(25 \%\) 23750 & \[
\begin{array}{r}
\text { Duty } 7 \frac{1}{2} \% \\
24850
\end{array}
\] \\
\hline 14 ft . Outthrow Bissell Disc Harrow w/ cut out and 6-horse Eveners. & \[
\begin{aligned}
& \text { No Duty } \\
& 17200
\end{aligned}
\] & No Duty 16900 & No Duty & No Duty 16700 & No Duty 16000 & No Duty 16000 & \[
\begin{aligned}
& \text { No Duty } \\
& 16000
\end{aligned}
\] & No Duty 16000 \\
\hline No. \(242-8 \frac{1}{2} \mathrm{ft}\). Stiff Tooth Cultivator w/ \(11 \frac{1}{2} \mathrm{in}\). Shovels and 6 -horse hitch. & \[
\begin{array}{r}
\text { Duty } 7 \frac{7}{2} \% \\
13600
\end{array}
\] & Duty \(7 \frac{1}{2} \%\) 13400 & \[
\begin{array}{r}
\text { Duty } 25 \% \\
13400
\end{array}
\] & Duty \(25 \%\)
12100 & \[
\begin{array}{r}
\text { Duty } 25 \% \\
12850
\end{array}
\] & \[
\begin{array}{r}
\text { Duty } 25 \% \\
12850
\end{array}
\] & \[
\begin{array}{r}
\text { Duty } 25 \% \\
13550
\end{array}
\] & \[
\begin{array}{r}
\text { Duty } 7 \frac{1}{2} \% \\
13850
\end{array}
\] \\
\hline 5 ft . Mowers & \[
\begin{array}{r}
\text { Duty } 6 \% \\
10400
\end{array}
\] & Duty 6\% 10200 & \[
\begin{array}{r}
\text { Duty } 25 \% \\
10200
\end{array}
\] & \[
\begin{array}{r}
\text { Duty } 25 \% \\
10100
\end{array}
\] & \[
\begin{array}{r}
\text { Duty } 25 \% \\
9850
\end{array}
\] & \[
\begin{array}{r}
\text { Duty } 25 \% \\
9850
\end{array}
\] & Duty \(25 \%\) 10750 & Duty \(7 \frac{1}{2} \%\) 11650 \\
\hline 8 f.t Binders w/ Tongue Truck and 4-horse Evene & \[
\begin{gathered}
\text { Duty } 6 \% \\
28500 \\
\hline
\end{gathered}
\] & \[
\begin{aligned}
& \text { Duty } 6 \% \\
& 28000
\end{aligned}
\] & \[
\begin{array}{|r|}
\text { Duty } 25 \% \\
28000 \\
\hline
\end{array}
\] & \[
\begin{array}{r}
\text { Duty } 25 \% \\
27500 \\
\hline
\end{array}
\] & \[
\begin{array}{r}
\text { Duty } 25 \% \\
26500 \\
\hline
\end{array}
\] & \[
\begin{array}{r}
\text { Duty } 25 \% \\
26500 \\
\hline
\end{array}
\] & \[
\begin{array}{r}
\text { Duty } 25 \% \\
26850 \\
\hline
\end{array}
\] & \[
\begin{array}{r}
\text { Duty } 7 \frac{1}{2} \% \\
28200 \\
\hline
\end{array}
\] \\
\hline Totals. & 1,102 50 & 1,083 50 & 1,064 50 & 1,020 50 & 1,006 00 & 1,006 00 & 1,045 50 & 1,082 00 \\
\hline Mode D. Tractor w/ \(5^{\prime \prime}\) Spade Lugs & \[
\begin{array}{r}
\text { Duty Free } \\
17000
\end{array}
\] & Duty Free 1, 13000 & Duty Free 1,170 00 & Duty Free
1,17000 & Duty Free 1, 19000 & Duty Free 1,190 00 & \[
\begin{aligned}
& \text { Duty Free } \\
& 1,26500
\end{aligned}
\] & Duty Free 1,21500 \\
\hline
\end{tabular}

\section*{John Deere Plow Company Limited, Regina, Sask.}

We feel, however, that we should draw your attention to certain improvements which have been made on some of these machines, which you may not have on record and which are not indicated in the prices.

For instance, the 20 -run Double Disc Drill with 4 -horse Hitch has been improved from year to year. In 1925 this Drill was equipped with Wood wheels, Wood Eveners and Wood Box, whereas to-day the Drill is equipped with Steel Wheels, Steel Eveners and Copper base, rust proof Steel Box and Zerk Alemite lubrication. The 14 -foot Out Throw Bissell Disk Harrows in 1925 were the rigid type and equipped with Wood Frame and Wood Eveners. They are now built entirely of steel, are the flexible or independent gang type equipped with Steel Eveners and are lubricated by the Zerk Alemite system.

Cultivators have been improved in much the same way as the Drills. Where Wood Wheels and Wood Eiveners were used, they are now equipped with Steel. Five-foot Mowers up until two years ago were the open gear type. These, however, have been improved continuously during the past ten years. At the present time the Gears, including the Axle and all Drive parts operate in a bath of oil. The Knife is now perfectly centered in its travel which adds greatly in reducing the draft of the Mower.

The 8 -foot Binders have been greatly improved during the past ten years, and to-day practically all the main drive parts operate on anti-friction bearings. The final drive is enclosed and operates in a bath of oil. The forecarriage is made entirely of steel and the machine is equipped with steel eveners and Zerk Alemite lubrication.

The Model "D" Tractor has possibly been improved to a greater extent than most machines. As you are aware, this has been the case with most Tractors. The Tractor has been increased in power and speed. A great many precautionary measures have been adopted to protect the machine from dust and foreign matters, which have added to the life of the machine and to the comfort of the operator.

We might also mention that during the past several years the farmer has been given the advantage of special prices on many machines. For instance, Drills of the older model have been sold at greatly reduced prices. This also applies to Harrows, Binders, Tractors and practically all machines. These reductions were made possible due to improved machinery being manufactured and the machinery which was in stock has been offered at these reduced prices. These reductions have been appreciated by our farmer customers, as it made it possible for them to purchase new machinery at considerable saving. These reductions did not affect the warranty of the machines, or the service from a repair standpoint.

Regina Branch, May 13, 1936.
TABLE 11.-COCKSHUTT PLOW CO., LTD.-CURRENT IMPLEMENT PRICES-NEW GOODS-"B" LIST CASH PRICES
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline Machine & 1920 & \[
\begin{gathered}
(1) \\
1921
\end{gathered}
\] & 1922 & 1923 & \[
\begin{gathered}
{ }^{(2)} \\
1924
\end{gathered}
\] & 1925 & \[
1926
\] & 1927 & \[
\begin{gathered}
\text { gas } \\
1928
\end{gathered}
\] \\
\hline & & & & & \(\left.{ }^{3}\right)\) & & & \(\left.{ }^{4}\right)\) & \\
\hline \(28^{\prime \prime}\) Jewel Gana w/4 H.H. & 159.00 & 195.00 & 151.00 & 153.00 & 168.00 & 153.50 & \(153 \cdot 50\) & 153.50 & 153.50 \\
\hline 20 DDD. w/4 HH w/P.L. \(14^{\prime}\) Wide Harr. w/6 H.H. & \[
\begin{array}{r}
268 \cdot 00 \\
\text { Prod. } 1922
\end{array}
\] & \(320 \cdot 00\) & \[
\begin{aligned}
& 257.00 \\
& 161.50
\end{aligned}
\] & \[
\begin{aligned}
& 265 \cdot 00 \\
& 172 \cdot 00
\end{aligned}
\] & \[
\begin{aligned}
& 290 \cdot 00 \\
& 193.00
\end{aligned}
\] & \[
\begin{aligned}
& 270 \cdot 00 \\
& 177.50
\end{aligned}
\] & \[
\begin{aligned}
& 268.00 \\
& 177.50
\end{aligned}
\] & \[
\begin{aligned}
& 268 \cdot 00 \\
& 175 \cdot 50
\end{aligned}
\] & \[
\begin{array}{r}
277 \cdot 00 \\
175 \cdot 50
\end{array}
\] \\
\hline \[
\begin{aligned}
& 9^{\prime} \text { Cult. P.L. w/6 H.H.. } \\
& 5^{\prime} \text { Giant Mower. } \\
& 8^{\prime} \text { Binder w/4 H.H....... }
\end{aligned}
\] & \[
\begin{array}{r}
140 \cdot 00 \\
97 \cdot 00 \\
275 \cdot 00
\end{array}
\] & \[
\begin{aligned}
& 150 \cdot 00 \\
& 118.00 \\
& 328.00
\end{aligned}
\] & \[
\begin{aligned}
& 129 \cdot 00 \\
& 100.00 \\
& 270 \cdot 00
\end{aligned}
\] & \[
\begin{aligned}
& 136 \cdot 00 \\
& 102 \cdot 00 \\
& 278 \cdot 00
\end{aligned}
\] & \[
\begin{aligned}
& 149 \cdot 00 \\
& 113 \cdot 00 \\
& 306 \cdot 00
\end{aligned}
\] & \[
\begin{aligned}
& 134 \cdot 00 \\
& 103 \cdot 50 \\
& 282 \cdot 50
\end{aligned}
\] & \[
\begin{aligned}
& 134 \cdot 00 \\
& 103 \cdot 50 \\
& 283 \cdot 50
\end{aligned}
\] & \[
\begin{aligned}
& 134 \cdot 00 \\
& 103 \cdot 50 \\
& 283 \cdot 50
\end{aligned}
\] & \[
\begin{gathered}
() \\
142.50 \\
103.00 \\
282 \cdot 50
\end{gathered}
\] \\
\hline Total. & ......... & ............ & 1,068.50 & 1,106.00 & 1,219.00 & 1,121.00 & 1,120.00 & 1,118.00 & 1,134.00 \\
\hline No, 400 Cr . Sep. or No. 450. & ............ & \(100 \cdot 00\) & \(100 \cdot 00\) & \(100 \cdot 00\) & 105.00 & ........... & 83.00 & 86.00 & 91.00 \\
\hline Repair Sales. & & 112,762.00 & & 93,564•00 & 81,319.00 & 105,123.00 & 119, \(062 \cdot 00\) & 115,963.00 & 111,360.00 \\
\hline
\end{tabular}
(1) Around 1921, steel eveners on plows, etc. became standard equipment.
\(\left.{ }^{(2}\right)\) Substantial price reductions became effective some time during the year 1924. Can not place date definitely.
\({ }^{(3)}\) Q.D. Shares now standard.
\({ }^{(4)}\) Plow redesigned and equipped with Alemite, including gun.
(5) Completely new drill. All steel, steel box, etc.
(6) Completely new cultivator.

TABLE 11.-COCKSHUTT PLOW CO., LTD.-CURRENT IMPLEMENT PRIOES-NEW GOODS-"B" LIST CASH PRICES-Coneluded
\begin{tabular}{l}
\hline \hline \multicolumn{1}{c|}{ Machine } \\
\hline
\end{tabular}
(7) Completely new disc harrow, in \(16^{\prime}\) size. Prices hereafter are on \(16^{\prime}\) size w/8 H.H. instead of \(14^{\prime}\) w \(/ 6\) H.H.
(s) Prior to 1929, we did not handle tractors. Repair sales for 1929 and subsequently, do not include tractor repairs.
(9) Changed design of wide harrow again. Quotation is for \(16^{\prime} \mathrm{w} / 8 \mathrm{H} . \mathrm{H}\). in new type machine,
(10) In 1932 and 1933, in addition to price reductions, we gave a further \(10 \%\) discount on all cash paid on purchases, whether actual cash sales, or part cash and balance time. In latter case, \(10 \%\) discount was allowed on the part eash payment, at time of sale, and on the note if paid by Nov, 15 th in each of these years.
\({ }^{(11)}\) Introduction of Oil Bath Binder. Between 1920-1936 five new binders designed, including Alemite No. 6A, this year, not shown in above prices.
(12) Introduction of Stainless Steel Dises.

Note: Interest Rates on Term Sales: up to 1927 incl.- \(9 \% ; 1928-32 \mathrm{incl} .-8 \% ; 1933-6 \% ; 1934-6\) incl.-7\%. A year ago we made a fairly careful survey of interest collections, and found that after write-offs and necessary adjustments and compromises, etc., our average collection of interest over a long period of years was less than \(3 \%\) on the time portion of our business. Insufficient to offset the cost of carrying the accommodation.

Table No. 12.-FARM IMPLEMENT PRICES (1-PAY) AT POINT OF MANUFACTURE 1920 TO 1936 INCLUSIVE
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|}
\hline Machine & To Feb. 1 & \[
\begin{gathered}
1920 \\
\text { To } \\
\text { June } 30
\end{gathered}
\] & After
July 1. & 1921 & 1922 & 1923 & \[
\begin{gathered}
\text { To } \\
\text { April 11, } \\
1924
\end{gathered}
\] & After April 11, 1925 & 1925 & 1926 \\
\hline & \$ ets. & \$ cts. & \$ cts. & \$ ets. & \$ cts. & S ets. & \$ cts. & \$ cts. & \$ ets. & \$ ets. \\
\hline 2 Furrow \(14^{\prime \prime}\) Gang Plow & 14120 & 14720 & 16320 & 18360 & 14513 & 15113 & 15913 & 15182 & 14732 & 14613 \\
\hline 20 DDD H.L. \(14^{\prime}\) S Disc with ........ & 21035 & 23635 & 24635 & 27369 & 21373 & 22273
15506 & 25073
18596 & 23956 & 22906 & 22673 \\
\hline 14
\(8^{\prime}\) Stiff Tooth Cul. H.L. \({ }^{\text {S }}\) S 6 H & & & & & & 15596 & 18596 & 17804 & 16804 & \[
\begin{aligned}
& 16596 \\
& 12003
\end{aligned}
\] \\
\hline \(6^{\prime}\) Mower 24 Section........ & 8352 & 9052 & 9452 & 10978 & 9131 & 9431 & 10431 & 9998 & 9548 & 9402 \\
\hline 8 rier 4 H....................... & 23811 & 25711 & 26711 & 30181 & 25104 & 25404 & 28320 & 27003 & 26003 & 25669 \\
\hline Total & & & & & & & & & & 1,009 56 \\
\hline Cream Separator, 500 lbs & 9506 & 10306 & 10706 & 10678 & 9188 & 9188 & 10088 & 9611 & 9011 & 8988 \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|}
\hline Machine & 1927 & 1928 & 1929 & 1930 & 1931 & 1932 & 1933 & 1934 & 1935. & 1936 \\
\hline & \$ cts. & \$ ets. & \& ets. & \& ets. & \$ ets. & \$ cts. & \$ cts. & \$ ets. & \$ ets. & \$ ets. \\
\hline 2 Furrow \(14^{\prime \prime}\) Gang Plow & 14613 & 14794 & 14694 & 14394 & 14394 & 13894 & 12791 & 12791 & 12864 & 12864 \\
\hline 20 DDD. H.L...... & 22673 & 22773 & 22773 & 22773 & 22773 & 22473 & 21473 & 21473 & 21581 & 22681 \\
\hline \(14^{\prime} \mathrm{S}\). Disc. with fcge. 6 H . & 16596 & 16596 & 16596 & 16196 & 16196 & 15196 & 14196 & 14196 & 14196 & 15396 \\
\hline \(8^{\prime}\) Stiff Tooth Cul. H.L. 6 H & 12003 & 12003 & 12003 & 12003 & 12003 & 11903 & 11320 & 11320 & 11620 & 11920 \\
\hline \(6^{\prime}\) ' Mower 24 Section. & 9402 & 9402 & 9402 & 9302 & 9002 & 8902 & 8702 & 8322 & 8316 & 9216 \\
\hline rier 4 H & 25669 & 25669 & 25669 & 25180 & 25080 & 24580 & 23280 & 23331 & 23505 & 24955 \\
\hline Total & 1,009 56 & 1,012 37 & 1,011 37 & 99848 & 99448 & 96948 & 91762 & 91433 & 92082 & 97032 \\
\hline Cream Separator, 500 lbs . & 8988 & 8988 & 9688 & 9688 & 9688 & 9688 & 9726 & 10006 & 10597 & 11197 \\
\hline
\end{tabular}

\section*{Massey Harris Co. Itd.}

\section*{No. 2 Great West Gang Plough}

This plough originally known as Great West Gang Plough was redesigned in 1922 and it was decided to call the redesigned plough No: 2 Great West Gang Plough. The new design included: New angle cross clevis with holes and pin for adjusting the hitch; new furrow and land wheels with malleable hubs; new rear lift; new front lift brackets and hangers with new hold-ups; new and improved type of bearing for colter, with tapered bearings, the oil cups being fitted with cotter pins to keep out dust and grit. Leather washers being used to hold the cotter pins in place. Foot life improved and strengthened, doing away with the float lever. Land wheel frame bracket changed so that both ends are bolted to the frame. Solid or gong type of rear wheel added in place of spoke type wheel. Heavier and stronger beam stops added.

1923 -Levers redesigned, doing away with malleable spring boxes and making separate steel bracket for cushion spring, lever and bracket previous to this had been in one piece.

Seat bracket redesigned and improved.
Low-draft evener clevis added.
1924 Bracket on land lever for cushion spring redesigned. Staple or runner for neckyoke added to front of pole.

1926 - Softer cushion spring supplied for land lever, 2 inches shorter with one gauge smaller wire. Cushion spring bolt changed to suit.

Furrow and land wheel boxes standardized, so that one pattern does for both wheels.
Furow lever fulcrum strap made \(1 \frac{1}{4}\) inch longer and another hole added so that plough could be let in deeper.

Angle clevis changed from angle steel to channel section with new clevis braekets. Fourteen inch medium bottoms added.

1927-End brace added for cross clevis on 12 inch ploughs.
New and improved rosette added for front right bail bracket.
Beam braces made heavier, stock size changed from 2 inches by 1 inch to 2 inches by \(1 \frac{1}{4}\) inch and one bolt added to end of beam brace to make a more rigid beam set.

1928-Rod breaker bottoms redesigned. New mouldboard, head and quick detachable share designed for 14 inches medium bottoms.

1929 - Bearing for rolling colter redesigned, now using cone type bearing with one piece cone in place of the two piece cone as used previously. This to assure a more concentric bearing.

Set screws added to plough heads for levelling up the share and mouldboard on medium bottoms.

Beam bracket for breaker board braces made heavier and stronger.
Bail caps changed from cast to malleable iron.
Draw pin for all quick detachable shares made \(1 / 16\) inch longer to give a better riveting job.

1930 F. \& L. wheels changed to French \& Hecht make.
1932 -Seat with seat plate cancelled in favour of the present seat which requires no seat plate.

Stock size of the old style beam braces increased to 2 inches by \(1 \frac{1}{4}\) inch was 2 inches by 1 inch (repair item).

1933-Stock specifications for bails changed from \(30 / 40\) O.H. to \(40 / 50\) O.H. making a much stiffer bail.

Hand nut for seat and pole cancelled in favour of a standard square nut.
Staple for rear wheel scraper changed from flat stock to round stock.
Old style cushion spring for land lever reinstated.
1934 - Square washer added to bolt for rosette for front right bail bracket and bolt changed to No. 3 plough head bolt.

Stock specification of key bolt P. 6803 in rear axle changed to 20/30 O.H.-was bolt steel. Pawl for levers, length of material increased \(\frac{1}{4}\) inch.

1935 -Printed parts lists cancelled. Now have to be ordered separate.
1936, February-New and better fitting landsides supplied for 12 -inch medium bottoms.

\section*{Massey-Harris Co. Lid.}

\section*{No. 11-20-Run H. I. Drill-4 H. Hitch, Double Discs}

Changes in Design from 1920 to 1936 inclusive.
Note: When new Grey Iron and Malleable parts are created, it means new Jigs and pattern equipment. When new Steel parts are created, it usually means new die equipment. When any new parts are created, it means an increase in the quantity of repair stock to be kept on hand, as repairs must be available for old parts as well as new.
1. Frame-From 1 to 3 pieces, this necessitated additional bracing at corners.
2. I. Beam of Frame - Increased in size from \(3 \frac{1}{2} \prime \prime\) to \(4^{\prime \prime}\). This necessitated longer braces from Cross Angles. This change was necessary owing to the using of larger Grain Boxes.
3. Axle-Increased in size from \(15 / 16^{\prime \prime}\) to \(1 \frac{1}{2}\) ". This necessitated heavier end Angles of Frame, larger Boxings, Hubs for Wheels, Gears, Gear Arms and Support Plates to "I" Beam.
4. Wheels-Changed from wood to all steel. Later increased in width from \(4^{\prime \prime}\) to \(5^{\prime \prime}\).
5. Grain Box-Increased in capacity from 5 to \(7 \frac{1}{2}\) bushels. This necessitated stronger Supports, Ends, Braces. Heavy Grey Iron Chairs replaced steel.
6. Grain Shaft-Increased from \(\frac{1}{\frac{1}{2}}\) to \(96^{\prime \prime}\) square. This necessitated new Grain Runs, Springs, Gears and Collar for Index Lever.
7. Pressure Arms on Square Shaft for Spring Bars-Arms and Clip increased in size from \(3 / 16^{\prime \prime}\) to \(\frac{1}{4}\) " and also stronger Malleable Swivel.
8. Grain Runs-Malleable Washers for fluted Cylinders replaced steel. Malleable giving longer wear. Larger bolts used to fasten Grain Runs to box.
9. Hold Up Chain-For Outer Covering Chains added.
10. Greasing-All working parts tapped for alemite fittings and large size alemite lubricator supplied, replacing oil can method of oiling.
11. Pressure Lever-Strengthened Ratchet now supplied. Malleable Hand Grip added.
12. Enclosed Type of Indicator-This replaced open multiple dial type. New type requiring 25 different parts and old type requiring 10 different parts. Enclosed type is dust proof, long wearing and easy to reset. Can be assembled on or removed from machine without removing runs from shaft. With "Open Multiple Dial Type" Worm and Worm Wheel were revolving in dust, therefore, were not long wearing. Necessary to remove Runs from shaft to replace worm.
13. Double Disc Bottoms-Alemite Fitting Supplied replacing oil method of oiling. Drag Bars increased in size from \({ }^{1 \prime \prime}\) to \(5 / 16^{\prime \prime}\) stock revising Die Equipment. Disc Bearings chilled and made larger. Felt Washers added to make more dust proof. New Frames made necessary owing to improvements to Bearings.
14. Hitches-All Steel Hitch now supplied replacing wood. Three-piece steel Adjusting Bracket with Braces for Sheave Pulley replacing malleable.

\section*{Massey-Harris Co. Ltd. \\ 14-foot Dise Harrow}

1920-1922 largest size made. Approximately only \(8 \frac{1}{2}^{\prime}\). 1923- \(\quad 14\)-foot Machine developed.
Changes in Design from 1923-36 to 14' machine.
Note: When new Grey Iron and Malleable parts are created, it means new Pattern and Jig Equipment. When new Steel parts are created, it usually means new Die Equipment. When any new parts are created, it means an increase in the number of different parts available for repair purposes, as new and old parts must be carried in repair stock.

Channel Steel Pole now used in place of wood. This change necessitated some changes to parts connected to Pole.

Equalizer was added to take care of the weight between the Inner and Outer Gangs (New Lever, Ratchet and Springs).

Alemite Zerk Lubrication added. (Nipples and Grease Gun.)
Method of applying Pressure Inner Gangs changed. (Lever, Spring Bar, Ratchet Bearings affected.)

Centre Tooth changed from Spring Tooth to Stiff Tooth. (A complete change of many parts.)

Seat Spring and Helper in lieu of straight Seat Spring.
Centre Point Draw Forecarriage in lieu of Castor Wheel Carriage. (Thirty-five parts in place of 12 , and heavier Draw Straps.)

Scrapers and Cleaner Bars changed to new type one piece wide Spring Stèel Scraper, more positive action.

Sleeves and Bearings for Ball Thrust made larger with Sleeves being chilled.
More positive action, Sockets and Plungers for all Levers.
Weight Boxes added.
New Axle Bolt with new type nut and lock washer made.
Massey-Harris Co. Ltd.
\(8^{\prime}\) Stiff Tooth P.L. Cultivator 6 H .
1920-6 \(\frac{1}{2}^{\prime}\) Hand Lift Machine Used.
1921-New 8' Machine Developed.
Changes in Design from 1921 to 1936 inclusive.
Note: When new Grey Iron or Malleable parts are created, it means new pattern equipment. When new Steel parts are created, it usually means new die equipment. When any new parts are created, it means an increase in number of different parts available for repair purposes, as new and old parts must be carried in repair stock.
1. Wheels-Changed from wood to steel. Width of tire increased from \(3^{\prime \prime}\) to \(4^{\prime \prime}\).
2. Power Lift-Crankshaft increased in size from \(1^{\prime \prime}\) to \(11^{\prime \prime}\). This necessitated new Power Lift Mechanism, Supporting Brackets, Larger Collars, Pins, Set Screws and heavier Supporting Angles.
3. Oiling-Syphon Oilers added replacing oil holes with Caps.
4. Drag Bars-Made of heavier construction. Machines now equipped with top tension device of Drag Bar. This change alone made necessary a total of 25 different new parts. A new Tooth was also developed.
5. Points-New 11 " Points now supplied as Standard Equipment in place of \(2^{\prime \prime}\) which was standard.
6. Helper Spring-Two of these Springs now supplied for easier lifting and also for absorbing shock when Teeth are dropped. Eight additional parts required for machine.
7. Pressure Shaft- Now made in two pieces. Pressure Arms for Spring Bars now heavy malleable parts replacing steel. Lift Arms for Lever now made in malleable and are adjustable. Three parts now required, two malleable and one steel replacing single steel part.
8. Pressure Springs-Now made of heavier wire.

20256-4
9. Axle Brackets-Made heavier and bolting to side of Channel as well as top.
10. Axle-Two short Axles and one Drive Shaft now used replacing long Axle. This necessitated Drive Chains, new Plates supporting Shaft, Sprockets, Collars, Clutch and Shields over Chains.
11. Trip Lever-Improved Lever and Bracket on Front Angle now supplied.
12. Pressure Lever-Steel Socket and Plungers now supplied. Lever also made of wider stock.

13 Footboards-Now supplied as standard equipment.
Massey-Harris Co. Ltd.
5-foot Mowers
1920-1922-No. 21 Mower.
1923- New No. 23 Mower developed.
Changes in Design from 1923 to 1936 inclusive.
Note: When new Grey Iron and Malleable parts are created, it means new Pattern and
Jig Equipment. When new Steel parts are created, it usually means new Die Equipment. When any new parts are created, it means an increase in the number of different parts available for repair purposes, as new and old parts must be carried in repair stock.

Heavier Frame.
Heavier Knife Back (precision lined Bar).
Heavy Guards (polished).
Heavier Seat Spring (also a Helper added).
Finer adjusting Washers on ends of Axles.
Steel Quadrant Lift, also Steel Lift Lever.
Improved Catch for Cover over Bevel Gear.
Cast Iron Cover for Tool Box with Keeper in lieu of sheet iron.
Adjustable Connection from Lift Quadrant to Bell Crank.
Keeper Spring added for bolt at Crank End of Pitman.
Malleable Singletree Hooks in place of steel Hooks more adaptable for replacing.
Arm on Drive Dogs drilled for cotters, to prevent loss.
Hand Grip added to Lift Lever.
Coil Spring and Plate in place of Hinges and Flat Spring to Swathboard.
Deeper Outside Shoe.
Keeper on Pole for Brace for Finger Bar.
Machined Steel End Roller Bearings, in place of Malleable Ends.
Wider Pole.
No. 33 Oil Bath Mower entirely new development. Made in 1934.

\section*{Massey Harris Co. Ltd.}

\section*{Grain Binder 8 Feet with Forecarriage}

Changes in design from 1920 to 1936 inclusive.
Note: When new Grey Iron or Malleable parts are created, it means new pattern equipment. When new Steel parts are created, it usually means new die equipment. When any new parts are created, it means an increase in number of different parts available for repair purposes, as new and old parts must be carried in repair stock.

Steel Drive Wheels.
Dust Proof Bands for Main Wheel Axle.
Built in Outside Reel Support (50 inches longer Reel Shaft, Support Reel Pipe and Brackets to support the Outer End of Reel, Windscreen also affected.

Four Syphon Oil Cups, supplanted by Alemite Zerk Lubrication. (Zerk Lubrication added to balance of machine 1936. Approximately 50 Fittings and Gun).

Lever for adjusting Butter Board from Driver's Seat.
Larger Bearing for Sprocket driving attachment.
Guide Sprocket for Elevator Chain.
Cover of Twine Can redesigned to allow Twine to come from Ball in a direct line, extra Guide added to Can.

Twine Guides chilled for better wear.
Wearing surface on Knotter Frame chilled.
Two piece Backsill for Table (easier to repair) Shield for Grain Wheel.
Removable Hub Grain Wheel. wider Face with Sleeve Bearing.
Steel Rollers, which run on Roller Bearings and Slackeners added for Rollers ( 21 new parts involved).

Steel Decks (new Hinges).
Heavier Front and Rear Sill of Gear Frame with Malleable Brackets machined for accuracy.

Diagonai Truss added to Gear Frame ( 6 parts involved).
Sprocket Clutch Wheeel (Teeth chilled for better wear).
Oil Bath Housing for Bevel Gears, necessitating changes to the Crank and Bevel Wheel Shaft Bearings.

Adjusting Lever for Main Drive Chain, in lieu of one piece Tightener.
Sprocket on Rear End of Crankshaft chilled.
Heavier Hangers for Drive Wheel:
Heavier Socket and Slide for Grain Wheel.
Inside Conveyer Roller lengthened and Sill supported by Steel Bracket (this eliminates broken Spindle).

Bracket for Front Gears driving Elevators made heavier.
Front Angle Support for Binding Attachment made heavier.

Improved Hand Grip for Reel Lever.
Adjustable Brace for Reel Standard.
Adjustable Support for Rear of Upper Elevator.
Rim of Driving Pinion for Knotter chilled.
Heavier and wider Stop Spring.
Steel Plate added to Drive Dog to eliminate wear.
Two piece Bale for Attachment.
Heavier Needle with Roller in Eye.
Compressor Arm changed to forged steel (Studs removable).
Heavier Breast Rail.
Self-aligning Bearing for Packer Crank.
Machined Connections to Packers.
Clamps for Sheaf Springs now hold two coils in place of one, adding greater resistance against breakage.

Header Board redesigned to be adjustable.
Eight more Roller Bearings with machined ends.
Sheaf Carrier-Pigeon Wing type replaced with new Rear Drop Carrier having Adjustable Trip.

Forecarriage-Wood Stub Pole Forecarriage replaced with new Model all steel Forecarriage with flanged Wheels, Ball Thrust, Revolving Axle, Two Point Draw, with two horses each side of Pole.

Hitches-Four Horse Wood Hitch replaced by heavy duty Steel Hitch.
May 14, 1936.
Massey-Harris Co. Ltd.
Cream Separators
Improvements and Changes

1936-No. 7

\section*{Spindle}

Ball bearings 2 SKF.
Complete housing for bearing protection.
Top of spindle hardened.
Lower Shaft-
Ball bearings 2 SKF.
Protecting caps with felt washers.

\section*{Clutch-}

All hardened positive type running in oil.
Crank shaft, runs in bronze bushes, replaceable.
Complete oiling system with sealed syphon overflow.
Two swinging pail shelves.
Oil drip pan.
Tinware 50 per cent heavier.
Swivelling and locking device on tank bracket.
Oil gauge.
All enamelled parts filled and water sanded to high class finish.
All screw nuts, etc., cadmium plated.
Gears enclosed in tight steel case.
Completely new bowl, closer skimming, cleaner flushing, all steel stainless discs and nut.
Larger straight face spiral inside gear.

Spindle- \(\quad 1920\)-No. 6
Upper bearing-babbitt.
Lower bearing-bronze.
Bearings open.
Soft steel.
Cast iron bushes.
Open end bushes.
Open type friction clutch.
Bearings bored in cast iron frame-nonreplaceable.
Upper and lower shafts-oil holes and squirt can.
One fixed shelf.
Surplus oil runs on floor.
Plain spider with set screw.
None.
Head and base only filled and dry sandedother parts just enamelled.
Some screws tinned, others uncoated.
Cast iron ring around rim of wheel.
Die cast centre.
Brass nut.
Tinned steel discs.
Light curved face worm wheel, cheaper, more friction.

\section*{Changes to No. 6 Cream Separator}

1920-Hand crank changed.
1921-Pail shelf changed to include bowl vice new pattern equipment.
1922-Base changed to allow 2 positions for pail shelf. Changes to pattern equipment. Lock nut for lower spindle bearing changed to cap nut and plug with copper washer to prevent oil leakage. New deeper socket wrench supplied to take care of above. Stem for bowl. Six grooves milled under milk outlet slots to prevent bowl overflowing.
1923-Gear cover for main frame. Change made to hold cover with three screws and provide a separate oil drain plug. Perviously had two serews only. Lower screws used for oil drain. Change to frame patterns and equipment and new pattern for gear cover.

Float changed necessitating new dies. Fins added to prevent float wearing through.
1924-Separate shields made for main gear and pinion to allow for power drive attachment.
1925 - Spiral changed from right hand to left hand on main gear and pinion to reverse thrust and stop oil leakage.

New cap made for upper spindle bearing for better protection. New dies required.
1926-Felt washer added under spindle bearing cap.
1927-None.
1928-Faucets changed to prevent milk splashing.
1929- None.
1930-None.
1931-None.
1932-No. 7 machine introduced.

\section*{No. 7 Separator}

1935-Air sealing system added to prevent condensation in damp places. New sealed oil overflow: Sealing washer on lower shaft and on top of spindle housing. Patterns and equipment changed.
1936-Stainless steel discs used instead of tinned steel.

Table No. 13.-CASH PRICE OF A GROUP OF FARM IMPLEMENTS IN SASKATCHEWAN (Zone B)
Costs of Group of Implements consisting of \(14^{\prime \prime}\) Gang Plow, 20 run Double Disk Drill, \(14^{\prime}\) Disc Harrow, \(8 \frac{1}{2}\) ' or \(9^{\prime}\) Stiff Tooth Cultivator, \(5^{\prime}\) Mower, \(8^{\prime}\) Binder, together with index numbers.
\begin{tabular}{|c|c|c|c|c|c|}
\hline & International & Cockshutt & \begin{tabular}{l}
John \\
Deere
\end{tabular} & Average & Index Nos. of cost of Group of Imp.
\[
1924-35=100
\] \\
\hline & \$ cts. & \$ cts. & \$ cts. & \$ ets. & \\
\hline 1920 & & & 1,125 50 & & \\
\hline & & 1,068 50 & \begin{tabular}{l}
1,322 \\
1,059 \\
\hline 0
\end{tabular} & & \\
\hline 1923 & & 1,106 00 & 1,080 00 & & \\
\hline 1924. & 1,228 00 & 1,219 00 & 1,199 50 & 1,215 50 & 110.5 \\
\hline 1925. & 1,135 00 & 1,12100 & 1,105 75 & 1,120 58 & 101.8 \\
\hline 1926. & 1,132 00 & 1,120 00 & 1,09700 & 1,116 33 & 101.4 \\
\hline 1927. & 1,120 50 & 1,118 00 & 1,100 00 & 1,112 83 & \(101 \cdot 1\) \\
\hline & 1,119 50 & 1,134 00 & 1,105 75 & 1,119 75 & 101.8 \\
\hline 1929. & 1,116 50 & 1,152 00 & 1,102 50 & 1,123 67 & \(102 \cdot 1\) \\
\hline 1930. & 1,098 50 & 1,134 00 & 1,083 50 & 1,105 33 & \(100 \cdot 4\) \\
\hline 1931. & 1,098 50 & 1,124 50 & 1,064 50 & 1,095 83 & \(99 \cdot 6\) \\
\hline 1932. & 1,081 00 & 1,105 50 & 1,020 50 & 1,069 00 & 97.1 \\
\hline 1933 & 1,036 50 & 1,061 00 & 1,006 00 & 1,034 50 & \(94 \cdot 0\) \\
\hline 1934. & *1,051 50 & 1,055 00 & 1,006 00 & 1,037 50 & \(94 \cdot 3\) \\
\hline 1935. & 1,056 50 & 1,061 00 & 1,045 50 & 1,054 33 & \(95 \cdot 8\) \\
\hline 1936. & 1,097 50 & 1,107 50 & 1,082 00 & 1,095 67 & \(99 \cdot 6\) \\
\hline
\end{tabular}
* \(\$ 11\) of the difference between 1933 and 1934 cost accounted for by using price of a No. 6 Field Cultivator in 1934 and following years. The No. 6 was listed for first time in 1934 and the No. 3 was listed for the last time in 1935.

SASKATCHEWAN
Table No. 14
Statement Showing Estimated Farm Price of Wheat and Estimated Value of Wheat Sales per Farm, together with Index Numbers.
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & Estimated Farm Price per bush. of Wheat & Index Numbers of Farm Prices of Wheat Average, \(1924-35=100\) & Estimated Average Yield per acre of Wheat (bush.) & \begin{tabular}{l}
Estimated Receipts per acre from \\
Wheat Sales
\end{tabular} & Estimated Value of Wheat Sales per farm & Index Numbers of value of Wheat Sales per farm Average, \(1924-35=100\) \\
\hline & \$ cts. & & & \$ cts. & \$ cts. & \\
\hline 1924. & 121 & 157 & \(10 \cdot 2\) & 1053 & 1,170 & 108 \\
\hline 1925. & 125 & 162 & \(18 \cdot 5\) & 2125 & 2,363 & 218 \\
\hline 1926. & 108 & 140 & \(16 \cdot 2\) & 1588 & 1,847 & 170 \\
\hline 1927. & 097 & 126 & \(19 \cdot 5\) & 1746 & 1,886 & 174 \\
\hline 1928. & 077 & 100 & \(23 \cdot 3\) & 1679 & 1,872 & 172 \\
\hline 1929. & 103 & 134 & 11.1 & 989 & 1,122 & 103 \\
\hline 1930. & 047 & 61 & \(14 \cdot 4\) & 606 & 663 & 61 \\
\hline 1931. & 038 & 49 & 8.8 & 277 & 310 & 29 \\
\hline 1932. & 035 & 45 & \(13 \cdot 6\) & 424 & 490 & 45 \\
\hline 1933. & 047 & 61 & 8.7 & 338 & 371 & 34 \\
\hline 1934. & 061 & 79 & \(8 \cdot 6\) & 433 & 427 & 39 \\
\hline 1935. & 060 & 78 & \(10 \cdot 2\) & 522 & 513 & 47 \\
\hline
\end{tabular}

Estimated receipts per acre from wheat sales arrived at by deducting 1.5 bushels from the yield per acre and multiplying the result by the estimated farm price per bushel.

\section*{SASKATCHEWAN}


\section*{AFTERNOON SESSION}

\section*{The Committee resumed at 4 o'clock p.m.}

The Chatrman: Gentlemen, I think we can start. Professor Hardy, will you be good enough to come back to the front again?

\section*{Professor E. A. Hardy recalled.}

The Chatrman: I imagine that probably some of the members of the committee would like to ask you some questions, or maybe Mr. Graham has some that he would like to ask.

\section*{By Mr. Graham:}
Q. Professor Hardy, when we adjourned I had two or three questions left that I wanted information on. I noticed that you mentioned traction engines in the presentation which you kindly gave to the committee. I wanted the history of when the early tractors came into being and when the decided change came in as regards quality value; briefly, a history of the traction engine as an implement of production. Would you give that, please?-A. Mr. Chairman and gentlemen, the tractor as we know it to-day, took its present form approximately in 1918. Twin Cities tractors and the Fordson tractors led the development, and the McCormick-Deering tractors which followed. The Titan 1020 was a twocylinder tractor which was manufactured by the International Harvester Company at that time. Since that time, since about 1921, tractors have all been reasonably standard and have been refined rather than drastically re-designed. The tractor back in 1912 and 1913, and up to 1917, was a large, heavy, slow moving machine which could not be compared with the present day machine.
Q. It would not be fair to compare that old type of tractor you are speaking about with that of the present day?-A. No.
Q. Have you any price quotations indicating the price of tractors since that period you mention until the present day tractors came into being?-A. I did not include the tractor in the group of implements which we tabulated throughout the period of years, because of the fact that a good many tractors had been changed even since 1924. However, in the table in which the prices of the International Harvester Company are computed-I do not happen to have a copy here before me - there is a list of prices on the 1020 McCormick-Deering, starting at about 920 some odd dollars.
Q. In what year?-A. In 1924; compared with the present price of-this is just from memory; I had that table but I have not it right here- 970 some odd dollars to-day.
Q. That is to say that there has not been a decrease in those years in the price, regardless of quality?-A. Well, from 1924 on there was a decrease one year, I think, as I remember the data; but the general trend has been a consistent price, with a gradual increase in the past two or three years.
Q. Mass production has not registered, then, apparently, on that type of tractor?-A. Well, mass production in that particular tractor has not been effective since 1924. Possibly the mass has not been so great in the last three or four years.
Q. I see?-A. That is, the amount of production.
Q. You have no price figures between 1918 and 1924?-A. Not collected, no.
Q. Some of the members were interested in the devolpment of the Diesel and if it were becoming available for farm use. Could you tell us the trend in Diesel engines?-A. The Diesel tractor is a very interesting devolpment. We in the west have been particularly interested in the Diesel because of the anticipation of increased economy, with an engine of higher efficiency. It is rather difficult
[Professor E. A. Hardy.]
to make a definite statement where the Diesel tractor has only been used in Saskatchewan one year. There were two or three Diesel tractors at most in the whole province last year. There are some seven or eight in use at the present time. However, we have been studying the Diesel in power plant work, and I have studied the Nebraska tests of these tractors and have visited and interviewed the men who are using them, and there is a possible saving with the Diesel tractor. For instance, the McCormick-Deering 2236 tractor to-day, which is common throughout the west, has an efficiency in the draw-bar work of about one horse-power hour on 1.11 pounds of fuel; that is for field work. The Diesel economy has improved that efficiency to about 89 pounds of fuel.

On belt work the efficiency has been increased from \(\cdot 7\) approximately, as I remember the Nebraska tests, to fuel per horse power hour of 49 , a considerable increase in efficiency for belt work. The economy saving there shows that in using distillate and in using Diesel fuels that one-third of the gallonage per the same unit of power can be saved, and that in saving one-third in gallonage there would also be a saving in cost per gallon of Diesel fuel versus distillate; distillate costing approximately on the average 17 to 18 cents a gallon throughout the province and the Diesel fuel an average of possibly 11 cents to 15 cents, or a saving of another third. Now, the catch in the whole thing, and there seems to be a catch in each of these developments, is the at present high cost of the Diesel tractor; and the farmer who is studying the situation has to see hours of work enough per year on his farm to effect a saving in fuel economy over a period of say 5 years to pay the difference in first cost so that during the remaining five years of use some of the increased efficiency can offset possibly the increased repair bill, and the rest of the increased efficiency can be considered profit to the owner of the tractor.
Q. What companies are offering Diesels for sale out there?-A. At present there are two, McCormick-Deering and the Caterpillar Tractor.
Q. Has there been any change in the price lists of these Diesels they are offering for farm purposes recently?-A. Well, Mr. Chairman and gentlemen, the Caterpillar Diesel, the R. D.-6-that is the three cylinder Diesel tractor of the crawler type-sold in Winnipeg last year for \(\$ 4,750\).

\section*{By Mr. Ward:}
Q. Did you say a three cylinder engine?-A. Yes, a three cylinder Diesel engine.
Q. Does it balance all right?-A. Oh, yes.
Q. What balance has it?-A. It has a \(120^{\circ}\) crank shaft.
Q. I did not know it was possible to balance a marine engine. It has to operate on land you see?-A. Oh, yes, there are a great many of these Caterpillar Diesels. We have one of them at the university for our Diesel course and she runs just as smoothly for a tractor as a 6 cylinder will for a car-very nicely. You would never know from listening as it idles or performs that it was a three cylinder engine. The balance is very very satisfactory.

\section*{By Mr. Donnelly:}
Q. Are they very heavy?-A. Yes, that tractor weighs in the neighbourhood of 11,000 pounds. It is a crawler.

\section*{By Mr. McLean:}
Q. Is that 40 horse power at the draw bar?-A. Forty horse power at the draw bar-let me see, it is called a 35, that means it is-I do not remember the Nebraska test but it is very nearly-Caterpillar have this method of rating they call it a 45 or a 75 , that is the draw bar rating, all the other tractors have like \(15 / 27\), that means 27 horse power on the belt; and as I remember this tractor it is very nearly 38 some odd on the draw bar.
Q. On the draw bar, yes?-A. And a little more on the belt. It is a heavy tractor. The present price in Winnipeg on the RD-6 is \(\$ 3,719\), or a reduction of \(\$ 1,000\) and some odd over last year's price.

\section*{By Mr. Graham:}
Q. What is the suggested explanation of that decrease, do you know?-A. I asked a representative of the Caterpillar Company and he told me that it was entirely due to the reduction of the duty, their costs were the same and their prices were based on all importations and that that was the result.

\section*{By the Chairman:}
Q. Are any of these Diesel engines made in smaller size than around 40 horse power?-A. The RD-4 is the smaller Caterpillar Diesel which is being operated, and I have not the Nebraska tests as yet, but its power is very nearly 40. I tested two of them south of Rosetown two weeks ago and they were developing in the neighbourhood of 40 horse power-pulling two one-way dise seeders weighing around 3,500 pounds at about 4 miles an hour, so that is a fairly heavy tractor. They are practically all that same group.
Q. What type of machine is that?-A. That was the caterpillar type. Now, the McCormick-Deering build two types of Diesels; one the T. series which is of the crawler type, and the price so far as I know is the same as last year\(\$ 3,928\) in Regina, and \(\$ 3,958\) in Saskatoon; then the wheel type Diesel manufactured by the International Harvester company was brought out last year and was priced at \(\$ 2,515\) in Saskatoon-I remember, at the fair-and the price quotation to-day at Saskatoon is \(\$ 2,515\), and the Regina price is \(\$ 2,496\). I enquired about the price of the WD-40 in Wolf Point to see if the Diesel tractor was being sold cheaper in the United States than it was in Canada and I found that at Wolf Point the tractor was selling at \(\$ 2,356.57\), and at Regina it was \(\$ 2,496\). Wolf Point really compares with Saskatoon territory which means \(\$ 2,356\) as compared with \(\$ 2,515\); but I have no record of a definite reduction in the Diesel tractor as far as the International Harvester company is concerned.
Q. Now, then, I want to ask you this question, Professor Hardy; there was some little material submitted by Dr. Hopkins of the experimental farm on the standardization of either implements or parts being a practical suggestion. Have you ever considered that question of the standardization of farm implements? -A. Mr. Chairman, I am a member of the American Society of Agricultural Engineers in the States and there has been a standardization committee of the society for I should say at least 20 years, and this committee is made up of independent engineers and engineers representing the implement companies, and it was through the efforts of this committee that the power take off standards were completed. And the reason for the standards of power take off were primarily due to the fact that there is an interchange of machinery. I may have a John Deere tractor driving a McCormick-Deering binder, or I may have a Caterpillar tractor drawing a MeCormick-Deering binder. It is disastrous if I try to connect the power take off and the joints won't fit; and consequently standardization has been adopted and effected where tractors and implements of different companies are being used. Another place where standardization has been developed is in the height of the draw bar. Tractors used to and still do vary some, but there was a drastic variation in the height of the draw bar, and I could buy a one-way dise to be drawn with an AllisChalmers tractor and the draw bar on the one-way disc would be far too high for the tractor; and consequently they have come together in that way. And, Mr . Chairman, that is very necessary, because it is an impossible situation to either have to use one line of machinery right through because of the fact that you own one tractor, or have to rebuild each machine to be operated with a
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definite tractor that you might have. With regard to standardization, however, of parts, tractor companies have of course followed the automotive engineering standards in bolts and nuts, and have followed the society of automotive engineers standard practice to a large degree in straight terms.
Q. What about farm implements, the smaller implements?-A. As far as farm implements are concerned the standardization has not gone very far, although there has been a definite opposition or criticism at least to the general idea of standardization in that it tends to trouble the imagination of the designers to some extent and would hinder development; that is, if you were to say this, that the manufacturing companies in Canada would pool all their patents on a binder and build one binder-that is an extreme of standardization is it not, and that has not been done at all.
Q. Are there certain features of farm implements which could easily be standardized without resulting in the rigidity that you speak of?-A. Yes, I think so. That is, in plough design and in dise design for instance, a great many manufacturers who build disc ploughs build the plough and buy the disc and the disc is pretty well standard to all ploughs. A great many who build disc harrows buy the discs. Now, some of them have discs made specially for their own with more dish. These, however, could be standardized and whether a company would be able to supply dises very much cheaper because of the company accepting a standard disc I am not prepared to say. But generally there is no doubt but what a dise manufacturing company if they could put out several million dises of the same design would probably make the price lower than if they were batch lots specially designed for each individual manufacturer.
Q. And that would be illustrative of possibly other features of different implements?-A. Yes. I feel though, Mr. Chairman, that the farm machinery industry have probably studied standardization and followed it about on a par with the automobile industry. I find this little fault against it in the case of competition, plough shares for instance; a plough is a plough and in the United States I have found that plough shares were sold by Sears Roebuck \& Company, and a number of companies, that would fit anybody's plough at a lower price than regular plough shares; and that there was a little hesitancy on the part of designers and manufacturing companies to design their implements standard in such a way, not that they feel it is bad business but that they loose the business entirely by some other concern coming in and running a competitive line of repairs to meet the whole series of ploughs.

Mr. McLean: Specialty houses.
Witness: Yes, specialty houses; and they I think quite legitimately feel that they should protect their own business in that way. They I might say, Mr . Chairman, have met the competition by building their own shares and selling them at competitive prices; so that as far as I can see that particular item would not have any effect, of course.

\section*{By Mr. Needham:}
Q. A thing that used to make a great amount of dissatisfaction in the small line was sections for a binder?-A. Yes.
Q. I have seen the day when the International had five different sections and sometimes you could get a carload direct from Chicago of binders coming from eastern Canada and they would use different sections, and that was bad?-A. Yes.
Q. Well, a thing like that makes it very inconvenient for the farmer. He takes out sections and they won't fit and he has to hitch up and go back into town again?-A. Yes. I think, however, that some of those have been more "nearly standardized. I know that was true of mowing machine ledger plates and sections for mowers. As a youngster 25 years ago in the shop I can remember difficulties that we had there. I think standardization should not be mini-
mized, it certainly should be held up as a desirable thing; and wherever standardization has been adopted at all, prices normally are lower.

\section*{By Mr. Senn:}
Q. Do you think that standardization would ever be feasible so long as designs change from year to year?-A. Well, not entirely; but yet I do think for instance that there is no doubt but what there are certain standard accessories which never should be altered just to change design.

\section*{By the Chairman:}
Q. The cutter bar of the binder and the mower are practically the same on all of them?-A. Yes. Undoubtedly any major re-design would go into the detail study of every part of the machine. I was thinking of it for instance from this angle this morning. We know that practically all of our tractors, at least a large group of them, have replaceable liners and pistons for use when they become worn. Now, that is the logical thing to think about. Would it be or would it nót be advisable for all companies to standardize and all have cylinders \(6 \frac{1}{2}\) inches in diameter, and have the same liners and pistons, the same wrist pins and the same rings. I doubt if they would ever do that.

\section*{By Mr. Senn:}
Q. I believe in that case you could not become 100 per cent effective with regard to all the old machines, as some types of designs have become obsolete in other ways?-A. Yes, that is true and quite valuable. For instance, I was south of Regina and talked with a man who had a Wallace tractor which he bought in 1921. The same cylinders and liners and pistons fit that tractor to-day, which is an advantage to this man. That means so far as that company is concerned over a period of 12 to 14 years they have maintained the same specifications with regard to cylinder liners and pistons and have kept that standard even after having re-designed the tractor, and have improved it possibly 100 per cent. In other parts the same cylinder liners and pistons are available and fit. That I think has been observed by large individual companies. I feel probably the plea is to maintain a standard in design and possibly not a standard between companies so that an interchange of parts could be had.
Q. It is possible that a change in the bore of a piston would make a better fit?-A. Yes. What they did was to increase the speed instead of increasing the bore. The valves are larger. They have re-designed it almost entirely, but they have left the liners and cylinders and pistons the same.
Q. Then it is not improved 100 per cent?-A. No.
Q. In so far as standardization is concerned?-A. No; I am merely feeling around to see where it has been done.

\section*{By Mr. Graham:}
Q. Obviously you spent considerable time travelling around and considering the farm implement problem that the committee is dealing with. Have you any concrete suggestions to offer the committee as to how farmers can secure implements at a lower price?-A. Well, Mr. Chairman, it is very difficult to make suggestions. I have had a great many suggestions given me by the men and agents to whom I have talked. It seems from studying the set-up of the distribution systems and the sales that one of the most expensive parts is the collection end. It has been suggested by quite a number that if some standard cash payment could be worked out whereby competition could not demand possible bidding between companies with regard to credit terms and whereby, the farmer would have possibly a larger cash equity in his purchase, the losses would be less and consequently the cost of operating that department would be less. Then, too, it seemed to me as I visited and discussed the matter with
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the implement companies that there is a tendency in Saskatchewan to compete a little one with the other in so far as companies are concerned in setting up a large distribution branch system throughout the province. For instance, one company has six large branches, expensive branches; another company has five, and another four. There was the general tendency to sort of want to follow suit, and I wondered-mind you, I have no data-if the distribution of farm implements warranted as expensive an overhead set-up as we had there.
Q. I notice in your material you suggest that the modern implement was getting something like the automobile and does not require as much expert service. What would you say to that?-A. Well that is debatable. I suppose as long as we have people their mechanical ability will vary. Mr. Chairman, there is no doubt less need for an extensive travelling expert service to-day than there was ten years ago. The companies, I know, are recognizing that fact, and in my brief I refer to the general tendency on the part of the companies to develop experts within their own agencies.
Q. That is, the dealers?-A. Yes, the dealer has become an expert; and to-day he takes care of his district. That certainly will reduce the overhead which was normally carried by the farmer through the price of the implement. It must have been so, to have an elaborate travelling expert service throughout the province.

\section*{By the Chairman:}
Q. In regard to the travelling expert service that you referred to this morning, and to which you are now referring, is the farmer not paying for that work when he gets service on his machine?-A. No. I may be operating a combine and complaining to-well, I shall not say to whom-that this combine is not giving satisfaction. The dealer wants me to be a satisfied customer, and he sends an expert out immediately even if I am 300 miles from the centre. The expert will make that combine satisfactory, and then he goes away. So far as I am concerned, I imagine, in a conceited way, I have received something for nothing. Of course, that is not true.
Q. That may apply to the first year or so that the machine is put in?-A. Yes, normally.
Q. My experience has been they will send experts out to repair the implement, but they will bill you for it later?-A. After that, yes: Yet, it is a desirable service. If I have a connecting rod go out on a tractor and I am not mechanically inclined and have not the tools, I can phone into the head office of the International Harvester company and they will send out a man and I pay for his time. Nevertheless they have that man in their employ and he is paid by them; whether there is sufficient cash revenue to cover their expenses is questionable. As a matter of fact I discussed this with a great many of the managers and they showed me that their man costs them \(\$ 1,200\) a year and the revenue from him was \(\$ 900\) a year. They pay the difference out of their overhead in order to keep him.

\section*{By Mr. McLean:}
Q. You say you would pay for his time?-A. Yes, to overhaul my tractor if I had it a period of years, and I would be billed for his time. That is a legitimate charge.
Q. I believe you said this morning there was a tendency to reduce expert service, and it was encouraged very greatly by the increased skill on the part of himself?-A. That is true.
Q. That is increasing at a very fast rate, is it not?-A. Yes. The younger generation are mechanically inclined. I may say a young man on the farm to-day is certainly a good mechanic, and is meeting that demand for more expert operation.

\section*{By the Chairman:}
Q. There has been a good deal of discussion from time to time on the trading in of old implements on new ones. Had you an opportunity to look into that, and can you say anything with regard to it?-A. Yes; I discussed that with a number of agents. Now I might give you one illustration to show that point. An agent down at Minton, Saskatchewan, of the International Harvester company sold a 28 run drill to a farmer for cash. He told me that he had a certain margin, we will say \(\$ 45\), for handling the drill; that the freight on that drill from Weyburn to Minton was approximately \(\$ 18\) or \(\$ 19\); that he had an allowance of \(\$ 6\) for setting it up; that he sold it for cash and took in an old drill at \(\$ 79\). He sold the drill for \(\$ 75\). He got \(\$ 25\) on his sale, and took notes for \(\$ 50\), paid the International Harvester company cash for the new drill, and advanced some \(\$ 38\) to the International and was holding notes in the hope if he got his collections he would get his \(\$ 12.50\) commission due him still on the exchange. Now, a great many of them find themselves in a worse predicament than that. They bid very high on the old implements and then cannot sell them for cash, and they are left holding the notes.

Mr. McLean: And do not get paid for them.
The Chatrman: The trade-in matter is confined to the agent?
Witness: Yes.

\section*{By Mr. Graham:}
Q. Except in tractors, I believe?-A. Well in tractors-the company will take them in and rebuild them. They are appraised by the company man so that they know what they are worth, and the allowances are probably less.

The Chatrman: Are there any other questions the members would like to ask Professor Hardy?

\section*{By Mr. Perley:}
Q. I should like to ask a question about the new carbureter and the high efficiency of it. Have you heard anything about this new Pogue carbureter?A. Yes, I have.
Q. Have you made any investigations?-A. I have been unable to make any investigation. Our own opinion is the diesel engine which was put in an Auburn car and driven across the country last year by Cummins, the Cummins diesel, increased the efficiency of the Auburn car 100 per cent; that is, he drove from New York to Los Angeles, 3,700 odd miles, at the rate of 41 miles to an imperial gallon. I have converted the figures to imperial gallons. An Auburn car in good condition might make 20 miles to the gallon with its gasoline engine; so there is a legitimate increase of from 20 to 40 miles. The reason that the diesel can obtain that excellent efficiency is this: The loss in heat through the exhaust is reduced approximately one-third. We lose 40 per cent of the heat liberated in the fuel through the exhaust. The temperature of the exhaust, as we have tested them in our laboratory is 1050 to 1100 degrees Fahrenheit. The temperature of the exhaust of the McCormac Deering diesel engine that we tested one month and a half ago in our laboratory was 650 degrees Fahrenheit, reducing the temperature of the exhaust considerably and resulting in a net saving. Then, too, combustion of the fuel is more complete because of the fact the fuel is interjected into a highly heated air atmosphere where there is an excess of oxygen available resulting again in a legitimate saving of heat energy and fuel energy which in turn increases the efficiency. Now, those are all definite and there is no imagination, no mystery about them. According to the Society of Automotive Engineers Journal back about February, one of our most authoritative engineers-I have forgotten his name; this is all extemporaneous-stated there was no rabbit in the hat so far as fuel economy
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was concerned; that every item of combustion was known. We know where the losses are; we know that normally the automobile engine can be made probably to develop the mileage. As a matter of fact the automobile engine in the last three or four years has improved the mileage by high compression and the use of anti-knock fuels from 10 to 12 per cent. So, as far as theory is concerned, as far as thermo-dynamics are concerned, as far as engineering is concerned we cannot find a foundation for 100 miles to the gallon or 200 miles to the gallon at all. And while I am very much interested in his process which is to convert the fuel air vapour into a dry gas and then burn it, I do not doubt at all, Mr. Chairman and gentlemen, but what there is a definite economy in the procedure, but until I can see an accurate A.A.A. observed test-that means the test will be observed by some recognized automobile association or some recognized engineering institute, not an analysis necessarily, but observed and checked up-I cannot believe that the records are authoritative.
Q. You spoke this morning about equalizing prices and you mentioned implement companies pooling freight. Do you think that is fair? Is it not discriminating against certain sections?-A. I mentioned that in discussing repairs. There would be no repairs'-well, I suppose, implements still-
Q. Pardon me. In the southern part of the province of Saskatchewan there is a large farming area; in the northern part of the province there are smaller farms; therefore implements would last much longer in the northern part than the southern part. Would it be fair for the southern farmer to pool the freight? -A. If the implement companies are raising the prices and we presume that a man in Assiniboia could buy a binder the same price as a man in Lloydminster and the volume of business at Lloydminster is very small and the volume of business at Assiniboia is greater, I would not say it was. And yet if the implement companies are absorbing that freight to make it possible for the small volume of business at Lloydminster to be carried at a lower price, then I would say yes.

\section*{By Mr. McLean:}
Q. On the other hand, if a man at Lloydminster or some other point in the north should pay for his implement and the other man could not, in certain circumstances they would move their warehouse and distribute from the north and the fellow in the south would have the added freight?-A. Yes.

Mr. Perley: Heads I win, tails you lose.

\section*{By Mr. Senn:}
Q. Have you made any study of the relative advantages of motor-driven implements and horse-driven implements?-A. Yes, we have. We find in Saskatchewan that this general situation has worked out that in the areas where motor driven machines operate most efficiently we find the greatest number of motor driven machines in use, and in the areas where a motor driven machine is not practicable and is not the most efficient type of power we find them used only by those who have a hobby, or feel that they can afford to do it irrespective of the efficiency. For instance, we have the plains areas: Regina, Weyburn, Rosetown, Elrose, Kindersley, Melfort and Tisdale-a flat, ideally suited area for motor driven power.
Q. Large farms?-A. Large farms. And we find in those areas tractors being used, and being used sometimes exclusively. Generally speaking, however, we find quite a well balanced horse tractor power unit on the farm; and in the rolling land where the fields are irregular and where tractors operate, you might say, inefficiently and questionably, the tractor is used there for threshing and for belt purposes and for emergency, summer-fallow or summer tillage work, and the horse units are balanced so that they can work steadily throughout the entire season. Now, with exceptions, that is the way you will find it in Saskatchewan.
Q. That is not an answer to my question after all. Even on large farms, where the tractor units are, perhaps, more efficient, have you made a study of whether horse-drawn vehicles or implements could not be operated more economically?-A. You mean from a farm management standpoint?
Q. Yes; the actual cost of operation?-A. No, we have not. The farm management department would know. Possibly Mr. Rutherford could tell you definitely. He is acquainted with Dr. Allen's farm management studies, but we have not set up anything like that. In a number of instances in the United States they have set up farms and have operated them with different power units and kept accurate cost results, but we have not had the money nor the staff to carry on experiments like that.
Q. You say that might be obtained from another source?-A. The results of Dr. Allen's studies might throw some light on that subject if it was worked out in that way. For instance, in Dr. Allen's farm management studies in just these same areas they have costs and experiences from farmers using tractors and from farmers using horses; but whether they are comparable or whether the conditions are at all comparable, I do not know. This bulletin has been handed to me. It is a survey on probable net revenues-a study of probable net revenues for the principal soil types in Saskatchewan. "For the half-section and section farms the operating statements are based on the assumption that the field draft power is supplied by horses. After preparation of statements for mechanically operated section farms, it was apparent that with prices assumed for wheat and gasoline the tractor operation of section farms is generally less satisfactory than operation with horse power. For the farms of two sections in area, where conditions permit, mechanical operation is usually preferable. Consequently, the statements prepared for these larger farms relate to field draft power being supplied by tractors."

This is bulletin No. 64, Agricultural Extension, studies of probable net farm revenues for the principal soil types in Saskatchewan, and this quotation is found on page 5 .

The Charrman: Are there any other questions you would like to ask Professor Hardy?

\section*{By Mr. McLean:}
Q. I understood you to say that the I.H.C. shipped west from Hamilton through Minneapolis?-A. When I was discussing the North Dakota shipments. Implements made in Hamilton were not shipped directly to those agencies from Hamilton, but were shipped from Hamilton through Minneapolis.
Q. To southern Saskatchewan?-A. No, to Montana and North Dakota.
Q. Implements made in Hamilton were shipped to the United States through Minneapolis?-A. Yes. For instance, I understand that field cultivators and the big drill were manufactured at Hamilton and were being supplied to North Dakota and Montana from Hamilton through Minneapolis. There would be no shipments through Minneapolis to Saskatchewan.
Q. You said that the Minneapolis Marine Company was now on an all-cash basis and that repairs were cash. I think that happened about a year ago, did it not?-A. Yes.
Q. Did you notice much change in their prices at that time?-A. I asked them about prices and they said that they had no definite price list, that they were clearing up excessive stocks at bargain prices. For instance, I had a number of enquiries during the winter, farmers writing in about the Twin City tractors because it was possible to get bargain prices, and their prices were based on all-cash. Now, as far as I know-I had an interview with both the Saskatoon and Regina managers-they have no altered price list, but their whole work has been to clean up the large inventories that they had at set rates for cash.
Q. They made reductions of about one-quarter to one-third?-A. Yes.
[Professor E. A. Hardy.]
Q. Twenty-five per cent to thirty-three per cent on what they had, and that was for stuff they had on hand?-A. Pretty well. He told me that they had not been shipping in volume at all; that they had just been maintaining repair stocks and were cleaning them out at that figure.

\section*{By Mr. Senn:}
Q. Returning to shipments from Hamilton to Minneapolis, could you say whether that is a general practice, or just to meet some unusual situation?-A. Mr . Chairman, I cannot tell, because the men with whom I spoke did not know. They said they understood they had something on their invoices about Hamilton shipments through Minneapolis. We were asking them-for instance, we were trying to figure out why it was that a drill and some of the field cultivators were more expensive in the United States along the border than in Canada, and it was admitted that it was due to the extra freight from Hamilton to Minneapolis and out through the distribution that was responsible for that, because we found that drills and wide field cultivators were more expensive, generally speaking, in the United States than they were in Canada.
Q. As a matter of fact, the trade statistics will show that that has always been of short duration?-A. I do not know. We had access to no figures-that is back of 1936 .

\section*{By Mr. Needham:}
Q. Is it not since their large cultivator and drill were manufactured, and they were not manufacturing over there?-A. Yes, yet the same reason was true for the John Deere implements, and it was rather funny. We did not work out a satisfactory solution as far as our own minds were concerned.

\section*{By Mr. McLean:}
Q. The John Deere Company were making the large implements in the United States?-A. Yes, and sending them to Montana and Saskatchewan and selling them cheaper in Saskatchewan than in Montana and Dakota.

The Charman: I may say that the committee is very grateful to you, doctor, for the material you have gathered. You have given a lot of attention to it, and I am sure I voice the feeling of the committee when I say that we appreciate what you and your department have done for us.

\section*{Witness retired.}

The Chatrman: Now, gentlemen, the honourable Mr. Taggart, Minister of Agriculture for Saskatchewan, is here. He is down here on business and he has asked the privilege of appearing before this committee. If it is agreeable we will call Mr. Taggart now.

James G. TagGart, called.

\section*{By the Chairman:}
Q. I think I should advise the committee, Mr. Taggart, that you were formerly connected with the Swift Current experimental farm?-A. Yes.
Q. How long were you there?-A. Fourteen years.
Q. And you did a good deal of experimental work in connection with agricultural implements, did you?-A. Yes.
Q. Both from the standpoint of the farmer and the implements companies? -A. Yes.

The Chairman: So, gentlemen, Mr. Taggart is particularly well equipped to assist us in gathering the information which we want. Proceed, Mr. Taggart.

Witness: Mr. Chairman and gentlemen, I feel that Professor Hardy has really adequately dealt with the Saskatchewan situation, and, perhaps, I should not impose upon your time to make any further observations. However, through the kindness of your chairman I am permitted to say a few words. I accompanied Professor Hardy on part of his trip in making the investigations he has described, and I am sure that he has, in my opinion, pretty fully and very fairly set out the situation as he found it. I wish to assure you on behalf of the Saskatchewan government that we are very glad indeed to have the opportunity of assisting this committee by making Dr. Hardy's services available and assisting him in making the survey which he did in the field and among the implement dealers.

However, there is one aspect of the situation in Saskatchewan which Dr. Hardy deliberately did not deal with fully, and that might be described as the economic position of the farmer. If I might do so, I should like to take a few minutes to describe that phase and to indicate to you what I believe to be the urgent need of the farmer for lower cost implements as well, perhaps, incidentally, as lower costs for many other things that the farmer has to buy. First, I may say that there are 136,400 farmers in Saskatchewan according to the 1931 census. In addition to the 136,400 farmers odd there are regularly employed by the farmers more than 12,000 people. There are the family employees-the, workers on those farms-who, perhaps, cannot be called employees because they are, probably, not paid, and they number about 40,000 . There are 100,000 or more seasonal employees who work on an average of, perhaps, eight weeks. This just gives you some idea of the number of people who are directly affected by the economic position of agriculture in the province of Saskatchewan. In addition, of course, as we all recognize, there are many other people who are indirectly affected by the economic position of agriculture, almost to the same extent as the farmer is.

The second aspect of the situation in Saskatchewan which I want to deal with is this, that no matter what type of farming we practise, except, perhaps, ranching, we must cultivate the soil, grow and harvest the crops. That is to say, if we are raising hogs or producing dairy products, the animals must be fed at certain seasons of the year anyway, and to feed these animals we must cultivate the soil and produce crops. So that we cannot escape the cost of implements by changing our type of farming. As a matter of fact, if we diversified our agriculture to any considerable extent we might actually increase the cost of implements by reason of the fact that a diversity in agriculture may and probably will call for a greater diversity in the implements. The area of land under cultivation in Saskatchewan is approximately \(30,000,000\) acres, and the cultivation of that soil and the harvesting of the crops grown on it-when they do grow, and they do sometimes-involves the use of a great deal of equipment. As a matter of fact, we all recognize clearly that agriculture in Saskatchewan is utterly impossible without inadequate equipment. There is no possibility of people living by agriculture in that province unless they have command of a reasonable quantity of equipment in reasonably good condition and at a reasonable cost.

Now, there may be disputes and differences of opinion as to how important equipment actually is in the farmer's entire set-up, and you may get, or, probably have had, different estimates of the importance of the item described as implements. We have attempted to get at this question from several different points of view; but I can cite two figures which may be of value to the committee. I will not guarantee that they are absolutely accurate, but they represent the best opinion we can get at the moment. One is that over a long period of years the farmer should spend-and when he has the money he does spend-between 13 per cent and 14 per cent of the inventory value of his equipment each year for repairs and replacements. So that if you get an accurate
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survey as to the inventory value of the equipment you can, by taking 13 per cent or 14 per cent of that figure, determine what the annual upkeep or maintenance charge ought to be.

The other point of view from which we have attacked this question is to try to determine what percentage of the farmers' gross or total income is used to purchase implements and keep implements in repair. Dr. Allen, whose surveys Professor Hardy referred to a few moments ago, gives the opinion that he, in turn, obtained from the farmers, that roughly 10 per cent or slightly more of the farmer's total cash income is used each year for replacement and repair of implements, or, perhaps, I should say, equipment rather than implements. I have seen statements in the public press and elsewhere attributed to different people to the effect that the farmers of western Canada spend only 3 per cent of their income for implements and replacements. Any surveys or any accurate figures we can get are in entire disagreement with that figure. I do not want to burden you with details as to how these figures are reached, but if any member of the committee cares to do so he can check the reports which Professor Hardy has filed, and he can find the basic figures upon which these statements are made.

Another aspect of this question is to attempt to determine what has happened to the farmer or to his equipment during a period of depression and crop failure. It would seem, as far as we can get at the facts, that in periods of good crops and good prices the farmers tend to spend more than the normal amount for equipment; and, of course, during the years of low prices and low income they tend to spend less. It would seem that since 1930 the farmers of Saskatchewan have spent annually less than 6 per cent of the inventory value of their equipment each year, whereas to maintain that equipment in a proper working condition it would appear from some surveys that they should have spent 13 per cent of the inventory value. You can see, then, that there must have been during the period since 1930 a progressive deterioration in the quality, value and condition of equipment, so that at the present time the equipment must be-and observations boar this out-at a lower point in as far as condition is concerned.

\section*{By Mr. Perley:}
Q. May I ask with regard to inventory value, how you arrive at that?-A. That is the statement of the farmer as to the value of his equipment at the present moment.
Q. That is the price he puts on it?-A. Yes. The surveys to which I referred, made by Dr. Allen, included reports from something like 2,500 farmers.
Q. How do you arrive at that inventory value?-A. That is a statement of the farmer himself as to the value of his equipment at the present moment.
Q. That is the price that he puts it at?-A. Yes. That is to say, the surveys to which I referred, made by Dr. Allen, included reports from something like 2,500 farmers; and those 1 eports were obtained by personal visits to the farmers and not by questionnaires.
Q. That would vary considerably from year to year?-A. Yes, that varies from one year to the other, and with conditions in different districts. But this is an attempt to apply one figure to the whole province, which is naturally not right for any one spot.

\section*{By Mr. Senn:}
Q. You could not say what percentage of that 13 or 14 per cent would be the purchase price of repairs and new machinery?-A. As I recall the figureperhaps I can get that figure for you accurately-the survey figures indicate that the annual expenditure on this 13 per cent basis for the purchase of equipment was \(\$ 219\), and the annual expenditure for repairs was \(\$ 60\), making a total
of \(\$ 279\), which is roughly 13 per cent of the stated inventory value of the total equipment; and that in turn is about \(10 \cdot 3\) per cent of the stated value of the farmer's income during the same period.

\section*{By Hon. Mr. Gardiner:}
Q. A little more than three for implements for every one of repairs?-A. Yes, that would be about right. What I have said indicates that the farmer must be at this moment at nearly the end of his rope in so far as his present equipment is concerned; and it would seem that, accordingly, within the next year or two regardless of cost or anything else, if the farmer is to continue farming he will have to make extensive replacements of that equipment. I have talked to many farmers about this, and have observed a good many of them in action, and I am inclined to the view that while theoretically the farmer may have to make those replacements, he actually will not do so to any great extent until either the price comes down to somewhere near his level of values, or his income on the other hand goes up to somewhere to meet the present prices of implements. Even though in many cases he might be able to do so by stinting himself in other directions, he will hold out against making these purchases as long as he possibly can. I think, if you ask Professor Hardy the question, he would verify the statement I am about to make, that we saw on our trip many cases of implements tied together with baling wire, mended by home-made devices in such a way as to enable the man to carry on and get his crop in, and he got it in reasonably satisfactorily. That is the only reaction the farmer can put up to the high prices which prevail for the implements which he buysrefuse to buy and hold out as long as he can possibly hold out by resorting to all of these makeshift devices. Any person who has lived in southern Saskatchewan for the last six years knows that the farmer is full of ability and full of ideas when it comes to getting by without spending any large sums of money for equipment.

\section*{Mr. Mclean: Hear, hear.}

Mr. Johnston: Or anything else.
Wrtness: I am saying this not because I think it is a desirable thing that the farmer should have to do that, but because it is the natural and only reaction that he can give to the situation; and I am saying it to the implement companies, if they happen to hear what I say, that they need not expect an extensive lucrative business until either their prices come within the farmer's reach by reduced cost or his income goes up within reach of the present prices of implements.

\section*{By Mr. McLean:}
Q. It is a good thing that he is able to do that, if he has to?-A. It is his only defence; and it is a very lucky thing that he is able to do it.

I wanted to emphasize that point because I think it is really important in trying to evaluate and judge the situation and determine what is going to happen. It is true, as Professor Hardy says, if you go from Rosetown to Swift Current at the present time you will find in the fields a fair number of new implements. You will find a fair number of new tractors. But in that district, particularly the heavy soil part of it, there was a very good crop last year produced on large farms by extensive methods, and the total value of the crop per farm was reasonably high. These men were in a position to make outlays which could not be made by a great many other farmers in other parts of the province where the crop per farm is small; even though a high yield is obtained the total value of the crop may not be great. Even in this district where purchases have been good in the last few months, my guess would be that perhaps not ten per cent of the farmers have bought any new equipment in the last two
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or three years. So the great majority of them are still holding out against the purchase of any great quantity of equipment of any kind. I believe at the present time that agriculture has definitely entered the up-grade in western Canada, and is therefore able to bear the increased costs which are indicated in the price lists of some of the implement companies. As a matter of fact, in Saskatchewan in 1935 the total income of the farmers was greater than it was the year before. I believe that in Manitoba and Alberta the reverse was true. In any event, such upturn as there may have been in the farm income is not very great, and certainly the income of all the farmers in the province of Saskatchewan is still very much below what it was between the years 1922 and 1930. I should like to give you a few figures to indicate that situation, because it is really startling to people who have not studied the matter carefully. I am not suggesting that the members of this committee have not done that, but it is very possible that what we say here may be read by people elsewhere.

We have two methods, usually, among the statisticians of presenting agricultural income. One is to give us the total estimated value of all the production. For example, in a certain year they will tell us that the province produced 114 million bushels of wheat and that is worth so much money; it produced 80 million bushels of oats and that is worth so much money and so on. The other method is to estimate the details of what products were actually sold from the farms and at what price they actually were sold. When we use those two different methods we arrive at two quite different figures. For example, when we take the total value of the production of oats and barley, and then estimate again the total value of the production of beef and pork and add the two together, we are really adding together the same thing, because oats and barley are used to feed the pigs and cattle which produce the pork and the beef; and really there is only one revenue there to the farmer, and not two. I have taken the method which attempts to show the actual value of the sales of the various products from the farms of Saskatchewan. In the year 1935 our nearest estimate is that the value of the wheat sales from all the farms in the province was \(\$ 68,400,000\); that the value of the other grain sold was \(\$ 5,515,000\); that the value of the dairy products sold was \(\$ 6,250,000\); that the value of wool sold was \(\$ 134,000\); that the value of poultry and poultry products sold was \(\$ 3,000,000\); that the value of cattle sold was \(\$ 7,387,000\); that the value of pigs sold was \(\$ 3,744,000\).

\section*{By Mr. McLean:}
Q. What was that for pigs?-A. \(\$ 3,744,000\).
Q. Thank you.-A. And that the value of sheep-it might better be described as mutton or lambs-was \(\$ 328,000\); and the value of horses sold was \(\$ 354,000\). That value, I might say, does not include the value of the sales from one farm to the other in the same district. It includes the value of the horses actually sold off the farms, and not internal sales from one farm to another. That gives us a total of \(\$ 95,112,000\), and it gives us an average of \(\$ 708\) per farm.

I wish to make an explanation there to the effect that we have regarded as farms only farms which are 51 acres or more in extent. In the 1931 census which I quoted to you a few moments ago it gave us 136,400 farms, but the farmers who occupied 51 acres or more numbered actually 134,400 ; that is to say there weie 2,000 enterprises listed as farms where the operations were on less than 50 acres, and we have thrown them out of the calculation because we think that some of them are not properly regarded as farms. The total gross sales of all the farms of Saskatchewan within this limit for the year 1935 were estimated at \(\$ 95,112,000\), and that gives you a value of \(\$ 708\) per farm.

Now, in order not to weary you with too many figures, I might give you the totals including these same products for a number of years back from 1935. In the year 1934 the total value of sales was \(\$ 81,406,000\); in 1933 the total value in sales was \(\$ 70,828,000\); and in 1932 it was \(\$ 72,179,000\); and in 1931 it was
\(\$ 66,206,000\); in 1930 the total volume of sales was \(\$ 101,800,000\); in 1929-a memorable year, the year we dropped off the end of the plank-it was \(\$ 179,675\),000 ; in 1928 it was \(\$ 273,566,000\); in 1927 it was \(\$ 272,405,000\); in 1926 it was \(\$ 264,996,000\); and in 1925 the total value of sales was \(\$ 333,894,000\). That is as far as I have examined the record. 1925 gave the farmers of Saskatchewan the largest total income they ever had in any one year, but you will notice that between this year, 1925 , and 1929 , the income ranged from \(\$ 179,000,000\) to \(\$ 333,000,000\). The income per farm on the lowest year, 1931, was \(\$ 493\); and the income per farm in the highest year we have here, 1925, was \(\$ 2,856\). Now, I do not want to weary you with further figures, but with these figures you may make any comparisons you like and work out the average for the last four years or the last five years and compare that with the average for the earlier years. You can do it any way you like, but you will find that the income of the farmers of Saskatchewan in the last six years has been but 25 or 30 per cent of what it was in the preceding six years.

\section*{By Mr. Spence:}
Q. Do you know whether there were horses on all these farms? Is that condition not true with respect to other lines of business?-A. I do not know whether that is true there-I have no other figures. I do not know of any other line of business in which income has dropped from 100 to 25 . Quite a few of the farmers were wiped out. However, I am not talking about other figures at the moment.
Q. Have you seen any similar figures for say the Province of Ontario?A. No, I haven't, Mr. Spence. There has been I know a heavy decline in the income of Ontario farmers; but what it is compared to this, I do not know.

Mr. Perley: I never took out my binder in 1931 at all.
Witness: That was one year in which you did not wear your binder out.
Mr. McLean: You saved the 10 per cent that year.
Mr. Perley: It would last a long while if you didn't have to use it any more than you did in 1931.

Witness: There are many other figures bearing on this same problem which I could give to the Committee and which I am prepared to leave with the Committee, although I do not think you would be justified in having them printed; but there are some figures here in which members of the Committee might be interested in examining. I will leave them with the Committee, if you wish to have them.

Now, let me just for a moment deal with a different aspect of the question. It is one which was raised during Professor Hardy's presentation, and it is one of considerable interest and importance in a study of this kind. I think the question was asked of Professor Hardy as to the relative merits of tractors and horses for farm operation in Saskatchewan; and I think Professor Hardy's answer was quite within the facts. But I should like to indicate just a little more definitely the very great importance of distinguishing between areas when liscussing this problem. For purposes of comparison I have taken two typical rural municipalities in Saskatchewan. One of them is near Yorkton, and the other one is near Rosetown; both in the central part of the province, and each about 200 miles north of the international boundary, and the one at Rosetown about 200 miles further west than the one at Yorkton. According to the 1931 census we find that in the Yorkton municipality there were 481 farmers, and in the Rosetown municipality there were 391. The total area occupied by farmers in the Yorkton municipality was 183,000 acres, and in the Rosetown municipality there were 196,000 acres occupied as farms. The acreage of wheat in the Yorkton municipality was 33,000 , and the acreage of wheat in the Rosetown municipality was 96,700 . The acreage of oats in the Yorkton municipality was

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16,800 , and in the Rosetown municipality it was 10,200 . The number of horses in the Yorkton municipality was 4,150 , and in the Rosetown municipality it was 2,158 . The acreage of cultivated land for each horse in the Yorkton municipality was just under 22 and the acreage of cultivated land for each horse in the Rosetown municipality was just over 81.

\section*{By Mr. Senn:}
Q. Would that be work horses, or all horses?-A. All horses, as a matter of fact. It would be about the same in the two municipalities. I am merely comparing the one with the other. I was giving figures. Now, we believe, in fact we know from many observations, that with a reasonably efficient setup of horse equipment and land one work horse can operate about 35 acres in Saskatchewan.

But here we have a municipality in which if there is no other form of power, work horses of all kinds would be operating nearly 82 acres. Obviously a large part of the power used on the farm in the Rosetown municipality comes from tractors; and obviously the reason for that is that the people in the municipality are almost exclusively devoted to the growing of wheat. And the further reason why they are devoted to the growing of wheat is that wheat is the most productive crop they can grow, the most valuable crop per acre to grow there. It is subjected to fewer failures. They may be numerous now, but they are fewer than any other crop that can be grown in the municipality. It is for that reason they devote themselves to the growing of wheat. Moreover the topography of their country, the nature of their soil, are both such as to facilitate the use of tractors. Another interesting aspect of this comparison is that in the Yorkton municipality there are 7,400 cattle of all kinds. In the Rosetown municipality there are 1,660 cattle of all kinds. 1,660 cattle distributed among more or less evenly 390 farmers, just enough cattle approximately to supply the domestic needs of the people in the district; whereas in the Yorkton municipality where there is a considenable acreage of waste land the cattle population constitutes an important source of income commercially to these people, and these cattle incidentally are pastured mostly on waste land which could not be economically used otherwise.

Now, I give you those comparisons, or a comparison of the two municipalities for the purpose of pointing out that there is no single simple answer as to whether tractors or horses are more efficient.

\section*{By Mr. McLean:}
Q. You have no figures for hogs in those two municipalities?-A. Yes, I have.
Q. They would be interesting, I think.-A. It all depends upon the conditions under which these people are working. The hog population in Yorkton, according to the 1931 census, was 3,765 ; in the Rosetown municipality, 2,673 . Now, those figures are nearer together than one would expect and the reason why is that in both cases apparently a considerable percentage of the hog population is used for the domestic needs of the people themselves. Even in Yorkton municipality hogs do not constitute an important source of income to the farmers apart from their own food supply. The same situation is true in regard to poultry. There are 48,320 poultry of all kinds in the Yorkton municipality and 35,300 in the Rosetown municipality; in both cases just a little more than sufficient for the domestic needs of the people who live in the municipalities.

\section*{By Mr. Donnelly:}
Q. Have you the number of tractors in each of those municipalities?-A. I have not. I am sorry. I was not able to obtain that because it was not available by municipalities in the statistical report I have. But I know that there must
be, considering the acreage of land cultivated in the Rosetown municipality, a large number of tractors. Moreover I know the country fairly well; I have been all over it, but I do not know the number of tractors.

Now let me say a word about the farmers' attitude, and then I shall be through. The farmers' attitude towards the implement companies and the price that they pay for machines and parts is rather difficult to summarize in a sense for the reason the attitude varies a great deal. There is a certain percentage of the farmers who have bought large amounts of equipment and paid for them and operated them satisfactorily. Generally speaking their attitude toward the implement companies and towards the price structure is not one of hostility. They, of course, would like very much to have lower prices. It would be advantageous to them in every way; but they are not raising serious objection to the present price structure and the present set-up. The number of such men in my opinion and in my experience is small. There is, of course, at the other end of the scale a group of men who may also have undertaken to buy large quantities of machinery. They have not used them efficiently or satisfactorily and perhaps have not paid for them. It does not matter very much to this kind of man the kind of implement we give him. He will probably be considerably dissatisfied. That kind of man again is small in number. The great majority of the farmers in between these two extremes is definitely of the opinion-and it is an opinion, of course, based on their interest and their point of view-that implements are too costly, and particularly are they too costly in view of the income of those same farmers. They could not, from their point of view, see any sound reason why the implements, which are vital to the success of their business, should continue to be so high in prices and have increased in prices during the time that the farmer's own income has dropped to very low figures. They believe that some other organization ought to be prepared to shoulder at least part of the load that the farmer has to carry. They make some suggestions - one of them was advanced by Professor Hardy-we heard this from a number of men-and that is that the man who is prepared to pay cash or a substantial cash payment ought perhaps to receive a materially greater discount for that cash than he does at the present time. Now, on the other hand there may be objections to that because it might constitute a hardship on some men who are good men but who are not able to pay the cash, or not very much, but who will still be able, over a period of years, to pay for the equipment which they need. There are two sides to that. Generally speaking the man who has the ability to pay believes that he is carrying an undue part of the load involved in bad debts, collection costs and the like.

\section*{By Mr. Golding:}
Q. What has been the success of the companies, taking it over a period of years, from 1930, in regard to their collections? Have they been able to collect their accounts?-A. Well, the collections have been bad since 1930.
Q. You have no idea what they did write off?-A. I cannot give that to you, although I feel sure the implement companies themselves can give it to you, and will give it to you accurately.

\section*{By Mr. Spence:}
Q. Would it be 20 per cent or 25 per cent?-A. I would not like to make any estimate at all, because I have not any facts on which to base my estimate; I do not know.

\section*{By Mr. McLean.}
Q. Is this not true: while there are many accounts at the present not collectable and do not appear to be collectable for some time in the future, [Hon. J. G. Taggart, B.S.A.]
yet they will not be written off and forgotten, because experience has shown in the past they have been able to collect accounts long years after they have been forgotten?-A. Yes; I can give you an example of that. I do not remember the figures to a high degree of accuracy, but I do remember the manager of one of the major implement company's branch in the western part of the province telling me in one district in western Saskatchewan in the year 1922 his company had outstanding notes to the extent of \(\$ 250,000\); and that beginning with 1922 and ending with 1929 they sold anuually in the district some \(\$ 40,000\) worth of implements. They collected cash for their current sales, and collected all or practically all of the accounts which were outstanding in 1922.
Q. Yes?-A. So that where crops and prices have at all justified it, the farmers generally have paid for their implements.
Q. Quite so.-A. We hope that history will repeat itself with respect to crops and prices, and if it does I feel sure many worries will be removed from many other business organizations. I have given you one suggestion which has come from some farmers as to the means which might be used to reduce the cost to the man who is able to pay promptly for what he gets. Farmers are again of two opinions as to the desirability of reducing the number of branches of the implement companies, reducing the amount of service that is available. They see on the one hand in the reduced service or reduced availability of parts of machines the possibility of injury to their own business by reason of the fact they may not be able to get goods so promptly, they may not be able to inspect so rigidly the machines they propose to buy. On the other hand, the farmers do realize that the implement companies-perhaps, justifiably, I do not know-do seem to have a very elaborate and very costly distribution set up, and there may be a possibility of reduced prices in some reductions in that distribution set-up. That is worthy of study, at least. It is not offered as a direct criticism of the implement companies methods of doing business, but is offered as a suggestion as a possible means of reducing the cost to the farmers.

Another point which Dr. Hardy mentioned, I think, incidentally, in his talk this morning was that in some cases anyway L.C.L. freight rates from distribution points to the farmers' points are fairly high. It might be possible, however, not to reduce L.C.L. rates, but it might be possible to increase the number of points to which carloads or part carloads could be distributed. That is to say, if one agency is not able to take a full carload, perhaps another agency could take part of it and, perhaps, those men could be given the carload rate to the first unloading point and then the L.C.L. rate on the balance to the next station. I understand it is not possible now, but it might assist if that could be worked out. We would, naturally, like to see any advantage of that kind go to the farmer who buys the implements rather than to the company, or somebody else who handles the implements. The farmers-and as far as that goes I am in the same position-are not in a position to offer any statistics as to the implement companies' business back of the small warehouse. We do not know as farmers anything about the manufacturing of machinery. We may have opinions, but, of course, we have no knowledge; and for that reason we cannot offer any suggestions at all. There are some things, however, which occur in the country which cause us to ask questions, and one of them is this: We are looking to the future now with the expectation of getting crops and prices which will justify some purchases. There has been a tendency at times, especially at boom times when implements were selling freely, for implement companies to put on the market with some degree of pressure, perhaps, behind them, implements which were not wholly worked out to a point where they were satisfactory. Farmers, in many cases, have had to bear perhaps too great a percentage of the cost of developing new machines-that is some farmers-
the venturesome ones certainly have had to bear that cost. One of the suggestions, therefore, that farmers are inclined to make is that new implements should be introduced slowly and cautiously, and only after the most thorough testing of those machines to be sure that they are right mechanically and that they will be useful for the purpose they are intended to serve, and that they are actually needed. We are not suggesting that there should be no advancement and no progress in the implement industry, but we are suggesting real caution in the hasty manufacture of new machines of new designs and the hasty sale of those to farmers before those machines have been thoroughly tried and tested for the conditions under which they are to work. Such actions have resulted in losses, I think, not only to the farmers but to the implement companies as well; so that in the interest of both, caution in that direction seems to be highly desirable. I do not think we should attempt to give specific examples of that situation, although I think I could do so. All we can see from the farmer's point of view is, first, that the farmer's purchasing power is down to such a point that he is not in a position to buy implements in any volume; he is not in a position even to keep in repair the implements he has at the present time at present prices: He thinks that from the part of the organization which can be seen that it might be possible to reduce prices by a more cautious sales policy with respect to extended credit and cost of collection; and it may be possible to reduce cost to the implement companies in general by, in some cases, a more cautious development policy with respect to new and untried machines. It might be possible to reduce costs to the companies by reduction of the extensive distribution system; and some have suggested, too, I should add, that it may be possible to reduce costs by taking it out of the dealer. The dealer, so far as my observation goes-and I think Dr. Hardy will bear me out in thisapparently, is not fattened particularly in his business, and it seems difficult to find a point on his bones that might be picked any more bare than they are at the present time-unless by some chance he was reduced greatly in numbers. That might be a possible economy if it could be done. The problem rather seems to be for the implement companies-especially those which are in a reasonable position financially-to recognize the fact that their success ultimately depends on the success of the customers who buy their goods, and if they expect to get an increased volume of production to carry their overhead and management costs, the only way we can see in the immediate future of getting it out of westem Canada anyway is to reduce prices to a point at which the farmer will be able to pay.

Now, Mr. Chairman, perhaps I have rambled too much. I certainly wish to thank the committee for having listened so long. If there are any questions I shall do my best to answer them.

\section*{The Charman: Are there any questions?}

\section*{By Mr. Senn:}
Q. I would like to ask one question. The witness spoke about reducing the cost of implements to a price which the farmer is able to pay. Would the witness tell us what that point is?-A. No. That is a general phrase. I had no specified meaning in mind. I do not think anybody has. I think I can say this that I have observed in the last few months cases of new implements or unused implements which have stayed in the warehouse for three or four years having been reduced in price by thirty, forty or fifty per cent, and selling readily, whereas those same implements, apparently, could not be sold at the list prices. I have seen quite a few cases of that, indicating that some substantial price reduction would stimulate sales accordingly. Whether the implement companies can do that is a question for them to answer.
[Hon. J. G. Taggart, B.S.A.]

By Mr. Spence:
Q. We all realize the difficult position the farmer is in in paying for farm implements in comparison with the low price he receives for his commodity. One gentleman said something about the farmer paying in proportion to the price of his commodity. We would all like to see that. However, providing an implement manufacturer cannot make a machine at, say, less than \(\$ 200\) will my friend tell me how he can sell it for \(\$ 175\) or \(\$ 150\) to suit the farmer market. He made some suggestion of a grant of some kind, a contribution from somewhere to help the farmer out. I would be glad to know how to do that. There is no objection to that if there is any way in which it can be done; but it is impossible to ask the farm implement maker to sell stuff at less than the cost of the material, if he is honest to his cost. I say that cost should be honest.-A. I did not intend to convey the impression that somebody should bonus the farmer in order to buy implements.
Q. You said some system should be evolved to get the difference between what he could afford to pay and what he had to pay?-A. I had in mind the statement that one reason for the high cost of implements is the heavy overhead in relation to the volume, and I was simply suggesting that if the price were reduced the volume could be greatly increased and, perhaps, the implement companies might come as near to breaking even as they do now, at any rate, and they would be doing business instead of doing no business.

The Chairman: Mr. Graham, have you any questions?
Mr. Graham: Just one question.

\section*{By Mr. Graham:}
Q. Mr. Taggart, could you throw any light on perhaps the outstanding peculiarity of Professor Hardy's statement that the comparative prices in the United States and Canada for large drills and cultivators are peculiar in as much as the prices here in Canada were less than in the United States?-A. I ean make some suggestions there. I would not like to absolutely guarantee their accuracy, but I will give you some sources of information.

In 1931 I made a fairly extensive trip through the wheat-growing area of the United States; and I found that a considerable number of the large seed drills, cultivators and wide dises in use all the way from Montana to Kansas were manufactured at Hamilton, Ontario. I asked a good many questions about this, and the information that I received from various sources was that these implements - the wide drill, the wide field cultivator and the wide single disc-had been developed for use originally in western Canada; and in so far as the International Harvester Company were concerned, they were being manufactured exclusively at Hamilton, Ontario. After these implements had been introduced and used in western Canada for a year or two, their use spread to the adjoining states, but the company continued to manufacture them at Hamilton, Ontario; because, as I understood at the time there was no duty on farm implements going into the United States. The other companies, of course, to meet the competition offered by the International, began to manufacture drills, cultivators and dises of the same size. The International company had been charging the Hamilton price plus freight to point of delivery in the United States. Then, and it may still be true, the freight rates were higher in the United States than they were in Canada. Therefore they obtained a higher price for the machine in the United States. The other companies, following the lead of the International Harvester Company, even if they made these machines in the United States, in some cases close to the point at which they were sold, still continued to charge their farmers the higher price because the Harvester Company was also charging the higher price, and they had to meet the Harvester company's price in Canada for the same equipment. I am not sure on this point, but I believe that since that time, in perhaps the last year or the last year and a half, the Inter-
national Harvester Company has started to manufacture these wide implements in some of their American factories. I cannot give any definite information on that, but I believe that to be the case. It may be that within a short time you will find this difference will disappear. But so far as I can find out from questioning people who are in the implement business and should know something about it, there is some set of reasons of that kind explaining why these particular implements cost more in North Dakota, Montana, Kansas and the other western sattes than they do in Saskatchewan.

The Chairman: Are there any other questions?
Mr. Graham: That is all.
The Chairman: If there are no further questions, I must say that we are very much indebted to Mr. Taggart and Professor Hardy.

Mr. Bertrand: I think it is only appropriate that we should move a vote of thanks to Mr. Taggart and to Professor Hardy for the very valuable information they have given and the contribution that they have made to this investigation. I hope that the machinery companies will take the trouble to read the report which they have made to this committee. If they do, I think they will surely get some benefit from it. Existing conditions in Saskatchewan are very similar to those in Ontario; and while congratulating these two gentlemen on what they have brought to light in this committee, I think that what they have said about Saskatchewan applies to all the other provinces in Canada.

Mr. McLean: Hear, hear.
Mr. Bertrand: We are very much indebted to them.
The Charrman: Thank you, Mr. Bertrand. I think we can tender that expression of thanks to the two gentlemen for the contribution they have made. (Applause.)

Now, gentlemen, that is all there is on the program this afternoon. The committee is called for to-morrow morning at eleven o'clock when Mr. McDonald, the auditor, will be in a position to present an interim report on his observations with respect to the International Harvester Company. He will be followed right after, possibly in the forenoon, by a representative of the implement company.

Mr. McLean: Will we be able to have Professor Hardy before us at a later date after we have heard the evidence of some of the implement companies?

The Chatrman: I do not know. No arrangement was made in that regard.
Mr. McLean: The idea is that it might be well to check up on some of their statements, perhaps.

Professor Hardy: I will be in the city until to-morrow night. I am planning to leave for Toronto to-morrow night.

The Charman: Well, we can discuss that with counsel and see if we think it is necessary.

Mr. McLean: All right.
The Chatrman: The committee will stand adjourned until to-morrow morning at eleven o'clock.

The committee adjourned at 6.05 p.m. to meet again on Wednesday, June 10, at eleven a.m.


\section*{HOUSE OF COMMONS}

\section*{STANDING COMMITTEE}

ON

\section*{AGRICULTURE AND COLONIZATION}

\section*{MINUTES OF PROCEEDINGS AND EVIDENCE (Farm Implement Price Inquiry)}

\section*{WEDNESDAY, JUNE 10, 1936}

No. 9

\section*{WITNESSES:}

Mr. F. M. Morton, Resident Manager of the International Harvester Company, Ltd.
Mr. C. R. Morrison, President of the International Harvester Company, Ltd.
Mr. C. E. Jarchow, Comptroller for the International Harvester Company, Ltd.
Mr. F. E. Siefkin, General Attorney for the International Harvester Company, Ltd.
Mr. Walter J. Macdonald, C.A., Auditor for the Committee.
J. O. PATENAUDE, I.S.O.

\section*{EXHIBITS FILED}

No. 10-Annual Report International Harvester Company Limited, for 1935.
No. 11-Answers to Questionnaire from International Harvester Company Limited.

\section*{MINUTES OF THE PROCEEDINGS}

Wednesday, June 10, 1936.
The Standing Committee on Agriculture and Colonization met this day at 11 a.m.

The Chairman, Mr. W. G. Weir, presided.
Members present: Messrs. Beaubier, Bertrand (Prescott), Bouchard, Boulanger, Cleaver, Douglas, Dubois, Evans, Fontaine, Furniss, Gardiner, Golding, Gosselin, Graydon, Johnson (Lake Centre), Leader, Leclerc, MacKinnon (Edmonton West), MacLean (Prince), Macphail (Miss), MacRae, McKenzie (Lambton-Kent), McLean (Melfort), McNevin (Victoria, Ont.), Mitchell, Needham, Patterson, Perley (Qu'Appelle), Rennie, Rheaume, Robichaud, Ross, Senn, Spence, Stirling, Taylor (Norfolk), Thompson, Thorson, Tomlinson, Turner, Ward, Weir.

In attendance: Mr. R. T. Graham, K.C., counsel for the committee.
The chairman informed the committee that the representatives of the International Harvester Company were present to give evidence, viz: Mr. F. M. Morton, Resident Manager of the International Harvester Company, Ltd., of Canada; Mr. C. R. Morrison, President of the International Harvester Company, Ltd., of Canada; Mr. C. E. Jarchow, Comptroller of the International Harvester Company, Ltd., Chicago; Mr. F. E. Siefkin, General Attorney for the International Harvester Company, Ltd., Chicago.

Mr. Morton, Mr. Morrison, Mr. Jarchow, called, sworn and examined.
Witnesses retired.
Mr. Graham filed as Exhibit No. 10 report of International Harvester Company, Ltd., for 1935;

Also Exhibit No. 11, replies to Questionnaire sent out to the International Harvester Company, Ltd.

The hour being one o'clock, the committee adjourned to meet again this day at 4 p.m.

\section*{AFTERNOON SESSION}

The committee resumed at 4 o'clock, the chairman presiding.
Members present: Messrs. Beaubier, Bertrand (Prescott), Bouchard, Cleaver, Donnelly, Douglas, Dubois, Evans, Furniss, Gardiner, Golding, Graydon, Johnson (Lake Centre), MacRae, McKenzie (Lambton-Kent), McLean (Melfort), McNevin (Victoria, Ont.), Motherwell, Needham, Patterson, Perley (Qu'Appelle), Robichaud, Senn, Spence, Taylor (Norfolk), Ward, Weir.

In attendance: Mr. R. T. Graham, K.C., Counsel for the Committee, and Mr. Walter J. Macdonald, C.A., Winnipeg, Auditor for the Committee, who presented to the committee a statement of the work done by him in relation to the inquiry to date.

The committee then adjourned to meet again to-morrow, Thursday, June 11, at 11 a.m.

\author{
WALTER HILL, \\ Clerk of the Committee.
}

\section*{MINUTES OF EVIDENCE}

\author{
House of Commons, Room 268,
}

June 10, 1936.
The Select Standing Committee on Agriculture and Colonization appointed to inquire into the price of agricultural implements met at 11 o'clock, Mr. Weir, the Chairman, presided.

The Chairman: Gentlemen, it will be necessary to change the plan of hearing as we announced it last evening. Mr. Macdonald, the auditor, is not prepared to go on this morning. However, we are fortunate in having the International Harvester Company here and they are prepared to go on the witness stand this morning.

Now, you will recall that the Committee on Agriculture and Colonization has been interested in the price of farm implements for some time and have been carrying on an enquiry in that respect. I will read for the information of the representatives of the company and of the committee as well the order of reference given to this committee some weeks ago.
(Chairman reads order of reference).
I wish to assure you at the beginning that this committee is interested primarily in the facts regarding the cost of farm implements. You will appreciate, I think, as well as the members of the committee do that farmers in general feel that the prices of farm implements are high and, no doubt, you would like to be able to produce implements at a lower cost and deliver them to the farmers at a lower cost. This reference has been handed to this committee and the committee has undertaken quite an extensive inquiry into the causes underlying the prices of farm implements. The committee is interested in getting at the essential facts with respect to the manufacture, sale and distribution of farm implements. I think the committee is broadminded enough that it will accept your statements in the spirit in which they are given, and be prepared to meet you in every way possible in trying to establish the basic foundation lying behind the prices of farm implements.

Now, I understand that there are several gentlemen here to-day from the company who will assist the witness in this examination, and we will ask them to take their places alongside the witness and give him whatever assistance he desires.

Mr. Morton: Mr. Chairman and gentlemen, the officers of the company who may testify and who are present are Mr. Charles R. Morrison, President of the International Harvester Company of Canada, Limited, Mr. C. E. Jarchow, Controller of the International Harvester Company, Chicago, and myself, F. M. Morton, Vice President and Resident Manager of the International Harvester Company of Canada Limited, Hamilton.

The Chatrman: We will be very glad if these gentlemen will come to the front and take the chairs arranged for them. Now, in a committee of this character, and other committees as well, it is the customary procedure to swear the witnesses. The clerk will do that now.

Mr. F. M. Morton, Mr. C. R. Morrison, Mr. C. E. Jarchow, called and sworn.

The Chatrman: Gentlemen, you will recall that the essential information with regard to this inquiry was secured by way of questionnaire. You gentlemen, of course, are no doubt familiar with the details of the questionnaire and the
information secured therefrom. May I express to you the appreciation of the committee, and also the appreciation of the counsel and auditor for your kind co-operation in gathering that information together.

We have with us Mr. Graham who is acting as counsel for the committee, and I shall at this stage turn the inquiry over to him. Whom do you wish to represent the company to begin with?

Mr. Morton: Since Mr. Morrison is our senior official and president of the company I would suggest he take the witness chair.

The Chatrman: Very well. Probably Mr. Morrison can change chairs with you.

Mr. C. R. Morrison, examined by Mr. Graham.
Q. Mr. Morrison, what is your position with the International Harvester Company of Canada, Limited?-A. President.
Q. You are the president. Your home is where?-A. Chicago.
Q. Are you an official also of the parent company?-A. I am.
Q. What position do you hold?-A. Vice President.
Q. What is the proper name of the parent company?-A. International Harvester Company.
Q. It is not incorporated or described as being incorporated?-A. No; that is not appended to the name.
Q. Your associate, Mr. Morton, has also introduced himself. The other two gentlemen, Mr. Morrison, occupy what position with the company?-A. Mr. C. E. Jarchow is comptroller of the International Harvester Company at Chicago. I believe there are to be just three witnesses, Mr. Morton, Mr. Jarchow and myself. Do you wish the name of our other associate sitting here?
Q. Yes.-A. Mr. Forest E. Siefkin, who is the general attorney for the International Harvester Company at Chicago.
Q. The location of the Canadian International is where?-A. Hamilton, Ontario.
Q. And it is a wholly owned subsidiary of the International company?A. Yes.
Q. In Chicago? Does the Canadian company have any subsidiary company in Canada? I notice there is one company in British Columbia.-A. The International Harvester Company Limited has no subsidiary. May I point out, Mr . Graham, that the questionnaire is incorrect in that respect. This British Columbia company was shown as being associated with the Canadian company, but it is not.
Q. It is an associate of the parent company?-A. Of the International Harvester Company.
Q. Let us clear that up. It is known as the Canadian Forest Products Limited of Vancouver, B.C.?-A. Yes.
Q. It owns, as I understand, timber limits; is that the fact?-A. Yes.
Q. My information is-you may correct me if I am wrong-it is not active in business activity generally?-A. It is not.
Q. It is a subsidiary of the American rather than the Canadian Inter-national?-A. Yes, sir.
Q. Perhaps it might be just as well to explain the system which I notice you are following, Mr. Morrison. You propose to give evidence for the company and to be instructed by those officers whom you have with you, unless you think that particular officer can answer the more involved information required; is that so?-A. If it is agreeable to the Committee, I should like to do it that way.

Mr. Senn: May I ask this question? Before cross-examining, it is customary to allow a witness to give a statement if he has one to give. I do not
[Mr. C. R. Morrison.]
know whether Mr. Morrison has prepared a statement or not; but in any investigation that I have been on, the witness was allowed first of all to make a statement before cross-examination.

The Chairman : I do not know that the witness has to give any statement. We suggested to him some time ago if they had one to give we should like to have a copy of it in advance. As far as I am concerned I would be quite prepared to have the company officials make any statement they wish after we have proceeded with the examination.

Mr. Senn: If they have any statement.
The Chairman: I think the essential information has been secured by way of questionnaire.

Mr. Senn: If they have a statement I think they should be allowed to make it.

The Charman: I will say as far as I am concerned, if the company have a statement they wish to make at some later stage in the proceedings I shall be quite prepared to have them do so. Is that satisfactory?

Witness: We have no statement to make at this stage, but we might wish to make one later on.

\section*{By Mr. Graham:}
Q. Mr. Morrison, the Canadian company have how many plants?-A. Two.
Q. Both operating?-A. Both operating.
Q. Where are those two plants?-A. The principal plant is at Hamilton, Ontario, and there is another at Chatham that manufactures farm wagons, farm trucks and motor cars.
Q. And the principal plant at Hamilton manufactures all of the farm implements?-A. Yes, all manufactured by the Canada company.
Q. And the trucks?-A. No, motor cars.
Q. Where are the motor trucks--A. At Chatham.
Q. At the Chatham plant? Your twine plant is where?-A. Hamilton.
Q. It is part of the main plant?-A. Yes.
Q. Now, I notice the Canadian company has numerous branch houses throughout Canada. Have you your replies to the questionnaire in front of you?-A. No, I do not have.
Q. Have you a copy, Mr. Morton?

Mr. Morton: It is available here among us.

\section*{By Mr. Graham:}
Q. I think it would greatly assist you if you had it?-A. I am sorry; I did not bring it with me. We will have it at the next meeting.
Q. I notice in the answer you gave us you have six branches in Saskatchewan, four in Ontario, three in Alberta, two in Quebec, two in Manitoba, one in New Brunswick and one in British Columbia? That would be correct?A. That is correct.
Q. Then you have what is known as a transfer point at Fort William. What is the purpose of that transfer point?-A. The purpose of the transfer point is to accumulate a stock of goods and have them available for western Canada.
Q. I presume it is at Fort William because Fort William is at the head of the lakes?-A. Fort William, Ontario.
Q. Incidentally, in your shipments from the factory to that transfer point at Fort William, what is the practice of the company in moving the implements? By water?-A. Largely by water.
Q. Does the International Company of Canada, Limited, own any lake boats?-A. No.
Q. Not at all? You simply use the ordinary boats? It is, in other words, a supply depot for western Canada at the head of the lakes?-A. That is correct.
Q. I notice the Canadian company commenced operations in Canada on September 21, 1903?-A. That is correct.
Q. I notice also-you can correct me if I am wrong-that the International Harvester Company, the parent company, holds \(14,999,000\) of the \(\$ 15,000,000\) worth of stock?-A. That is correct.
Q. In other words, wholly owned. Now, Mr. Morrison, because of the importance of the parent company to the farm implement industry, and because of the fact it is located in the United States, which is the chief competitive factor to the Canadian market, I propose to ask you for certain information regarding that parent company, and because of your position in the parent company you can easily get that. You have told us that the official name is the International Harvester Company. I have been furnished with the annual report of the parent company for the year 1935. You recognize it?-A. Yes.
Q. I shall put this in as an exhibit. I notice it is a consolidated report. Does it include the assets and liabilities of all subsidiary companies of the International Harvester Company, the parent company?-A. It does.
Q. Including the Canadian company?-A. It does.
Q. I notice on page 13 is listed considerable information as to the plants that you own in the United States in the subsidiary organizations you have. In the United States the parent company is the so called McCormick Works, Chicago, Illinois. It manufactures grain binders, mowers, rakes, corn binders and shredders, ensilage cutters, manure spreaders, feed grinders, hammer mills. Is that correct?-A. That is correct.
Q. Your Milwaukee Works at Milwaukee, Wisconsin, manufactures farm and industrial tractors, farm engines, diesel engines, cream separators, milking machines?-A. That is true.
Q. Your tractor works at Chicago, Illinois-what is the name of the company, the International Harvester Company, too?-A. The International Harvester Company.
Q. It manufactures farm and industrial tractors and TracTracTors. Then your Farmall Works at Rock Island, Illinois,--A. Yes?
Q. It manufactures farm tractors. What is the distinction between Chicago and Rock Island?-A. No distinction at all; both of them are factories owned by the International Harvester Company.
Q. You are simply utilizing them for the purpose such as indicated?A. Yes.
Q. You have a manufacturing plant at Fort Wayne, Indiana, and I notice you manufacture motor trucks?-A. Yes.
Q. And the West Pullman Works, Chicago, Illinois, I notice manufacture magnetos, carburetors, bearings, gears and milk coolers. Included in that word bearing would there be what are known as ball-bearings?-A. We build our own line there and it includes a variety of both roller-bearings and ballbearings.
Q. And then in the manufacturing plant at Auburn, N.Y., you manufacture hay presses, tillage implements, potato planters and diggers and soil pulverizers; and there is a similar plant at Canton, Illinois, and one at Chattanooga, Tenn. That is to supply your southern trade is it?-A. With certain lines of goods.
Q. Yes; ploughs, cane mills and fertilizer distributors. The East Moline Works, at East Moline, Ill., manufacture harvester threshers, corn pickers and grain threshers; and at the Richmond works at Richmond, Ind., you manufacture seeding machines, corn and cotton planters?-A. That is correct.
Q. And at Rock Falls, Ill., you make corn shellers, harrows, side rake and tedders and hay loaders. Now then, you list the Canadian companies at Chatham and Hamilton, Ontario, and in Europe I notice you have manufacturing plants in France?-A Yes, there are two there.
[Mr. C. R. Morrison.]
Q. And you manufacture there I notice harvesting machines and seeding machines, rakes, tedders, tillage implements and ploughs?-A. Yes.
Q. And one in Sweden manufacturing harvesting machines and seeding machines. And then I notice that you have twine mills, one in Chicago and one in New Orleans, Louisiana. In Europe you have twine mills, too, in France, Germany and Sweden. Now then, in addition to these I notice in your list that the company owns iron ore mines in Minnesota-of course, they are all in Minnesota, aren't they?-A. Yes.
Q. There are four mines?-A. That is correct.
Q. You own coal mines in Kentucky, 6,507 acres of coal land producing coal and coke; and you have a by-product coke plant at South Chicago, Illinois, producing coke and by-products; and you have blast furnaces and steel mills, one in South Chicago, Illinois, with blast furnaces, open hearth furnaces, bessemer converters and blooming mills. Then you have I notice a sisal plantation in connection with binder twine in Cuba. So that the International Harvester Company might be described as a pretty well integrated company?-A. Yes.
Q. I understand that the company owns certain short railroads in the city of Chicago?-A. Industrial railroads.
Q. Just serving your plant I presume?-A. And other plants.
Q. Now then, your parent company occupies a very important place in the farm implement industry in the United States, that is correct?-A. That is true.
Q. Would you be able to give us an idea of the percentage of sales last year of farm implements and tractors by your company as compared to other companies to other companies in that industry in the United States?-A. I haven't the figures available, Mr. Graham, to give you the percentage of the implement business in the United States that the International Harvester Company enjoys, but I can answer your question by saying that it is the largest implement company in the United States, as a single company.
Q. I notice a long time ago in connection with an inquiry by a federal trade commission inquiring into the cause of high prices of farm implements and held in 1920 they list the International for these years: In 1913, 56•74 per cent out of 26 large companies; in 1914, \(55 \cdot 81\) per cent; in 1915, 59•19 per cent; in 1916, 59.45 per cent; in 1917, 60.75 per cent, and in 1918, 59.27 per cent. Would you say there is much change in that?-A. Yes. I would say that the Harvester Company to-day does not have that large a percentage of the business of the United States.
Q. I notice that in 1918, which is the last year reported here, that your total sales in that year were \(\$ 193,604,000\) ?-A. What year was that?
Q. That was in 1918, \(\$ 193,604,000\). I know this does not dispute your statement that your sales of farm implements and motor trucks in the United States, Canada and foreign countries was \(\$ 217,000,000\); and I might say that that figure includes exports as well as domestic business. I had in mind, you notice, that in the last year, which the report says was not the biggest year by any means, I notice that the amount of your total sales was even greater in dollar value than the 1918 report?-A. Well, I am not prepared to testify to the figures that you are quoting for 1918. I do not know the source of those figures.
Q. I presume that you are acquainted with this report of the United States Federal Trade Commission of 1920?-A. In a general way, yes.
Q. By the way, Mr. Morrison, so far as we could find that was the last searching inquiry into the farm implement industry by a governmental body. Is that correct?-A. I think that is true.
Q. Your position still remains very important, if not a dominating one, in the farm implement business in the United States?-A. It is an important one.
Q. I do not suppose there are any other companies manufacturing the same line who have anything like the same integrated position that your company has?-A. I do not know.
Q. You would not be able to estimate, if you do not agree with these figures, what your percentage is at the present time?-A. No, I cannot do that.
Q. I suppose that could be secured from the American Statistical Bureau?A. Possibly so.
Q. Now then, that is in the United States, Mr. Morrison?-A. Beg your pardon.
Q. That is in the United States. Now, in the world markets, I notice that you export to a great many overseas countries?-A. That is true.
Q. I was rather pleased to note that in your statement here you make a distinction between Canada and foreign countries. The relationship is so close that I notice you exclude Canada from the term foreign country?-A. In the operation, as well as-
Q. You treat these two as- - A. The Canadian business is very closely associated in our minds with the United States business.
Q. Yes. Now then, I notice these factories in the countries that I have mentioned, you are supplying these markets, the distributing markets, from these plants in France, in Germany and I think Sweden?-A. Yes.
Q. That was not always true, I suppose at some time your company supplied that foreign market from the United States?-A. Yes.
Q. That position I suppose has been forced upon you by certain conditions? -A. Yes.
Q. You still, I presume, export to Argentina for instance?-A. Yes.
Q. From where, Mr. Morrison?-A. Some from Chicago, and some from Hamilton, Ontario, and some from foreign factories located in Europe.
Q. What do the shipments from Hamilton to the Argentine comprise-I don't want the details, of what do they consist?-A. Drills and cultivators. I could give you a more complete list if you wish.
Q. Perhaps sometime you might give it to me?-A. Yes.
Q. Drills and cultivators; why does the Hamilton plant fill that demand for export?-A. Well, they are making the kind of implements that are used in the Argentine.
Q. You suit the supply to the demand. As a matter of fact, the Hamilton factory has an exceptionally shall I say good record in the manufacture of large drills and large cultivators?-A. I do not know that I get your question.
Q. That the Canadian plant has had peculiar success in the manufacture of these two implements you mention, the large cultivator and the large drill?A. Not any greater success than the other lines they manufacture.
Q. I mean, in comparison with your American plant?-A. Not any greater.
Q. Not any greater?-A. They efficiently manufacture all lines produced there.
Q. And then I presume you export to the United Kingdom?-A. Yes.
Q. And to other British Empire countries?-A. Yes.
Q. Does the preferential treatment that is given to Canada under the Ottawa agreements-you know the Ottawa agreements?-A. Yes.
Q. Does that cause you to use the Canadian company as a source of supply for those countries giving the preference?-A. That is one of the reasons.
Q. That is one of the reasons. In these countries I presume your company has to meet any competition that presents itself?-A. It does.
Q. You might meet, for instance in the Argentine, the Massey-Harris Company, the Cockshutt Plow Company and possibly Frost and Wood?-A. And all the others that operate in that country.
Q. By the way, Mr. Morrison, the Argentine gives no preference to Canadian or American companies, they are on an equal importation basis; isn't that correct?-A. I am not prepared to say, but I believe that is true.
[Mr. C. R. Morrison.]
Q. That is true so far as you know of Scandinavian countries?-A. I have no information in regard to that.
Q. Now then, dealing with the statement of the parent company once more, I notice your total sales are stated for the year 1935; by the way, is that for the calendar year 1935?-A. That is the calendar year, and our fiscal year as well.
Q. And the total is \(\$ 217,000,000\). I notice that before the Price Spreads Commission you indicated that the Canadian business in relationship to the whole over a period of 10 years was between 15 and 20 per cent. Do you recall giving that evidence?-A. That was my estimate, and I think that figure is approximately correct.
Q. It is fairly accurate?-A. Yes.
Q. And I presume in keeping with all well managed companies that this would be a very conservative statement of the financial position of your com-pany?-A. It would be a statement put up as nearly scientifically as possible.
Q. Yes. I notice that in the year 1935 the parent company showed a profit on their whole world wide business of \(\$ 119,618,000\) ?-A. Yes, sir.
Q. And then, I was interested in one item on page 4 that you have under your assets, receivables: Dealers', Farmers', and Motor Truck Users' Notes amounting to \(\$ 78,489,530.55\). Is that correct?-A. That is correct.
Q. And accounts receivable of approximately \(\$ 22,000,000 ?-\mathrm{A}\). Yes.
Q. I notice that in your assets you do not value such things as patent rights?-A. That is correct.
Q. And then I notice that you have set up a substantial reserve for plant depreciation, one for development and extension, one for losses on receivables, and a contingent reserve. That is right?-A. That is true.
Q. I notice with regard to the reserve for special maintenance that your Canadian company uses the same phraseology, a reserve for special maintenance. I notice your interpretation of that particular reserve is to re-line blast furnaces, maintenance of docks and harbours, conversion of power systems, and other renewals and replacements. I presume that has a different meaning than the one in connection with the Canadian company.-A. It would represent a reserve for renewals and replacements of anything owned by the Canada company in that respect.
Q. I notice in the "remarks" that you state that the total sales for 1935 were 57 per cent more than 1934 but 35 per cent less than 1929, your high. That is correct?-A. That is correct.
Q. I notice, too, you mention that 1928 is the high year in the Canadian sales picture?-A. Yes.
Q. One year before yours?-A. Yes.
Q. And that the net profits for 1935 represent \(6 \cdot 2\) per cent of the total capital invested in the business. That is right?-A. That is true.
Q. Dealing again with this export business, Mr. Morrison, my understanding is that you do not export from the parent company under the parent company's name, the International Harvester Company or from the Canadian company under the Canadian firm name?-A. The exports from the United States are under the name of the export subsidiary, the International Harvester Export Company.
Q. The International Harvester Export Company?-A. Yes. Some of the goods exported from the Canadian plants are exported direct.
Q. Some are exported direct?-A. And some through the export company.
Q. Why the distinction, Mr. Morrison? Will you just explain that so we will understand it?-A. The only goods that are exported from Canada, from the Canada company or by the company direct are to Great Britain.
Q. Under the preferential agreement?-A. Yes.
Q. Otherwise the Canadian company uses your exports subsidiary?-A. That is true.
Q. Can you tell us, please, how your parent company invoices the shipments to your subsidiary?-A. Mr. Jarchow, I believe you can answer that question better than I can.

Mr. Jarchow: The sales to foreign companies, either foreign jobbers or foreign subsidiary companies, are sold by the parent company to the International Harvester Export Company, who in turn re-sell to the foreign jobber or the foreign subsidiary.

Mr. Graham: Can you tell us at what mark-up over factory cost you invoice that to the export company?

Mr. Jarchow: The price abroad is based on what we call the New York export price, f.o.b. New York, which in turn is based upon the domestic price. It does not necessarily have any relation to the cost.

Mr. Graham: I see. I wondered if there was not a measuring stock of a percentage above some basic price at which you invoiced your export company.

Mr. Jarchow: The measuring stick is the United States price to dealers.
Mr. Graham: The United States price to dealers; so much off that?
Mr. Jarchow: Yes.
Mr. Graham: Could you indicate how much that is?
Witness: That varies, Mr. Graham, in different circumstances. The prices necessarily used in the export trade are prices that meet world competition.

\section*{By Mr. Graham:}
Q. And there is no one set measuring stick, rule or custom by which you invoice goods?-A. I think the prices used are fairly comparable for all, in a general way, at least; but competitive conditions and competitive world prices have their influence on prices in connection with shipments to various foreign countries.
Q. You keep that in mind in fixing the export prices for Canada, do you?A. Yes.
Q. Do you see my point? I want to know what your Canadian company does. Does it follow the same rule if it is invoicing goods to your export com-pany?-A. Substantially the same.
Q. I presume it would be considerably lower than the price at which you would sell in Canada-you have no jobbers-to your dealers?-A. It would be lower than the price we would sell to the dealer, but would not be lower than the price we would sell to the jobber, if jobbers were in existence.
Q. There is no jobber. That is what I mean.-A. We do have two jobbers in Canada in the extreme eastern part of Canada. They operate in rather restricted territories.
Q. In eastern Canada?-A. Yes, in eastern Canada.
Q. In what province?-A. New Brunswick.
Q. None in Ontario?-A. No.
Q. None in Quebec?-A. No. And offhand, without having the definite figures before me, I should say that the prices used in connection with the export business to foreign countries would be fairly comparable with the prices that those jobbers would receive.
Q. What would those jobbers get, say, on dealers?-A. From 15 to 17 per cent.
Q. The export company in turn, you tell me, or Mr. Jarchow tells me, sells to the overseas jobber or distributor?-A. That is true.
Q. I presume at an enhanced price over the invoice price they would get?A. I beg your pardon?
Q. At an enhanced price over the invoice price to them?-A. What are you referring to now?
[Mr. C. R. Morrison.]
Q. To the export company.-A. The shipments from Canada?
Q. I am assuming now that it has come from Canada or the United States and has got into the hands of the exporting subsidiary. They in turn have a mark-up over the invoice price to the foreign jobber or foreign distributor?A. Just what that figure is probably Mr. Jarchow could tell you.

Mr. Jarchow: The relationship is this, that the price which the export company bills the foreign jobber is also used as a basis for the price from the Canada Company to the export company. The Canada Company allows the export company a 2 per cent commission. But aside from that 2 per cent the price is identical with the price which the export company will rebill its goods to foreign jobbers.

Mr. Graham: I am afraid I will have to ask you to say that over again.
Mr. Jarchow: The billing price of the Canadian company to the export company-

Mr. Graham: Which would be, as Mr. Morrison says, 15 to 17 per cent below dealers?

Mr. Jarchow: Yes.
Mr. Graham: Yes?
Mr. Jarchow: - is the same price that the export company in turn will bill these goods to the foreign jobber, except for a 2 per cent commission which they allow the export company.

Mr. Graham : That is what I mean, that the export company's profit would be limited to that 2 per cent.

Mr. Spence: Those at this end of the room can hardly hear Mr. Jarchow or Mr. Graham. It is a room in which it is very hard to hear. I wish you would speak louder.

Mr. Graham: Yes. And by the way, I might say the reporters have asked me, in the light of the poor acoustics, if the members in asking questions would kindly speak a little louder because they find it very difficult to get it up here. I will try to observe the same rule.

That 2 per cent, Mr. Jarchow, is the limit of the profit that the exporting company can make. They do make profits, I presume-the export company?

Mr. Jarchow: Yes.
Mr. Graham: Those would go to the parent company?
Mr. Jarchow: If they were declaring dividends.
Mr. Graham: The Canadian company would not get any loss from them. Now, I wanted to inquire into the selling organization in the United States. You have a subsidiary for that purpose, too, have you not, Mr. Morrison?

Witness: Yes.

\section*{By Mr. Graham:}
Q. What is its name?-A. The International Harvester Company of America.
Q. The International Harvester Company of America?-A. Yes.
Q. Incorporated?-A. Incorporated. The name "incorporated" does not appear. The word "incorporated" does not appear in the name, but it is an incorporated company.
Q. In the United States you do not have to put that after it?-A. No.
Q. Is your parent company incorporated?-A. It is incorporated.
Q. Yes, but it does not appear?-A. It does not appear in the name.
Q. Just state generally to the committee, please, the function of that selling company, the International Harvester Company of America?-A. The International Harvester Company of America is the company that sell the products of the International Harvester Company in the United States.
Q. Where is its head office, in Chicago?-A. In Chicago.
Q. It is, too, a wholly owned subsidiary, I presume?-A. Yes.
Q. Who does it, in turn, deal with?- A. It deals with the dealers.
Q. With the dealers?-A. Yes; and in some instances, jobbers.
Q. In some instances with jobbers?-A. Yes. And in connection with the motor truck line particularly, a part of its business, it deals directly with the consumer.
Q. Referring again to the 1920 report, does it sell to any of the mail order houses in the United States?-A. No.
Q. To any co-operative associations?-A. We sell twine in certain states to the Farm Bureau.
Q. But not farm implements?-A. No.
Q. Or repairs?-A. No.
Q. Is that the policy of the company, or is it simply that they do not want to purchase?-A. Well, the policy of the company is, and always has been, to use the implement dealer as its medium of distribution.
Q. Can you tell us, Mr. Morrison, the measuring stick, or a fairly close approximation of the measuring stick by which the manufacturing company, the parent company, sells its products to the selling organization, the International Harvester Company of America?-A. You, for example, would like to know how much lower the price to the selling company might be than the price to a dealer?
Q. Well, I would prefer to know it the other way, if you can give it-the increase over factory cost, if that is the system that you use.-A. That is not the system that we use. The prices charged by the Harvester Company to the selling company approximate 25 per cent below the prices named to the dealers.
Q. Approximately 25 per cent off dealers?-A. 25 per cent below dealers prices.
Q. Yes, below. Is the terminology not sometimes "off" dealers?-A. Oh, I thought you said " of ".
Q. No, " off".-A. "Off" is correct.
Q. It would be 25 per cent off dealers prices?-A. Yes.
Q. Does it, by the way, purchase implements outright, or is it on a consignment basis?-A. It purchases outright.
Q. And pays the parent company?-A. And pays the parent company.
Q. In repairs, is there the same marginal arrangement, or is there a difference there?-A. There is a differential. I have not the figures in mind, Mr. Graham.
Q. You could get them, I presume, if we wanted them later?-A. Yes.
Q. It would likely be more than the implement margin?-A. I do not think so.
Q. You do not think so?-A. No.
Q. Does that organization maintain a supply of repair parts over the country?-A. The selling company?
Q. Yes?-A. Yes.
Q. It has a great many branches?-A. Yes.
Q. You have a great many branches in the United States the same as they have in Canada?-A. Yes.
Q. These branches would all be branches of that selling organization?-A. That is correct.
Q. And as you say they maintain about the same ratio of repairs as your Canadian branches for the Canadian company?-A. Yes,
Q. Does that company, Mr. Morrison, service implements that are sold?A. The America company, the selling company, it has quite a service organization, but the responsibility for service to the farmer is that of the dealer.
Q. But the selling organization does maintain--A. - a supporting service organization.
[Mr. C. R. Morrison.]
Q. I wanted to get this. I was wondering about your income tax return in the United States. That subsidiary company, how would the parent company declare profits-merely by dividend from that subsidiary company?

Mr. Jarchow: Perhaps I do not understand your question.
Mr. Graham: Take the sales company separately. It would have a financial statement, I presume. The only way the parent company gets a return from its investment in that subsidiary would be when the subsidiary declares a cash dividend or builds up a reserve?

Mr. Jarchow: There are two sources of profit. First, in the difference-if there is any difference-between its manufacturing cost and its billing price to the subsidiary company. That constitutes a profit of the parent company. In addition, there might be a profit if the subsidiary company declared a dividend to the parent company.

Mr. Graham: But in making up its report you treat all assets, reserves and liabilities and consolidate them all into the one?

Mr. Jarchow: All of the profits are in that report, whether declared or not.

\section*{By Mr. Graham:}
Q. You told me, Mr. Morrison, that your selling organization is given a price 25 per cent off dealers. You are not able to give me what that represents as a mark-up over factory costs?-A. No, sir.
Q. That could be secured, with sufficient time, on specific implements, could it?-A. It would be possible.
Q. At what mark-up over its own cost does the selling organization sell to the dealer? It has got a 25 per cent spread?-A. Just figure out the reverse of that.
Q. It would be 25 per cent mark-up over its own cost figure?-A. About \(33 \frac{1}{3}\) mark-up over its own cost, because the America company pays a price approximating 25 per cent less than the dealer's price. The dealer's price is the larger price, therefore the result obtained from deducting 25 per cent from the larger figure would represent a mark-up of \(33 \frac{1}{3}\) per cent on the smaller.
Q. Twenty-five per cent of the dealer's price. It is \(33 \frac{1}{3}\) per cent of the sales company's cost price, but 25 per cent of the dealer's price?-A. I do not know that I got your question.

I will explain this that inasmuch as the American company's price, the selling subsidiary of the International Harvester Company, is approximately 25 per cent less than the dealer's price, if you attempted to compute that price, the dealer's price, for example, as a mark-up over the selling company's price would represent an increase of \(33 \frac{1}{3}\) per cent above the selling company's price.
Q. Now, then, in the United States what is the average of dealer's commission allowed by that selling organization? What would it average in per-centage?-A. Approximately 20 per cent.
Q. Has that been fairly constant over, say, the period we are using, from 1913 to 1936-has that been fairly constant during that period?-A. Oh, I think so. There might be some slight variation, but nothing of importance.
Q. What is that 20 per cent based on, Mr. Morrison?-A. That 20 per cent that I answered off-hand would represent the approximate commission that a dealer in the United States would receive if he were billed on the basis of a retail price.
Q. If he were billed on the basis of a retail price?-A. But that is not our method of handling the business. The dealers are at liberty to name any price they wish with respect to goods because they buy them from the selling company outright, and they are free agents with respect to naming prices; but the International Harvester Company of America frequently receives requests for prices. Farmers will write in to Chicago-farmers will come in
to Chicago and buy implements-not in any large way-but they will undertake while they are in there to buy an implement. Therefore, the selling company get out a retail price list for our own use basis f.o.b. Chicago price. We have sent that price list out to our dealers and notified them that those are the prices that we would use if we were quoting a retail price to a user, and using those figures that we got up as a retail price the dealer's price would be about 20 per cent less than those retail prices we established.
Q. That would be 20 per cent-

Mr. Cleaver: It would be 24 per cent mark-up.
Witness: On the user's price, selling price.
Mr. Cleaver: It would be 24 per cent mark-up.
Witness: 25 per cent.

\section*{By Mr. Graham:}
Q. Professor Hardy of Saskatchewan yesterday went fairly thoroughly over North Dakota and Montana, and he based his opinion on, and I know it coincides with the trade commission report I have mentioned, that generally speaking the dealer's results suggested this price?-A. I am not prepared to say whether they do or not. They are not required to do it if they do not want to.
Q. I understand that your laws in the United States forbid you to designate the price at which the dealer must sell?-A. That is true.
Q. You can only suggest the price to the dealer?-A. Yes.
Q. Now, then, I want to get, as a result of that, Mr. Morrison-because you will recall the evidence regarding this given by yourself before the Price Spreads Commission in 1935-naturally the committee has become quite interested in acquiring the basis of purchases by the Canadian company when it so requires from the parent company in the United States. In the evidence given by you before the Price Spreads Commission, you intimated that up until 1930 the Canadian company-I am not certain that you gave this evidencethat they imported approximately 50 per cent of their total selling requirements from the parent company?-A. Yes, I think that would be the correct figure.
Q. And since 1930 that these importations had dropped to approximately 20 per cent?-A. That was true at that time.
Q. What would you say now?-A. I would say that on the basis of 1935 business, perhaps the implements alone, excluding motor trucks from the picture -the implements alone would represent about 30 per cent imported goods.
Q. For 1935?-A. For 1935.
Q. Was there any particular reason why it happened to step up in that year?-A. The only source of supply of the Canadian company for tractors, of course, is the parent company, and the tractor business in 1935 was somewhat better than it had been in the previous few years.
Q. It would be inclined to indicate that?-A. Yes.
Q. Unfortunately, you have not got your replies to the questionnaire there. On exhibit 11, contained in your replies to the questionnaire dealing with section \(6-\mathrm{A}, 1,2\) and 3 continued showing the cost of sales over the years 1926 to 1935 inclusive, I notice that in the year 1926 there are listed purchases from the International Harvester Company, Chicago, \(\$ 6,577,000 ; 1927, \$ 7,656,000\); 1928, \(\$ 14,297,000 ; 1929, \$ 8,496,000 ; 1930, \$ 5,464,000 ; 1931, \$ 1,085,000 ; 1932\), \(\$ 803,000 ; 1933, \$ 807,000 ; 1934, \$ 1,126,000 ; 1935, \$ 1,877,000\). I do not suppose, Mr. Jarchow, that you can recall those figures, but they are contained in this reply.

Mr. Jarchow: I recall some of them.
[Mr. C. R. Morrison.]

Mr. Graham: What would that be, Mr. Jarchow, the total purchases of the Canadian company during those years from the American parent concern?

Mr. Jarchow: That is right.
Mr. Graham: I would include any farm implement-tractors?
Mr. Jarchow: That is right.
Mr. Graham: And any parts of tractors?
Mr. Jarchow: Yes.
Mr. Graham: I notice that in the questionnaire, Mr. Jarchow, you are asked to give it for the whole period under review, and it was impossible, was it?

Mr. Jarchow: It was at that time. We now have it.
Mr. Graham: And that would include also any finished parts purchased by the Canadian company from the American?

Mr. Jarchow: Those are all finished parts-those figures you read.
Mr. Graham: No raw materials?
Mr. Jarchow: No raw materials in that.

\section*{By Mr. Graham:}
Q. Now, Mr. Morrison, you recall before the Price Spreads Commission that as a pure guess, or, perhaps, estimate would be a better word, you intimated to that committee that because of certain regulations of our National Revenue Department the parent company found it necessary to invoice those implements purchased by the Canadian company at a mark-up of 10 to 12 per cent over what you would have sold to them had it not been for the departmental regulations?-A. That is true.
Q. Now, I wanted to get a little more factual data with regard to that. Until recently can you tell us your interpretation of the ruling of the department in fixing the fair market value on sales by the parent company to the Canadian company?-A. Of course, it is within the province of the officials of the Customs Department to stipulate what is the fair market value, and that privilege rests entirely with them.
Q. Yes?-A. But they did establish a fair market value which was a necessity-the billing price of the parent company to the Canadian company -which was a higher figure than the parent company would have sold the Canadian company had it been free to name its own price.
Q. We were instructed by Mr. Richards of the Department of National Revenue for a great many years, in fact for this whole period under review, 1913 to the middle of 1936, the regulation was that the price at which the Canadian company could purchase from the parent company was \(12 \frac{1}{2}\) per cent off dealers. I am instructed that is not quite correct. Do you remember the actual measuring stick?-A. Yes. For agricultural implements the formula followed was to allow a discount of \(17 \frac{1}{2}\) per cent off the dealer's price and to the net result obtained add back five per cent. If you compute that it would make \(13 \cdot 375\) per cent.
Q. We call it 13.38 per cent roughly.-A. Yes.
Q. You would agree with Mr. Richards in saying so far as you remember that was the regulation throughout that period until- - A. When did that period begin?
Q. 1907.-A. No, I do not agree with that statement, if my information is correct.
Q. Now Mr. Morrison, perhaps you misunderstood my question. Our period under review is from 1913. The act came into force in 1907, and Mr. Richards says that-_A. Since 1907?
Q. Yes. We are only interested in 1913 to 1936.-A. That formula had existed since 1913 -no, let me correct that; I am making a mistake. Up to 1917 the formula followed established a higher price than the one we have just discussed.
Q. In 1917?-A. Up to 1917, early in 1917 this formula that has been described was the one that was put into effect.
Q. Before that you told me there was a higher discount or a lesser?A. There was a lesser discount, or in other words, a higher duty value.
Q. Can you tell us how long the new ruling has been in force which allows the larger discount?-A. My recollection is it was in May, 1935.
Q. Can you instruct the committee as to what the present discount is?A. A flat discount on agricultural implements of 20 per cent.
Q. That agrees with my information. That has been in effect, you say, from May, 1935?-A. That is the basis of my recollection.
Q. Now, then, if that regulation had not been in force, Mr. Morrison, what would be the basis of your invoice price to the Canadian company on farm implements?-A. We would-when I say we, I mean the International Harvester Company-have charged the Canada company the same price approximately that the International Harvester Company charged its American subsidiary, the International Harvester Company of America.
Q. That would have been the basis on which you would have treated the Canadian company?-A. Yes.
Q. And would you say your estimate given before the Price Spreads is correct, that that would have resolved itself into a mark-up over what you would have shown to the Canadian company of 10 to 12 per cent?-A. That is, I think, a fair estimate.

\section*{By Mr. Cleaver:}
Q. It would be the difference between 25 per cent mark-up and \(13 \cdot 375\) ?A. Approximately.

\section*{By Mr. Graham:}
Q. However it is a pure matter, as Mr. Cleaver points out, of taking in all the information you have given, and finding the net result; is not that correct? -A. That is true.
Q. Now, with regard to tractors, what has been the system?-A. Until this last change, in May, 1935, the basis or formula for fixing the duty value price of tractors was the dealer's United States cash price.
Q. The dealer's United States cash price?-A. Yes.
Q. You mean, Mr. Morrison, if the Canadian company wanted to buy tractors from the parent company that would be considered the fair market value that they would purchase at?-A. That was considered the fair market value.
Q. The dealer's United States price?-A. Yes.
Q. They treated the I.H.C. of Canada as a dealer?-A. In establishing value.
Q. In farm implements they treated the Canadian company as a jobber?-

\section*{A. Yes.}
Q. But in tractors they treated the company as a dealer; has that been changed?-A. Yes.
Q. What is now the basis?-A. The basis now is on a level with the agricultural implements.
Q. On the same level as agricultural implements?-A. Yes.
Q. Those changes in the regulation would improve the financial results of your Canadian subsidiary?-A. To the extent of the lower price the Canada company would be charged for the goods.
[Mr. C. R. Morrison.]

Mr. McLean: Mr. Graham, may I ask you a question just now?
Mr. Graham: Yes.
Mr. McLean: Mr. Morrison said a moment ago the discount on charges to the I.H.C. of America was 25 per cent. He later said that but for the value for duty purposes regulation they would have charged the Canadian company the same figures. He then added since May when the regulation was changed the discount on prices to the Canadian company was 20 per cent.

Witness: That is correct.
Mr. McLean: Then there is a discrepancy.
Mr. Graham: 20 per cent off dealers.
Mr. McLean: Exactly. Mr. Morrison said a little while ago that the discount charged to the selling company of America, the I.H.C. pay 25 per cent. He then said that but for the regulation in force now they would have allowed the Canadian company the same discount. The third statement I want to draw attention to is, from May, 1935, when the regulation was apparently changed, a flat discount of 20 per cent has been"allowed to the Canadian company. That means there is a difference there of 5 per cent in what is allowed the Canadian company as against the American company, although if the situation was changed Mr. Morrison said they could allow the same discount to the two companies. I think it is time to clean that up.

Mr. Graham: Put the question you have in mind to Mr. Morrison.
Mr. McLean: I thought it would be better to put it through you. I will ask Mr. Morrison that question.

\section*{By Mr. McLean:}
Q. Did I understand you correctly in my repeating of these three matters, Mr. Morrison?-A. You did.
Q. Have you changed your mind as to the advisability of allowing the Canadian company the same discount now which you said you would have done in past years had it not been for the regulation?-A. No, our minds are not changed. We would be glad to allow the Canadian company the same discount as allowed the American company in the United States. But the present duty value or formula for establishing those duty values will greatly improve over what it was before. It does not meet quite that situation. If the duty values had been established on the basis of 25 back instead of 20 as it now exists, then the Canada company would be on a parity so far as price is concerned with the American selling company.
Q. Even since May, 1935, you have been compelled by these regulations to charge the extra five per cent?-A. Yes.
Q. That is the information I want.

\section*{By Mr. Cleaver:}
Q. If I may clear up the whole point, prior to May, 1935, the parent company in the United States in regard to tractors was charging the Canadian company 25 per cent more than they would have done had it not been for the Canadian value for duty purposes?

Mr. Graham: I was going to lay a foundation for that.
Mr. Cleaver: I am sorry.
Mr. Graham: It is quite all right.

\section*{By Mr. Graham:}
Q. You have told us that in fixing the fair market value for tractors until recently the basis was dealer U.S. cash price?-A. Quite true.
Q. Now then, what would you have sold tractors to your American selling subsidiary less than the dealer's U.S. cash price?-A. Discount of 25 per cent.
Q. So that you are right, Mr. Cleaver. That will be correct. The Canadian company would be paying 25 per cent more because of the fair market value? A. No. The reason I did not answer yes to your question, Mr. Cleaver, is that it would be \(33 \frac{1}{3}\) per cent more, instead of 25 .
Q. You are more favourable to the committee than we are. However, you said the differential was 25 per cent?-A. That is so.
Q. What about trucks and truck parts? Is there a distinction there as well?-A. Well, I am not prepared to testify in regard to motor truck parts. We had a factory in Chatham, and all the trucks we sell in Canada are obtained from that plant, and any materials whether in finished parts or otherwise which Canada has to manufacture, so I am not prepared to testify on that.

Mr. Tomlinson: I cannot hear, and I do not know if anyone else can.
The Chatrman: There is a little disturbance at the moment. I think everybody should speak a little louder.

\section*{By Mr. Graham:}
Q. In the matter of truck parts, as you point out, the Canadian company would pay the same as any other manufacturer would in the United States in like quantities; is that not correct? There would be no distinction in the price of truck parts; it will be the same as in the case of farm implements and tractors?-A. There is no relation as between the price of motor truck parts and implement parts.
Q. They are not in this picture at all?-A. They are not in the picture. So far as your question is concerned regarding the duty values they are not in the picture at all.
Q. Not in this picture?-A. No.
Q. That discount of yours-I am assuming for the moment that it is approximately correct-in going back to the purchases as shown on exhibit 11 , which shows the amount of purchases by the Canadian company from the American company, would the savings in those years, except 1935, be approximately 10 or 12 per cent of those amounts?-A. The prices shown in those figures, that you are quoting, so far as they apply to goods imported from the United States, are from 10 to 12 per cent higher than they would have been had we been permitted to make the same price to the Canada company that was made to the American selling company.
Q. Let us take the year 1936 when the purchases from the International Harvester Company of Chicago are shown by the Canadian company to have been \(\$ 6,500,000\). Would it be fair to infer that these are 10 to 12 per cent higher than they could have been purchased- - A. Yes.

Mr. Perley: How could that apply to the tractors which come in free? How would that regulation apply to tractors?

Witness: I did not hear that question. May I go back to the former question for just a moment?

\section*{By Mr. Graham:}
Q. Yes.-A. My answer applies to the implements and repairs for implements that are included in those figures. The figures you have on your statement represent everything that the Canada company has purchased from the International Harvester Company, and in there would be some motor trucks and parts that this has no effect upon.

\section*{By Mr. Cleaver:}
Q. And tractors and parts?-A. And tractors.
[Mr. C. R. Morrison.]
Q. Could you give us, Mr. Morrison, or Mr. Jarchow, a break-down showing the amount that constitute the purchases of farm implements, repairs, truck parts and tractors. Would that be possible?-A. Mr. Jarchow can tell you that?

Mr. Jarchow: It could be done, it would take a considerable time to break that down.

Mr. Graham: Could you give me a fair approximation of the percentages? Not necessarily now, but some time later. Would you care to consider a reasonable approximation throughout these years, 1926 to 1935 inclusive, of the percentage of farm implements and repairs, the percentage of tractor and the percentage of truck parts.

Mr. Jarchow: It would take a considerable time to do it, and it is a big job.
Mr. Graham: Yes. We will have to go into this later if we can; I mean, to draw conclusions.

\section*{By Mr. Graham:}
Q. Now, I will direct this question to you, Mr. Morrison: This parent company in its bookkeeping system kept no record of that shall I say excess profit forced upon you by our departmental regulation?-A. No.

Mr. Graham: Does the Canadian Company, Mr. Jarchow?
Mr. Jarchow: No.
Mr. Graham: It is not separated or kept track of?
Mr. Jarchow: No.
Mr. Graham: So the only way to arrive at it would be to break down that total into its component parts and estimate, do you agree?

Mr. Jarchow: Yes.

\section*{By Mr. Graham:}
Q. Now then, I just wanted to examine the results of that. You would have to pay-at least, the Canadian company would perhaps have a little liability but it would have to pay a little higher duty on the increased prices that would be quoted?-A. Under the old form.
Q. Under the old form?-A. Yes.
Q. And in turn assuming that they had sold their implements at the prices at which they did sell them throughout the years had they gotten the lower price it would have reflected itself in their annual net result?-A. That is true.
Q. It perhaps in some years might also have made the company liable for a larger income tax?-A. Yes.
Q. That would be true too, so that these would be the plus and minus factors which agreed as a result of that?-A. Yes.
Q. And one other thing that you would have to pay if that were enforced, that special excise tax would be slightly increased because of the amount paid out on the duty paid value?-A. On the larger amount.
Q. Now then, dealing with tractors, we have been speaking now of what is sometimes called the dumping provision of the customs tariff act. Tractors are not manufactured in Canada and they were subject to duty up until recently. There again in purchasing these tractors you would have to show the fair market value when importing these goods too; that is correct?-A. That is true.
Q. Do you happen to know, Mr. Morrison, if in your export trade to other countries you meet similar regulations, regulations similar to our fair market value provision which is contained in subsection 6 of section 43 I think?-A. I do not know whether we do or not, Mr. Graham. I am not sufficiently familiar with the tariff regulations of foreign countries to be able to answer that question.
Q. My own brief examination of the detailed information submitted to us is that generally it is a c.i.f. basis, a landed basis, rather than fair market value. Take South American for instance, I notice that was the case with Argentina?A. I am not prepared to testify on that subject.
Q. Now then, to go back to your system of selling organizations in the United States, Mr. Morrison, I notice that you stated and I notice that in other inquiries it has been stated that there is a marked difference between the American system of distribution and the Canadian in as much as in the United States it is suggested that you sell outright to the dealer and he in turn assumes all responsibility after that. I wondered if that is correct, except as a rule of conduct rather than the actual course of business?-A. Well, the only reason that the Canadian dealers are not on the same basis as the dealers in the United States is because the dealers in Canada have not been able to finance their retail operations the same as the U.S.
Q. But, have your American dealers?-A. Yes.
Q. I just wanted to call your attention to that, and I am not criticizing your attitude. I am not going to give you the name of the companies here, because it is not important at the moment, but it is a letter addressed to the Canadian government trade commissioner at New York and it is in reply to an inquiry which we asked them to make. The letter was dated May 5, 1936, and it states:-

We have your letter of April 28th and in reply have to say that there is no substantial difference between the method of sales and distribution of farm machinery in the United States and in Canada. It is true that there are more dealers in the United States who are in position to purchase outright machines for stock. We operate under a sales contract in the United States and under a commission form a contract in Canada. Nevertheless in both countries we accept the farmer's paper as direct credit and carry the farmer ourselves.
Then in this report to which I have made reference, the report of the Federal Trade Commission of 1920 , I notice that all the incidents of our system were then at least in practice in the United States. Let me just go over it. In the 1920 report the commissioners find, that the manufacturer either of itself or through its sales organization maintained salesmen and experts. And then it deals with your company's position, gives credit either to the dealer-which would of course be the same thing as if you gave it directly-and it shows that you have the same problem in the collection of your outstandings as we have here; that you carry on extensive advertising campaigns; that freight charges from the factory to the branch house are paid by the manufacturer; that the retail dealer ordinarily pays the remaining charge; that you maintain transfer points and that you service machines. And it struck me, Mr. Morrison, that there is no distinction in fact between the problem which the American parent company has in its distribution system and the problem the Canadian company has; and I notice that you carry, as I pointed out there, some \(\$ 170,000,000\) of dealers and farmers notes. Do you not agree with me that there is in fact exactly the same load placed on the American company as on the Canadian company?-A. Not exactly.
Q. What would be the distinction?-A. In the first place, the leader in the United States has his own money invested in the repair stock which he carries.
Q. In Canada that is not so?-A. That is not true in Canada.
Q. You give them to him on consignment?-A. Yes.
Q. In all cases?-A. Oh, there are some classes of repairs that we stipulate in our contract that we will not carry at the end of the year, but the vast majority of repairs he has in his inventory at the end of the year are what we call "on consignment" repairs.
Q. Yes?-A. And there are instances where dealers prefer to and are able to purchase repairs under a straight sale contract in Canada, and we are glad to have them do that when they are able to do it. Now, another distinction between the dealers operations in the United States and Canada is that the
[Mr, C. R. Morrison.]
dealer in the United States does stock machines and to a considerable extent there is no consignment contract between the selling company in the United States and the dealer. There are terms given that will enable the dealer to have an extended term on certain machines if they are on hand and unsold at a given date, but there is a final pay day when if he still has the machine on hand he must pay for it. So, the dealer in the United States has more money invested in his stock of implements than the dealer in Canada. In reselling these implements the dealer in the United States while he is able to finance a reasonable stock of implements is not able wholly to finance the resale of these implements because frequently they are sold on long terms to farmers. In that resale credit the selling company in the United States agrees to accept these farmers' notes if they are good and collectable and apply them to the credit of the dealer's account against the purchase price of the machines. Have I made it clear, Mr. Graham?
Q. Yes.-A. That is a similar feature between the dealers' operations in the United States and in Canada, that in both places the Harvester Company or its subsidiary does finance the final credit for sale of goods to the farmer when they are sold on extended terms and when the farmer's paper is good and collectable.
Q. Yes. I notice this, Mr. Morrison, as just a fact that has some importance in testing the extent to which the manufacturer in Canada and in the United States carry their outstandings in their reserves. I notice that the percentage is about the same, in fact Canada is a little higher, about \(\$ 2,000,000\). The Canadian outstandings are given on exhibit 6 in section 6-A-5 as being \(\$ 9,300,000\) with a reserve of -yes, roughly \(\$ 10,000,000\). Now, assuming that the Canadian company represent about 15 or 20 per cent of the whole you will notice that the parent company has a larger percentage of outstandings proportionately than has the Canadian company. That would seem to bear out the suggestion that the parent company is acutally carrying a heavier load of credit than is the Canadian company, keeping in mind ratio of sales?-A. But, in the parent company's figures are receivables taken from dealers-
Q. Quite?-A. - in connection with the outright purchase of these implements, while in the Canadian company figures receivables represent solely or almost solely the farmer's paper.
Q. I agree, but it would not matter much in the net load placed upon the company whether you financed the dealer or the farmer; the load would be in having to finance somebody, wouldn't that be correct?-A. I think that is a fair statement.
Q. That would be a fair statement either from the standpoint of the manufacturer or the sales subsidiary?-A. You know, not having the figures before me, Mr. Graham, I am somewhat at a disadvantage.
Q. You might make a note of that as something to consider and give us your opinion on it later on?-A. I could do that.

Mr. Senn: Mr. Chairman, may I ask a question in connection with a matter just at the moment?

Mr. Graham: Mr. Chairman, I am through with this particular branch of my inquiry into the parent organization. I suggest that members of the committee be given an opportunity to ask any questions they wish on that.

\section*{By Mr. Senn:}
Q. Professor Hardy's evidence yesterday had to do particularly with prices in northern Dakota and Montana as compared with prices in Saskatchewan. He made the statement that, owing to drowth conditions in the northern states, you had to change your system of distribution in that area and sell on consignment, the way that you do in Canada.-A. That is not correct.
Q. I just wanted to know what the system was.-A. We are not selling on consignment in the United States.
Q. I beg your pardon?-A. We are not selling on consignment in the United States, even in that territory.
Q. What changes have you had to make in those areas where the dealers, owing to the depression and other causes, have been unable to buy outright?A. Well, in the first place, because of drowth conditions that have existed there, the dealers have not purchased in the quantities that they would have under other circumstances. They have not made the purchases. There might be instances-and there are instances as far as that is concerned-where the final due date arrives for the payment by the dealer for a purchase that he has made of implements, and he is unable to pay. In cases of that kind, if he is unable to pay, we are simply forced to carry it. It is a debt that he owes. It is a debt that he will pay, presumably, as soon as he can. But it is another case of these due bills receivable.
Q. But on the whole, you have not changed your system?-A. We have not changed our system.

The Chatrman: Are there any other question on this particular phase of the inquiry?

Mr. Ward: I have a question I should like to ask. It may not be just exactly the proper time to ask it.

The Chatrman: Excuse me a moment, Mr. Ward. I am going to suggest to members of the committee that, when they come to ask questions either of Mr. Graham or the representatives here, they kindly stand up. It gives every one a much better chance to hear.

Mr. Bertrand: And also give their names.
Mr. McLean: The chairman will do it first, of course.
The Chatrman: Mr. Ward, will you kindly give your name?
Mr. Ward: I think the reporter knows me all right.

\section*{By Mr. Ward:}
Q. What reduction would or could be effected in the price of machinery to the farmers if sales were made on a cash basis?-A. The difference between the cash price that exists to-day and the time price that exists to-day. In our retail price list we name a price for cash on delivery; and the difference between that price and the price that the man would get if he bought the implement on various terms represents the advantage that the cash buyer would have. That is provided for in our present prices.
Q. None of the losses incurred due to time sales are charged up to the cash purchasers?-A. I would not say that. There is not a business of any kind in existence that does not have to provide in its price levels a certain amount for losses.

Mr. Graham: I think Mr. Ward's question is directed to this situation: Suppose you were able to sell all your implements for cash and had no collection problems and no bad debt problems. Is that your point, Mr. Ward?

Mr. Ward: That is the point.
Mr. Graham: Would you care to estimate, Mr. Morrison, the saving that could be made in the price to the consumer? I think that is Mr. Ward's point.

Mr. Ward: That is it.
Witness: That is a hard question to answer without thought and study of the figures. If you mean how much of a reduction we could make in prices as they exist to-day if the business were immediately put upon a cash basis, I would say that our prices to-day are entirely too low considering the costs of manu-
[Mr. C. R. Morrison.]
facturing. Therefore to name a cash price that would be an ideal price if the business were conducted wholly on a cash basis and to state how much lower that price would be than the present existing prices, I cannot answer that off-hand. I would like to say this, however, that in western Canada from 75 per cent to 85 per cent of the purchases of implements by farmers are on a time basis, and in eastern Canada a somewhat smaller figure. They buy on a time basis because they are unable to pay the full cash price. Now, if we established solely a cash business, that very large part of the farmers in Canada could not buy the machines. They are farmers that we want to give service to just the same as the other farmers. They need the implements. They could not pay for the implements if they had to pay entirely in cash. Therefore they would not get the service. Our volume of business would be reduced to the point that our costs on such of the goods as we did sell on a cash basis would be so high that the cash buyer would have to pay a higher price that he is paying to-day, because the smaller volume of business would have to carry the expense of running the business.

Mr. Golding: Mr. Chairman, I have a question to ask. Could Mr. Morrison give any statement as to the amount which had to be written off by the parent company as well as the Hamilton company, on account of being unable to make collections during the period that we are now discussing in Canada?

Mr. Graham: That information is given in your reply, and will be given by Mr. McDonald in the auditor's report.

The Chatrman: Speak up, Mr. Graham, please.
Mr. Graham: Incidentally on that point I might ask Mr. Morrison a question which may throw some light on it.

\section*{By Mr. Graham:}
Q. I notice in your annual report which I have been referring to-and which I propose to file, by the way, Mr. Chairman, as an exhibit--that you state: "The company has followed its established practice in charging off against its bad debt reserve all receivables determined during the year to be worthless, and all other receivables in the United States and Canada more than five years old (less recoveries during the year on debts previously written off), and adding to the reserve an amount deemed adequate to provide for future losses." That is hardly correct, is it?. In your Canadian business you have not followed that out?-A. We have not on the Canadian company books, Mr. Graham. But in that combined statement that you have, provision has been made for whatever amount is required.

Mr. Graham: Yes. The exact figures of the Canadian company will be presented to the committee, Mr. Golding.

Mr. Golding: They will be presented?
Mr. Grafiam: Yes.
Mr. Golding: I think that is something worth having.
Witness: I thought I had some figures here that could answer you definitely off-hand. But my recollection is that, in the period that you are talking about, our bad debt losses already sustained or estimated to be sustained on the volume of business done in that period is about five per cent of the volume of business. I think that is the correct figure. That volume of business, of course, represents our total volume, and includes cash business where the man pays when he gets the goods, as well as the other.

\section*{By Mr. Golding:}
Q. We hear this statement made so many times, I think the committee would be entitled to get some actual figures to show just exactly what is happening in that connection?-A. We will be very glad to give you those figures. I can state further that my recollection is-subject to correction if I
find when I get the figures that they are not exactly right-that these losses already sustained or estimated to be sustained for that period represent about 13 per cent of the time sales or the notes taken in that period.

The Chairman: Well, it is nearly one o'clock. I presume it is hardly worth while starting on any other individual feature.

Some Hon. Members: No.
Mr. McLean: When do we meet again?
The Chairman: I think the committee should meet this afternoon.
Mr. McLean: At four o'clock?
The Chatrman: Will somebody move we adjourn now, to meet at four o'clock?

Mr. McLean: Yes.
Mr. Johnston: I will move that.
The Chairman: Then we will meet this afternoon at four o'clock. Are all agreed?

Some Hon. Members: Agreed.
The committee adjourned at 12.55 p.m. to meet again at 4 p.m.

\section*{AFTERNOON SITTING}

The Committee resumed at 4 o'clock.
The Chairman: Gentlemen, if you will kindly come to order we will start this afternoon's meeting. May I say that it is the wish of counsel and I think, perhaps, for the general information of the committee as well it is advisable, that we put Mr. Macdonald on the stand this afternoon and allow the implement company to stand down until to-morrow morning. I think it is important that we should have an interim statement from Mr. Macdonald, who is dealing with the International Harvester Company this afternoon. Of course, Mr . Macdonald will be subject to the examination of the committee just as anyone else. However, may I repeat the request that I made this morning that each person who desires to question the witness should stand up and ask his question in a voice sufficiently loud that the reporters may hear. That is very desirable.

Hon. Mr. Motherwell: Hear, hear. And the other fellows too.
Mr. McLean: Before Mr. Macdonald commences with his evidence, I would like to move that the number of copies to be printed of the daily evidence be increased to some blank number. I do not know how many you have printed now, but I asked for a number of extra copies and I was told that the number at present printed is not very large. I would like to see a much larger number of copies of the daily evidence printed from now on, including to-day.

The Chairman: At the present time 500 are printed in English and 250 in French. In order to do what Mr. McLean suggests we would have to report back to the house to get permission to print additional copies.

Mr. McLean: I move that this matter of extra copies be included in the report. I do not know how many the committee should have printed, but I think the number supplied at present is too small. I move that 1,000 copies be printed in English and 350 in French.

Mr. Senn: Where does the demand come from? In what direction does Mr. McLean want them to be sent?

Mr. McLean: I would like, and I think every member of the committee and every member of the house would like to get a fair number of extra copies that are not available at the present time. By the time the members of the two houses are supplied and departmental demands are met there is practically nothing left for distribution, and I think that an enquiry as important as this one is developing into, particularly from to-day on, should have enough copies printed so that every member could get a reasonable number in addition to the copy that comes to him.

Mr. Senn: I suggest that if this is done each member should get his quota. There would have to be a proper division, otherwise someone would get in ahead of the others.

The Chatrman: Will you leave the matter in the hands of the sub-committee?

Mr. McLean: Yes, that will suit me.
The Chatrman: It is moved by Mr. McLean seconded by Mr. Donnelly that provision be made for the printing of additional copies of the evidence from this day forward.
(Carried).
Mr. Douglas: Once the type is set up, it is just a matter of the cost of additional paper.

The Chairman: That is all right if we use them.
Walter Macdonald, recalled.
Mr. Chairman and gentlemen, I submitted certain facts and reported on certain matters with regard to the International Harvester Company of Canada, Limited. In order that the committee might be fully apprised of the import of the submission which I am about to make, it is necessary that I should review the events leading up thereto. On April 2 the scope of the enquiry was placed before you by counsel for the committee. It was indicated therein that I would at once proceed with the preparation of a questionnaire to be submitted to the three large manufacturing firms in the industry; that is, the International Harvester Company of Canada, Limited, the Massey-Harris Company Limited, the Cockshutt Plow Company, Limited, with its controlled affiliate, the Frost and Wood Company, Limited, now wholly owned. On April 8 the representatives of the three companies attended in Ottawa and a draft questionnaire which I had prepared in the meantime was placed before them and thoroughly discussed.

From information available to me from other sources I find that the length of time which usually elapses between commencement of an enquiry such as this and the mailing of the questionnaire to the companies varies from six weeks to three months. Your questionnaire was produced to the companies three weeks after Mr. Graham and I arrived in Ottawa. Similarly the time allowed to the companies for answering and to the auditor for considering, verifying and reporting on the answers is usually about twice as much as had been allotted to the companies and myself in this instant.

After conferring with your chairman and in view of the approaching prorogation of the House, I again met the representatives of the companies in Toronto on May 12, and pointed out that the exigencies of the situation demanded the utmost speed in replying to the essential parts of the questionnaire. As a result they promised to give me as complete returns as possible and to have these in my hands by the morning of May 25. This they did, and I may here say that the co-operation received from the companies has been excellent and that they have done everything in their power to satisfy my admittedly exacting demands. The two large companies particularly have exercised every effort
to furnish information. At the same time all of this has been produced under pressure and it was obvious from my initial scrutiny of the matter submitted that the replies had not been thoroughly considered or co-ordinated before being sent in. Mistakes were almost inevitable, and in many instances figures produced in one section did not correspond with similar figures reflected in other sections of the replies.

Of necessity therefore a great deal of tabulation and checking of detail was necessary in order to bring the information submitted in line with the requirements of this inquiry. This tabulation was completed, also under pressure, by myself and by my staff one week ago.

Since that time I have visited the head office of the International Harvester Company of Canada, Limited, at Hamilton and without in any way verifying the accuracy of the information submitted, I have at least co-ordinated certain parts which required co-ordination, and have assured myself that the financial picture which I will endeavour to transmit to you covers the periods indicated.

The figures now submitted to you are fundamentally those submitted to me by the company in question, with certain changes in, and re-arrangement thereof made by myself. Such changes as I have made are at least known to the Harvester company, if not acquiesced in by its officers.

I repeat, however, that the information furnished to me by this company has been produced under pressure and that the figures now submitted by me have also been produced under pressure and without verification. In consequence this must be viewed by your committee in the light of an interim submission.

Officials of the International Harvester Company who are now present for examination are of course aware of all of these facts.

Are there any questions at that point?

\section*{By Mr. Senn:}
Q. You are not suggesting, Mr. Macdonald, that the figures are not sufficiently accurate for the purpose of the committee?-A. No, I am not suggesting anything of that kind; but as you will realize Mr. Senn, figures submitted by any company to be transformed so that they reflect the things which this committee is inquiring into-in other words the company produces these figures for its own purposes, which are not always in line with the purposes of this committee, and in addition, of course, there are very often factors underlying the services which can only be determined by a closer examination of the records that I have been able to make.

\section*{By Mr. McLean:}
Q. Mr. Macdonald, you said some figures had been altered by you. I presume you meant they had been re-arranged from a bookkeeping standpoint. You do not mean the figures have been changed by you?-A. Well the underlying figures are not changed, but the captions under which they have been shown have been moved from one section to another because of the fact they were not in line with the purpose of this committee and I think that makes it clear. I call the next caption "The effect of the fixed value for duty purposes on the operations of United States manufacturers selling their products in Canada."

At various times in the conduct of the inquiry by your committee reference has been made to the effect of the dumping regulations of the Canadian Government and in this connection I refer you more particularly to the submission of Mr. Edward H. Richards, Appraiser of Values for the Canadian customs, pages 228 to 235 of the printed proceedings of your committee.

In order to enable your committee to evaluate the effect of these provisions and of duty, as factors in the Canadian distribution of implements manufactured in the United States, I have prepared the following documents which I now submit.
[Mr. Walter C. Macdonald, C.A.]
STATEMENT SHOWING THE EFFECT OF "FIXED VALUE FOR DUTY PURPOSES"AND OF DUTIES AND EXCISE TAX ON THE PROFITS OF CANADIANSALES SUBSIDIARIES OF UNITED STATES MANUFACTURERS(One implement only)
Code ..... 1930 ..... 1931
1. Cash price to farmer f.o.b. Winnipeg ..... 130 ..... 130
Deduct-
2. Commission to agent ..... 23 ..... 23
3. Freight from factory to Winnipeg ..... 7 ..... 7
4. ..... 30 ..... 30
5. Net sales realization to company ..... 100 ..... 100
Cost of Sale
6. Invoice price from U.S.A. factory ..... 79
7. Duty (and Excise Tax 1 per cent in 1931) ..... 21
8. Total cost of sale. ..... 84 ..... 100
9. Margin over cost of sale available to Canadian Com-pany to pay its selling and distribution costs, collectionand bad debts expense and administration, etc... .. 1616 nil
Spread or mark-up between factory cost and net sales rea- lization as above-
5. Net realization ..... 100
10. Factory cost 1930 basis (U.S.A. factory) ..... 62
Spread or mark-up over factory cost ..... 38
Division of Spread or Mark-up-
11. U.S.A. company or factory ..... 17
12. Canadian Government duty and excise ..... 21
13. Canadian sales company ..... nil
38 ..... 38

Chart A
EFFECT OF DUTIES AND OF FIXED VALUE FOR DUTY PURPOSES ON THE OPERATIONS OF CANADIAN SUBSIDIARIES OF UNITED STATES COMPANIES


It should be appreciated that this inquiry has no jurisdiction in the United States and that certain of the information set forth in table A and chart A is only made available through the courtesy of the company who supplied the figures.

Table A should not be considered as being typical of all implements and machines imported into Canada for resale but simply as indicative of the effect of the factors above enumerated on such imports.

The "fixed value for duty purposes" obviously produces a substantial diversion of the profit margin from the Canadian selling organizations of the United States manufacturers to the parent companies in the United States.

This principle is also applicable to other companies operating in Canada through their selling subsidiaries or through direct factory branches. In this category would be included such companies as John Deere Company, Ltd., The Minneapolis Moline Co., The J. I. Case Co., and the Oliver Company, as well as the International Harvester company.

\section*{By Mr. Donnelly:}
Q. Where does the fixing of value for duty purposes come in this? You have the value of your goods there in 1930, which is 79 . Your duty on that machine may have been 6 per cent-it was 5 in 1930, and in 1931 it was 21 along with your excise tax. Where is your fixing for duty value there?-A. I think we should deal with that as we come to it.
Q. I do not see any fixing for duty value about it. I was wondering where the fixing for duty value comes in.-A. That is using the phrase which is used in order to cover the general term which has been used in connection with it. The companies value for duty purposes establishes the value at which it comes into Canada.
Q. I understand that; it looks to me as if some goods are coming in at the same price. Is that not the difference? At one time it was 6 per cent, and then it came to 21 by excise tax?-A. The point is if the fixed value was not on it would come in at a lesser; it would be allowed to come in at a lesser duty.
Q. It would have done the same thing in 1930?-A. I think, doctor, if we can go on we will deal with it. I have carefully gone through this so that all the facts may be covered, and I think that phase is covered as well. In view of the limited time available to the committee your chairman did not consider it advisable to submit a questionnaire to these companies. Consideration of the position of these companies in the industry is none the less vital to any complete survey inasmuch as the four companies indicated sold approximately 18 per cent of the Canadian requirements in regard to farm implements in the years surveyed by the royal commission of 1934 .

The figures in table A were only available for the years 1930 to 1933 and for simplicity I have confined the table to the years 1930 and 1931, reflecting adequately, I think, the effect of a relatively low duty rate as compared with a relatively high duty rate.

The figures for 1930 apply prior to the change in tariff on September 18, of that year.

Referring now to Table A. (For simplicity in reference I have allocated to the different figures in this table, code numbers which will be found in the left hand margin.)

Item No. 1 shows the cash price to the consumer at Winnipeg which was the same in both years.

Items No. 2 and 3 show the deductions for agents commission and for freight from the United States factory to Winnipeg.

Item No. 4 is a total of items 2 and 3.
Item No. 5 reflects the net price realized by the Canadian company in Canadian dollars from the sale of the implement in question.

Item No. 6 shows the invoice price from the United States to the Canadian company and is computed, I have ascertained, at the rate of 86.62 per cent of the U.S. dealers' price f.o.b. Chicago.

In round figures, the fixed value for duty purposes in this case is thus \(13 \frac{1}{3}\) per cent below dealers' price in the United States.

Item No. 7 shows the duty computed in 1930 at 6 per cent on the invoice price and in 1931 at 25 per cent of the invoice price plus 1 per cent excise tax.

Item No. 8 is a total of items 6 and 7 and is the cost to the Canadian company comparable to the realization shown in item No. 5. It will be noted that in 1931 the invoice price from the United States factory plus the duty paid to the Canadian Government exactly equalled the net price realized by the Canadian company in Canadian dollars, leaving nothing for selling and distribution costs, for collection or bad debts or for administration expense or return on capital invested in the Canadian selling company, while in 1930 there was a small margin to the Canadian company (item 9 ) in the amount of \(\$ 16\).

In the lower half of table I have shown a division of the profit margin or "spread" between the United States manufacturer, the Canadian Government and the Canadian Sales Company.
Item No. 5 in the lower half is comparable with item 5 in the upper half being \(\$ 100\) in each year.

Item No. 10 is the factory cost ( 1930 basis) and the difference between the two gives the spread or mark up over factory costs in the amount of \(\$ 38\).

Item No. 11 shows the United States company to have received the same amount in each year.

Item No. 12 shows the Canadian Customs took a considerably greater amount under the high tariff of 1931 than it did in the first period.

Item No. 13 shows that the Canadian Sales Company had less than 16 per cent margin for selling, collection and administration expense, etc., in 1930, and no margin at all when it came to October of the same year.

Chart A shows the results as Table A but will probably assist you in visualizing the effect of the "fixed value for duty purposes" and of the change in duty rates, on the operations of the company when they are considered.

The first column shows a breakdown of the implement referred to in Table A in Chart Form. Net realized price to the company has been shown as \(\$ 100\) and, in this case, the additions for agents' commissions and freight amounted to \(\$ 30\), making the price to the farmer \(\$ 130\).

The implement cost the (United States) company to manufacture \(\$ 62\) leaving \(\$ 38\) out of which to pay-
1. Distribution and administrative expense of the Canadian company who market the machine.
2. Duty paid by the Canadian company.
3. Administrative expenses and return on capital only, to the United States corporation.
On Chart A it will be seen that the Canadian company received a margin ( \(\$ 17\) ) in 1930, but nothing in 1931. The actual cost of distribution in Canada, exclusive of return on capital, will be shown to you later in this submission-it amounts to over 18 per cent so that the margin allowed to the Canadian company even in 1930 was insufficient to pay the distribution charges.

Duty in 1930 was \(\$ 5\), being 6 per cent on a figure slightly in excess of \(\$ 80\), and that was the fixed value for duty purposes.

The United States company thus received \(\$ 16\) to take care of its administrative expenses and return on capital.
[Mr. Walter C. Macdonald, C.A.]

Admitting at the present time that my information is incomplete, it appears to me that a margin of 10 per cent over factory cost to the American manufacturing company in this instance, would be liberal.

The third column shows that the Canadian government by increasing the duty and inaugurating an excise tax in 1931, took all of the profit which had previously gone to the Canadian company leaving it no margin on which to pay its distribution and administrative expenses. For clearness I have confined this comparison to a year in which United States exchange was at parity, or better. In the years 1932, 1933 and 1934, as you have seen from a chart submitted to you from Mr. Rutherford, United States exchange was at a premium, therefore, the Canadian company not only had no margin for distribution and administrative expenses, but was operating at an actual loss in the amount of the premium paid on the United States funds. This loss would still further be increased if the distribution expense were added to the adverse exchange percentage.

Although in these years the United States company would apparently continue to receive its profit margin of \(\$ 16\).

Are there any questions on that? Has that cleared up Dr. Donnelly's point.

\section*{By Mr. Donnelly:}
Q. I do not see anything else in it than just the effect of the duty. You have shown us the difference in the amount of duty at different times. But as I understand fixing of value for duty purposes it is this: You go over there to the United States and buy an implement for which you pay \(\$ 79\), and when you go to bring it in the government says the value is not \(\$ 79\), the right and proper value is \(\$ 130\), and you pay duty on the \(\$ 130\). They fix the value that you have to pay duty on. This does not say anything about the fixing of value for duty purposes, it just shows to me the effect of the duty as applied to two different scales of duty?-A. Perhaps the chart does not-it may be open to criticism there-as I say, this was produced under pressure. The intent was just to show in the first column what the United States factory cost was and then to show the margin between the cost and selling price and to break it down between the Canadian company, duty and the United States company. Now, the point is that if your duty value were not fixed it would have cut down the United States company's proportion which is shown in column 2, and would correspondingly have increased the Canadian company's proportion.

\section*{By Mr. Senn:}
Q. Well, in any case the price is the same to the farmer in these years which you have under discussion?-A. Presumably, yes. This covers but a short period of time, it really is not two years. I had it down originally as 1931 and 1930 but it was pointed out that the cost of these implements was a little different in 1931 and I have changed it to two months.
Q. In the case of the International company the Canadian company is practically wholly owned by the American company, is it not?-A. Yes.
Q. Well then, whether the profit accrues to the Canadian company or to the American company is a matter of indifference to the International Harvester company?-A. That is true, but it reflects a very marked change in the profits of the Harvester company which you have under consideration at the present time, the Canadian company.
Q. Is it fair to assume this, that the Canadian treasury received a larger amount in 1931 from imported implements than they did in 1930?-A. Well, that depends on the number imported, of course.
Q. You are speaking of imported implements only at the moment?-A. Yes.
Q. So that the Canadian government after all is receiving the benefit of the higher duty?-A. The Canadian government?

Mr. Cleaver: Might I interrupt, Mr. Chairman; I think the parent company overcame that difficulty and did not pay the Canadian government the increase, they overcame it by marking up the price of their goods. The actual duty paid would be on their selling price, but they escaped the dump duty, and the difference between the dump duty and the small amount of increase in duty would not be a large amount.

> By Mr. Senn:
Q. I think still, Mr. Macdonald, in fairness we should say this, that the importations themselves fell off in 1930?-A. Yes.
Q. And the percentage of importations in relation to the amounts sold fell off, so that it would have the effect finally of throwing more business into the hands of the Canadian company, would it not?-A. Not in this case.
Q. Well, if their importations were only 40 per cent of their total sales in 1931 and 1932, as Mr. Morrison said this morning, and where they are down from what they were previously, surely that is an indication that the Canadian company enjoy a larger percentage of the business than formerly?-A. That might be, but there was less of a demand for the goods which were formerly imported, for instance tractors; that would hit their importations heavily, because the demand and output of tractors has been relatively small since 1930 . But that again is outside of my province, unless you want to develop that point.

Mr. Senn: Very well.

\section*{By Mr. Evans:}
Q. In your chart A, August and October, 1930, you show the duty, and the Canadian company; in the next chart, in October, you show the Canadian company and the duty absorbing all the margin of the Canadian companythat and the excise tax; does that mean that the Canadian government got all that the Canadian company got before?-A. That is exactly it.
Q. The margin?-A. Yes, but there still remains an element of profit which was entirely in the hands of the United States company.
Q. In the parent company?-A. Yes. But the real import of this as far as the question we are considering is concerned is this; that if you have sold a thousand dollars worth of goods and you have bought one-half of them at \(\$ 66\) you have made a profit of 33 per cent on that half; but if you bought the remaining half at the same price at which you had to sell them naturally your market has decreased on the average. And now, that is the net effect of this thing on the item which we are considering at the present time.

\section*{By Mr. Donnelly:}
Q. What part of the mark up price do they pay the duty on?-A. They pay it on \(86 \cdot 666\) of the dealer's price at Chicago.
Q. When the dealer buys the goods from the company, at the factory door? -A. At Chicago, at the factory door. Now, that is not \(86 \cdot 666\) of the net price which the company realizes on the sale to the dealer in Canada, because of the fact that the Canadian price is different from the American.

Witness: Now, as to the effect of the factors shown in Table A on the operations of the International Harvester Company: At this point let me say that the Canadian Harvester Company acts in two distinct capacities.
1. As manufacturer and distributor of the product of its own factories in the Dominion.
2. As distributor of the product of the American factories of the Harvester Corporation (and to a limited extent of other products).
[Mr. Walter C. Macdonald, C.A.]

Mr. Morrison, the President of the Canadian company, stated before the Royal Commission that aproximately 50 per cent of the implements and machines sold in Canada were the product of their U.S. factories, up to 1930. Since then the percentage of American manufactured goods sold to the Canadian subsidiary had shown a decreasing percentage.

As to its operations in the second capacity, I have indicated that a diversion of profit occurs through the operation of the "fixed value for duty purposes" provision of the Canadian Customs, inasmuch as the price which the United States manufacturer shall charge to the Canadian distribution company was fixed at a margin of \(13 \cdot 38\) per cent until May, 1935, below the prevailing dealers' price in the U.S.A. This margin is insufficient to provide for the normal expenses incidental to distribution in Canada, including selling, servicing, collection and bad debts expenses, and other such items. In other words, the Canadian distributing company is forced to operate at a loss while as we have seen in Table A a margin of \(\$ 17\) of the net sales realization dollars goes to the U.S. manufacturer.

In view of all these facts it was necessary that as your auditor I should have an estimate of the effect in dollars and cents of the diversion of profits in this case, and at an interview in Toronto on May 12 I asked the representative of the Harvester Company for this information for all of the years from 1913 to date. This I confirmed in writing on May 16. No information, as yet, has been forthcoming from the officials of the company.

On my visit to Hamilton last week, I naturally inquired into this feature and was informed that the company does not break down its sales or cost of sales as between Canadian manufactured implements and implements manufactured in the U.S.A. The records of the company tend to support this in so far as I have been able to examine them in the very brief time at my disposal. It is admitted, however, by the company that both the gross profit and the net profit shown by the records of the Canadian company are weighted downwards in terms of this excess charge, the amount of which cannot be readily determined.

This fact must be borne in mind throughout our discussion of the operating results of the company, and in connection with practically all of the financial statements to be submitted to you by me in regard to the operations of the International Harvester Company of Canada, Limited.

It may be opportune to say, in fairness to the company, that in as much as the Canadian government fixes the price at which these goods shall cross the international boundary the company must utilize that price in invoicing to Canada, or pay a dumping duty; also that the company officials have co-operated with me in examining ways in which an estimate of the figure in question can be arrived at. They will, no doubt, furnish counsel with the reasons for their failure to establish definite figures, one of which is, I understand, that underlying invoices are not available for more than three or four years back.

Now we come to table B and table C.

\section*{INTERNATIONAL HARVESTER COMPANY OF CANADA, LIMITED CONDENSED STATEMENT OF PROFIT AND LOSS, 1926 TO 1935, INCLUSIVE}
(In Thousands of Dollars)
\begin{tabular}{|c|c|c|c|}
\hline & \begin{tabular}{l}
First \\
4 Years \\
26 to 1929
\end{tabular} & \[
\begin{aligned}
& \text { Last } \\
& 6 \text { Years } \\
& 1930 \text { to } 1935
\end{aligned}
\] & \[
\begin{aligned}
& 10 \text { Years } \\
& 1926 \text { to } 1935
\end{aligned}
\] \\
\hline \multicolumn{4}{|l|}{Net Sales:} \\
\hline After deducting agents commissions and freight from factory to point of sale, etc. & 103,019 & 59,285 & 162,304 \\
\hline \multirow[t]{2}{*}{Cost of the Above Sales: Including goods manufactured in Canada at factory cost and goods purchased from International Harvester Company U.S.A. aud otherwise at invoice value basis..} & & & \\
\hline & 77,148 & 47,410 & 124,558 \\
\hline Gross Profit. . . . . . . . . . . . . . . . . . . . & 25,871 & 11,875 & 37,746 \\
\hline Mark-up percentage.. & 33.53\% & 25.05\% & 30.30\% \\
\hline \multicolumn{4}{|l|}{Expenses:} \\
\hline Management and administration.. & 781 & 526 & 1,307 \\
\hline Selling and distribution.. & 10,174 & 11,319 & 21,493 \\
\hline Collection expense. & 2,223 & 2,198 & 4,421 \\
\hline Provision for bad debts. . .. .. . . . . . & 4,205 & 2,420 & 6,625 \\
\hline Loss on exchange-U.S.A. and other.. & & 766 & 843 \\
\hline & 17,460 & 17,229 & 34,689 \\
\hline \multirow[t]{2}{*}{\begin{tabular}{l}
Less interest received net of interest paid, and other sundry revenues. \\
Total expense net of incidental revenues..
\end{tabular}} & & 1,585 & \\
\hline & 14,326 & 15,644 & 29,970 \\
\hline Profit or Loss on Operating. . . . . . . & 11,545 & \[
\begin{gathered}
3,769 \\
\text { Loss }
\end{gathered}
\] & 7,776 \\
\hline \multicolumn{3}{|l|}{Add non-operating revenue (excess of fire insurance reserves over losses for the period).} & 389 \\
\hline \multicolumn{3}{|l|}{\multirow[b]{2}{*}{Deduct appropriation for pensions. . .. .. .. .. .. .. ..}} & 8,165 \\
\hline & & & \\
\hline \multicolumn{4}{|l|}{\multirow[t]{3}{*}{\begin{tabular}{l}
Apparent profit for period of ten years to Nov. 30, 1935. Allocated as Follows: \\
For income taxes to Canadian Government. . .. .. 1,288 \\
Return to parent company-U.S.A... .. .. .. .. 6,164
\end{tabular}}} \\
\hline & & & \\
\hline & & & \\
\hline \multicolumn{4}{|c|}{7,452} \\
\hline
\end{tabular}

INTERNATIONAL HARVESTER COMPANY OF CANADA, LIMITED CONDENSED STATEMENT OF PROFIT AND LOSS-1926 TO 1935, INCLUSIVE
(In Percentages)


\section*{CONDENSED STATEMENT OF PROFIT AND LOSS PERIOD FROM 1926 TO 1935 INCLUSIVE}

It was originally intended that the period covered by this inquiry should be from 1913 to 1935 inclusive. In view of the need for haste, however, it was necessary to curtail the information requested from the companies for the period from 1913 to 1935, and to permit them, in view of the limited time allowed, to furnish full information for the period from 1926 to 1935 only. Table B, which shows a condensation of the operating results, and table C, which shows the same results stated as percentages of sales, cover only the ten year period which I have indicated.

Before proceeding to a review of these statements one should first consider the scope of operations of the International Harvester Company Canada, Limited, as reflected therein, remembering that it is an integral part of a much larger organization, the International Harvester Corporation of the United States; that its operations are, in the final analysis, directed from Chicago; and that due in part to the failure of the company to evaluate for the committee the extent to which profits have been diverted to the parent organization it will probably be essential to consider along with the operations and profits of the Canadian company, such profits as accrue to the whole organization from sales made to the Canadian consumer.

The International Harvester of Canada, Limited operates three factories:-
1. The Implement Factory with its malleable and grey iron foundries in Hamilton.
2. The Twine Mill in Hamilton.
3. The Truck Factory at Chatham.

The products of all of these factories together with those imported from the United States are included in the statements now submitted to you for the reason that the company can furnish no complete analysis of its sales, cost of sales, or expenses, divided as between:-
1. Implements and machines-Canada.
2. Implements and machines-America.
3. Trucks.
4. Twine.

Turning now to table B and dealing with the differnet sections of that statement as they appear:-
Net Sales
All of the implement companies in Canada and the United States state their sales on the basis of net dollars realized at the factory door. The sales figures shown are, therefore, net sales realizations after deducting agent's commissions and freight from factory to point of sale.

To evaluate these figures in terms of the farmer's dollar spent for farm implements one would require to add approximately 33 per cent for commission and freight. In other words, the farmer pays \(\$ 133\) for an implement from which the company realizes \(\$ 100\). Approximately \(\$ 22\) goes to the agent as his commission, and approximately \(\$ 11\) to the railroad company. That is on a Regina basis.

The relationship of freight and commission to the farmer's dollar in other sections of Canada will be set forth in a later submission.

Attached hereto I will submit to you an analysis of sales as between the principal divisions shown on the books of the company. That statement will be ready to-morrow morning.
Cost of sales
In terms of the information which I have already furnished, your committee will readily understand that this is a composite figure; that is, that it includes implements and machines, Canada; implements and machines, American; trucks and twine.

\section*{By Mr. Needham:}
Q. Where did you get those figures, that the company gets \(\$ 100\) and the agent gets \(\$ 22\) ?-A. That is an average of 26 implements compiled by the Royal Commission on Price Spreads. I can show that to you if you wish, but it is correct.

Mr. Needham: It does not work out that way.
Mr. Cleaver: You get a lot more than that, I suppose.
Witness: That is at Regina. But the following information will, perhaps, be of use in evaluating the factors included therein:-
1. Importations of implements and machines from the United States during this period were as follows: First four years \((1926,1927,1928,1929) \ldots . .\). . \(\$ \begin{aligned} & 37,028,000 \\ & \text { Second six years }\end{aligned}\) 11,165,000 Second six years.. .. .. .. .. .. .. .. .. .. .. 11,165,000

Total ten years. . . . . . . . . . . . . . . . . . \$ 48,193,000
[Mr. Walter C. Macdonald, C.A.]
It is to this item that the fixed value provision applies.
Duty was paid on importations as follows:-
First four years. . . . . . . . . . . . . . . . . . . . . . . . . . . . \$ 1,467,000
Last six years. . . . . . . . . . . . . . . . . . . . . . . . . .. 975,000
Total ten years. . . . . . . . . . . . . . . . . . . . . . \(\$ 2,442,000\)
2. The cost of shipments from the Hamilton Implement
Works during the same period was as follows:
First four years . . . . . . . . . . . . . . . . \(\$ 28,061,000\)
Second six years. . . . . . . . . . . . . . \(15,888,000\)
Total ten years. . . . . . . . . . . . . . . . . . . . . . \(\$ 43,949,000\)
3. The cost of shipments from the Hamilton Twine Works during this period was:
First four years. . . . . . . . . . . . . . . . . \(\$ 7,521,000\)
Second six years. . . . . . . . . . . . . . . . \(8,331,000\)
Total ten years.
\(\$ 15,852,000\)
4. The cost of shipments from the Chatham Truck Works was as follows:
\(\begin{array}{llllllr}\text { First four years. . . . . . . . . . . . . . . . } & \$ 6,214,000 \\ \text { Second six years. . . . . . . . . . . . } & 6,568,000\end{array}\)
Total ten years . . . . . . . . . . . . . . . . . . . . . . . \(\$ 12,782,000\)

These may be considered as the principal component parts of costs of sales.

\section*{Gross Profits-}

This is the net figure arrived at by deducting cost of sales from the sales realization figures and results in mark-ups of the percentages indicated. This percentage is much lower than the average of the industry, among the reasons being, of course, the heavy weighting included in the figures by reason of the " fixed value for duty purposes" provision, a feature which we have already discussed in detail.

As the Harvester Company have not, so far, furnished me with figures showing the amount of this weighing, I feel it incumbent upon me as your auditor to furnish you with some estimate of the extent thereof; and I purpose, at this point, to deal with three such approximations, admitting in each case that the figures shown are rough estimates only, subject to later verification and adjustment. You understand definitely that these figures are submitted on that basis.

\section*{First Approximation}

Under examination on this point before the Royal Commission of 1934, Mr. Morrison, the president of the International Harvester Company, stated that the approximate amount by which the invoice prices under the "Fixed value for duty purposes" provision, would exceed the normal prices charged to corresponding subsidiaries of the Harvester Company in the U.S.A. would be 10 to 12 per cent.

Applying these percentages to the purchases from the parent and affiliated companies would produce the following results:-
\begin{tabular}{|c|c|c|}
\hline At 10 per cent & First four years. . Second six years. . & \[
\begin{array}{r}
\$ 3,703,000 \\
1,117,000
\end{array}
\] \\
\hline & Total ten years.. & \\
\hline At 12 per cent & First four years.. & \$4,443,600 \\
\hline & Second six years.. .. .. & 1,34(),400 \\
\hline
\end{tabular}

Total ten years. . . . . . . . . . . . .. \(\$ 5,784,000\)
If Mr. Morrison's estimate be correct it would show that gross profits for the ten-year period should be increased by \(\$ 4,820,000\) at 10 per cent or by \(\$ 5,874,000\) at 12 per cent increasing the mark-up percentage from \(30 \cdot 30\) per cent to \(34 \cdot 17\) per cent or to \(34 \cdot 95\) per cent.

So far as I can determine in the short period available to me, I was not able to make any careful examination of the records in Hamilton nor did I have any reason to doubt the accuracy of Mr. Morrison's estimate. From such fragmentary information as was available, however, I adduce that in invoicing to the Canadian company at the normal price quoted by Mr. Morrison there would still exist some substantial margin of profit to the manufacturing company in the United States.

\section*{Second Approximation}

The company has furnished me, in replying to my questionnaire over the ten-year period, with the factory costs and net sales realizations on ten implements considered at the time the questionnaire was drawn to be typical of those commonly used in eastern and western Canada and manufactured by their Hamilton plant. The list comprises the following and you will note that it does not include a thresher which, I am informed, is sold at a higher mark-up over factory cost than any of these implements.

> 2 furrow 14 -inch gang plough only
> 14 -foot single dise harrow
> 9 -foot stiff tooth cultivator-duck foot
> 8-inch binder complete
> 6-foot mower
> Cream separator 450 pounds capacity
> Tractor, 3 plough or 4 plough
> Reaper thresher
> 10 -inch walking plough
> 4 section iron diamond harrow with cross bar
> 13 run single disc 7 -inch spring drill
> 10 -foot dump rake

From the replies I adduce the fact that these typical machines show an average mark-up on cost of 50 per cent. Applying this percentage to the sales volume in Canada for the ten years it would appear to me that, allowing bare factory cost to the U.S. factories and assuming the gross profit on these typical implements to be indicative of the general mark-up over factory costs to the Harvester organization as a whole, would show a gross profit earned from the Canadian sales outlet for Canadian and American factories approximately \(\$ 54,000\) as against \(\$ 37,746,000\) shown by the records of the Canadian company.

In considering this yard-stick the committee should remember that repair parts show a mark-up of over 25 per cent over factory cost, and that this would tend to increase the mark-up of the company as a whole as to implements over the average of the typical implements which I have indicated.
[Mr. Walter C. Macdonald, C.A.]

\section*{Third Approximation:}

The third approximation which may be applied is based on a comparison with the mark-ups shown by companies who manufacture all their products in Canada.

In this regard I refer you to page 3994 of the proceedings of the royal commission of 1934, in which the following comparisons were made as between the Massey-Harris company and the International Harvester Company of Canada, Limited.

I will read them and state the excesses of the Massey-Harris percentage over the Harvester company, remembering that the Massey-Harris manufactured practically all of their products sold in Canada.


We on our part have examined the questionnaire replies of the other companies and find that their mark-up on a comparable basis to that of the Harvester company, would produce a figure substantiating that as shown in approximation No. 2 , namely 50 per cent.

At this point I should say there is a marked difference in the accounting systems of the different manufacturers in the industry.

Application of the Massey-Harris percentage above indicates to the sales of the Harvester company in the years shown would increase the mark-up to a figure considerably in excess of 50 per cent.

The committee will appreciate that I place these approximations before them with considerable hesitation. I had hoped that the Harvester company would be able to evaluate the hidden factor in these figures for me but in the absence of figures from them it appears to be my duty as auditor to, at least. set forth some idea of the effect of the actual profits realized by the Harvester company from the Canadian sales outlet.

I appreciate that in approximation No. 1 some element of profit is allowed to enure to the U.S. factory.

In the absence of any comprehensive information as to the U.S. costs it is impossible for me to estimate the effect of this factor in approximations two and three. I submit however that the costing system of the Harvester organization and presumably therefore of the American factories is based on charging to factory costs all charges relating directly or indirectly to manufacturing, including a proportion of the salary and expenses of management from Chicago executive downward. Consequently I am of the opinion that any factory cost established includes, practically speaking, everything but the interest return on the capital invested in production.

There is a reference in the Harvester company's reply to the questionnaire which indicates that everything is charged to factory cost which logically can be considered as a part of that cost.

The approximations I have indicated have been discussed with the officials of the Harvester company who are present this morning. They will, no doubt, be able to give you their opinion on the validity or otherwise of the conclusions that I have drawn for your committee. I have advised the company of my intention and of the basis of my approximations of the basis on which I have drawn them.

\section*{Expenses}

The basis upon which the company operates its expense allocation is that practically all expenditures are charged to one or other of the following main divisions:-
(1) Factory cost
(2) Selling and distribution
(3) Collection expense.

I have already indicated that the factory cost includes a pro-ration of all salaries and expense of the company from the Chicago office down, but in the limited time at my disposal I have not been able to investigate this expense feature with any degree of thoroughness. The system of pro-ration is intricate and will require much more careful study and consideration before any opinion can be formed on the reasonability or otherwise with which expenses are apportioned.

The company's officials are present and will be in a position to advise you of their treatment of the expense factors.

It may be interesting to note that the total cost of the Chicago office in 1929 was \(\$ 290,000\), but that management and administration expense shown in the financial statements in that year was \(\$ 75,267,000\) only. Thereby showing that the Chicago office was pro-rated over the other divisions and did not remain shown on the statements as administrative expense, which latter is the normal procedure.

It is noted also that until 1930 it had been the custom of the company to pay substantial bonuses to the management and to employees at the year end. The largest amount paid in any one year was in 1929 when \(\$ 195,000\) was so disbursed.

In regard to bad debts the balance sheet of the company did not contain, in the opinion of their auditors, adequate provision for bad debts. After consultation with the company's officials and considering the documents which they submitted, I have agreed to an additional amount of \(\$ 1,500,000\) being set aside, establishing the reserve at approximately 25 per cent of the total accounts and bills receivable on the books of the company as at November 30,1935 . This figure is subject to later examination and revision by me if necessary.

\section*{Non-operating Revenue}

It has been the practice of the company to carry its own insurance on the buildings.used in its distribution system, charging the normal insurance premiums against operating and crediting the reserve account. Against this account they charge such losses as develop from year to year. The reserves exceeded the losses during the ten-year period by \(\$ 389,000\), which I have accordingly added back to the profits of the company as shown in Table B. It is really a profit. Pension Plan

The company operates a pension plan for its employees and charges to its operation a sum approximately 3 per cent of all salaries and wages which is in turn credited to pension reserve.

In addition it has appropriated out of its yearly operating results considerable amounts from time to time for additional pensions reserve. The figure of \(\$ 713,000\) represents the contribution of the company in excess of the 3 per cent surcharge which I have indicated.

The officials of the company will be able to give you full information on the operation of their pension plan.
[Mr. Walter C. Macdonald, C.A.]

\section*{Return to Parent Company}

As a net result for the ten years it will be noted from the last figures on Table \(B\) that, after paying income tax to the Canadian government, the parent company had an apparent return from its Canadian operations of \(\$ 6,164\),000 . This must, of course, be increased by the profits of unknown amount diverted to the U. S. companies.

The average investment of the International Harvester Company (U.S.A.) in the Canadian company during the ten-year period under review was \(\$ 29\),136,128 , of which \(\$ 6,164,000\) is \(2 \cdot 1\) per cent.

I submit hereunder a summarization of the realization to the American company for the past ten years, before income taxes, in terms of the three approximations which I have utilized in attempting to evaluate the real profits of the Canadian factory and of the business of the International Harvester Corporation.
\[
\begin{array}{ccc}
\text { Approximation No. } 1 \text { shows profits of...................... } & \$ 12,272,000 \\
\text { With a return on the average capital investment.. } & 4 \cdot 2 \% \\
\text { Approximation No. } 2 \text { and No. } 3 \text { show a return of.... } & \$ 24,452,000 \\
\text { With a return on the average capital investment. . } & 8 \cdot 4 \%
\end{array}
\]

May I again reiterate that this submission is made by me under pressure, that is prepared in a period of time not adequate to give proper treatment to the subject matter, that it is based upon information supplied also under pressure by the company and that for these reasons it must be considered more as an indication of trends than as a statement of accounting fact.

\section*{By Mr. Cleaver:}
Q. Did you have any opportunity to verify the capital content of the Canadian company?-A. The capital content of the Canadian company as shown by the records consist of moneys advanced by the American company and invested in fixed assets and otherwise inoperative.

\section*{By Mr. Graham:}
Q. On page 7 of the statement that you make it would be interesting to note that the total cost of the Chicago office from 1929 appears. Would it be well to make it clear that there is a charge the Chicago company makes to the Canadian company?-A. That is correct.
Q. That is correct for that year?-A. For which approximately two-thirds, or a little over two-thirds represents salary and the remainder represent the ordinary office and travelling expenses of such an organization.

\section*{By Mr. McLean:}
Q. In giving us the factory cost I understood from your remarks that you included overhead, depreciation, management and everything inside the factory itself. Is that correct?-A. That is correct.
Q. Depreciation on machinery?-A. Depreciation on machinery is included and on the building.
Q. And property?-A. Yes, everything of that description.
Q. It includes taxes, of course?-A. Yes; the factory accounting system is very complete.

\section*{By Mr. Golding:}
Q. You spoke of the company carrying its own insurance?-A. That is correct, yes.
Q. You put that as a profit to the company, what it paid for this insurance; is that correct?-A. Yes.
Q. The balance. I did not get that quite clear.-A. May I make it clear? The company carries its own insurance on its branch warehouses. It takes the normal insurance premium which it would pay for insurance to other companies, and charges that against operating and sets it aside in a reserve fund. It is a book entry only. The company charges against that reserve the actual money which it pays out for losses. The difference between the amount in the reserve and the amount that is paid out over a ten-year period I have considered properly as a profit to the company.

\section*{By Mr. Needham:}
Q. In arriving at the overhead, did you have in mind or did you discover anything as to the percentage of the plant and buildings which was actually in operation?-A. No; it was impossible for an accountant to determine, walking through a plant of 176 acres, how much of it was in operation. I think that is a matter for an engineer, not an accountant. As a matter of fact, I was not inside the plant. I was occupied, I should say, fourteen hours a day down there, and my duties did not carry me through the plant. I did not have time for that, much as I should like to have done it.

\section*{By Mr. Senn:}
Q. You made no enquiry in your questionnaire regarding that?-A. Yes, I did, but the replies to that section of the questionnaire were deferred and we have not received it so far as I can recollect. A short time ago I was told that some more stuff had come in, but I have not examined it yet. It may be in that.

The Chatrman: Gentlemen, I must insist on the agreement we arrived at, which was to the effect that each member would stand up and put his question so everyone could hear it.

\section*{By Mr. Ward:}
Q. I gathered from your remarks, Mr. Macdonald, you are not in a position to recommend as to whether a physical examination should be made of the plant or plants to determine as to what extent these plants are actually in use; that is the factory buildings, and warehouses and so on that are now being charged up to overhead in respect to the machines we are buying?-A. The only comment I would have to make is that what I have seen of the company it is very efficiently operated, and its operating policies are sound. 1928 or 1929, I have forgotten which, anyhow, these two years were the peak years of their operations in Canada, so that over four or five years it would hardly be likely they would be over-expanding, in this particular instance at least.
Q. You are not in a position to say whether or not a physical examination should be made in order to determine exactly?-A. I think that is a matter for the committee to determine; all I can tell you is what I have found.
Q. That is fair.

\section*{By Mr. Donnelly:}
Q. I should like to ask Mr. Macdonald if he has any explanation for this? I notice in chart B in the first four years the total amount of sales was \(\$ 103,000,000\) in round figures, and the expenses for selling and distributing \(\$ 10,000,000\). When we take the next column we find in six years the net sales were \(\$ 59,000,000\) and the cost of selling and distributing \(\$ 11,000,000\) which means \(\$ 11,000,000\) for selling and distributing \(\$ 59,000,000\) and \(\$ 10,000,000\) for selling and distributing \(\$ 103,000,000\). The same thing is true in regard to collecting expenses, \(\$ 2,000,000\) for collecting \(\$ 59,000,000\) and \(\$ 2,000,000\) for collecting \(\$ 103,000,000\). How do you account for those figures?-A. I account for those figures by saying in regard to them you should really ask the company
[Mr. Walter C. Macdonald, C.A.]
that and not me; but I would say this in regard to selling and distributing facilities: You are aware of the facilities which they provide, and all those are maintained irrespective of volume. In regard to their collection expenses I should say the collection expenses, if they decreased 10 per cent-they decreased 5 per cent-they were not doing too badly, considering the cost of collection in the last six years. I am not pleading the company's case-

\section*{By Mr. McLean:}
Q. I do not know just exactly what table C means. I notice the provision for bad debts remained the same figure for two years, 408. I was wondering if the danger of bad debts would not be greater in some years than others?A. That, Mr. McLean, has caught me in a state-I should have removed that interpretation. The reason for that is that I simply took the bad debts that were written off and set aside over the ten year period and pro-rated them back in proportion to sales. I felt that was the fair way to do it, because otherwise you would have shown a most disproportionate result in the second six years as against the four; so that is one respect in which I have altered the figures.
Q. I do not think that would be correct.-A. I make no apologies for that.

The Chairman: Does anyone desire to ask Mr. Macdonald any further questions?

Witness: That statement shows as adequately as I think it is possible to do so, the operations of the Canadian company as shown by the books of that company.

\section*{By the Chairman:}
Q. Does that complete your statement?-A. At the present time, Mr. Weir, yes.
Q. That is the interim statement that you have this afternoon?-A. Yes. In addition to that I have information regarding manufacturing and cost of implements, and so on, which will have to be submitted later on in the week.

The Chairman: It is 5.30 . I do not suppose it is the wish of the committee to call any other witnesses this afternoon. If there are no further questions we shall adjourn until to-morrow morning.

The committee adjourned at 5.30 o'clock, to meet again on Thursday, June 11, at 11 o'clock.

\section*{STANDING COMMITTEE}

ON

\section*{AGRICULTURE AND COLONIZATION}

\section*{MINUTES OF PROCEEDINGS AND EVIDENCE (Farm Implement Price Inquiry)}

THURSDAY, JUNE 11, 1936
No. 10

\section*{WITNESSES:}

Mr. F. M. Morton, Resident Manager of the International Harvester Company, Ltd.
Mr. C. R. Morrison, President of the International Harvester Company, Ltd.
Mr. C. E. Jarchow, Comptroller for the International Harvester Company, Ltd.

\section*{Mr. F. E. Siefkin, General Attorney for the International Harvester Company, Ltd.}

Mr. H. C. Seidenbecker, Assistant Comptroller, International Harvester Company, Chicago.
Mr. J. W. Dillon, Purchasing Agent, International Harvester Company, Hamilton.
Mr. C. B. Munger, General Auditor, International Harvester Company, Hamilton.

\section*{EXHIBITS FILED}

No. 12.-Federal Trade Commission Report on the Causes of High Prices of Farm Implements.

No. 13.-Farm Implement Machinery in Canada-Published by the Department of Trade and Commerce-Dominion Bureau of Statistics.

\section*{REPORTS TO THE HOUSE}

Thursday, June 11, 1936.
The Standing Committee on Agriculture and Colonization begs leave to present the following as a

\section*{Third Report}

By an Order of Reference, dated March 13, your committee was authorized to print from day to day 500 copies in English and 200 copies in French of the minutes of proceedings and evidence, together with papers, documents and records to be incorporated with such evidence.

On account of the demand for copies, your committee requests permission to print an additional 500 copies in English and 100 copies in French, of all minutes of proceedings and evidence, together with papers, documents and records to be incorporated with such evidence, and that Standing Order 64 be suspended in relation thereto.

All of which is respectfully submitted.

\author{
W. G. WEIR, \\ Chairman.
}

\section*{MINUTES OF PROCEEDINGS}

Thursday, June 11, 1936.
The Standing Committee on Agriculture and Colonization met this day at 11 a.m. The chairman, Mr. W. G. Weir, presided.

Members present: Messrs. Bertrand (Prescott), Boulanger, Cleaver, Coldwell, Donnelly, Douglas, Dubois, Evans, Fontaine, Furniss, Golding, Graydon, Johnson (Lake Centre), Leclerc, MacRae, McKenzie (Lambton-Kent), McLean (Melfort), McNevin (Victoria, Ont.), Mitchell, Motherwell, Needham, Patterson, Perley (Qu'Appelle), Rennie, Rheaume, Senn, Spence, Taylor (Norfolk), Thompson, Thorson, Tomlinson, Turner, Ward, Weir.

In attendance: Mr. R. T. Graham, counsel for the committee, and Mr. Walter J. Macdonald, C.A., auditor for the committee.

The sub-committee presented the following report:-
Your sub-committee recommends that the committee do report to the house and request permission to print an additional 500 copies in English and 100 copies in French of all minutes of the proceedings and evidence, together with papers, documents and records to be incorporated with such evidence, and that Standing Order No. 64 be suspended in relation thereto.
On motion of Mr. Johnson (Lake Centre) :
Resolved,-That the report of the sub-committee be concurred in.
The following officials of the International Harvester Company Limited were recalled for further examination:-

Mr. C. R. Morrison, President of the Canadian company of the International Harvester Company, Ltd.;

Mr. F. M. Morton, resident manager of the Canadian company of the International Harvester Company, Ltd.;

Mr. C. E. Jarchow, financial controller of the International Harvester Company, Ltd.;

Mr. F. E. Siefkin, general attorney for the International Harvester Company, Ltd., of Chicago.

Mr. R. T. Graham filed Exhibit No. 12-Federal Trade Commission Report on the causes of High Prices of Farm Implements, May 4, 1929.

Adjourned to 4 p.m.

\section*{AFTERNOON SESSION}

The committee resumed at 4 o'clock, the Chairman presiding.
Members present: Messrs. Bertrand (Prescott), Bouchard, Cleaver, Donnelly, Evans, Furniss, Gardiner, Golding, Graydon, Johnson (Lake Centre), Leader, MacRae, McKenzie (Lambton-Kent), McLean (Melfort), McNevin (Victoria, Ont.), Mitchell, Needham, Patterson, Perley (Qu'Appelle), Rennie, Senn, Taylor (Norfolk), Thorson, Tomlinson, Turner, Ward, Weir.

In attendance: Mr. R. T. Graham, K.C., counsel for the committee, and Mr. Walter J. Macdonald, C.A., auditor for the committee.

Mr. Morton, Mr. Morrison, Mr. Jarchow and Mr. Siefkin of the International Harvester Company Limited, recalled and further examined.

The committee adjourned at 6 o'clock to meet again at 8 p.m.

\section*{EVENING SESSION}

The committee resumed at 8.30 p.m., the Chairman presiding.
Members present: Messrs. Bertrand (Prescott), Bouchard, Cleaver, Donnelly, Dubois, Dupuis, Evans, Fafard, Golding, Johnson (Lake Centre), MacRae, McLean (Melfort), McNevin (Victoria, Ont.), Needham, Rheaume, Senn, Taylor (Norfolk), Thorson, Tomlinson, Turner, Ward, Weir.

In attendance: Mr. R. T. Graham, K.C., counsel for the committee, and Mr. Walter J. Macdonald, C.A., auditor for the committee.

Mr. Graham resumed the examination of the officers of the International Harvester Company in relation to the price of agricultural implements.

In addition to the officers previous named, Mr. John W. Dillon, purchasing agent of the International Harvester Company, Hamilton, was called and also Mr. H. C. Seidenbecker, assistant comptroller, International Harvester Company Limited, Chicago, and Mr. C. B. Munger, general auditor, International Harvester Company, Ltd., Hamilton.

Mr. Graham, K.C., filed Exhibit No. 13.-Farm Implement Machinery in Canada.

The committee adjourned at 10 p.m. to meet again on Friday at 11 a.m.

> WALTER HILL, Clerk of the Committee.

\section*{MINUTES OF EVIDENCE}

House of Commons, Room 231, June 11, 1936.

The Select Standing Committee on Agriculture and Colonization appointed to inquire into the prices of agricultural implements met at 11 o'clock. Mr. Weir, the chairman, presided.

Mr. R. T. Graham, K.C., Counsel for the committee.
The Chatrman: Gentlemen, if you will kindly come to order we shall proceed. The Sub-committee yesterday made a recommendation with regard to printing additional copies of the evidence. I have the recommendation here and I shall ask Mr. Johnson to move it.

Mr. Johnson: Your sub-coinmittee recommends, that the committee do report to the House and request permission to print an additional 500 copies in English and 100 copies in French of all Minutes of the Proceedings and Evidence, together with papers, documents and records to be incorporated with such evidence and that Standing Order No. 64 be suspended in relation thereto.

Mr. Taylor: I second the motion.

\section*{Carried.}

The Chairman: We are taking up this morning where we left off yesterday afternoon. The representatives of the International Harvester Company, Mr. Morrison, Mr. Morton, Mr. Jarchow, Mr. Siefkin will be on the stand.

Mr. F. D. Siefkin, counsel for the International Harvester Company.
Mr. C. R. Morrison, Mr. F. M. Morton, Mr. C. E. Jarchow, recalled.
Mr. Graham: Mr. Morrison called to my attention the fact that there were one or two corrections he wanted to make to the typewritten copy of the report of yesterday. I suggest that be done now.

Mr. Morrison: Mr. Chairman and members of the committee: On receipt of the printed copies of the minutes of June 9, I noticed three errors in the evidence as transcribed and after conferring with the chairman and counsel, as well as with the official reporter, they have agreed that the following corrections should be made in the printed record:-

Page 361.-The sixth question and answer should read in the printed record:-
"Q. I notice that in the year 1935 the parent company showed a profit on their whole world wide business of \(\$ 19,618,000\) ?-A. Yes, sir."

Page 366.-The question:-
"You can only suggest the price to the dealer?" was not answered.
Page 370.-The last sentence in the answer to the fourth question should read:-
"We have a factory in Chatham, and all the trucks we sell in Canada are obtained from that plant, and any materials whether in finished parts or otherwise are for the purposes of manufacture, so I am not prepared to testify on that."

The Chatrman: May I say the clerk advises me these corrections will be made in the ordinary way in to-day's report.

\section*{By Mr. Graham:}
Q. Mr. Morrison, in connection with the evidence that you tendered yesterday, would you furnish us with a copy of the financial statement of your export company, and secondly, of the International Harvester Company of America the selling organization. Do they present a financial sheet?-A. The American company does.
Q. How about the export company?-A. Yes.
Q. You have not got those with you?-A. No.
Q. Would you kindly make a note and furnish me with a late one, 1935 if possible, similar to the one presented by the parent organization. I wanted to examine into the capital structure of the Canadian company. Have you the replies to the questionnaires in front of you this morning?-A. Yes, we have.
Q. I have my pages numbered. I am referring to section 2, page 11, materials, which. appear fairly early in your reply. I suggest to you, Mr. Jarchow, that it would be wise and would save time if you numbered your sheets right through, and as I refer to them by number you can easily find them.

Would you give to the committee the history of the capital structure of the International Harvester Company of Canada Limited?-A. The International Harvester Company Limited was incorporated in 1903 with a capital of \(\$ 1,000,000\) all common stock. This was increased to \(\$ 10,000,000\) in 1917, and to \(\$ 15,000,000\) in 1918. There is no preferred stock outstanding. All of the common stock was issued for cash. This cash was advanced by the International Harvester Company, Chicago, and was used in the Canadian business to purchase additional machinery and equipment to enlarge plant facilities, to erect branch houses and to provide additional working capital, such as increase in investment, inventories, raw materials and finished products, increased investment in notes, accounts receivable, etc.
Q. I notice in your replies that you indicate that the Canadian company does not borrow any of its cash requirements from the bank, for instance, is that correct?

Mr. Jarchow: Generally speaking they do not borrow from the banks.

\section*{By Mr. Graham:}
Q. Who supplies your requirements over and above your Canadian cash receipts?-A. The International Harvester Company.
Q. The parent company?-A. The parent company.
Q. What is the arrangement between the two companies with regard to money so borrowed?

Mr. Jarchow: There is no special arrangement. The money is advanced by the parent company to the International Harvester Company of Canada to be repaid as circumstances permit. There is no interest paid on these advances.

Mr. Graham: No interest is paid on those advances?
Mr. Jarchow: No.
Mr. Graham: Now, I notice, Mr. Jarchow, that commencing in 1914, exhibit 6-A in your replies to the questionnaire dealing with section 6-A-5 the amounts payable to the International Harvester Company and affiliated companies are set out; you have that in front of you?

Mr. Jarchow: Yes.
Mr. Graham: In 1914 it amounted to \(\$ 35,800,000\) ?
Mr. Jarchow: That is right.
[Mr. C. R. Morrison.]

Mr. Graham: Would that include moneys loaned by the Harvester company as well as purchases made by you from the parent company or affiliated company?

Mr. Jarchow: Yes.
Mr. Graham: That would include everything?
Mr. Jarchow: Yes.
Mr. Graham: Would you be able to distinguish in the years 1914 to 1936 between the borrowed moneys and the purchases payable?

Mr. Jarchow: Not very readily.
Mr. Graham: It could be done, could it?
Mr. Jarchow: I am afraid it would have to be done arbitrarily because a certain amount of these advances are permanently locked up in fixed capital, such as plant machinery, branch houses, receivables, inventories and so forth.

Mr. Graham: I notice, Mr. Jarchow, that in 1914 the figure was \(\$ 36,000,000\); in 1915 it was \(\$ 29,500,000 ; 1916, \$ 25,000,000 ; 1917, \$ 15,000,000 ; 1918\), \(\$ 15,000,000 ; 1919, \$ 16,000,000 ; 1920, \$ 17,000,000 ; 1921, \$ 18,000,000 ; 1922\), \(\$ 15,700,000 ; 1923, \$ 16,000,000 ; 1924, \$ 10,000,000 ; 1925, \$ 6,000,000 ; 1926\), \(\$ 7,500,000 ; 1927, \$ 6,000,000 ; 1928, \$ 7,300,000 ; 1929, \$ 8,500,000 ; 1930, \$ 5,500,000\); 1931, \(\$ 5,500,000 ; 1932, \$ 2,000,000 ; 1933, \$ 3,000,000 ; 1934, \$ 4,000,000 ; 1935\), \(\$ 2,000,000\). Is that correct?

Mr. Jarchow: It is correct.
Mr. Graham: And I notice in your 1913 statement, exhibit 3, section \(6 \mathrm{~A}-1,2,3\), in the replies to the questionnaire-you have that?

Mr. Jarchow: I believe I have. My papers are not numbered the same as yours.

Mr. Graham: I notice there is an item, dealing with the profit and loss account of 1913, of interest paid the International Harvester Corporation of \(\$ 1,012,493\). At that time, apparently, the custom was to pay the parent company interest?

Mr. Jarchow: Interest was paid to the parent company during the years 1913 to 1919, but nothing since.

Mr. Graham: 1913 to 1919 ?
Mr. Jarchow: Yes.
Mr. Graham: At what rate?
Mr. Jarchow: I do not recall.
Mr. Graham: Would your records show that?
Mr. Jarchow: Our records would show it.
Mr. Graham: Would you kindly make a record and give it to us. But, since 1929 no interest has been payable by the Canadian company to the parent organization?

Mr. Jarchow: That is correct.
Mr. Graham: I notice, however, in your computation of your interest returns on your capital used in the business the amount borrowed would be included in determining that net profit or net loss; is that correct?

Mr. Jarchow: That is correct.
Mr. Graham: And, as Mr. Cleaver has pointed out to me, I presume the increase in capital in 1917 of \(\$ 10,000,000\)-that was an increase-and a further \(\$ 4,000,000\) in 1918 would be, I suppose, to supply capital in a different form that you considered as a permanent investment, as you say?

Mr. Jarchow: That is correct.
Mr. Graham: Now, then, has the Canadian company ever declared any dividends?

Mr. Jarchow: Yes, it has.
Mr. Graham: Would you give us a record of those please-since 1913?
Mr. Jarchow: The only dividend declared since 1913 was in the year 1921 when a dividend of \(\$ 3,000,000\) was declared. Nothing has been declared since 1921.

Mr. Graham: And the parent company simply considers your surplus of assets over liabilities as its asset in the whole organization known as the International Harvester Company; would that be correct?

Mr. Jarchow: I am not sure that I understand your question.
Mr. Graham: Since 1921 you paid no dividends. I presume that the parent company considers that the surplus of assets over liabilities represents their asset in the Canadian company?

Mr. Jarchow: That is correct.
Mr. Graham: Now, you have already told us that 90 per cent of that stockat least, more than that-is held by the parent organization of the International Harvester Company, with regard to management and control and the interrelationship of the parent company with the Canadian company, Mr. Morrison, you have already told us that you are vice-president of the parent organization and president of the Canadian?

Witness: That is true.

\section*{By Mr. Graham:}
Q. Mr. Morrison, on page 2 of your replies to questionnaires, under section 1 general, you list the officers and the directors of the Canadian company. I notice there are four vice presidents, two of whom reside in Canada, Mr. Morton and Mr . Wallace and two of whom reside in Chicago, Mr. Ewald and Mr. Smith?-A. That is correct.
Q. The treasurer, Mr. Keller, resides in Chicago?-A. That is true.
Q. The secretary, Mr. White, resides in Chicago?-A. Yes.
Q. And the assistant treasurer, Mr. Odell Junior, resides in Chicago?A. Yes.
Q. Then there is the assistant treasurer, Mr. Austin, who resides in Hamilton?-A. Yes.
Q. And the assistant secretary, Mr. Munger, who resides in Hamilton?A. Yes.
Q. Your body of directors consists of nine persons-your board of directors? -A. Yes.
Q. And I notice that Mr. Morton is the only resident Canadian who is on that board?-A. That is correct.
Q. The others reside in Chicago?-A. Yes.
Q. I notice that Mr. Jarchow who is here this morning and Mr. Siefkin are both on your Canadian board of directors?-A. Yes.
Q. Now, then, I want to know who determines the policy, as it were, in some regards of the Canadian company; does that board of directors meet fairly frequently?-A. At intervals during the year.
Q. It generally sits in Chicago because of the--A. Yes, in Chicago.
Q. How many in that list I have given you of directors take an active part in the management or direction of the Canadian concern?-A. You mean exclusively in the Canadian concern or actively?
Q. No, active. There would be Mr. Jarchow?-A. I would say, Mr. Graham, that every member of the board of directors is interested in some manner in the Canadian company activities.
Q. In the Canadian company activities?-A. Yes.
Q. Other than just attending the directors' meeting?-A. Oh, yes.
[Mr. C. R. Morrison.]
Q. So far as the Canadian company is concerned, who, for instance, decides where the Canadian company will purchase its raw material supplies?-A. That would be largely decided at the Canadian plant-Hamilton, Ontario.
Q. Would the decision be communicated to you in Chicago?-A. It would be communicated to Chicago; eventually it would come to me.
Q. And Chicago, I presume, would naturally approve or disapprove or otherwise?-A. Naturally, because we have a purchasing organization at Hamilton, and that purchasing organization-its activities are confined to the Canadian business, and our confidence in that organization and their ability to perform their functions would cause us to accept their decision.
Q. Now, then, who decides throughout this period under review, or who has decided, whether implements marketed in Canada should be manufactured in Canada in your Canadian plant or imported from the United States?-A. A subject of that kind would be brought up before the board of directors.
Q. And that board would decide?-A. That board would decide where the manufacture should be, but prior to the decision of the board the members of the board would, naturally, confer with the organization at Chicago whose activities are directly those of manufacturing and get the benefit of their advice.
Q. There is co-operation between the two departments?-A. Yes.
Q. Who decides the credit policy of the Canadian company?-A. The credit policy of the Canadian company would be decided by myself as president of the company, and by Mr. F. C. Smith who is in charge of Canadian credits and collections.
Q. Who would decide the price list, the fixing of the prices of implements being offered for sale by the Canadian company in Canada?-A. There again I would be the one that would make the decision, supplemented by the advice and counsel of Mr. C. A. Ewald who is sales manager of the Canadian company, a member of the board of directors and an officer of the company.
Q. And, I suppose, after due consideration with Mr. Morton on the Canadian position?-A. Yes.

Mr. Senn: Will you speak louder, please?
Mr. Graham: Yes. I am sorry if I have not been doing so.

\section*{By Mr. Graham:}
Q. The only charge that the American parent company makes to the Canadian company is a certain amount apportioned for salaries to the Chicago officers of the Canadian company and for their expenses, I presume, in connection with the Canadian business. Is that correct?-A. That is correct.
Q. Mr. Jarchow furnished me with a break-down of that. I have not it with me, but I will have you confirm it later, Mr. Morrison. Could you briefly outline the credit policy of the Canadian company at the present time in Canada? Has there been any change in the credit policy since last year?-A. Since 1935 ?
Q. Yes.-A. Yes. Our credits have been restricted somewhat more in 1936 than they were prior to that time.
Q. I beg your pardon?-A. Our credits have been restricted more since January 1, 1936, than they were before.
Q. Could you divide Canada territorially, as I presume the company divides it, and give us for 1935 a general statement of the credit policy? Take the Maritimes. What was the 1935 policy in the Maritimes?-A. Well, I think I can answer that question, Mr. Graham, in a general way that will perhaps satisfy your inquiry. In eastern Canada the farming is more diversified than it is in western Canada; and the hazards are not as great in connection with the business in eastern Canada-
Q. In farming?-A. - in farming, as they are in western Canada. In western Canada certain sections have suffered a series of crop failures over the last six years or more. Each of those successive crop failures has naturally
affected the financial responsibility of the farmer, and we have had to become a little tighter in our credits as that condition has developed. I would say, off-hand, that the sections of western Canada, consisting largely of southern Saskatchewan and central Saskatchewan, and perhaps the southwestern part of Manitoba and the western part of Alberta-

Mr. Donnelly: The eastern part.
Witness: Thank you-the eastern part of Alberta, have been sections where the credits have become most hazardous, where we have had to be more careful, and have had to establish more drastic policies with respect to credits than any place else.

\section*{By Mr. Graham:}
Q. Generally speaking, what were the terms of credit sales in eastern Canada prior to the period you speak of? Have they remained the same? There has not been any change in eastern Canada between the 1935 policy and the 1936 policy, has there?-A. I do not think there has been any change in eastern Canada; at least, I cannot recall that we made any change.
Q. What was your rule as to the minimum that you would accept in cash in eastern Canada; I mean, in per cent?-A. Would you let me refresh my mind on that, to be sure that the answer is very accurate?
Q. Yes, certainly.-A. As a general rule, we require in eastern Canada an initial cash payment of 25 per cent.
Q. 25 per cent?-A. Yes, in connection with time sales.
Q. And what was the limit in the number of payments that the balance was extended over?-A. On some of the machines, those of lower price, we allow just one fall payment; that is, one-quarter cash down on delivery and the other payment in the fall of the year. On some machines we allow a second fall payment, and on a very few we will permit a third fall payment. That is, the first fall is in the year in which the sale is made.
Q. And in eastern Canada is the same differential charged as between the cash and credit sales as in western Canada?-A. Well, I would have to compare the figures; but I would say approximately the same.
Q. What interest would your credit in eastern Canada carry before maturity and after maturity?-A. It would carry a lower rate of interest than western Canada. In eastern Canada our prevailing rate of interest is 6 per cent before maturity and 7 per cent after maturity.
Q. And in western Canada, I understand, it changes a little in the different provinces. Will you give us Manitoba, Saskatchewan and Alberta?-A. Manitoba, Alberta and British Columbia are 7 per cent before maturity and 8 per cent after maturity.
Q. And Saskatchewan?-A. Saskatchewan is 7 per cent before maturity and 7 per cent after maturity. I would like to explain that the reason the interest rate is not larger after maturity than before maturity there is because the provincial laws of Saskatchewan prevent it.
Q. Would you give us, for 1935, a general outline of your terms of sale in western Canada? I presume by western Canada you particularly refer to Manitoba, Saskatchewan and Alberta?

Mr. Senn: Louder.
By Mr: Graham:
Q. You particularly refer to Manitoba, Saskatchewan and Alberta?A. Yes.
Q. That is what you have been referring to as western Canada. British Columbia is not in the same credit category as those three central western provinces. Is that correct?-A. Not exactly the same. Our volume of business in implements in British Columbia is quite small.
[Mr. C. R. Morrison.]
Q. Give us, please, the former credit policy in the three prairie provinces, as you have outlined it applying to the east over the period of years which you have been doing business?-A. We have sold goods in western Canada on substantially the same general credit terms that we have in the east; that is, sell some machines and price some machines at one-quarter down and the balance in the first fall. Pardon me, it was one-quarter down. It has been increased since to more than that. Other machines are sold with the regular down payment and two fall payments; and a few with the initial cash payment and three falls.
Q. You mean by the regular cash payment, the 25 per cent?-A. We did have 25 per cent, but we have increased that.
Q. This year, 1936-A. We increased the initial down payment early in 1935 ; and we made a further increase in 1936.
Q. What was the increase in 1935, Mr. Morrison?-A. Our previous terms provided early in 1935 and prior for an initial down payment of 25 per cent.
Q. Yes.-A. I am referring now to western Canada.
Q. Yes?-A. In May, 1935, I think it was, we increased that initial down payment to \(33 \frac{1}{3}\) per cent, as applied to the general line implements, but left tractors and some of the larger power implements at 25 per cent. In 1936 we increased the initial payment for the general line implements to 50 per cent, and tractors and the large power machinery to \(33 \frac{1}{3}\) per cent. Just recently we have modified the down payment terms on implements from 50 per cent to 40 per cent.
Q. Does that rule apply over the whole of Saskatchewan, or do you distinguish between that area that you spoke about, southern Saskatchewan and central Saskatchewan, southwestern Manitoba and the eastern portion of Alberta? Is there any difference there?-A. There would be no difference in the case of a purchaser whose credit would be acceptable; but in the sections of western Canada where these crop failures have occurred, we have asked them to be extremely particular, because of the general credit situation there. We have told them that unless the credit responsibility of the purchaser could be pretty definitely established-and when I say credit responsibility, I do not mean necessarily that he could go to a bank and get any amount of cash that he wants; his general credit reputation is a part of the consideration, and his prospects for being able to work out his indebtedness-and unless the purchaser could measure up to those requirements, we preferred that, in that extremely hazardous country, the business should be put strictly on a cash basis.
Q. On a whole cash basis?-A. A whole cash basis.
Q. To that type of individual?-A. Yes, because our history of bills receivable from that particular section of western Canada is rather bad. Now, I might say one thing further in that connection, Mr. Graham, that no definite territorial lines are established-saying we won't do any business in that territory except on a strictly cash basis-because in the other sections of western Canada where conditions are not as hazardous there are many purchasers whom we would not sell except for one hundred per cent cash.
Q. Because in your opinion they are not entitled to any credit?-A. Because the individual would not be entitled to credit. After all, this credit policy is largely governed by the individual; I mean, his reputation, ability, honesty, integrity, and so forth.
Q. Mr. Morrison, with regard to the use of patent rights, would the Canadian company have full advantage of the patent rights that the parent company would have?-A. Yes.
Q. I would like you to explain to the committee how valuable to your company are the patent rights that you hold, as a factor in the manufacture of implements?-A. Well, we place no dollar value on them.
Q. No, I do not mean that.-A. We place no dollar value on them in our balance sheet, but we are very jealous of some of the patents that we own and would naturally protect ourselves against infringement.
Q. Take the McCormick binder, would there be some patent rights still had with regard to the manufacture of that particular implement?-A. We haven't a McCormick binder, it is a McCormick-Deering binder.
Q. Yes, the old original patents would have long since expired I presume?A. The old original patents would, but the machine being improved from year to year would mean I presume that we have some patents on some of these improvements.
Q. Yes?-A. I have no detailed information in regard to the patent situation.
Q. In the implement industry in the United States there is no pooling of patent rights to inventions such as I understand there is in the electrical industry?-A. No.
Q. Would you have any knowledge of the pooling idea among the large electrical companies, as to whether my information is correct that they have adopted a system whereby each company gives notice to a central organization of certain new developments?-A. I have no knowledge on that subject.
Q. And it has never been tried in the implement industry?-A. No.
Q. Would that be true of specifications and plans of any implement; would the Canadian company be given all these free of charge?-A. Yes.
Q. And I presume all improvements made either by the Canadian company or the parent company are common to both?-A. Yes.
Q. In other words, the Canadian company pays nothing because of these rights, and plans, and specifications and improvements?-A. I would say, no.
Q. Now then, I just want to go back to this matter of the cost to the Canadian company of the officers whom you have named as either officers or directors of the Canadian company, and I notice by the information submitted by your company to Mr. Macdonald, our auditor, it is set out that the total cost debit to the Canadian company in the year 1929-have you a copy of this Mr. Jarchow?

Mr. Jarchow: I have.
Mr. Graham: The total cost to the Canadian company in the year 1929 I notice is \(\$ 290,000\), and in 1935 it is \(\$ 217,000\); that is, salaries for the first half year in 1929 were \(\$ 106,000\), and in the second half year they were \(\$ 108,000\); and the salaries totalled \(\$ 214,000\) in 1929, and the other expenses-travelling, rent and telephones-in 1929 amounted to \(\$ 76,000\), making a total as I said of \(\$ 290,000\). In 1935 salaries for the first half year were \(\$ 80,000\), for the second half year they were \(\$ 82,000\), and the other expenses (travelling, rent and telephones) were \(\$ 55,000\), making a total of \(\$ 217,000\) in 1935 . Would that be correct, the amount as submitted to us?

Mr. Jarchow: I think it is.

\section*{By Mr. Graham (to Mr. Jarchow) :}
Q. Perhaps you can answer this, Mr. Jarchow: that would be the only direct charge made by the parent company to the Canadian company?-A. That is correct.
Q. How are these salaries apportioned?-A. They are apportioned on the basis of time, the amount of time the individuals who are included in that group devote to Canadian matters. It does not include any expense of any individual who devotes all of his time to the business in the United States or in foreign countries, merely the portion of time that can be properly assigned to the Canadian business.
Q. Would it include any others than the list of officers and directors indicated, would it include any clerical help in that?-A. It would, yes.
[Mr. C. R. Morrison.]
Q. You would apportion the salary of any persons who had been doing work for the Canadian company, or in connection with its business?-A. That is correct.
Q. I suppose if necessary a more detailed statement could be made. I suppose you keep a separate ledger sheet for this?-A. Yes.
Q. Would you secure a breakdown of that sufficient to show us the details, Mr. Jarchow?-A. I am just wondering what sort of a breakdown you would like to have.
Q. I imagine as between the salaried officers, the directors and the clerical or other salaries or types that you have, giving all the particulars that might be of value in determining the fairness of that charge.

\section*{By Mr. Graham (to Mr. Morrison):}
Q. Mr. Morrison, I think I asked you this yesterday but I wanted to delve into it a little bit more; I notice that in the Price Spreads Report you had been with the company then some 36 years, and I presume that would be 38 years now would it not?-A. There has been no break since that time.
Q. You would quite easily qualify in knowledge as an expert on international business, I presume your long experience would enable you to speak fairly authoritatively for the industry either in the United States or in Canada as a result of that long experience?-A. Within the limits of my personal activities.
Q. Yes. How did you rise, Mr. Morrison; through the usual channels-that is, did you come up from the bottom or were you "planted" on the Interna-tional?-A. I believe that any promotion that I may have received has been the result of effort and years of service.
Q. And you have had experience in the operating branches; I mean by that the manufacturing branch, the sales branch, the collection branch-practically all the branches of your own company?-A. Not manufacturing.
Q. Would that include credit?-A. Yes.
Q. I asked you yesterday if the parent company had ever adopted as it were farm implements originating in the Hamilton plant rather than in your parent organization. I had particular reference to the large drill and cultivator. In that connection the Hon. Mr. Taggart who gave evidence before the committee stated that some years ago he had made a rather complete tour of the several western American states-Nebraska and others-and he was quite interested and surprised to find that these two large implements as used in these states had been manufactured at Hamilton rather than at Chicago or in your American plants; and Professor Hardy gave evidence that even to-day apparently some of the Hamilton machinery such as the large drill and cultivator is finding its way into these states through Minneapolis. What do you say as to that?-A. Well, as far as the International Harvester Company of Canada is concerned, Mr. Graham, very little of the products made at Hamilton is shipped into the United States, but if Hamilton produces something new in the way of an improvement on a machine we would naturally adopt, or adapt, it to our American manufacture. I do not know to whose line of goods Professor Hardy made reference.
Q. He mentioned yours, and I think Massey-Harris?-A. I have no knowledge of just how much the Massey-Harris company or any other companythey manufacture in Canada and some in the United States-but the lines the Harvester company sold in the United States are almost exclusively of United States manufacture, although there were a few implements that were brought over the line.
Q. Can you tell us this, or perhaps Mr. Morton could tell us, what year the Canadian company started to manufacture what is known as the large drill and the large cultivator?

Mr. Morton: I would say, Mr. Graham, that that large drill dates backI am just giving you an approximation, we could give you definite information + but it dates back seven or eight years.
Q. Seven or eight years?

Mr. Morrison: May I interrupt here? I would like to make a statement, Mr. Graham, that to the best of my knowledge we are not importing into the United States any drills made in Canada.
Q. I mean, over the period I am speaking about, 1913 to 1936?-A. To the best of my recollection we did not do it during that period.
Q. That would be your recollection too, Mr. Morton?

Mr. Morton: There has been very little go over there.
Q. In connection with these two, the large drill and cultivator, you have told us that they were first manufactured here about six years ago?

Mr. Morton: Perhaps a little longer than that.
Q. Would you say, Mr. Morton, I suppose you would have to fairly say that that implement when it was first manufactured in Canada had to be exported to the parent company organization in the United States?-A. I do not think so.
Q. It was originated here in Hamilton?-A. Yes.
Q. Did you ever supply these western states about which I am speaking with any of these large drills or cultivators?

Mr. Morton: There was a limited quantity went in.
Q. Now, Mr. Morton, when the parent organization commenced to manufacture light implements-?-A. Now, I don't know that I am in a position to answer that; we still manufacture in Canada.
Q. You had not exported any?-A. Only on odd occasions.
Q. When?-A. Well, if there should be call for them.
Q. From whom?-A. From the States.
Q. From the parent company or from the farmer, an individual?-A. Perhaps I had better refer that question to Mr. Morrison, because I would not know just the details of the origin of the call.
Q. Would you tell us, Mr. Morrison?-A. I will have to reiterate what I have said before. I have no recollection of any drills being sold in the United States which were manufactured in Canada.
Q. You will notice that that is slightly in conflict with Mr. Morton's memory?-A. Apparently there is a conflict in memory, but I feel quite confident that my own memory is correct.
Q. Have you any information, Mr. Morrison or Mr. Morton in regard to this. Those implements that were exported to the United States, if there were any would not be handled by the export company?-A. The export company would have nothing to do with the importation into the United States and Canada.
Q. That would be dealt with by the Canadian company?-A. Yes.

Mr. McLean: At this point would you ask about the other implements that were said to be shipped from Hamilton to Minneapolis. You might clear that up.

Mr. Graham: Do you remember the implements?
Mr. McLean: I believe cultivators were mentioned.
Mr. Graham: I asked that.
By Mr. Graham:
Q. In the year 1935 you have no knowledge of any of the large drills or cultivators being shipped into the United States through Minneapolis?

Mr. Morton: No.
[Mr. C. R. Morrison.]
Q. That would be your evidence too, Mr. Morrison?-A. I believe that we did receive in the United States a few field cultivators that were manufactured in Canada.
Q. How would that be dealt with, Mr. Morrison? Would the parent company notify the Hamilton concern to fill that particular order?-A. Yes, the parent company would order the goods from the Canada company.
Q. Where would they be shipped, to the nearest point of distribution?A. Yes.
Q. What would give rise to an occasion where you have to ask the Hamilton company - - A. They might have developed an implement that was peculiarly efficient under certain conditions, and we would consider it a better implement for that particular section than the one made in the United States.
Q. I now come to the price changes that have occurred. You are well aware, Mr. Morrison, of the interest that this committee takes in the increase of prices announced in the spring of this year, January 1936?-A. Yes.
Q. Who made the announcement of the increase in prices?-A. I did.
Q. You did yourself? I should like you, Mr. Morrison, if you will, to place on the records of the committee the reasons which the company suggests prompted them to announce the price increases in January of this year?A. Well the only reason that we selected January of this year to announce the increase in prices is that we had not done it before. It should have been done two or three years before.
Q. Why?-A. Because of the high cost of manufacture.
Q. The high cost of manufacture. I want you, if you can, to put on record all of the reasons which the company feel justify them to increase the price. You can take as much time as you like, because I am anxious to have the whole statement go on the record.-A. For years, during this depression, the companies have been operating at very much of a disadvantage because of low volume and high manufacturing costs, and the need to get a larger margin in the way of price has existed for several years.
Q. How many years would you say?-A. Well particularly during the last three or four years.
Q. Particularly during the last three or four years?-A. Yes.
Q. Have you any other reason you would care to place on record? Is there anything else that suggests itself to you as justification for the price increase? -A. I cannot think of anything that would be more comprehensive than the need because of high costs and low profits or lack of profits entirely.
Q. You use the term "higher costs of manufacturing." where would the higher costs of manufacturing appear, in the whole general cost of manufacturing? Where would that higher cost you speak about appear?-A. It would be in materials, labour rates and high manufacturing expenses by reason of low production and fixed expenses that could not be reduced.
Q. Did that situation that you suggest apply to the United States as well as Canada?-A. The general price situation?
Q. No, the reasons that you are advancing?-A. Yes.
Q. Was there a price increase in the United States at the same time? -A. In January, 1936?
Q. Yes.-A. No; the United States made their increase in prices in 1934 and again in 1935.
Q. Can you tell us what those increases were in comparison with increases put into effect on the Canadian side?-A. I can give you only a general percentage figure.
Q. Give it and we shall treat it as an approximation.-A. My recollection is that the increase that went into effect in 1934 in the United States amounted to about 7 per cent on an average.
Q. Over the general line of implements?-A. Over the general line of implements.
Q. Including tractors?-A. Prices of tractors, Mr. Graham, have changed more frequently than other implements because of changes in design of tractors and so forth, and there have been certain other elements that influence this. Do you wish me to continue my statement?
Q. Yes.-A. I cannot recall the percentage of increase that might be applied through the 1935 advance in the United States, but it was not as much as 1934 and did not cover nearly as many items. My best recollection is the advance in price in Canada that took effect in January, 1936, on those implements that were advanced would average somewhere around 3 per cent.

\section*{By Mr. Cleaver:}
Q. Have you given the percentage of increase in the United States for 1935?-A. No; I cannot give that, Mr. Cleaver, because it covered only a relatively few items, and I have seen no figure applying it against the total volume. May I say just one thing further in that connection; at the time we increased prices in Canada in January, 1936, we also reduced prices on a number of items.
Q. Since 1932 there has been a governmental policy in the United States that might be described as the NRA or Roosevelt policy; is not that correct? -A. The National Industrial Recovery Act in the United States, I believe, became effective in January, 1933.
Q. Would you agree with me, Mr. Morrison, that since the effective date that you have mentioned, because of the policy and its application to labour cost, material cost and to almost the whole price level of all commodities in the United States, one of the purposes of that policy was to increase prices; is that correct?-A. One of the purposes of the NRA was to increase prices?
Q. Yes.-A. I could not make a confirmative answer to that.
Q. Did it not set up certain codes and ask the industries to subscribe to those codes?-A. Yes.
Q. And those codes did set up a higher scale of wages, for instance?A. The codes did set minimum wages and maximum hours.
Q. And they were higher than the prevailing rates before; is that correct? -A. You mean as applied to all industry in general?
Q. Yes.-A. My knowledge of the minimum wages in other industries and the maximum hours in other industries, Mr. Graham, is very limited.
Q. Let us take the experience of your own company. I presume you loyally co-operated with the federal government in the application of it?-A. We did.
Q. And you tried to live up to the spirit and the purpose of the legislation I believe?-A. Completely.
Q. Let me ask you this. I notice on the trend index that from 1930 to 1933 the wholesale prices of farm implements in the United States show a slight downward trend, and from 1933 on a very marked substantial upward trend. Would you agree with that?-A. I would not agree that the period from 1933 on would show a very substantial upward trend. I will agree that there has been some upward trend, and I will agree that in the first period you mentioned there was a tendency down.
Q. That would be true of materials and labour?-A. No; you are asking the question with regard to prices.
Q. Quite, but I am also asking now about material costs and labour costs. Was there not a downward trend from 1930 to 1933 in the United States?-A. Yes, that is true.
[Mr. C. R. Morrison.]
Q. From 1933 on there has been an upward trend of material costs and labour costs?-A. I believe that to be true.
Q. Would you say the N.R.A. policy was the chief factor in bringing about the change in the downward trend and change in the upward trend in 1933, or would you say it was an important factor?-A. I do not believe, Mr. Graham, that I should care to attribute any allotted portion of that situation to the N.R.A. or any other special governmental action.
Q. In any case, Mr. Morrison, if the N.R.A. had any effect on the increase in cost of farm implements in the United States you will agree with me that policy could have no bearing on the Canadian prices, because it was not in effect?-A. It could only have a bearing on the Canadian prices as far as it applied to implements imported into Canada that are manufactured in the United States.

Mr. McLean: Or material.

\section*{By Mr. Graham:}
Q. Now, were there any other changes in the Canadian price structure in the year 1935?-A. There were no important changes in 1935 as far as the International Harvester Company of Canada is concerned.
Q. The committee, Mr. Morrison, were also naturally interested in the letter addressed to myself and placed on the records dated May 15, 1936, from Mr. Morton who is vice president of the Canadian company, advising the committee of certain reductions in price on a long list of imported machines on which they have made price reductions, " in view of the recent budget reductions in tariff from \(12 \frac{1}{2}\) per cent to \(7 \frac{1}{2}\) per cent. These lower prices became effective May 2, but we are also applying them to the stock of imported machines now on hand in Canada, which represents a considerable portion of our 1936 requirements. This stock was brought in at the higher rates of duty previously in force, but regardless of that fact, we are passing the saving made by the duty reduction along to our customers." Who arrived at that decision?-A. I did.
Q. You did. And would you kindly confirm the reasons set out in the letter-that is lowering the duties from \(12 \frac{1}{2}\) per cent to \(7 \frac{1}{2}\) per cent-was that the sole reason that dictated that price change?-A. Yes.
Q. The letter, as you know, contains an actual list of the implements affected by that price change and the reduction in dollars. Can you tell us, Mr. Morrison, if those reductions on the individual implements correspond to the saving that the tariff reduction represents?-A. Yes.
Q. Exactly. You pass on the saving made in the reduction of that duty? -A. Yes. There might have been one or two items in there where our price had been too low that we figured on the basis of the duties revised downwards, and the reduction might not have amounted in those very few instances to exactly the amount of duty reduction; but I might say that in substance all of the other reductions corresponded to the duty and excise tax reduction.
Q. If I gave you the list, Mr. Morrison, could you tell us one or two implements that you have in mind; could you easily pick them out?-A. I do not believe I could; but I would like to explain that when the reductions were made it was my instruction to the Canadian sales organization to give effect to the full duty and excise tax reductions, but I stipulated also that if they found any instances where the prices on the imported implements were too low to correct the general situation at that time and, afterwards, to my recollection, I asked them; did you find any cases where your reduction did not amount to as much as the duty reduction? My recollection is that there were only two or three items.
Q. Now, Mr. Morrison, if you will, I want to call upon your long experience in the implement industry. Would the reasons that you advanced-that Mr. Morton advanced in his letter of May 15-apply in your opinion to all farm
implement manufacturers selling American manufactured implements in Canada with equal force as to your own company?-A. It would depend entirely on their own price situation, Mr. Graham. I do not believe I am qualified to testify for any other manufacturer.
Q. Let me put it this way: You will agree that the reduction in the duty would effect a saving to any company selling in Canada imported implements?A. There would be a saving as the result of the duty reductions.
Q. Does the John Deere company, the Oliver Farm Implement company, the J. I. Case company and the Minneapolis Moline company-are they considered important factors in the United States group of farm implement manufacturers? -A. Excellent.
Q. They are substantial companies?-A. Yes.
Q. Possibly next to your own company, the largest in the United States?A. John Deere would be next to the International Harvester in importance in the United States.
Q. And the Oliver Farm Implement Limited?-A. There are other implement manufacturers in the United States that are larger than the Oliver.
Q. Does the Oliver Farm Implement company make a thoroughly general line of farm implements?-A. They do not make a complete line.
Q. But in a general way, do they?-A. They are listed among those that manufacture in a large way.
Q. But there are certain machines which they do not manufacture. Is John Deere a very substantial maker?-A. Yes.
Q. And J. I. Case?-A. Yes.
Q. And Minneapolis Moline?-A. They are-
Q. Specializing in tractors?-A. No. They are general line manufacturers.
Q. They are general line manufacturers too. Now, then, I know that the committee want to know this, that the treaty made between the United States and Canada, and effective early in January, reduced the duty on farm implements from 25 to \(12 \frac{1}{2}\) per cent-you recall that?-A. Yes.
Q. Did that have a similar effect to the reduction from \(12 \frac{1}{2}\) per cent to \(7 \frac{1}{2}\) per cent?-A. Yes. The reductions and duties that took effect at that time would represent savings just the same as the reductions and duties that took effect at later time.
Q. Was there any price change in the Canadian imported implements at that time?--A. Yes.
Q. At that time?-A. At that time.
Q. And on the same list that you have furnished in connection with Mr. Morton's letter of May 15-the same list of implements?-A. On some of those implements, many of them.
Q. Could you furnish us, Mr. Morrison, with a similar list and a similar dollar reduction applicable to the tariff change as a result of the United StatesCanadian treaty?-A. We could furnish you with a list of the price reductions that were put into effect in January, 1936.
Q. I would be glad if you would do that. Now, then, in regard to tractors, what has been the effect of those duty changes on tractors?-A. Well, if you are referring to farm tractors
Q. Yes, farm tractors?-A. The tractors that we sold in largest number were duty free.
Q. That is, under a price of \(\$ 1,400\) ?-A. Under a price of \(\$ 1,400\).
Q. How many types of tractors were you manufacturing prior-within a recent development?-A. Oh, within the last couple of years.
Q. The Diesel would not be in that class; it would be dutiable ever since it was brought on the market, would it not?-A. That is true.
Q. Were all of your other tractors being imported into Canada below the \(\$ 1,400\) class?-A. All the tractors sold for farm purposes with the possible
[Mr. C. R. Morrison.]
exception of crawler tractors. Crawler tractors would run into a larger figure and be dutiable, but not very many tractors of that particular type were purchased for farm use in Canada.
Q. And what was the result of the tariff change on your Diesel and crawler types?-A. It serves to reduce the duty.
Q. It was reduced, you remember, from 25 per cent and put on the free list?-A. Yes.
Q. What has been the result of that tariff change in the price of Diesel and crawler tractors and any other tractors that you manufacture and bring into Canada over the \(\$ 1,400\) ?-A. They were reduced in price.
Q. Would you kindly furnish us with your statement of the reduction and a description of the type of tractor affected by that?-A. Yes.
Q. We were instructed yesterday, for instance, Mr. Morrison, by Professor Hardy, that the Caterpillar who make the crawler type of tractor-A. That is right.
Q. That in Winnipeg they reduced the Diesel tractor from some \(\$ 4,700\) to practically \(\$ 3,700\) - a substantial saving. Do you know whether that is correct?-A. No, I do not know.

Mr. Graham: Now, Mr. Chairman, I am going to another phase of this matter of arrangements, if there are any, between the companies as to the fixing of prices. Perhaps I had better permit the committee to ask questions on any phases I have examined into.

The Chairman: Yes. There may be some questions which members would like to ask; and I will ask each questioner to ask his question standing.

\section*{By Mr. Coldwell:}
Q. A matter of interest was introduced this morning in reply to a question by Mr. Graham, and I happened to have in my hand a table compiled on the 1934 price list in the city of Regina on 10 implements, some of which were purchased from the International Harvester and some from the Massey-Harris. It shows this, that the cash price of those implements in that year was \(\$ 1,275.25\). To that was added the carrying charge which amounted to \(\$ 51\), which brings the total of one fall price plan up to \(\$ 1,326\). Now, in this particular case a quarter, we will say, was paid down, which amounts to \(\$ 331.56\) cash. The balance carried over was \(\$ 994.60\), including, of course, the carrying charge. This would bear interest at 7 per cent. The point I am making is this, that while we are told that the interest is 6 or 7 per cent of the amount of the implement, when we add this carrying charge on the amount of the balance of \(\$ 943.69\) for six months we find that actually the interest charged is \(18 \cdot 19\) per cent. I would like to get some comment on that, because here we have a carrying charge added and while, ostensibly, the interest is 6 or 7 per cent, in reality, with the carrying charges, we find that on the actual amount deferred until the fall the cost of carrying is approximately \(18 \cdot 19\) per cent. That is one of the points we are interested in, and I would like to bring that particular matter to your attention?-A. The difference between the time prices that you refer to and the cash prices covers more than interest. The time price carries with it a credit risk because the man has not paid cash at the time he took his machine. It also carries with it the expense of collections. So that you cannot attribute the difference between the cash price and the time price as being interest, or solely interest. Does that answer the question?
Q. I realize that; but the point I am making is this: it is true that the companies, perhaps, have not always selected their risks wisely, but here we have a situation where we have perfectly good individuals who, because they are unable to meet the payments in cash in April, we will say, are burdened with the carrying charge of \(18 \cdot 19\) per cent, including interest and collection and all the rest of it?-A. The \(18^{\circ}\) is figured at an annual rate.
Q. No, six months?-A. On the annual rate.
Q. Yes, certainly.-A. Forgetting the agricultural implement industry, and taking merchandising of all characters as a basis, you are aware of the fact that it is a common practice in merchandising to allow a 2 per cent cash discount for cash in ten days; or if a man does not take advantage of that cash discount, he pays in 30 days. If you will compute the annual rate of interest on the basis of that allowance for cash in ten days as compared with the payment of the full price in thirty days, you will find that it amounts to 36 per cent per annum as compared with the 18 per cent that you referred to in the implement industry.

\section*{By Mr. Donnelly:}
Q. As a matter of fact, Mr. Morrison, if your business was on a cash basis, and not a time business at all, you would be able to sell your implements for less, would you not?-A. I tried to answer that yesterday. From 75 per cent to 85 per cent of the farmers in western Canada buy their implements on time. The reason they do that is because they cannot pay cash for them. If the implement business were put on a strictly cash basis, that very large proportion of the farmers could not buy; and they need implements as badly as the fewer farmers who could raise the cash. The result would be that the volume of business would be curtailed to the point that the cost of maintaining the business and running the business, applied to the small volume that you would get on a cash basis, would compel a cash price that is higher than the present cash price.
Q. But there is a feeling among the people who pay cash just the opposite to what Mr. Coldwell refers to, namely, that they do not get enough discount for cash, that they are paying too big a price as compared with the time price, taking into consideration the number of men that we see travelling throughout the west to make collections, and the number of losses that we know you must make. We believe that the man who pays cash does not get enough consideration. I have just one or two other questions. You referred to the \(\$ 1,400\) tractor. Where is the \(\$ 1,400\) considered, at the door of the factory or the consumer's place?-A. That, I believe, would be the duty value price.
Q. The what?-A. The duty value price.
Q. That is at the door of the factory?

Mr. Cleaver: The value for duty.
Witness: The value for duty purposes.

\section*{By Mr. Donnelly:}
Q. You pay duty on the \(\$ 1,400\), on a tractor under \(\$ 1,400\) ?-A. Yes.
Q. Where is the price set for that \(\$ 1,400\) ? Where is it taken into con-sideration?-A. At the port of entry.
Q. At the port of entry?-A. Yes.
Q. You pay duty at your port of entry on the price of the implement at your factory, do you?-A. You pay duty at the port of entry on the price established by your customs department as being the duty value.

Mr. Cleaver: The value for duty.
Witness: The value for duty.
Mr. McLean: Which is generally the wholesale price.

\section*{By Mr. Donnelly:}
Q. You say that from 1929 to 1936 , the present time, you have had to increase the price of implements here in this country due to certain things. One, you said, was the cost of labour; the other was the cost of material. Do you mean to tell this committee that from 1929 until the present time the cost of labour has gone up in this country?-A. I do not believe that 1929 was the year that was used.
[Mr. C. R. Morrison.]
Q. As a matter of fact, you have increased the price from 1929. You did not lower the price of implements from 1929 on; and it is only lately it has gone up above that. You said the cost of material had gone up since that time?A. I think Mr. Graham, in his question that I answered in the way I did, was referring to the last three or four years. I would like to have in front of me, before I would attempt to answer your question as to the trend in labour and material prices, the figures so that I could see them.

Mr. Graham: Mr. Chairman, perhaps I might explain to Dr. Donnelly that, in the replies to the questionnaires, the companies have given their breakdowns on those very features. I wanted to simply bring out the reason, so that later I can examine on that very point that you raised, Dr. Donnelly. We have their actual break-downs on certain implements referred to.

Mr. Donnelly: All right. There is another question I want to ask.

\section*{By Mr. Donnelly:}
Q. You said the rate of interest in Saskatchewan was 7 per cent before and 7 per cent after maturity. How long has that been in effect?-A. I will give you the date. The 7 per cent before and 7 per cent after due rates were put into effect in Saskatchewan on February 1, 1934.
Q. What was it before that?-A. I will answer your question rather comprehensively. Before January 1, 1928, the rates in Saskatchewan were 9 per cent before maturity and 9 per cent after. On January 1, 1928, the rates were reduced to 8 per cent before and after maturity. On January 1, 1933, the rates were reduced to 6 per cent before and after maturity; and on February 1, 1934, they were raised to 7 per cent before and after maturity.
Q. You say also that you asked for 25 per cent cash. You have been in the company for some time, Mr. Morrison. Back in 1915, 1916, and 1917, were you asking for 25 per cent cash then?-A. We did not always get it, but our terms were-
Q. You might have asked for all cash but you would not get it either?-A. No. What I mean by that is this: Our rates and terms, as printed, provided for 25 per cent; but we did not always get it. We came very close to getting 25 per cent on the general implement line; but on the larger machines like tractors, threshers and combines, we did not get 25 per cent many times.
Q. As a matter of fact, your sales policy has changed quite considerably since that time, from what it was back in 1915, 1916, and 1917?-A. Our experience in connection with bad debt losses has caused us to adopt a more conservative attitude.
Q. Your policy has changed; there is no doubt about that. Because I remember quite well your men going through the country at that time practically asking people to buy implements. To-day that is hardly true. You stated also that you often consulted with Mr. Morton in setting the prices of these implements. Is that not true? You said you did, did you not?-A. No. I did not say that we consulted with Mr. Morton with respect to that. I said I consulted with Mr. Ewald, our Canadian sales manager.
Q. I beg your pardon. You consulted with him as to what prices you should ask for implements?-A. Yes.
Q. Do you ever consult with the other companies as to that?-A. No.
Q. You have nothing whatever to do with any of the other companies, in saying what price they ask for their implements or anything else?-A. We will ask them what prices they are asking for their implements. As a matter of fact, when we get out our prices on our implements, we will send those prices to the other companies.
Q. And they do the same with you?-A. They do the same with us. That is just an ordinary business courtesy that I presume exists in all kinds of business.

By Mr. Coldwell:
Q. Do we understand that there is no price setting by agreement between the various implement companies, such as we have in some other lines?-A. There is not.

\section*{By Mr. Cleaver:}
Q. Coming to the difference between credit sales and cash sales, could you tell us on what percentage of the credit sales you have had losses, by way of actual losses, in the last five years? I see you set up a reserve for losses of about 15 per cent?-A. I have some figures here, Mr. Cleaver, that would have to be segregated to give you the five-year period. I can give you the ten-year period including those years.
Q. The ten-year period would be quite satisfactory.-A. Our losses sustained or estimated to be sustained on the receivables that we have taken in Canada in that period amount to 13 per cent.
Q. Could you give me the cost of collection of your receivables over the same period or over the last five years?-A. Do you mean on a percentage basis or on a dollar cost basis?
Q. On a percentage basis.

\section*{By Mr. Donnelly:}
Q. That 13 per cent loss would be over the dominion?-A. Yes.

Mr. McLean: On the credit sales.
Wifness: A very large part of it is in the west.
Mr. Donnelly: It would be much higher if you took the west alone.

\section*{By Mr. Johnston:}
Q. Is that 13 per cent on your total sales or just on your time sales?-A. Just on the time sales, on the notes taken.

Mr. Golding: What is the amount of the time sales?
Mr. Cleaver: He said about 85 per cent of the total.

\section*{By Mr. Golding:}
Q. Yes, but what is the amount of sales, so that we can get an idea of it? -A. Do you mean the amount of the times sales against which this 13 per cent was estimated?
Q. Yes?-A. That would amount to \(\$ 52,300,000\).

The Chairman: Over the ten-year period?
Mr. Graham: I would ask the reporter to make a note of Mr. Weir's question.

\section*{By Mr. Graham:}
Q. What is the ten year period you are speaking of?-A. 1926 to 1935.
Q. Inclusive?-A. Yes.

\section*{By Mr. Cleaver:}
Q. The gross figure on which you are taking the percentage over the full ten years is \(\$ 52,000,000\) ?-A. That is right.
Q. You were looking up for me your cost of collection?-A. All right.
Q. I believe there was some evidence before the Price Spreads Committee that that is approximately 10 per cent. If you cannot find the exact figures, could you from memory tell me whether 10 per cent would be approximately correct?-A. I would have to take those figures and compute them over the
[Mr. C. R. Morrison.]
period of time. I have the figures here in front of me covering the cost of collection for each individual year from 1904 to 1936.
Q. Could you now give me the cost of collection in a percentage over any of the last recent years?-A. Yes. I can give you the cost for each year on a percentage basis.
Q. Justh read it out, of you will.-A. For what years do you wish it?
Q. Well, starting in 1929 and moving forward.-A. All right. The costs were:
\begin{tabular}{|c|c|}
\hline Year & Percentage \\
\hline 1929. & \(6 \cdot 4\) \\
\hline 1930.. & \(12 \cdot 4\) \\
\hline 1931. & \(11 \cdot 9\) \\
\hline 1932. & \(13 \cdot 3\) \\
\hline 1933. & \(12 \cdot 5\) \\
\hline 1934. & \(10 \cdot 1\) \\
\hline 1935. & \(9 \cdot 0\) \\
\hline
\end{tabular}

Those are the last final figures or definite figures that we have.
Q. Over the last five years the percentage cost of collection on time sales would averagee about 11 per cent.-A. I would say so.
Q. So that to the 13 per cent of loss you must add 11 per cent for the cost of collection which would make a total of 24 per cent that time sales have cost, you more than cash sales during that period?-A. I think that is correct.
Q. And to that amount of 24 per cent must be added the interest that you would have to pay on the money tied up?

Mr. McLean: No, that is included in the interest that is collected.
Mr. Cleaver: I am coming to that in a moment.

\section*{By Mr. Cleaver:}
Q. To figure out the total cost to the company of time sales for that period you would first take your loss of 13 per cent, then your cost of collection of 11 per cent, making a total of 24 per cent; and then to that amount you must also add your interest costs?-A. If you had to borrow money in order to carry these receivables, yes.
Q. Quite true?-A. The International Harvester Company of Canada has not borrowed money for that purpose.
Q. But if you had had to borrow it you would have had to pay interest? -A. Yes, if we had had to borrow it.
Q. Well then, that is the cost to the company. Now, then, coming to the other side of the picture, what did the company collect from these time sale purchasers more than they collected from the cash purchasers to reimburse the company for this cost?-A. I have not a separate figure for that, Mr. Cleaver; but I will say this, that the additional amount charged for time as compared with the cash price has not in that period amounted to as much as it has cost.
Q. I think that is rather obvious, that there would be quite a large difference between these two; well then, to that extent the cash purchasers are being used to subsidize the time purchasers?-A. Not to that extent; that is, assuming that our cash prices are sufficiently high that they cover the manufacturing costs and all other expenses incident to running a business. But, that is not true, the cash prices themselves are even too low. I wish to state that the difference between the amount charged for time sales over cash sales and the total expenses in handling of these time sales including the loss has been borne by the stock holders or the owners of the business, rather than the farmer who pays cash.
Q. I will come to that point in a minute in the financial statement; but just following that up, your sole source of revenue is the money that you receive from the sale of implements, and there are two sources; one, the selling price that you get from the cash buyer; and two, the selling price that you get from the time buyer; that is true, isn't it?-A. That is true, as far as it applies to implements, yes.
Q. Well then, if you had not received enough money from the time buyer to reimburse you for the loss you sustained through selling to the time buyer is it not equally true that the cash buyer helped to subsidize, or to make up that loss?-A. Not necessarily. If our prices were named on a basis that the cash price and the time price buying would show the company a profit, and a satisfactory profit, on the operations of the business, even in the fact of these losses that we are talking about, then I should say that the cash buyer possibly assumes a considerable part of it. However, these losses do reflect in the balance sheeet of the company.
Q. Perhaps my question would be a little more palatable if I were to put it in this way; that the fact that you do not collect enough from your time buyer to take care of the proper cost of time selling increases your losses?-A. The fact that we have not had prices high enough, both cash and time, has had the effect of increasing our losses.
Q. I think we understand each other. Coming to the question of losses then, we will see what they are. In 1921 the Canadian business paid a dividend of \(\$ 3,000,000\). Is that right?-A. I believe that is right.

Mr. Jarchow: That is correct.

\section*{By Mr. Cleaver:}
Q. And about that time the parent company found that it was more profitable to retain the profits of the Canadian company in the United States and never let them get to Canada, on account of our value for duty which our Customs Department set up?-A. That is a statement I cannot subscribe to.
Q. We are having a bad time. Well, we will take a little more time with it. What implements did you export from the United States to Canada in the years following 1921?-A. We exported from the United States into Canada tractorbinders, harvester-threshers, tractors-
Q. Not too fast, we will just get a few typical ones-tractor-binders, yes? -A. Harvester-threshers.
Q. Yes?-A. Tractors, corn-binders.
Q. That is enough. Would you give me the price at which you invoiced your selling company in the United States a tractor-binder?-A. You mean, give it to you in dollars? I haven't the figures, but the way the Harvester company sold that machine to the distributing company in the United States was at a figure which represented the dealer's price in the United States less 25 per cent.
Q. Now, in order that there will not be any confusion in this we better reduce it to actual dollars and cents. Could you have that looked up for me; the price at which you invoiced to your selling company in the United States a tractor-binder, a harvester-thresher, a tractor and a corn-binder; and then the price which your parent company invoiced these very same articles at to the Canadian company. And I am suggesting to you that you can tell us now that the invoice price to the Canadian company was 13 per cent higher than to the same American selling company?-A. Not 13 per cent. The difference was this: The price to the American selling company was the dealer's price less 25 per cent; and the price to the Canadian company was the dealer's price less a net of \(13 \cdot 375\) per cent.
Q. In other words, the price to the Canadian company for exactly the same machine was \(10 \cdot 6\) per cent higher than the price at which you sold that
[Mr. C. R. Morrison.]
machine to the selling company in the United States?-A. It was the difference between the discount of 25 per cent and the discount of \(13 \cdot 375\).
Q. Yes, it is \(10 \cdot 6\) ?-A. I don't know how you figure it.
Q. Well now, let us get it down so that there will be no misunderstanding, in actual dollars. Take a \(\$ 300\) machine and give me the price at which you invoiced that to the American selling company, and the price at which you invoiced it to the Canadian company?-A. The difference-
Q. Take a \(\$ 300\) machine, a machine that you would invoice to the American selling company at \(\$ 300\), at what amount would you invoice that same machine to the Canadian company? Have you the answer?-A. Yes. The price to the United States distributing company would be \(\$ 300\).
Q. Yes?-A. The price to the Canadian company would be \(\$ 346\).
Q. Yes. Well then, I suggest to you that the question I put to you a few minutes ago is correct; that on account of our tariff regulations you found it more profitable to make your profits in the parent company than to make them over here; you charged the Canadian company \(\$ 46\) more for that one machine than you charged the American selling company for the same machine? -A. You realize, Mr. Cleaver, that the price that we charged the Canadian company was one that we were compelled to price at.
Q. I realize that. I am trying to show why your Canadian company from 1921 on showed no dividends; bless you, you kept them at home. I am not saying that you were wrong in doing it. I am saying that our silly tariff regulations encouraged you to do it?-A. The profits of the Canadian company, of course, are affiected by the higher price that they had to pay for these implements than if they had been purchased at the same price as the United States distributor paid.
Q. Now, we have the figure on this one type of implement, let us have the figure on another type-a tractor. Take a tractor that would sell to your American company for \(\$ 1,000\); what would you charge the Canadian company for that same tractor during the period when there was the full 25 per cent spread. Just recall your evidence of yesterday.-A. Yes. I want to give you the figures. I will give you an illustration, Mr. Cleaver, based on a tractor that would be priced to a dealer in the United States at \(\$ 1,000\).
Q. Yes.-A. The American distributing company would pay \(\$ 750\) for that tractor, the Canadian company would pay \(\$ 950\).
Q. So that the Canadian company was charged \(\$ 200\) more money for exactly the same tractor than you charged the American selling company?A. That is correct.
Q. And once again I suggest to you you found it profitable to keep your profits in the United States and never to let the Canadian company make them? -A. I don't like the inference that might be taken from that statement that we found it profitable. It sounds like we had elected to do that.
Q. I am not suggesting that.-A. The way it turns out.
Q. Then, shall we say necesary?-A. That is better, and that is the reason I have not subscribed to your statement.
Q. Now, take your set up rate as at the date, on those same two implements on which you told me the prices charged to the American company and to the Canadian company?-A. You want them in dollars?
Q. In dollars, the same as we had them a moment ago. If you would rather give it after lunch, I am quite willing that it should go on the record then. -A. It would mean doing some figuring here, but I think I can give you what you want by dealing with it on a percentage basis.
Q. I would rather leave it until after lunch, and get it in dollars, and then there will be no argument.

The Charman: The committee shall adjourn now until four o'elock this afternoon.

Committee adjourned at one o'clock, to meet again at four o'clock.

\section*{AFTERNOON SESSION}

The committee resumed at 4 o'clock.
The Chatrman: Gentlemen, we shall continue from where we left off when the committee rose. I think Mr. Cleaver had the floor, and I shall now ask him to continue.

Mr. C. R. Morrison, Mr. F. M. Morton, Mr. C. E. Jarchow, recalled.

\section*{By Mr. Cleaver:}
Q. You have given us, Mr. Morrison, the amounts that you were more or less compelled to mark up the selling price to the Canadian company beyond the price at which you wished to make it. Would you now give us the actual selling price to the farmer in Canada and the selling price to the farmer in the United States of the tractor that we were talking about this morning?-A. We would not have those figures at all, Mr. Cleaver, the selling price to the farmer.
Q. Can you get those for us?-A. It would be very hard to get it from the States. You understand that the tractors are sold to dealers in the States, who in turn make their price. I can give you however, the figures you were asking for this morning on the hypothetical implements on which you want to know the difference.
Q. Thank you. Will you give them now?-A. On an implement that the dealer's price would be \(\$ 100\) in the States, the United States selling company would be charged \(\$ 75\) for that implement. Prior to the recent change in the value for duty purposes in Canada the Canadian company would have been charged \(\$ 86.63\) for the implement. Since the change in the formula for establishing value for duty purposes the Canadian company is charged \(\$ 80\). That is on the implement-
Q. Before you leave that, may I ask this question? Why is the Canadian company still charged \(\$ 5\) more than the American company for the same imple-ment?-A. Because the value for duty purposes stipulated by the Canadian government provides for discount of only 20 per cent.
Q. Whereas your actual discount is \(\$ 25\) ?-A. To the U.S. selling company.
Q. I wanted that on the record. Then you have another one there?-A. I have the hypothetical tractor. If the tractor was priced \(\$ 1,000\) to a dealer in the United States, the U.S. selling company would be charged \(\$ 750\). Prior to the recent change in the Canadian customs value for duty purposes, the Canada company was charged \(\$ 950\). Since the change in Canada in the value for duty purposes, the Canada company is charged \(\$ 800\).
Q. And if the Canadian customs would go as far as they perhaps should go and allow a mark-down or duty for value which is true in fact the Canadian company would only be charged \(\$ 750\) ?-A. That is true.
Q. Then, in order to have it on the record at this point would you indicate to the committee the actual amount of duty saving which the company made by charging the Canadian company this excess price showing why it was so absolutely necessary that you should do it? Take the same typical cases of \(\$ 100\) implements. If you had billed them to the Canadian company at \(\$ 75\) you would have had to pay 25 per cent duty on that sale plus a dump duty of \(\$ 25\); is that right?-A. No; I do not get the \(\$ 25\).
Q. The reason you marked it up to \(\$ 100\) was to escape the dump duty. What is the dump duty? Is the dump duty not the difference?-A. We did not mark up the implement to \(\$ 100, \mathrm{Mr}\). Cleaver. The comparable price between the U.S. selling company and the Canadian company-
Q. I mis-bespoke myself, \(\$ 86.63\).-A. Yes; the difference there is \(\$ 11.63\).
Q. Would you indicate to the committee in actual dollars the actual saving in duty which the company made by charging the Canadian company \(\$ 11.63\)
[Mr. C. R. Morrison.]
more than it wanted to?-A. Do you refer to the dumping penalty as a duty?
Q. Yes.-A. When you use the word " duty "-
Q. I want to get on the record- A. -you refer to the dumping penalty.
Q. I want to get on the record the reason for the markup?-A. If the implement had been charged to the Canada company at the same price it was charged to the U.S. selling company we would have had inflicted upon us the dumping duty representing the difference between the price we charged the Canada company or \(\$ 75\) and the \(\$ 85.63\) which they stipulated should be charged.
Q. In other words you would have been penalized to the extent of \(\$ 11.63\) ?A. That is true.
Q. Less the actual duty which you paid on the increase, of course?-A. Not less anything, because the duty we would pay would have to be paid on the value for duty purposes regardless of any price that might occur between the two companies.
Q. So that on an agricultural implement which you would bill to your selling company in the States, \(\$ 75\), if you had billed that same implement to the Canadian company at \(\$ 75\) you would have lost through having to pay in duty charges \(\$ 11.63\) ?-A. Through having had to pay that amount as a dumping penalty.
Q. So that by marking up an implement to the Canadian company \(\$ 11.63\) higher than it should have been, you saved a duty of \(\$ 11.63\) ?-A. I am not going to say yes to any such question as that, Mr. Cleaver, for this reason: The customs officials stipulated the price that should be used for establishing values for duty purposes, and we were expected and required, regardless of our wishes in the matter, to charge the company in Canada that same price; and if I am not mistaken on the manifests that are made over in the United States, manifesting those machines into Canada, I think we subscribe to the fact that this is the price and no other price exists between the two companies in the transaction.
Q. May I refresh your mind, Mr. Morrison, on the evidence you gave yesterday in reply to quite a similar question. I am reading from page 369. This is your answer: "No, our minds are not changed; we will be glad to allow the Canadian company the same discount as allowed the American company "?A. That is exactly true, and I stand on that right now.
Q. I suggest to you that the only reason why the Canadian company was charged this extra \(\$ 11.63\) on a \(\$ 75\) implement was because the Customs Department at Ottawa insisted on you doing it or on paying them that amount as a duty, as a penalty?-A. Well, that is substantially correct.
Q. So that you had no option, you had to do it?-A. We had no option.
Q. Now, coming to the tractor, and let us get the picture there in the same way. You have given us the figure on a tractor that your selling price to the U.S. selling company would be \(\$ 750\). If the tariff regulation had not interfered you would have billed the Canadian company that tractor at \(\$ 750\) ?-A. That is correct, yes.
Q. But as the result of or on account of the tariff regulation you billed the Canadian company at \(\$ 200\) more than that amount?-A. That is right.

\section*{By Mr. Donnelly:}
Q. Is there a duty on tractors?-A. There is no duty now on tractors, and there was no duty at the time Mr. Cleaver refers to on tractors, the value for duty purposes amounting to less than \(\$ 1,400\).

By Mr. Cleaver:
Q. Notwithstanding the fact that there was no duty on those tractors, there was this regulation of a value for duty?-A. That is true.
Q. And even though there was no duty on the tractors you would have had to pay \(\$ 200\) to the Canadian customs if you had not added that on the price in billing it to the Canadian company?-A. That is true.

Mr. McLean: There is also an excise duty.
Witness: Yes.

\section*{By Mr. Cleaver:}
Q. That applies throughout. Now, in order that we may reasonably estimate what loss this has been to the Canadian company, would you please indicate what percentage of the gross Canadian sales of your company are imports?-A. You mean for the whole period of time?
Q. Oh, for a reasonable period of time, so that we will get a fair idea?A. Several years ago the sales of implements in Canada represented about 50 per cent imported from the United States and about 50 per cent manufactured in Canada. Later those figures were reduced considerably as far as the imported machines were concerned.
Q. Now, in that figure are you including both trucks and tractors?A. Not trucks; I am including tractors.
Q. Well, you imported trucks as well?-A. We did for a short time, but we started in several years ago to manufacture trucks.
Q. Take a normal year, not an abnormal year; would you say that your total implement tractor-your total sales in Canada would be about 50 per cent made in Canada and 50 per cent imports?-A. That was true several years ago.
Q. Was it true in the last normal year that you had?-A. In the last normal year I should say yes.
Q. Then, breaking up the 50 per cent of imports into tractors and other agricultural implements, how would you divide them in percentages?-A. I could not divide them here on the stand, because I would have to get at the figures and work it out.
Q. Could you give me an approximate figure?-A. I would not care to do that, because there are many figures involved in arriving at a proceeds division of that kind.
Q. Would it be asking too much to ask you to supply it?-A. It would be asking a great deal of work.

Mr. Graham: I spoke to Mr. Jarchow on the same point. Mr. Jarchow, you pointed out that it would take how long? I think it is a matter that the committee will have to decide.

Mr. Jarchow: We cannot go back many years, but for any one year it would involve a lot of work, because it involves going through each individual shipment and individual invoices.

\section*{By Mr. Cleaver:}
Q. I will leave that question for the time being. One thing more and I am through. How soon could we have the statement from you in regard to the selling price of our hypothetical tractor and implement in the United States as compared with Canada?-A. You mean the retail price?
Q. You said you would not care to do that now. How soon could we have it?-A. Well, the retail prices of tractors in the United States vary, Mr. Cleaver, in various sections of the country, depending upon transportation rates. We could give you the list price of a tractor in the United States at the factory which would be the retail price that we would ask a farmer if he came in to the factory to get one.
Q. Fine. Are you prepared to do that now; because if you are that will answer my question?-A. But against that, at what point would you want the price of the tractor.
[Mr. C. R. Morrison.]
Q. I was coming to that after I got this answer. What is your list price at the factory of this tractor we have been talking about that you would sell to the U.S. selling company at \(\$ 750\) ?-A. That was a purely hypothetical figure, because it was easy to figure. I will tell you what I will do. I will be very glad to get for you the list price in the United States at the factory which would represent the retail price we would ask at the factory for some typical tractor and give to you the same tractor at the present time at any point in Canada if you want the price.
Q. I would suggest that you give the corresponding price in Canadanamely, the list price at the factory?-A. There is no factory in Canada making tractors.
Q. Well, at your head office in Hamilton.-A. I should be glad to do that.
Q. Of course, in regard to all these figures and prices which you have given, these will vary depending upon the location or point of view; that is, freight rates enter into the picture over and above these figures you have given.A. Oh, yes.

\section*{By Mr. Johnston:}
Q. In connection with the tractor, when you are getting the figures for Mr . Cleaver I wonder if it would be possible to let us have the price at Regina instead of Hamilton?-A. Very glad to do that.
Q. In western Canada, Regina is quite a heavy distributing point.-A. We will be glad to get that.

\section*{By Mr. Ward:}
Q. Coming back to the question of time sales versus cash sales, suppose, for example, for the moment that you could divorce from your mind entirely any thought of the business past or even future in respect to implements, what saving could be made if sales were entirely cash sales? Is that too big an order?-A. If you could assure us as large a volume of business under the all-cash-
Q. You are begging the question.-A. I cannot help but beg the question, because it is very much involved.
Q. The point I wished to make was: has much encouragement been given to farmers to pay cash? Let me give you a concrete illustration. I went to a dealer just last summer to buy a binder. I said, "What will you sell me a binder for for cash?" He thought at so much money. I said, "Suppose, for example, you give me two years to pay for it; how much would it cost?" It was just \(\$ 10\) more?-A. How much time?
Q. That is so much cash and two payments, one last fall and one this next fall, eighteen months' time or sixteen months' time. If you figure it out, it was only about 4 per cent on the money that was involved in the transaction. There was no encouragement at all if, for example, I was going to the bank to borrow the money, for me to go to the bank and pay 7 per cent in order to buy the binder and pay cash for it. I think that has been generally true for at least 20 years, that little or no encouragement has been given by the companies to cash purchases?-A. One of the members of the committee this morning raised the question that the difference between the cash and the time price was entirely too high, and he had figured it out that it represented an annual rate of about 18 per cent on the money. Evidently there must be some discrepancy in the views here.
Q. The committee might be interested in a visit I made back in 1904 to a Doukhobor settlement in Saskatchewan, and they had just unloaded a carload of MaCormick binders. They bought them as a community directly from the factory and paid cash for them. The man in charge of the settlement told me
himself that they paid \(\$ 78\) for the binders; we were paying \(\$ 165\) at the same time?-A. When was this?
Q. 1904. We were paying \(\$ 165 .-A\). And he got them for \(\$ 78\) ?
Q. And he told me that he bought the binders for \(\$ 78\) ?-A. I have never seen a binder as low as that in the United States or Canada.
Q. Would that not be a fair price at the factory?-A. \(\$ 78\) ? No, never.
Q. For 6 -foot binders?-A. No, \(\$ 78\) at the factory-that is entirely too low.
Q. Thirty years ago?-A. Thirty years ago they cost more money than that.

Mr. McLian: What about that mythical carload that was wrecked on the C.P.R. and valued at \(\$ 36\) ?

Witness: I never heard of it. I do not know anything about it.
Mr. McLean: You surely have heard of it.
By Mr. Ward:
Q. This man in charge had no reason not to tell me the truth. He seemed to know what he was talking about and he told me and three other men who were with me that the binders had cost them \(\$ 78\) at the factory. Of course, they paid their own freight from the factory to what is now Kamsack, Saskatchewan. So that these things had given rise to a feeling that has been prevalent for a long time that no encouragement has been given by the companies to those who would pay cash; and I am not sure that much effort has been put forward by the companies to encourage cash purchases. Perhaps, Mr. Chairman, for many years it has been the proper business to sell on time?-A. Mr. Ward, if we were to take our losses in the last four or five years and our collection expenses, figures that I have testified to this morning, and we should fix a time price based on those losses, increase the prices up to the point that it would have absolutely covered those losses and given us a fair profit, the disparity between the cash price and the time price would have come back to us as a boomerang from the farmer who had to pay on time, and he would have charged us with usury for the price he would have been required to pay for the machine.

\section*{By Mr. Senn:}
Q. Mr. Morrison, a few minutes ago in reply to a question by Mr. Cleaver you stated that the percentage of Canadian sales by your company was 50 per cent imports and the other 50 per cent made in Canada. For what period of time did that condition exist?-A. That existed up until a few years ago, Mr . Senn; and the figure I am using is an approximation, because I do not have the definite figure. But I am quite sure in my own mind that it is about right.

Mr. Cleaver: His answer was the "last normal year," Mr. Senn.
By Mr. Senn:
For the last five years what would you say was the percentage of imports, of the Canadian sales by your Canadian company?-A. About 20 per cent.
Q. What is the reason for the difference in imports during that period?--A. Well, in that period of time, Mr. Senn, we have started the manufacture in Canada of some goods that we previously imported from the United States.
Q. Why did you do that, may I ask?

Mr. McLean: They were not selling enough to keep the shops going.
Witness: The duty rates had something to do with our decision.
By Mr. Senn:
Q. The imposition of a higher duty did have the effect of increasing your normal production in Canada?

Mr. McLean: No.
[Mr. C. R. Morrison.]

Mr. Cleaver: It had the effect of increasing the percentage but decreasing the normal production.

Mr. Senn: That may be Mr. Cleaver's idea, but I do not think it is the correct one.

Mr. Cleaver: You might take our figures, and I think they will show that.
Mr. Senn: I know the figures are much lower than they were in the years of low production. But we cannot get away from that fact, I think.

\section*{By Mr. Senn:}
Q. I am asking Mr. Morrison, and I think he will agree with me in this, that a larger percentage of the Canadian sales of their company was manufactured in Canada during the past five years since that higher duty was imposed than formerly?-A. Yes.
Q. Very well. Now, you have stated time and again, Mr. Morrison, in answer to questions, that the price at which you billed your goods to the Canadian company was some 10 per cent higher than it would otherwise have been if it were not for the customs regulations regarding fair valuation. Is that correct?-A. That is my testimony. The 10 or 12 per cent is an estimate on my part, because we do not have the definite figures.
Q. Well, it is approximately correct, you will say?-A. As near as I can tell.
Q. But since May, 1935, that has been reduced to 5 per cent, has it not, according to your estimate? There was a change in the regulation at that time? -A. I think perhaps that figure would be approximately correct.

Mr. McLean: Six and two-thirds, to be exact.

\section*{By Mr. Senn:}
Q. May I ask if the Canadian consumer was charged that 10 per cent or 12 per cent more than he would have been charged if you had been able to bill your implements to the company at the price that you desired to?

Mr. Clfaner: I think that question should be reserved.
Mr. Perley: You have had your turn; now sit down.
The Chairman: I think we should let Mr. Senn finish.
Mr. Cleaver: I would like to ask the chairman for a ruling. I think that question should be reserved until the witness gives the evidence which I asked for, and which he has not now, as to the selling price in Canada and in the United States.

The Chairman: I think Mr. Senn can finish his question.
Mr. Senn: What is your ruling?
The Chairman : I think you should finish your question.

\section*{By Mr. Senn:}
Q. I am not asking for an accurate answer by way of it being one hundred per cent correct, Mr. Morrison. But I do think that you could say off-hand, as president of the Canadian company, whether you have charged the consumer or farmer that 10 per cent extra which you had to charge the Canadian company? -A. I would say No, in a general way; and I would like to explain why I am saying no.
Q. Yes.-A. The implements imported upon which we paid a higher price, or upon which the Canada company paid a higher price than the company selling in the United States, were brought in here and sold in competition with similar implements manufactured in Canada; and we could not bring those into Canada and set a higher price simply because the Canada company had to pay more than it should have paid. In other words, our prices had to be reasonably comparable with competition.

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Q. May I ask this question: The 10 per cent difference was between the price charged your American selling company and the price charged to your Canadian company, was it not?-A. It was.
Q. Your American selling company, after all, is a wholly owned subsidiary, is it not?-A. Of the Harvester Company.
Q. Of the Harvester Company?-A. Yes.
Q. And the Canadian company is practically a wholly owned subsidiary of the same company?-A. Yes.
Q. What difference does it make in fact-outside of the imposition of the duty on the higher valuation-what you really charged those two companies?A. You mean what difference does it make to the Harvester Company?
Q. Yes?-A. If the parent company, which owns the stock in both the United States selling company and the Canadian selling company, charges the Canadian selling company a higher price than it charges the United States selling company, the parent company receives the benefit of that higher price in its profits. However, the goods coming into Canada were subject to a duty on the higher prices; the greater the duty and the greater the excise tax.
Q. Of course, I made that clear in my question.-A. Yes. That explains the situation as applied to the Harvester Company. However, it is only fair and reasonable that the selling company in Canada should be able to buy its goods at a fair and reasonable price. If it had been able to buy its goods at the same price as the United States selling company purchased them, the Canadian selling company would have had more profits; the parent company would have had less. Therefore, the profits that would have shown on the Canadian company's books would have been subject to an income tax in Canada, if there were profits.
Q. I can fully understand that. May I ask another question? You said that you could not sell your goods at any higher rate or any appreciably higher rate because they came into competition in Canada with Canadian-made goods or other goods, which made it impossible for you to increase the price by that 10 per cent. May I turn the question around the other way and ask you if, during that time, you had been able to sell to the Canadian company at the same price that you sold to the American company, could you have reduced the price by that 10 per cent in Canada, or would you have?-A. No.
Q. Why not?

Mr. Thorson: Which is it, could you have, or would you have?

\section*{By Mr. Senn:}
Q. There must be a reason for it?-A. If I understood your question correctly-and my understanding being the one that caused the response to your question to be no-it is reasonable to suppose that a Canadian manufacturer, manufacturing those same goods, would be able to manufacture them at a cost fully as low as any jobbing price that one company would make to another; and as the Canadian manufacturers' prices were based theoretically on costsalthough they had not for many years followed their costs in fixing their prices -the change in the values for duty purposes would not have affected the prices charged to the farmers.
Q. Now, you have stated on more than on one occasion that, the extra profit which should have accrued to the Canadian company went to the American company because of this 10 per cent higher duty which you had to give to the Canadian company; that is correct?-A. That is correct.
Q. If that had been otherwise, and you had been able to bill at the same price, could the Canadian company have sold their machines more cheaply in Canada?-A. Not over the perior of time that we are talking about. I thought I had answered that question before.
[Mr. C. R. Morrison.]
Q. Yes; but because they had made a certain amount of profit which came to the Canadian company by reason of having their goods billed at the same price, you stated, I think, that the profits in that case would accrue to the Canadian company.-A. To the United States parent company.
Q. No. If they had been billed at the same price as they were billed to the American company, the profit would have accrued to the Canadian company?A. That is correct.
Q. We will suppose that profit had accrued to the Canadian company. In that case could you have sold your implements more cheaply in Canada?A. Not over the period of time you are talking about. The excessive prices paid by the Canada company during that period of time only aggravated the loss situation of the Canada company. If it had been able to buy the goods during that period at the same price as the United States selling company, their losses would have been lessened.
Q. Then I am correct in my assumption, am I, that after all, this writing up or billing up of the goods to the Canadian company made little or no difference, outside of the perhaps small increase in the duty paid, to the Canadian consumer. Is that a correct assumption?-A. It is true for this period of time.
Q. Was the small additional amount that was paid by your company for duty purposes owing to this higher duty passed on to the consumer or not?A. No. That is the reason why the prices could not have been reduced to the consumer if the lower price had been charged to the Canada company.
Q. Then it seems to me that it is a fair assumption to say that this whole idea of valuation and the disadvantages that have been stated are matters for the company, and have had very little or no effect upon the consumer or consumer prices?-A. They have not had during the period, but it is an improper situation as far as the Canada company is concerned.
Q. Yes. I am willing to let it go at that, as far as I am concerned. I should like to ask another question along another line. You stated a short time ago, I think, that 13 per cent per annum was written off in your Canadian business for bad debts, did you not?-A. No. I said that on all the receivables taken during that period of time, the losses have amounted to 13 per cent of the total.
Q. Could you, without much trouble, divide that into eastern and western Canada, that is, as to the amounts written off?-A. We would have to analyze our accounts. But the very large part of it is western Canada.
Q. I should like to ask another question and then I am through. Perhaps it is too early to ask this question. If so, I will leave it until later. It has been stated that it has been the policy of your company and of the companies in Canada to charge a higher rate for fast moving parts or parts that wear out quickly than for those for which you have very little demand; that is, a higher rate, accordingly, to their cost of production. Is that correct?-A. That is not correct.
Q. There is one other question I should like to ask before I sit down. You stated that in 1934 there had been an increase in price, generally speaking, in your line of implements in the United States?-A. Yes.
Q. And another one in 1935?-A. Yes.
Q. Why did the price of your implements not go up in Canada during the same period?-A. Because of the general situation in Canada with respect to agriculture, we just delayed doing the thing that we should have done.
Q. Well, do you think the situation is any better now?-A. No. But there comes a time when you cannot go ahead any longer, in an impossible situation.
Q. Did your Canadian company make any agreement with the former government?

Mr. Cleaver: That is a leading question.
Mr. McLean: It is out of order.

\section*{By Mr. Senn:}
Q. Is that a fair question? If you cannot answer it, it is all right.A. If I should undertake to answer that question, I would not be answering it on any definite knowledge that I myself possess.
Q. All right, thank you.

Mr. Cleaver: Just one point arising out of that: So that the net result of this juggling of figures was the the United States government got the tax and profit instead of the Dominion government.

\section*{By Mr. McLean:}
Q. Mr. Chairman, Mr. Morrison this morning dealt with credit terms given at the present time in Canada. I was wondering if he could tell us without much difficulty what the most generous or the easiest credit terms had been over the years with which he was dealing at that time. Were they much easier at one time?-A. Are you referring now to the percentage of cash required?
Q. And the length of time for the balance.-A. There has been no change made in the length of time where the credit situation with the creditors is good, we still offer the same terms; cash, or part cash and one, or two, or three-pay terms.
Q. As you always did?-A. We still offer those terms for persons who can establish the eligibility for credit of that kind, that has not changed.
Q. But you did sell implements at a lower cash payment some years ago? -A. Yes, I testified this morning that our down payment in western Canada three or four years ago and prior to that time was 25 per cent, and that was the figure used in our published prices.
Q. The lowest figure at any time in that period?-A. That we put into our list prices.
Q. Yes, yes?-A. But we did sell tractors and larger implements frequently with a lower down payment.
Q. Yes, you testified to that this morning?-A. Yes.
Q. Was there any difference in credit terms between the east and the west generally speaking?-A. Not in length of time.
Q. But a difference in the down payment requirement?-A. In the earlier period the 25 per cent down payment was the same both west and east; in recent times we have increased the down payment in the west but have not made any change in the east.
Q. The down payment in the east is still 25 per cent?-A. It is still 25 per cent.
Q. Was there any difference in prices between comparable implements in the east and the west aside from transportation costs?-A. I do not think there is any difference in the price as between the west and the east except that caused by transportation costs, except this: In the east our prices are based on the delivered price to a dealer's town. That has been the custom in Canada for many many years, and it has just continued because it has been an old custom. Our prices in the east therefore are laid down at the dealer's town, the company paying the freight to the dealer's town. In the west the prices are not meant as delivered prices, but are prices either f.o.b. Fort William if they come from that assembly transfer stock, or f.o.b. the branch house.
Q. Yes. Well now, perhaps I should not ask you this, but I was wondering if there might be anything of a difference in the transportation that you charge as compared with the real transportation cost; what would the real difference in the freight delievered to the dealer's house in the east be as compared with what the dealer would actually have to pay in the west. Would their be much difference there?-A. I do not think so. I think that the freight put into the prices is substantially what the freight amounts to.
[Mr. C. R. Morrison.]
Q. Yes. Now, as far as you can calculate shortly, prices are the same east and west?-A. The basic prices are the same. Transportation makes the difference between the basio price and the delivered price at whatever point is involved.
Q. That is what I wanted to ask you about. Mr. Graham this morning asked you about the effect of the NRA code on prices in the United States and if they reflected on your costs in Canada. You dealt with that at the time, but there was one thing he did not ask about and which I wanted to ask your opinion on; that is, the effect of the very large degree of inflation which became the policy in the United States during the past two or three years; would you be able to tell us to what extent your figures with respect to raw materials and costs, and labour and other things, were raised by that inflation as apart from the cost, or even in conjunction with the cost?-A. I am not competent to offer any testimony in that respect, Mr. McLean. That is testimony that would have to be given by an expert who would have to study the effects on the various things concerned.
Q. Yes. That is fair enough. I wonder if we could get that from the company in any way?-A. The company does not have that.
Q. The company does not have that? The parent company would certainly have it?-A. The parent company has no figures available to show how much increase they paid for raw materials on the outside as caused by the inflation or any other single cause.
Q. It would be a matter of calculation rather than scientific statistics perhaps?-A. There are \(120,000,000\) people in the United States that probably now trying to figure that out.
Q. And having quite a time to do it too. Now, there are a couple of other questions, but I think they have been fairly well answered now. Mr. Morrison, taking this tractor that was charged at \(\$ 950\) for a long time and is now charged at \(\$ 800\) as against \(\$ 750\) to the distributing company of the Harvester Company in America, would the fact that you were charged a higher invoice price not have a tendency to harden prices in this country; when you came to fix selling prices on that implement you had it in your mind that if this were charged to you at \(\$ 950\) and you had paid excise tax on that; you had gone through a more expensive method of releasing it from customs, there were more formalities to go through, and those facts were in your mind. Would not that have the tendency of hardening the price of tractors in this country?-A. I do not believe that it did have that effect, for this reason, that when we established the price to the farmer on a tractor in Canada we simply ignored the prices that the Canadian company had to pay for the tractor.
Q. How would you set the price then?-A. The price is set on the basic domestic price plus what it costs to get that tractor up to the point where it is sold in Canada.
Q. The domestic price in the United States?-A. In the United States.
Q. The domestic retail price?-A. The domestic retail price.
Q. That cannot be right surely?-A. Why?
Q. You say that the price is based on the domestic retail price in the United States plus what it takes to bring it up to Canada?-A. I say that the price established for the farmer in Canada is based on the retail price in the United States and what it costs to get that tractor up into Canada from the factory.
Q. Well, a little while ago you told us that the retail price was not uniform, and was set by individual dealers in the United States?-A. I say, at the factory.
Q. Oh, I get you now, the price that your company would set at the factory is the retail price if the farmer came in there to Chicago?-A. Yes, that basic price is used to determine the price in the rest of Canada; in other words, if we had taken the price the Canadian company was charged for that tractor and added the excise tax and transportation costs to get it up to the point where
it was sold, and figured commission to the dealer and all related charges, it would have been very much higher than it is or has been.
Q. Yes. Supposing a Canadian company went down to Chicago-this is a hypothetical question-and wanted to act as distributors or dealers in a part of Canada, would they be able to buy these tractors, or if they were able to buy these tractors from the parent company at a wholesale price that was determined by the competitive selling basis in the United States, how would they fare when they came to bring these tractors into Canada at a higher value; would not the higher value be reflected in the cost to them landed in Canada? A. Yes, it does not make any difference who brings tractors into Canada they will be brought in at the price of value for duty purposes established by the government.
Q. And that applies to tractors made in the United States and brought into Canada I would presume?-A. Yes.
Q. Perhaps I would do better to put it this way: It does not make any difference to the shareholders of the parent company in the United States into whose pocket the higher price goes, unless they might pay a higher tax in the United States than they would pay in Canada, but it does not make any difference to the shareholders as such. But isn't it possible that it would tend to increase competition and lessen selling prices in Canada if a company that wished to distribute tractors in Canada had been able to import them from the United States at a price at which they could buy them there and bring them into Canada?-A. I do not believe that any company could buy tractors in the United States and bring them into Canada at an advantage over any other company.
Q. No? Well then it lessens the competition-it might have a tendency to lessen competition and harden prices in this country by preventing that kind of thing being done?-A. If anybody could bring tractors into Canada and sell them at an advantage in price, I mean could get them into Canada at a lower cost than anybody going over to the States now and getting tractors, yes; I would say that the man who brought his tractors into Canada at a lower price than anybody else would certainly have an advantage; but I do not know of anyone who has any advantage over anyone else in bringing tractors into Canada.
Q. No, there is no advantage. If a Canadian farmer or anybody was able to go over to the United States to-day and buy a carload of tractors and bring them in at a real value, at what they paid for them, instead of this at one time \(\$ 950\) and at the present time \(\$ 800\), he would be able to bring them in cheaper and to sell them at a lower price? I admit that you would be able to compete with them if that were so. I do not know that I got your question, Mr. McLean. If I could answer it in a general way I would say that if anybody could go into the United States and buy tractors and bring them into Canada at a lower value for duty purposes and therefore a lower excise tax and a lower first cost than somebody else, then that man who has the benefit of the lower price would certain have an advantage; but everybody bringing tractors into Canada from the United States is subject to the same regulations.
Q. Then if it is a fact that no one is able to bring them into Canada at a valuation, or at a price at which he might buy them there, that would have the effect of causing a hardening of prices, or an increase in prices in this country?-A. Well, I said a while ago that the price in Canada is set by starting with the retail price in the United States, and adding the actual cost of bringing the tractor up into Canada, which includes the excise tax.
Q. Had there been no value for duty in Canada at a higher level than the real value, would the farmer in Canada have been able to buy his tractor for any less money during those years?-A. I don't think so.
Q. You don't think he would have?-A. This has only been caused by the transportation cost and the excise taxes.
[Mr. C. R. Morrison.]
Q. So that these high valuations do not effect the retail value of them and do not even act as a psychological factor in holding up prices?-A. I don't think so.
Q. That is all I wanted to ask.

> By Mr. Needham:
Q. Mr. Morrison, you stated yesterday that the total number of bad debts written off was 5 per cent?-A. I stated that the bad debts written off for a certain period of time represented five per cent of the volume of business in that time, which included that business on which this 5 per cent was computed, included cash business and all business of the company; but I also stated yesterday and again affirmed it to-day, that the losses as against the goods actually sold on time, or against notes, amounted to 13 per cent.
Q. Would that apply to the whole of your business throughout the world or Canada?-A. That is exclusively the Canadian situation.
Q. Have you any time or age limit on which you pay accounts of that nature that you write off?-A. The reason I am having a conversation on the aside is that Mr. Jarchow is our comptroller and is the man under whose supervision our balance sheets are prepared, and I wanted to be sure my answer would be correct. The figures that I gave you have no reference to any arbitrary charging up of an account. It represents the total amount of business we sold on terms in that period of time against which we have actually sustained losses or estimate that we will sustain losses.
Q. You have no set time?-A. Not in the figures we have given you. In our balance sheet that the Harvester company gets out for its world operations we set receivables out after a certain length of time, but that is not true in regard to the figures I gave you for Canada.
Q. Have you any idea of the percentage of the bad debts that you have written off that are afterwards collected?-A. In those figures, 5 per cent or 13 per cent?
Q. Yes. Suppose you wrote off a million dollars.-A. And afterwards collected part of it?
Q. And afterwards collected part of it.-A. Those figures have the benefits of any collections that may have been made after a note had been charged off.
Q. At one period you might quote 13 per cent, and then it would be reduced afterward, or would that apply in the current year?-A. The possibilities of collecting a debt after it is written off are rather remote. There may be isolated cases where we are able to make a collection on an item after it has been charged to loss and discount. It is so remote and so infrequent that it would not affect the figures.
Q. We had a witness yesterday or the day before who was asked that question and he gave an example. I shall read you what he said:-

I can give you an example of that. I do not remember the figures to a high degree of accuracy, but I do remember the manager of one of the major implement company's branch in the western part of the province telling me in one district in western Saskatchewan in the year 1922 this company had outstanding notes to the extent of \(\$ 250,000\); and that beginning with 1922 and ending with 1929 they sold annually in the district some \(\$ 40,000\) worth of implements. They collected cash for their current sales and collected all or practically all of the accounts which were outstanding in 1922.
That was in my mind.-A. He did not say these accounts that were outstanding in 1922 had been charged off for a loss or discount.
Q. No; that is what I am trying to get at if I can. There is a possibility if a good year comes along maybe the thousands of dollars that had been
written off in western Canada over those six years of bad crops will be collected. If we have six years of good crops you might collect almost 100 per cent of the bad debts you have written off.-A. That would be a very happy circumstance.
Q. Yes, I know.-A. But if that did happen; if we had been able to collect money on indebtedness that had been previously written off on our books through loss and discount, that loss and discount account would receive credit for the money collected on those accounts, or the debts previously charged off. In other words, at any period that we might take up the percentage, showing the percentage of loss, it represents the actual percentage of loss.
Q. Did you bring that percentage of 13 per cent down in the year in which it was collected?-A. Yes.
Q. How far does your company in western Canada hold the agent liable for the payment of the note that you have accepted from the farmer?-A. Well, the fact that we have charged as much as we have for the loss and discount is indicative that they have not been penalized to any very great extent.
Q. But you do hold the agent?-A. Our contracts with the dealer carry a provision that we have 60 days' time after the time of annual settlement to determine whether or not the credit rating of the customer was good. Within that 60 -day period after the annual settlement with the dealer if we find that we have received from that dealer some notes that are no good, we charge them back to him and ask him to go out and secure them or convert them into cash or something of that kind. But after that 60 -day period is passed, if we then later discover they were not good, the dealer is not responsible.
Q. After the 60 days?-A. After the 60 days.
Q. How long has that been in force?-A. Some little time.

\section*{By Mr. McLean:}
Q. Sixty days after the settling date?-A. Yes.
Q. Which might be quite. a while after the sale?-A. It might be quite a while after the date the note originally reached our hands, because the notes might have come into our hands in March or April, and we might not have made a settlement with the dealer until the fall of the year. But after that annual settlement with the dealer we have 60 days in which to ascertain whether or not the credit as represented to us was good.

\section*{By Mr. Needham:}
Q. Before that 60 days expired you can turn those notes back to the agent? -A. Yes.
Q. I suppose you would not have any percentage of the amounts you turn back to the agent?-A. There are not any very large amounts turned back in that way, for this reason: We really insist on the agent giving us the opportunity to grade that paper before he delivers the machine, particularly if it is an expensive machine. When you get into the grain harvesting season, they will deliver a binder, for example, on which we would not have the opportunity to look up the credit of the final purchaser before delivery. Generally our branch house organizations, have the opportunity, especially in expensive machines, to investigate the credit responsible before the machine is delivered. And for that reason the amount of notes actually charged back to the dealer is very small.
Q. They would amount to- -A. Most of the refusals occur before the machine is delivered; therefore the notes do not have to be charged back. The deal is not consummated.
Q. That is your method of restricting credit, passing on the notes before the machine is delivered?-A. That is our method of trying to protect ourselves in the credit situation.
[Mr. C. R. Morrison.]

By Mr. Senn:
Q. I should like to ask Mr. Morrison one more question. Perhaps he would not be able to answer it; perhaps he will not care to answer it. I think you said to Mr. Cleaver, Mr. Morrison, that approximately 11 per cent of receivables went into collection costs, over a period of years. Is that correct?-A. That was about right in the last four or five years.
Q. That was the average, was it not? You could not say, I suppose, how much of that 11 per cent went into the collection of overdue accounts?-A. Overdue accounts?
Q. Yes.-A. Well, very largely past due accounts, Mr. Senn. Our collection expenses are largely, particularly the expenses of our travelling collectors, incurred after a note matures. If it is not paid on maturity then we have the collector interview the debtor.
Q. Would you care to give the committee any idea of the percentage of overdue accounts you have collected during the past four or five years? Perhaps you would not want to give that information.-A. I can answer your question approximately. Our percentage of cash collected on notes matured in the last five years-that represents all notes that have matured-has been somewhat less than 15 per cent.
Q. The collection costs have averaged 11 per cent?-A. The collection costs have averaged 11 per cent of cash collected.
Q. About-A. A different figure entirely.
Q. I know it is a different figure entirely but you have no idea or could not give the committee the information as to what percentage of overdue accounts you have collected from year to year, not accounts that are coming due, but overdue accounts?-A. That would be a rather difficult question to answer here, Mr. Senn, and it would require a good deal of analysis to work it out.
Q. Perhaps it is not worth while.-A. I might say this which perhaps may partially give the information you want. We do not spend a lot of money trying to collect notes in a territory where conditions are very bad, and we know the debtor cannot pay. We do not waste any money in that particular section of the country. Therefore we are not chasing good dollars after those that are temorarily bad.
Q. Unless times improve you will perhaps write that all off?-A. No, we keep them down on our books-yes, unless times improve a lot of that will be written off. We will keep the notes on our books for a reasonable length of time.
Q. What do you mean by "a reasonable length of time"?-A. Well I would say offhand that of the total notes outstanding at the present time that are past due, approximately 75 to 80 per cent of them must be six years old or over. By that I mean they have matured six years ago. That is an estimate, but I think it reflects virtually the facts.

The Chairman : Now gentlemen, I wonder if we can get along. Mr. Graham has another important section of the report with which he would like to deal.

\section*{By Mr. Golding:}
Q. Just a moment. In your evidence this morning, Mr. Morrison, you stated that there was a downward trend in prices from 1930 to 1933, and then there was an increase in prices. You also stated that prices should have been increased long before they were?-A. Yes.
Q. You agree with that?-A. Yes.
Q. Now, did your company happen to be one of the companies that gave the assurance that if tariffs were increased in 1930 your company would not increase prices during the time those tariffs were in existence?-A. That question was asked just a few moments ago, and I said at that time that if I
attempted to answer my answer would not represent actual information on my part.
Q. You could not say whether, on behalf of the Canadian company, that promise was given or not? You would not say for sure?-A. Would you repeat the question.
Q. I asked this question: was your company one of the companies that gave the assurance in 1930 that if tariffs were increased on your particular line of business you would undertake to guarantee there would be no increase in prices of your implements during the period the tariffs were in existence?-A. If I should answer that question it would be largely hearsay and would not reflect my own definite knowledge of the case.
Q. You would not say that your company did?-A. I would not say yes with no very definite knowledge on my part.

Mr. Graham: You are quite privileged to ask any of your officers. You are speaking for the company, and Mr. Golding is asking if there is any person who could answer that?

Witness: I do not think so.

\section*{By Mr. Golding:}
Q. You could give us that information?-A. I can find out, yes.
Q. I think the committee would be glad to have that information. Personally, I would anyway.

Mr. McLean: I wonder if I might ask Mr. Morrison who would be likely to know that fact; who would be likely to speak for the Canadian company?

Witness: I would have to go back to Chicago and see if I could dig up anybody that might have any knowledge of the situation existing back at that time.

Mr. McLean: You do not know of anyone in Canada who would be able to speak for the company?

Witness: Do you know anything about it, Mr. Morton?
Mr. Morton: I was just endeavouring to recall. I do not recall the exact circumstances. We could look up and see if we could find anything about it,

Witness: We will try to answer that question either from information obtained at Hamilton or Chicago.

Mr. Golding: That is all right.
The Chatrman: Now, if the committee is ready, I think we should let Mr. Graham proceed with another phase of his examination. I will ask Mr. Graham to proceed.

\section*{By Mr. Graham:}
Q. Just with regard to clearing up one or two questions which were put by members of the committee, I would like to get this clear: in that hypothetical example of the tractor for which the U.S. sales organization paid \(\$ 750\) and the Canadian \(\$ 950\), the mark-up there would be \(\$ 200\) ?-A. That is correct.
Q. That would be, I notice, a mark-up over the U.S. price of between 26 and 27 per cent?-A. Approximately 26 per cent.
Q. And in the case of the implement sold to the U.S. selling organization at \(\$ 75\) and to the Canadian at \(\$ 86.63\), a difference of \(\$ 11.63\), that would be a mark-up of approximately \(15 \frac{1}{2}\) per cent?-A. \(15 \frac{1}{2}\) per cent.
Q. Would the tractor example indicate the mark-up during the period that the old ruling was in effect?-A. It would from early in 1917.
Q. And in the farm implements, would the mark-up of \(15 \frac{1}{2}\) per cent be a reasonable indication of the mark-up of farm implements?-A. During that same period.
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Q. So that your original estimate of 10 to 12 per cent would be somewhat modified by these computations?-A. That answer of mine was an approximation.
Q. Yes, I understood it; but this would be probably - A. This would more clearly reflect certain machines taken as typical examples. Of course, the relative proportions of tractors in any given year and implements in any given year would have its influence on the average of that year.
Q. But that would be a fairly good indication?-A. Fairly good.
Q. Now, then, to get it clear about after the May 1st change in the regulations, I notice the cost of the tractor, the mark-up in dollars, is \(\$ 50\)-from \(\$ 750\) to \(\$ 800\); that would be approximately about \(6 \frac{1}{2}\) per cent of the mark-up, would it not?-A. Yes.
Q. And in the case of the implement it would be \(\$ 5\) of a mark-up on \(\$ 75\), which would be approximately \(6 \frac{1}{2}\) per cent too-which would be the same, as a matter of fact?-A. That is right.
Q. Now, then, I want to ask you this basic question, because a great many of the questions are directed at this particular phase of the examination: from your experience as an executive officer of the two companies what would you say, over an average period of, say, ten years, was a reasonable return to an implement manufacturer on the investment?-A. On the investment?
Q. Yes. Would you care to proffer an opinion on that?-A. I will be willing to reply to that question.
Q. If you would.-A. In all the years I have been in the implement business, and that represents a large number of years, I have never seen the time when in determining prices one could take factory costs as the basic price to start with-
Q. I am speaking now of the profit.-A. I am leading to that point-and added to that the various elements that enter into the business itself such as bad debt losses, selling expense, collection expense, and so forth, and set a price on that basis; because the most important element that a person is faced with always in naming his price is competition-the price of competition-that is the dominating factor in what you can do. If it were my privilege to be able to name prices at any figure I wanted to name in the implement business, I would be entirely satisfied if, over a period of time, I could get 8 per cent on the investment, over an average time. And let me point out that there is no manufacturing business which has met with more hazardous conditions than the implement business. The only customer that the implement manufacturer has in the end is the farmer, and the volume of business is contingent on crops and on the varying influences that affect crops, and world conditions that affect crop prices and so forth; and the implement business itself is different from most businesses in that the turn-over of your capital is very slow. The implements used in the harvesting of crops, for example, are used only for a short part of the year. You have to make your estimate and manufacture your machines. If you have a crop and are able to sell, you are fortunate; but if in the last minute, after you have manufactured the machines for that crop, the rust comes along as it did last year, or some other catastrophe, it is unfortunate for the manufacturer. Therefore, I would say that if the implement manufacturer could be insured over a period of time of 8 per cent on his investment, I think it would be a very satisfactory return, and one that has not been made by the implement manufacturers.
Q. In connection with a period of ten years which would be a fair normal period in which to judge the results of the Canadian company, I recall your evidence before the Price Spreads Committee in which you said that in the thirty-six years of your experience that the years succeeding 1930 to 1935 are years that hardly enter into any other period of your own thirty-six years'
- experience. I notice that you describe them as devastating or completely beyond your experience?-A. Both as to duration and intensity.
Q. I suggest to you, therefore, the years 1921 to 1930 -because you remember there were some bad years in there too in the west-would that not be a more reasonable ten year period to judge or draw inference from than, say, 1926 to 1935 ?-A. Some of those years in the period you are mentioning were unusually good years - the best years we ever had in the business.
Q. Yes; but let me give you-perhaps these are not your figures, but the consumption and selling value would be supplied by the industry to the Bureau of Statistics-let me give you these figures: \(1920, \$ 61,000,000 ; 1921, \$ 40,000,000\); \(1922, \$ 20,000,000 ; 1923, \$ 29,000,000 ; 1924, \$ 21,000,000 ; 1925, \$ 23,000,000 ; 1926\), \(\$ 38,000,000 ; 1927, \$ 52,000,000 ; 1928, \$ 66,000,000 ; 1929, \$ 52,000,000 ; 1930\), \(\$ 38,000,000\). Would you agree with me that that is a fair, reasonable period in which to set up a normal figure, rather than this devastating period that we are still in?-A. With regard to this normal period you are describing, just what are the years?
Q. 1921 to 1930 inclusive. 1920, Mr. Morrison, you will note just prior to 1921, was a year much larger than 1921. You got into decreased production and sales in 1921. Apparently that was the end of a period of prosperity. I will not hurry you on that, if you would like to consider it.-A. If you would give me a little time to consider it, I should be glad.
Q. Quite. I will go on and just make a note of that.-A. Yes.
Q. I simply wanted to establish this: you agree that if an agricultural implement manufacturing company, over a normal period of ten years, netted 8 per cent, as you suggested, they would have a reasonable return?-A. I did not qualify it by saying " over a normal period of ten years." I said if it would average 8 per cent during its life. To set aside any particular period of time and say now you have realized your ambition-perhaps you have for a year or two or something like that, and then you run into some slumps that will materially change the situation.
Q. Our difficulty is that we have not asked you for any figures except for this period and slightly back of that. We cannot, without asking you the figures, judge you since 1903. However, you can later give me an answer as to what you think of that period. Now, Mr. Morrison, you will know this, despite the answer you gave to one of the members of the committee this morning, that there is an impression on the part of a considerable number of people that there may be, as to the matter of price fixing as between the companies in the industry, an agreement or understanding. You know that, do you not?-A. I know that there is such an impression.
Q. Yes, that there are certain individuals who, rightly or wrongly, think that? -A. Well, possibly there are. I do not know.
Q. You will understand, too, that naturally the committee thinks it proper to examine into the facts and the reasons perhaps for that. I am referring again to this Federal Trade Commission report of 1920. It might be only fair to point out that since referring to it Mr. Siefkin, general attorney for the company, has referred me to a decision of the Supreme Court of the United States on a case arising out of this report. He informs me that the Supreme Court indicated considerable disapproval of the findings of this particular trade commission. I have a digest of that case here, but Mr. Siefkin tells me that he is not capable, or at least that he does not presume to pass judgment on the digest being complete, and has offered to get for me the record of the whole case which can be filed with the committee, supplemental to this exhibit that is being put in. Until I get that, of course I cannot pass judgment. But I would point out, in fairness, that one of the reasons given by the court for not agreeing with the findings of the committee in one particular was that the evidence taken by the committee was ex parte; that is, that the companies had not been present in order to answer some of the charges levelled at them. I want to be fair to the companies in that regard. I am not attempting to submit to the committee or to you that the
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charges as made are correct; it is only that I wish to base my questions to Mr . Morrison on some of the answers made in this report, showing that there is some suggestion on the part of regularly constituted commissions to the effect that there is in the United States an agreement, or was at that time rather, in 1920, an agreement between the companies with regard to maintaining price levels. You no doubt, Mr. Morrison, are well acquainted with the findings of that committee in that regard?-A. Yes, I am familiar with it.
Q. I notice, in justice to the Harvester Company, that while they support that particular finding with a goodly number of excerpts from letters passing between the implement companies, that there is very little mention made of your particular company as having passed letters that would be suggestive of the finding as found. However, on page 31 the commission makes a finding as a fact that the implement companies of the United States agreed, either at meetings or by letters exchanged between the companies, to fix, maintain and on occasion to increase the prices of farm implements. I need not read it to you, but it is extremely definite in its findings that there did exist at that time an agreement between the companies to maintain the prices of farm implements at an undue level. Having that as a basis, I should like to have you indicate your opinion of that finding of the commission in that regard, and to say whether there has been any change in the relationship of the companies in the United States with regard to the fixing of prices of farm implements either to the dealer or to the consumer?-A. Well, I think, if I am not mistaken, that the charges made in that report were not verified. That is, I mean by that, they were not confirmed.
Q. By the court, you mean?-A. By the court.
Q. I am not certain. Maybe Mr. Siefkin can inform us. I do not think the Supreme Court dealt with that particular finding?-A. I do not know.

Mr. Stefkin: Would you like a statement from me on that?
Mr. Graham: Certainly, Mr. Siefkin.
Mr. Siefkin: I can say that the Federal Trade Commission is a quasijudicial or administrative body, whose findings have no weight except as the recommendations of that body may be referred to the proper judicial body and passed through the courts. The ordinary action of the Federal Trade Commission consists of an order. That order not having been complied with, the Federal Trade Commission issues a cease and desist order. That not having been complied with, the Federal Trade Commission has to take it into court to get enforcement of that order. This proceeding is not exactly in that category. The commission has such powers of investigation as they may be delegated by congress. In this case they were making recommendations that were transmitted to the Department of Justice. The Department of Justice, following that report of 1920, brought a proceeding in the United States District Court in Minnesota, a statutory three-judge court, two members of which held that the findings of the commission-I think I am correct in this-were not substantiated. That case was appealed to the Supreme Court of the United States, and in 274 United States, the Supreme Court decided that the charges of the Federal Trade Commission were not substantiated. How much of that report was carried out in the court action, I am not prepared to say here. I would be glad to file a copy of the Supreme Court's opinion and, in order to more clearly understand it, a copy of the opinion of the lower court, if I can get printed copies of it outside of the bound volumes. But in any event, the final opinion of the Supreme Court of the United States in 1927 completely disposes of the Federal Trade Commission report of 1920, whether it was through the fact that the Department of Justice did not take up, as feeling they had substantial reasons back of it, certain parts of the report; or whether, having taken them up, the Supreme Court disposed of what was taken up.

Mr. Graham: That is fine, Mr. Siefkin. I notice just in the head note prepared for me that the point in issue before the Supreme Court was the suggestion
that the Federal Trade Commission made that there was a combine, and that your company should be dissolved.

Mr. Siefkin: Yes.
Mr. Graham: That it should be broken up into parts. However, if you will kindly file that Supreme Court report, it will complete the records of the committee; and they can, in due course, study both the report and the decision.

\section*{By Mr. Graham:}
Q. Now, Mr. Morrison, would you say that that report is not correct, so far as your knowledge is concerned?-A. If the report were correct, Mr. Graham, and the Harvester Company were a party to the things allegated there, I would not have known it at that time because I was not in a part of the business that would have been involved in it. But if you should ask my opinion on the subject, I should say that the Harvester Company was not guilty as charged.
Q. Now that you are a very high executive officer in the company, what would you say as to the condition that now exists in the United States?-A. I should say that there is no agreement.
Q. No agreement?-A. Between the manufacturers as to increasing prices.
Q. To what extent is information exchanged between the companies as to prices?-A. When we get out our prices, as a matter of business courtesy we send copies to others in the same line of business:
Q. Is that policy followed out in Canada?-A. That policy is followed out in Canada.
Q. You will understand, Mr. Morrison, that to the ordinary lay person it is rather more than a coincidence. Take the 1936 price increase. Seemingly action was taken simultaneously by your own company, Massey-Harris, John Deere, Oliver and J. I. Case. You know that, I suppose?-A. All of them raised prices about the same time.
Q. Was that just a coincidence, or how did it come about that all the companies did that?-A. I cannot answer for all the other companies. I can give you very definitely the story as far as it affects the Harvester Company.
Q. I should be glad if you would do that.-A. I believe, if you will remember, that in my testimony before the Price Spreads Commission I said that I did not see how increases in prices could be avoided; but we did not put increases in prices in effect in 1935.
Q. No?-A. However, as we went along during the year 1935, it became more and more apparent that such a move was necessary. So I instructed the sales department to prepare a list of the machines, and we got some cost figures-based on a normal cost, Mr. Graham, I would like to state, and not on actual costs existing to-day-and went over those figures very carefully. I asked our sales manager, Mr. Ewald, to make a recommendation as to what he felt the increase in price should be on the various machines. Later I went over those with him and I changed a good many of them. That necessarily is a long job; I mean, there are so many machines involved in it and you are not able to continuously apply yourself to it. There are many attachments involved and so forth, so it is a big job to go over the entire line. We, however, had just about finished the work and were just about ready to get our prices outthat is, I mean, to get the figures ready to be printed or to be stencilled-when Mr. Ewald came to me and said that one of our competitors had his prices out. I said, "How do you know?" He said, "I have a copy of them that has been sent to the territory." I said, "How do those changes in price compare with the changes we are contemplating making?" He said, "They are very nearly alike." He said, "There is not any very great variation in them."
Q. In the percentage of increase in the implements that were increased?A. Yes. And I asked him if there were any instances where there were glaring
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discrepancies between prices, and I think he said to me there were one or two or three, or something of that kind. I can't remember what the implements were, but it made a special impression on me at the time; but I think we did change one or two of our implement prices because of what the other parties had done at that time before getting out our price lists. If we had not done it then we would have had to do it later anyway.
Q. In the matter of competition?-A. Yes.
Q. Could you tell the Committee what company happened to be the first one to announce the new prices?-A. I am not sure that I know which company announced their prices first, but the company I referred to was the MasseyHarris Company. Now, whether any other companies issued prices prior to Massey-Harris I am not prepared to say.
Q. You say, Mr. Morrison, that prior to the receipt of that information contained in their price list secured by Mr. Ewald there had been no correspondence passed between you and the Massey-Harris Company?-A. None whatever.
Q. None that you know of?-A. None whatever.
Q. You will agree with me that it is rather a coincidence that all of the companies were seized with the same opinion at the same time?-A. I don't think they were seized with the same opinion at the same time. I think that opinion had existed in most cases for several years-the necessity for increases in prices.
Q. Would not that make the coincidence a little more great; because it had existed in the minds of each for so long; and they appear to have coincided remarkably?-A. Of course, any general increase in price that is going into effect is likely to take place at the beginning of some year.
Q. Of some year? Particularly for spring tillage implements? That applies to the whole line, because you have information regarding your operations of the previous year, and you get out your prices for the entire line at one time.
Q. You say, Mr. Morrison, it is the practice of all companies to exchange prices when any change is made?-A. I do not know if it is the practice of all companies. We send ours out, and we receive some.
Q. As a matter of courtesy?-A. As a matter of courtesy, and after price changes have taken effect.
Q. I see. With regard to the decrease that you told us about, there was no consultation between the companies with regard to the decrease?-A. Absolutely not.
Q. Now, I want you to turn to the section headed "Materials," on page 4 of my replies.

The Chatrman: Are you starting a new section now?
Mr. Graham: Yes. It is a kind of long section.
The Chairman: Probably it would be better to rise now.
Mr. McLean: We could sit again to-night.
The Chatrman: What is the wish of the Committee in that regard? I might say this, that we are very much obliged to these gentlemen, particularly those who came here from Chicago to give evidence, and I think we should keep ever in mind the fact that they would like to get back there next week. I am sure that this Committee would like to get all the information possible from them, and if we could meet to-night we might be able to dispose of some additional part of the inquiry. What is the pleasure of the Committee?

Mr. McLean: We could meet at 8.30 o'clock to-night.
The Charman: The Committee stands adjourned until 8.30 o'clock to-night.

The Committee adjourned at 5.50 o'clock p.m., to meet again at 8.30 o'clock this day.

\section*{EVENING SITTING}

The committee resumed at 8.30 o'clock.
The Chafrman: Gentlemen, if you will kindly come to order we shall continue our meeting. Mr. Graham, I believe you were starting one point of your examination, and I assume you wish to continue it.

Mr. C. R. Morrison, Mr. F. M. Morton, Mr. C. E. Jarchow, recalled.

\section*{By Mr. Graham:}
Q. Would you turn please to the section of your replies headed "Raw materials," Mr. Morrison?-A. Section 2?
Q. Section 2. In reply to the question, "What are the chief raw materials required by the implement industry?", you list pig iron, steel, and under that sub-heading appears steel bars, rods, and structural shapes, plates, soft-centre shapes, shears and mould board, harrow and plough dises, annealed and galvanized sheets, cold drawn (purchased as hot rolled and drawn in our own factory) black pipe, scrap iron, grey iron castings (manufactured in company's owned factories), malleable castings (manufacture in company's owned factories) lumber production, stock and crating, cotton duck, webbing and drilling, paint materials, dried colours, varnishes oils and thinners, chain, steel and malleable, coil springs, ball and roller bearings, coal, steam and melting, coke, foundry, fuel oil and gas. You state that these have been the principal commodities which have been utilized in the manufacturing operations in the years 1913 to 1930 inclusive? Is that correct?-A. It is correct.
Q. Would you say in 1935 that these still remain the chief principal commodities of raw materials?-A. Yes.
Q. Is it possible for you, Mr. Morrison, to give me the percentage of importance in volume that each of those raw materials bears to the whole? -A. It would not be possible for me to do that.
Q. You have not it with your anyway?-A. I beg your pardon?
Q. You would not be able to do it with the material you have on hand along with the officers with you?-A. No, I have no information with me to permit me to answer your question on a percentage basis.
Q. I refer you to page 5 of the farm implement machinery in Canada, 1935, published by the Department of Trade and Commerce, Dominion Bureau of Statistics, census of industry in the mining, metallurgical and chemical branch. I am putting this in as an exhibit. It will be exhibit 13. I notice on page 5 that they list in table 9 the material used in manufacturing in 1933 and 1934, and they set up as a unit of measure the quantity of total cost at works, and the total cost quantity at works. I should like you to look that over. My understanding is, Mr. Morrison, those figures are compiled from information supplied by the farm implement industry in Canada to the Dominion Bureau of Statistics. Give me your opinion as to whether that would be a fair measure by which to judge the importance of the different items of raw materials which I have named?-A. I am asking my man in charge of the purchasing at Hamilton to come up to see if he can throw any light on this subject. His name is Mr. John W. Dillon.
Q. I do not mean if they are correct, I mean if they are a fair average, if they are indicative of the importance of the items.-A. Mr. Dillon says he believes that these figures fairly represent the relative proportions of the materials used.
Q. The total in the year 1934, Mr. Morrison, was \(\$ 3,632,821\) ?-A. That is for the entire industry?
Q. That is for the total of the- - A. Yes, that represents the entire industry?
Q. Yes, the entire industry reported. I will not say it represents every company in Canada. Now, I have steel and if I have included the proper items there, \(\$ 1,173,212\) of that total of \(\$ 33,600,000\)-am I correct in including in steel the items I have?-A. There are some items in there, Mr. Graham, that are not properly steel.
Q. Will you kindly give me the steel items?-A. Do you want the steel items or the list of items that we do not consider all steel?
Q. You had better give me the items that you do consider all steel and amounts.

Mr. Dillon: Ingot blooms, billets-do you want the consumption figure or the total?

Mr. Graham: The dollar figure.
Mr. Dillon: \(\$ 65,150\). Bars, rods and shaftitng \(\$ 788,569\); plates, \(\$ 41,113\); sheets, \(\$ 61,670\); galvanized sheets \(\$ 78,422\); structural sheets-that is angles and channels, etc. \(\$ 43,088\); wire, \(\$ 23,215\); alloy steel \(\$ 11,909\); other iron and steel, \(\$ 6,497\). It says other iron and steel. I presume a portion of that item is iron.

Mr. Graham: It is not a very large amount?
Mr. Dillon: It is not an important amount.
Mr. Graham: If my mathematics are correct that will be \(\$ 1,119,533\) properly applicable to steel purchases. You can check that at your leisure. Now, then, pig iron is listed there as what?

Mr. Dillon: \$134,267.
Mr. Graham: Castings?
Mr. Dillon: \(\$ 65,150\).
Mr. Graham: Is not there another item on castings? What are those two items?

Mr. Dillon: Iron castings, all kinds, \(\$ 220,432\). Castings purchased \(\$ 65,150\).

Mr. Graham: That will be a total of \(\$ 285,582\) for castings. Cotton duck, ete., \(\$ 109,000\) ?

Mr. Dillon: That is right.
Mr. Graham: Lumber \(\$ 363,000\) ?
Mr. Dillon: Right.
Mr. Graham: Paints, oils, etc., \(\$ 92,885\); is that correct?
Mr. Dillon: Yes.
Mr. Graham: Manufactured parts, \(\$ 473,802\). Probably you had better read that item out.

Mr. Dillon: "Articles used for further manufacturing parts for machines or vehicles, \(\$ 473,802\)."

Mr. Graham: Now, those are the principal items, the larger items embodied in that report, are they not?

Mr. Dillon: Yes.
By Mr. Graham:
Q. Now, Mr. Morrison, on page 40 of the replies under section 4 under the heading of manufactures, on that particular page, you state as follows: "Direct or productive materials unit costs are based on engineering department specifications which are provided for each kind, type and size of implement. The
number of implements manufactured extended at these unit costs results in total 'prime' material expenditure for the season. The difference between 'prime' and the total charge to productive material account becomes our material adjustment figure."

Do I understand that the practice has been when a binder is produced that your engineering department furnishes not only specifications of the binder but the actual amount of component materials that will go into the manufacture of that binder?

Mr. Dillon: Yes, material lists are made up and the sizes are given.
Mr. Graham: And that has been issued each year, has it?
Mr. Dillon: I would not say so. Our material lists are made up, and any changes that would happen throughout the year are incorporated. It would not necessarily mean a new list-kept up to date, of course.

Mr. Graham: You state then that "the number of implements manufactured extended at these unit costs results in total prime material expenditure for the season. The difference between "prime" and the total charge to productive material account becomes our material adjustment figure."

Witness: I presume it is. We have not found the place yet. Yes, that is correct.

\section*{By Mr. Graham:}
Q. I presume the company would keep the succeeding engineers' specifications pertaining to each implement over the years?-A. As long as the implement is being produced.
Q. Would it be possible to produce to the committee on the list of typical implements that we have set over the period in question the engineer's itemized statement of the materials that went into that implement, and the cost estimated by that particular department over this item?-A. Mr. Jarchow had better answer that question.

Mr. Jarchow: Did I understand you to say that you would like that information over a period of years?

Mr. Graham: If it were available.
Mr. Jarchow: I doubt very much if that could be done because much of it would have to be reproduced.

Mr. Graham: Would you not keep the engineers' specifications?
Mr. Jarchow: Yes, but we would not have applied against it the costs which were current in each year.

Mr. Graham: How do you in each year give us an estimate of those prime costs?

Mr. Jarchow: Because we keep the summary of our costs for each year without attempting to keep up all the minute detail.

Mr. Graham: That summary would be prepared the same year as the engineer's report, would it?

Mr. Jarchow: Yes.
Mr. Graham: Could we have that? I want it for this reason, that it would be valuable not only in dealing with the material section of your reply, but would throw a great light on the suggestion that implements have greatly improved over this period. It would give us the history of both the improvements and the increased material cost, if any, throughout these years. It struck me-

Mr. Morton: We might have the odd set of specifications on discontinued machines. They are very bulky. I suppose a set of specifications on one machine
[Mr. C. R. Morrison.]
might be very thick-thousands of items or hundreds of items. With some machines it would be higher, and each one is in details.

Mr. Graham: I presume they could be made available to Mr. Macdonald.
Mr. Morton: Over what period did you have in mind?
Mr. Graham: Until you spoke about the bulkiness, I had in mind the period from 1913 to 1936.

Mr. Morton: It would be some trunk full.
Mr. Jarchow: A room full.
Mr. Morton: It would be very bulky.
Mr. Graham: I am referring only to the list of implements.
Mr. Morton: The list involves some big machines. We would be glad to make them available for Mr. Macdonald's scrutiny.

Mr. Graham: It struck me that that would be a very valuable source of information as to the first cost and to the improvements that have taken place in these implements throughout the period. Mr. Macdonald, I presume, can consider that particular point. We will go back to materials proper, Mr. Morrison.

\section*{By Mr. Graham:}
Q. On the succeeding page, schedule A, attached to your material reply section, you set out over the period in question, or at least part of the period in question the percentage of purchases: (1) in Canada, (2) in the United States, (3) in the United Kingdom, and (4) other sources. This is schedule A of your material section?-A. Yes, sir.
Q. And I notice that this first page deals with steel-bars, rods and shapes. In 1913 you purchased 50 per cent in Canada and 50 per cent in the United States. In 1922 that is switched to 40 per cent in Canada and 60 per cent in the United States. And then it goes along until 1926 when it is equally divided, \(50-50\); then in 1928 it is 60 per cent in Canada and 40 per cent in the United States; in 1930 it goes up to 85 per cent in Canada and 15 per cent in the United States and continues thereat until 1936. That is correct?-A. That is correct.
Q. And plates, I notice in 1922 it is 15 per cent in Canada and 85 per cent in the United States, until 1931 when that exactly reverses itself and 85 per cent is now purchased in Canada and 15 per cent in the United States?-A. That is right.
Q. And continues until the present. Soft centre-shares and mouldboards, throughout the whole period I notice you bought 100 per cent in the United States?-A. That is correct.
Q. Harrow and plough dises, 100 per cent throughout the period from the United States?-A. That is right.
Q. Annealed and galvanized sheets, in 1913 you were buying 100 per cent from the United States. Then for a period from 1922 to 1925 you were purchasing 30 per cent in Canada and 70 per cent in the United States; in 1925you purchased 40 per cent in Canada and 60 per cent in the United States; in 1926, 75 per cent in Canada and 25 per cent in the United States, and that continued until 1930 when you began to purchase 95 per cent in Canada and 5 per cent in the United States, and that continued until the present?-A. That is true.
Q. Black pipe, it ranges from 100 per cent in the United States in 1913; and since 1926, 100 per cent in Canada?-A. That is right.
Q. Scrap iron, 80 per cent in Canada and 20 per cent in the United States up until 1925, and thereafter 100 per cent in Canada?-A. That is true.
Q. And lumber, in 1913, 60 per cent in Canada and 40 per cent in the United States; in 1922 it dropped to 25 per cent in Canada and 75 per cent in the United States and that continued until the present?-A. That is correct.
Q. Cotton duck, 98 per cent throughout from Canada and 2 per cent from the United States?-A. Yes.
Q. Paints and other materials, colours, starts in 1913 with \(50-50\), and in 1929 you commence to purchase 97 per cent of your requirements in Canada and 3 per cent in the United States?-A. That is true.
Q. And that continued until to-day. Chain-steel and malleable, throughout the whole period, 5 per cent in Canada and 95 per cent from the United States?-A. Yes.
Q. Springs, coiled, 100 per cent from 1913 until 1934, 10 per cent from Canada and 90 per cent from the United States; in 1935, 40 per cent from Canada and 60 per cent from the United States; and in this year 1936, 10 per cent from Canada and 90 per cent from the United States. Is that correct?-A. That is true.
Q. Ball and roller bearings, the whole period up until 1934, 100 per cent from the United States, and in the last two years 85 per cent in Canada and 15 per cent in the United States?-A. No-other.
Q. 15 per cent in the United Kingdom, is it-no. I was wrong. Until 1934, 100 per cent from the United States; and in the last two years 85 per cent cent from the United States and 15 per cent from the United Kingdom or other? A. No, other.
Q. Other countries?-A. Yes.
Q. Coal, 100 per cent throughout from the United States?-A. That is true.
Q. And coke, foundry, with the exception of the years 1925, 1926 and 1927 in which you purchased 85 per cent of your requirements in Canada and 15 in the United States, you purchased 100 per cent from the United States?-A. That is right.
Q. Fuel oil, 100 per cent from Canada?-A. Yes.
Q. Pig iron, in 1913, 60 per cent from Canada and 40 per cent from the United States?-A. Yes.
Q. With slight changes thereafter until in 192680 per cent from Canada and 20 per cent from the United States; and thereafter 100 per cent from Canada?-A. Correct.
Q. That is the total of your requirements. Now, you were asked to furnish the companies from which you purchased the larger percentage of your requirements over that period. I notice that you reply dealing with the period 1932 to 1936 inclusive. That would be the five years requested in the questionnaire? -A. That is correct.
Q. Eighty-five per cent of your steel, I notice, comes from the Steel Company of Canada, Limited, at Hamilton; the Burlington Steel Company, Limited, Hamilton; the Dominion Iron and Coal Company, Sydney, Nova Scotia, and the Algoma Steel Corporation, Sault Ste Marie, Ontario?-A. Yes.
Q. Plates, 10 per cent from the United States Steel Products, Company, New York; 5 per cent from the Wisconsin Steel Company, Chicago; 85 per cent from the Dominion Foundries and Steels, Hamilton, Ontario; and the remainder from-

Mr. Morton: No. The first three items apply to the first classification.
Mr. Graham: That is right, bars, rods and shapes; 10 per cent from the United States Steel Products Company, New York, and 5 per cent from the Wisconsin Steel Company, Chicago.

Witness: Yes. That refers to bars, rods and shapes.

\section*{By Mr. Graham:}
Q. Yes. And in regard to plates, you got 85 per cent from the Dominion Foundries and Steels, Hamilton, Ontario; 12 \(\frac{1}{2}\) per cent from the United States Steel Products Company, New York, and \(2 \frac{1}{2}\) per cent from the Wisconsin Steel Company, Chicago?-A. True.
[Mr. C. R. Morrison.]
Q. Soft centre, 100 per cent from the Crucible Steel Company of America, New York; is that correct?-A. That is correct.
Q. Harrow and plough dises, 98 per cent from the Ingersoll Steel and Dise Company, Chicago, Illinois, and 2 per cent from the Crucible Steel Company of America, New York?-A. That is right.
Q. Annealed and galvanized sheets, 95 per cent from the Steel Company of Canada, Limited, Hamilton, Ontario, and 5 per cent from the United States Steel Products Company, New York?-A. Yes.
Q. Black pipe, 70 per cent from Page Hersey Tubes, Limited, Toronto, 20 per cent from the Steel Company of Canada, Limited, Montreal, and 10 per cent from the Canadian Tube and Iron Company, Montreal?-A. Yes.
Q. Scrap iron, 85 per cent from the International Iron and Metal Company, Hamilton, 10 per cent from the Crown Iron and Metal Conipany, Hamilton, and 5 per cent from the Canadian Pacific Railroad Company, Montreal?A. Yes.
Q. Lumber, 25 per cent from the Long Lumber Company of Hamilton and two other companies, Robert Bury and Company, Toronto, and Pedwell Hardwood Lumber Company, Orillia, Ontario; 50 per cent from the Goodyear Yellow Pine Company, Picayune, Mississippi; 15 per cent frum Upham and Walsh Company, Chicago; 5 per cent from the Golf Shaft and Block Company, Memphis, Tennessee; and 5 per cent from the Pearl River Lumber Company, Hammond, Louisiana?-A. Yes.
Q. Cotton duck, 100 per cent from the J. Spencer Turner Company, Hamilton, Ontario and Yarmouth, Nova Scotia?-A. Yes.
Q. Paint materials, 40 per cent from Scarfe and Company, Limited, Brantford, Ontario; 40 per cent from the Imperial Varnish and Colour Company, Toronto; and 20 per cent from the Dominion Linseed Oil Mills, Toronto, and three other Canadian companies. Is that correct?-A. That is correct.
Q. Chain, \(2 \frac{1}{2}\) per cent from the McKinnon Columbus Chain Company, St. Catharines, Ontario; \(2 \frac{1}{2}\) per cent from the Dominion Chain Company, Niagara Falls, Ontario; 93 per cent from the International Harvester Company, Chicago; and 2 per cent from the Locke Steel Chain Company, Bridgeport, Connecticut? -A. Yes.
Q. Springs, coiled, 90 per cent from the International Harvester Company, Chicago; and 10 per cent from Wallace Barnes Company, Hamilton, Ontario? -A. Yes.
Q. Bearings, 15 per cent from the Canadian SKF Company, Toronto; 5 per cent from the New Departure Manufacturing Company, Bristol, Connecticut; 60 per cent from the Timken Roller Bearing Company, Canton, Ohio; and 20 per cent from the International Harvester Company, Chicago, Illinois?-A. Yes.
Q. Coke, 100 per cent from the Semet Solvay Company, Buffalo, New York. Standard Fuels Company, Limited, Toronto, Ontario are agents for that company in Ontario?-A. Yes.
Q. Coal, \(33 \frac{1}{3}\) per cent from the Pittsburgh Coal Company, Pittsburgh; \(33 \frac{1}{3}\) per cent from the New Jellico Coal Company, Cincinnati, Ohio and \(33 \frac{1}{3}\) per cent from the Weaver Coal Company, Toronto, Ontario?-A. Yes.
Q. By the way, would the Weaver Coal Company be agents for an American company, Mr. Morrison, or do you know?

Mr. Dillon: They would act, I would say, as jobbers for some American coal companies.

\section*{By Mr. Graham:}
Q. Fuel oil, 85 per cent from the Imperial Oil Company, Limited, Hamilton, Ontario and 15 per cent from the Burlington Refineries, Limited, Hamilton, Ontario. That is correct?-A. Yes.
Q. Pig iron, 90 per cent from the Steel Company of Canada, Limited, Hamilton, Ontario; and 10 per cent from the Canada Furnace Company, Port Colborne, Ontario; the above split between Canadian firms only; cannot give an accurate split between United States and Canadian firms. That is correct?A. That is true.
Q. The greatest tonnage of pig iron is purchased from Canadian sources and at the present time all pig iron is purchased in Canada; that is correct?-A. Yes.
Q. Are any of these companies, Mr. Morrison, subsidiaries or affiliates of the parent company in the United States. I notice the Wisconsin Steel Company is.-A. The Wisconsin Steel Company is; and, of course, the International Harvester Company is mentioned down here in connection with chains.
Q. Any of the others?-A. Outside of the Wisconsin Steel Company, none.
Q. Now you notice a substantial shift in 1930 in the purchases from the United States and in Canada in certain items. What would be the explanation of that, Mr. Morrison?-A. You mean substantial shifts from purchasing in the United States to purchasing in Canada?
Q. Yes, in some items.-A. I think Mr. Dillon can answer that question much better than I; because, as I said this morning, the purchasing is left almost entirely with the Hamilton organization.

Mr. Dillon: Well, one basic reason there is our policy of buying as much of our materials in Canada as it is possible to do. If you take prior to 1930, especially the steel bars, our principal supplier at that time was the Steel Company of Canada.

Mr. Johnston: Louder.
Mr. Graham: Speak up, please.
Mr. Dillon: At that time, prior to 1930, I would say that they did not have sufficient mill capacity to supply all the steel requirements for Canada; after 1929, with the advent of new mills, they were able to look after a greater amount of our Canadian requirements.

Mr. Graham: I see. Just lately, too, there is the further incentive that you gain a greater drawback if you attain a certain Canadian content?

Mr. Dillon: There is not; not that I know of.
Mr. Graham: Do you happen to know, Mr. Morrison or Mr. Morton?
Mr. Morton: A greater Canadian content?
Mr. Graham: Canadian content.
Mr. Morton: Well, on the contract end of our business there are some new regulations.

Mr. Graham: With the Canadian content.
Mr. Morton: Yes, Empire content.
Mr. Graham: Not Canadian, but Empire content.
Mr. Morton: Empire content.
Mr. Graham: Your name is Mr. Dillon, is it not?
Mr. Dillon: Yes.
Mr. Graham: Are you the purchasing officer of the company?
Mr. Dillon: Purchasing agent or buyer.
Mr. Graham: Finally, I suppose, the decision as to where to purchase your raw materials is based on the laid down price at Hamilton or wherever you require to buy.

Mr. Dillon: Right.
Mr. Graham: What is your method? I ask this because I was a little intrigued by the information I secured in the automobile industry. What is
[Mr. C. R. Morrison.]
your method of purchase of any substantial quantity, say, of steel? Do you secure the price that you could purchase for in the United States import, and lay down at your factory?-A. Yes, naturally I have that information when we are ready to make a steel contract, and the usual practice in steel, and in pig iron, is that you will make a quarterly contract.
Q. I see?-A. We know the price from the published information about the price of steel and pig iron in the U.S., and then we get our local prices and make our contract.
Q. And, as you say, you buy in the cheapest market, naturally?-A. Right.
Q. By the way, Mr. Dillon, knowing as you do the changes that took place say in steel prices would you agree with me that in the last two or three years Canadian steel prices have shown a peculiar independence of United States prices and United Kingdom prices?-A. I would.
Q. Canadian prices have remained lower and steadier, and have not seemed to follow the trend of steel prices in these countries, is that right?-A. That is true.
Q. Would you suggest that the United States price had been affected by the N.R.A.?-A. Well, that is one phase of the business that I cannot answer anything about.
Q. You would not care to answer about that. I admit that it is a very difficult thing to talk about, as Mr. Morrison suggests.

Mr. Golding: Mr. Chairman, I do not believe that is too difficult to answer. I believe that prices just had to increase under that, and the cost of raw materials unquestionably must have increased.

Mr. Graham: I quite agree with Mr. Morrison's answer. I can understand the head of a large American corporation at this time not wanting to appear to pass judgment as to the effect of a political policy. I have a very learned treatise on the economic results of the application of the N.R.A., and I suggest that we could file that with the committee. It is by a recognized authority, so that perhaps we can turn to that source for information as to the results of the N.R.A.

\section*{By Mr. Graham (to Mr. Dillon) :}
Q. In purchasing raw material from the United States, in importing the raw materials you have to satisfy the regulations of the Department of National Revenue with regard to fair market value?-A. That is correct.
Q. I understand that the rule with regard to raw materials as between the producer and your company as the manufacturer would be the going price between like concerns in the United States conditioned on quantity; is that correct?-A. Yes, that is substantially correct.
Q. In like amounts?-A. In like amounts-in quantity.
Q. There is a higher value put on smaller amounts than on larger amounts? -A. I would qualify that in this way, we will take the sale price-
Q. Yes, the smaller quantity would make no difference?-A. I am talking about carloads of say 10,000 pound lots. That would make no difference.
Q. And do you buy that way, do you buy in sufficient quantity to get the advantage of this reduction on volume with respect to fair market value?-A. I would say so.
Q. Now, with regard to these manufactured parts, I notice you have listed these in your reply-this is on my page 15, section 2, materials, clause \(G\) of the reply.

The Chatrman: I think you will have to go a little slower as undoubtedly there is a lot of difficulty in getting it down at the rate you are going, and if you do that it will save time by avoiding the necessity for making corrections.

Mr. Graham: Perhaps you are right. I thought the reporter could take the list of these few materials. I read rather rapidly because I was following right down the list and thought to give it to the reporter when I had finished.

\section*{By Mr. Graham (to Mr. Morrison):}
Q. You have that, Mr. Morrison?-A. Yes.
Q. These are the manufactured parts that you as a company purchase but do not make in your own factories, is that right?-A. If I am looking at the same page as you are. Are you referring Mr. Graham to the first two items, steel chains and springs-coiled?
Q. If you have the page, I was simply going to read out the parts that you do purchase and do not manufacture. You partly purchased steel chain, springs-coiled, belting-rubber (threshers), bearings-ball, bearings-roller, pulleys (threshers), screens (threshers), riddles (threshers), classifier drums (threshers), zerk fittings and guns and oilers. That is the list, isn't it?-A. That is the list of articles that the Canadian company purchases and do not manufacture themselves.
Q. Yes, and I do not propose to read the country of origin or who they are purchased from, but that has all been set out on that list?-A. Yes.
Q. Now, among the companies that supply some of these manufactured parts I notice that the International Harvester company, the parent company, is listed as the manufacturer of steel chains, spring-coiled, bearings-roller, and I think that is all. That is correct isn't it?-A. That is correct.
Q. In selling these to your Canadian company what is the basis on which these parts are sold?-A. Mr. Dillon will answer that.

Mr. Dillon: I could not say definitely. I know that they would pay our factory cost plus a mark up.
Q. Plus a mark up; have you any idea what the mark up would be- 10 per cent, I suggest?-A. Well, I would say that that is what it might be.
Q. Factory cost plus 10 per cent?-A. Might I consult one more member of my organization with regard to that, if you please?
Q. Yes?-A. I will ask Mr. Seidenbecker.

Mr. Seidenbecker: Unless it has been changed lately I know that it was invoiced by the Link Belt at the list, less the discount allowed by the customs in Canada. It was discussed several years ago.

Mr. Morrison: In other words, the Customs Department established discounts from that list. I think that is the answer to your question.

Witness: What is that?
Mr. Seidenbecker: This steel chain that you are talking about that is brought in from the United States is based on the list price I believe of the Link Belt Company in the United States that makes a similar chain, and the duty value is at the discount allowed by the customs in Canada.

\section*{By Mr. Graham (to Mr. Seidenbecker) :}
Q. You do not happen to know what that discount was?-A. I do not. I know that it was several years ago.
Q. In other words you pay that value for duty purposes as fixed by the department?-A. Yes, sir.
Q. That would apply I presume to all other material of the same kind?A. That applies to all chain of that type.
Q. Mr. Morrison, Mr. Macdonald suggests this: When you manufacture these parts either in your own factory or in a subsidiary that in selling to like manufacturers in the United States, to any manufacturer in the United States requiring these articles, there would be a differential between that price and the price at which you sell it to your subsidiary; can you tell me what that is?A. I cannot tell you. I cannot remember that we ever sold any of them to other manufacturers. We do not sell to other manufacturers.
[Mr. C. R. Morrison.]
Q. Well then, as between what you, the manufacturing company, the parent company, would pay to your subsidiary, and the price at which you sell it to your Canadian company, what difference would there be?

Mr. Jarchow: It is produced by one of the plants of the parent company. It is not the case of a sale from a subsidiary company to the parent company as a parent company. In other words, there is no billing involved.

Mr. Graham: There is no billing involved; why, Mr. Jarchow?
Mr. Jarchow: Because it is like any of the other articles which you would manufacture at that plant.

\section*{By Mr. Graham:}
Q. Suppose the parent company wants a large order of ball-bearings say, how is that transaction handled between you and I presume the Wisconsin Steel?-A. I thought you were speaking about steel.
Q. No, I mean any of these commodities subject to that rule one of your auditors gave us a moment ago?-A. I might ask Mr. Seidenbecker.
Q. I want to know if the position of the International Harvester Company of Canada Limited is equal when it comes to purchasing from the subsidiary that manufactures any of these parts; do they enjoy an equal purchasing position to that of the parent company when they purchase from the same subsidiary?

Mr. Seidenbecker: I believe the position in Canada is based on-I know at the time the discussion came up with the customs here in Ottawa that the discount was based on the discount allowed to firms like Eatons who were importing chain from the Link Belt, and we were interested in chain of a similar type produced in the United States.
Q. Can you tell me how the parent company purchased or secured these parts from that subsidiary?

Mr. Seidenbecker: The parent company is not buying, it is one of their plants manufacturing that chain.
Q. I want to get this clear, that when the parent company requires a certain number of chains I presume they requisition them from some subsidiary?

Mr. Seidenbecker: No, from one of their own plants.
Mr. Morrison: The plant that manufactures the chain is owned by the International Harvester Company, and it is not produced by a subsidiary of the Harvester company.
Q. That is the point; what about the items on your parts list like steel drums, ball-bearings-they would be produced by the Wisconsin Steel, would they not?-A. No, they would be produced by plants owned by the International Harvester Company.
Q. Let me get an item that is produced. Take your dises, Mr. Morrison. I notice they are not included in your manufacturing.-A. Dises are bought on the outside.
Q. From outside companies?-A. From outside companies.
Q. Does the Canadian company purchase dises from those companies? Why would they not be listed in the manufacturing parts lists, Mr. Dillon.

Mr. Dillon: It is purchased from the Ingersoll company and the Crucible Steel company.
Q. I do not see it on that list. Mr. Morrison, I want to get this clear in my mind. In the 1935 statement of the parent company the West Pullman Works, for instance, manufactures certain definite items; is that correct?-A. That is correct.
Q. Now, is that company not separately incorporated?-A. The West. Pullman?
Q. Yes.-A. No, sir.
Q. None of those companies which are named in here as affiliated are separately incorporated; they are all part of one large organization; is that correct, the McCormick Works, and the Milwaulkee Works?-A. None of those are subsidiaries in any sense of the word. They are merely names of plants owned by the International Harvester company.
Q. So that you have no similar separate organization to the International Harvester Company of Canada, Limited, a manufacturing subsidiary in the United States?-A. No, no subsidiary of the Harvester company in the United States is manufacturing.
Q. Let us see, now. The West Pullman Works are apparently manufacturing magnetos, carbureters, bearings, gears, milk coolers, etc. There would be surely a charge out to the other manufacturing division, that required any of those items; is that not correct?-A. That is true.
Q. On what basis would they charge out, a cost plus?-A. I should like to have Mr. Seidenbecker answer that question, if you please.

Mr. Seidenbecker: You mean ships from the United States works to Canada?

Mr. Graham: No.
Mr. Morrison: From one works to another.
Mr. Seidenbecker: One works to another is based on the current market value on materials and labour.

Mr. Graham: The current market value?
Mr. Seidenbecker: Yes; with the normal burden.
Mr. Graham: With the normal burden?
Mr. Seidenbecker: Yes.
Mr. Graham: In other words that would be factory cost, would it?
Mr. Seidenbecker: Normal factory cost.
Mr. Graham: Is there any provision for a profit allowed on that factory cost to the West Pullman Works?

Mr. Seidenbecker: From one International Harvester plant to another?
Mr. Graham: Yes.
Mr. Seidenbecker: No, there is none.
Mr. Graham: Then to get it clear, if the International Harvester Company of Canada Limited, want to manufacture magnetos, bearings, gears and milk coolers and wanted to get these from the West Pullman Works, tell us again please the basis on which they would have to pay.

Mr. Seidenbecker: That all depends on what you are shipping. If you are shipping bearings where there is a market value for a similar bearing in the United States, the value is fixed by Canadian customs at the price at which it is sold for home consumption.

Mr. Graham: To a manufacturer in like quantities?
Mr. Seidenbecker: Yes.
Mr. Graham: In like quantities.
Mr. Seidenbecker: Yes.
Mr. Graham: You don't know the exact basis?
Mr. Seidenbecker: No.

\section*{By Mr. Graham:}
Q. Now then Mr. Morrison, in regard to materials which the Canadian company import and which you use for making up implements for export purposes, there has been over that whole period a 99 per cent drawback of duty paid. That is correct?-A. What period do you refer to?
[Mr. C. R. Morrison.]
Q. 1913 to 1936. Let me put it this way. It is not important. For a great many years there has been a rule that a manufacturer importing parts to make implements for export, is entitled to 99 per cent drawback?-A. That is correct.
Q. Not the excise, just the duy. And then there is a drawback allowed on materials used by the Canadian manufacturer in the finished implement. At the present time there is a domestic drawback of 80 per cent. That is correct, is it not Mr. Dillon?

Mr. Morton: Mr. Munger, can you answer that?
Mr. Munger: There is no domestic drawback on any products that we manufacture at the present time.

Mr. Graham: I notice you show a list of the claims you made for drawbacks in 1925 and 1926. In 1925 you received \(\$ 1,281.32\); in 1926, \(\$ 14,044.19\).

Mr. Munger: That is correct.
Mr. Graham: Was there a marked change in 1926 in regard to the domestic drawback claims made by your company?

Mr. Munger: The regulations were withdrawn.
Mr. Graham: Which gave you the right. I notice with regard to the 99 per cent drawback in 1926, the export drawback was \(\$ 58,800\); in 1927, \(\$ 10,000\); in \(1928, \$ 9,000 ; 1929, \$ 12,000 ; 1930, \$ 35,700 ; 1931\), \(\$ 17,155 ; 1932, \$ 2,739 ; 1933\), \(\$ 1,183 ; 1934, \$ 538\), and \(1935, \$ 1,027\).

Mr. Munger: Those figures are correct.
Mr. Graham: I notice there is a note added to that as follows:-
It does not follow that the amounts given above apply to shipments for the year indicated. The figures show the total amount of claims filed with the Department each year without regard to periods in which shipments were made.
Mr. Munger: That is correct.

\section*{By Mr. Graham:}
Q. Mr. Morrison will you please turn to exhibit A of the supplemental statement attached to section 2, under materials, section F?-A. Section F?
Q. Yes.-A. I have found it.
Q. You were asked the question to give the average unit cost price of principal commodities under general classifications which were consumed in the manufacture of implements for the years 1913 to 1935 inclusive. I am not going to read it all. By the way, I am filing this whole reply so it will be available to the committee. I am just putting in a digest of it, because it is a very much detailed document. You have listed the malleable castings, the grey castings, pig iron, the bought scrap, steel, lumber, fuel oil, coal, coke, and cotton duck. That is correct?-A. Yes.
Q. And in the malleable you have given the rate of cost per hundredweight for the years 1913 to 1935 inclusive; the same with grey iron; the same with pig iron, only the unit is the ton, is it not?-A. The gross ton.
Q. The bought scrap?-A. The unit is the net ton.
Q. The steel used is the hundred- - A. Correct.
Q. Lumber per thousand feet, fuel oil per gallon; coal is--A. The net ton.
Q. Coke is the net ton and the unit in cotton duck is the yard?-A. Correct.
Q. Now I notice in regard to the castings that they are manufactured in your own foundries; that is correct?-A. That is true.
Q. What is the method in practice in your own Canadian company in securing the requirements that your manufacturing division wants from your castings foundries?

Mr. Morton: You mean how do we determine how many castings we need?

Mr. Graham: No, in fixing the price per unit.
Mr. Morton: That is the foundry cost.
Witness: The foundries are part of the manufacturing department.
Mr. Morton: They are units in the plant manufacturing castings.
Mr. Graham: So that those prices you give over the years are the actual cost of producing the different types of castings during those years in your own foundries?

Witness: Yes.

\section*{By Mr. Graham:}
Q. The price quoted would therefore be weighted with the volume of production and the resultant high or low overhead?

Mr. Morton: Volume naturally affects the cost.
Mr. Graham: That would not be true of pig iron?
Mr. Morton: That would be an outside purchase.
Mr. Graham: Was that bought separately?
Mr. Morton: Yes, sir.
Mr. Graham: And the same with steel, lumber, fuel oil, coal, coke. Perhaps, Mr. Chairman, some of the members of the committee would like to ask questions.

The Chairman: If there are any members who desire to ask questions at this stage we should be glad to give them this opportunity.

\section*{By Mr. Cleaver:}
Q. There is just one question I would like to ask in order to get information if possible in regard to the differential between what the subsidiaries in the United States charge other subsidiaries and the price charged to the Canadian company on account of the value for duty. Now, I understand that each of these subsidiaries bill out their goods to another subsidiary at factory cost if that is possible, but when you come to bill out to the Canadian company you are again faced with the same condition that we discussed this afternoon, namely, the value for duty set by our customs department?-A. They are not subsidiaries. The ones you are referring to are a different class owned by the parent company, and when one plant furnishes some of its product to another plant it is on the basis of normal factory cost.
Q. And a billing is made of that; but when you come to transfer those goods to the Canadian plant you are then faced with this same value for duty problem?-A. Correct.

\section*{By Mr. McLean:}
Q. In billing the parts out of the factory or branch that made them, I suppose overhead and depreciation and all such items as that are included in the factory cost?-A. To be sure.
Q. But no mark-up for profit?-A. That is right.

The Chatrman: If there are no more questions we will adjourn until 11 o'clock to-morrow morning.

The committee adjourned to meet Friday, June 12, at 11 o'clock.


\section*{STANDING COMMITTEE}

ON

\section*{agriculture and colonization}

\section*{MINUTES OF PROCEEDINGS AND EVIDENCE}
(Farm Implement Price Inquiry)

FRIDAY JUNE 12, 1936
TUESDAY, JUNE 16, 1936

No. 11

\section*{WITNESSES:}

Mr. T. A. Russell, President of the Massey-Harris Company, Ltd.
Mr. S. R. M. Dingle, Comptroller of the Massey-Harris Company, Ltd.
Mr. S. S. Lee, Canadian Sales Manager, Massey-Harris Company, Ltd.
Mr. R. B. Whitehead, Counsel for the Massey-Harris Company, Ltd.

\section*{MINUTES OF PROCEEDINGS}

\author{
Committee Room 231, House of Commons,
}

Friday, June 12, 1936.

\section*{(In Camera)}

The Standing Committee on Agriculture and Colonization met at 11 o'clock a.m., this day, Mr. Weir, the Chairman, presiding.

The following members of the Committee were present:-
Messieurs: Beaubier, Bertrand (Prescott), Bouchard, Boulanger, Cleaver, Cochrane, Coldwell, Davidson, Donnelly, Douglas, Dubois, Evans, Furniss, Gardiner, Golding, Graydon, Johnston (Lake Centre), Leader, Leclere, MacKinnon (Edmonton West), McKenzie (Lambton-Kent), McLean (Melfort), McNevin (Victoria, Ont.), Motherwell, Needham, Perley (Qu’Appelle), Reid, Robichaud, Ross (Middlesex East), Senn, Thorson, Tomlinson, Turner, Ward and Weir.-35.
In Attendance as witnesses, and to supply information to the Committee:
Mr. C. R. Morrison, President, and Mr. F. M. Morton, Resident Manager, Canadian Company of the International Harvester Company, Limited.
Mr. C. E. Jarchow, Financial Controller, and Mr. F. E. Siefkin, General Attorney, International Harvester Company, Limited, Chicago; also,
Mr. John W. Dillon, Purchasing Agent and Mr. C. B. Munger, General Auditor, International Harvester Company, Ltd., Hamilton; also,
Mr. H. C. Seidenbacker, Assistant Comptroller, International Harvester Company, Limited, Chicago.

\section*{Present: Mr. R. T. Graham, K.C., Counsel, and Mr. Walter J. Macdonald,} C.A., acting for the Committee.

The Chairman stated that after consideration and discussion with the representatives of the Harvester Company, he thought the proceedings at this meeting should be conducted in camera, in justice to the Company, which had so freely co-operated with the Committee to supply needed information.

After discussion, Mr. Golding moved, seconded by Mr. Johnston, That this Committee proceed to take evidence in camera, and that the evidence taken down be not printed. Three copies only of the transcription to be made; one for the Chairman, one for the Counsel and one for Mr. Morton, Resident Manager of Canadian Company.

Motion carried.
Questions by Counsel and members of the Committee were answered by Mr . Morrison, Mr. Morton, Mr. Jachrow, Mr. Siefkin and Mr. Dillon.

Examination continued until 1.20 o'clock, when, after considerable discussion as to the date of next meeting, it was finally decided that the Committee would meet at the call of the Chair.

Members of the Committee, expressed much appreciation for the splendid way in which the evidence had been supplied by the witnesses.

The Committee adjourned.
E. L. MORRIS, Acting Clerk of the Committee.

\section*{MINUTES OF PROCEEDINGS}

Tuesday, June 16, 1936.
The Standing Committee on Agriculture and Colonization met this day at 11 a.m. The Chairman, Mr. W. G. Weir, presided.

Members present: Messrs. Bertrand (Prescott), Bouchard, Cleaver, Coldwell, Donnelly, Douglas, Dupuis, Evans, Fontaine, Fraser, Furniss, Gardiner, Golding, Gosselin, Graydon, Johnson (Lake Centre), Leader, Leclerc, MacRae, McLean (Melfort), McNevin (Victoria, Ont.), Mitchell, Motherwell, Needham, Perley (Qu'Appelle), Rennie, Robichaud, Senn, Spence, Taylor (Norfolk), Thorson, Turner, Ward, Weir.

In Attendance: Mr. R. T. Graham, K.C., counsel for the Committee, and Mr. Walter J. Macdonald, C.A., auditor for the Committee.

On motion of Mr. Thorson,-
Resolved,-That the Minutes of the Proceedings of the Committee meeting held in camera on Friday, June 12, 1936, be printed in the issue of to-day's proceedings of the Committee.

The following officials of the Massey-Harris Company of Toronto, were called, sworn and examined:-

Mr. T. A. Russell, president of the Massey-Harris Company of Toronto.
Mr. S. R. M. Dingle, comptroller of the Massey-Harris Company of Toronto.
Mr. S. S. Lee, Canadian sales manager of the Massey-Harris Company of Toronto.

Witnesses retired to be recalled at 4 p.m.
Mr. R. B. Whitehead, counsel for the Massey-Harris Company of Toronto, in attendance for the company.

On motion of Mr. Thorson,-
Resolved,-That the name of Mr. Gardiner, Minister of Agriculture, be added to the subcommittee, and that the subcommittee do prepare and submit a draft report to the committee for consideration as soon as possible.

The hour being 1 o'clock, the committee adjourned to meet at 4 p.m. this day.
The committee reconvened at \(4 \mathrm{p} . \mathrm{m}\). when no quorum being present the Chairman declared the meeting adjourned until Friday at 11 a.m.

The Chairman and counsel agreed that the following corrections should be made in the printed record of June 11:-

Page 437, line 3,-
. . . but it made a special impression . . .
should read,
. . . but they made no special impression . . .

Page 437, line 26,-
. . . tillage implements? That applies . . .
should read,
. . . tillage implements?-A. That applies . . .
Page 444, line 37,-
Mr. Morton: Well, on the contract end . . .
should read,
Mr. Morton: Well, on the truck end . . .
Page 445 , line 42,-
. . . we will take the sale price-
should read,
. . . we will take the price of steel.
Page 446, line 31,-
It was discussed several years ago.
should read,
It was fixed several years ago.
Page 447, line 36,-
. . . like steel drums, . . .
should read,
. . . like steel chains . . .
WALTER HILL,
Clerk of the Committee.

\title{
MINUTES OF EVIDENCE
}

\author{
House of Commons, Room 429,
}

June 16th, 1936.
The Select Standing Committee on Agriculture and Colonization appointed to inquire into the prices of agricultural implements met at 11 o'clock, Mr. Weir, the chairman, presided.

Appearances:-
R. T. Graham, K.C., Counsel for the Committee.
R. B. Whitehead, Counsel for Massey-Harris Company.

The Chairman: Gentlemen, if you will kindly come to order. Would it be agreeable to the committee to have the minutes of our meeting held in camera last week printed in the record of to-day's proceedings; that includes the names of the witnesses who appeared and so on?

Mr. J. T. Thorson, seconded by Mr. H. Cleaver, moved that the minutes be included in record. Motion carried.

The Chatrman: Merely for purposes of record may I say, that at the conclusion of the meeting last Friday, at which we were examining certain officials of the International Harvester Company, that to meet their convenience and at their request, owing to certain prior engagements which they had, they were released following the meeting of Friday morning. The committee agreed to their request on the understanding that these witnesses would be back again at such time as their further appearance might be desired by this committee; that the officials of the International Harvester Company were merely "stood down " at their own request. They are subject to recall for the purposes of this investigation at any later date when their presence may be required.

I would like to bring one other matter to the attention of the committee. By the appearance of things parliament is likely to close Friday or Saturday, and if we are going to make a report to the house it will be necessary for us to do so very quickly and have it dealt with some time to-morrow; so I would like to suggest to the committee that they either name a sub-committee or make some provision for the drafting of a report. Are there any suggestions in that regard?

Mr. Spence: We have a sub-committee now, have we not? Would they not be all right?

The Chairman: Well, yes. Would it be agreeable to the committee if our sub-committee on agenda draft a report for submission to the main committee to-morrow morning?

Members: Agreed.
The Chairman: May I suggest one change in that regard, that the name of the Minister of Agriculture be added to the personnel of that committee?

Mr. Ward: Who are the members of that sub-committee?
The Chatrman: They include Messrs. Senn, Perley, Needham, Thorson, Johnston, Taylor and Bouchard; we propose to add the name of the Hon. Mr. Gardiner; and, of course, myself.

On a motion by Mr. Senn, seconded by Mr. McLean, it was agreed that the name of the Hon. J. D. Gardiner be added to the personnel of the sub-committee instructed to prepare a draft report to the House by the Committee for submission to the committee at its sitting to-morrow morning.

Mr. Leader: I would suggest that this draft report be available to all members of the committee, if possible, before presentation.

Mr. Thorson: It will be presented to the committee first, I presume.
The Chairman: It would not be the customary thing for a report to be sent to the house without consideration by the main committee.

Mr. Leader: All members of the committee should have an opportunity to know what is going to be presented.

The Chairman: It will be presented to this committee and we can then decide what action will be taken on it.

Mr. Thorson: The sub-committee will merely prepare a draft report for submission to this committee.

The Chairman: This morning we have with us representatives of the Massey-Harris Company. I presume that you, Mr. Russell, as president of the company will be the principal witness. If you wish to have any of the other officials of the company associated with you I think the committee would be quite prepared to have you do so.

\section*{Mr. Russell: Thank you.}

The Chairman: I am taking it for granted that the committee would wish to proceed in much the same manner as they did when the officials of the other company were here. I will simply ask Mr. Graham to outline the nature of the examination he wishes to proceed with, and then to proceed from that point. The clerk of the committee is required to swear all witnesses, and I would be glad if he would proceed with that duty at this time.

Mr. Thorson: Just a minute, Mr. Chairman. In view of the fact that we will be making our report almost immediately, is it worth while commencing the examination of the company? It is quite obvious that we will not conclude the examination nor even make any great progress with the examination. I simply raise the question as to the desirability of starting at all, since we cannot possibly, within the limitation of our time, make any headway.

Mr. Senn: I had the very same thing in mind, Mr. Chairman. It is obvious that we cannot complete the examination of the Massey-Harris Company in one day, and some part of the day will have to be taken up in preparing a report if it is going to be presented to the committee to-morrow.

Mr. Leader: We can work at night on it.
Mr. McLean: We can have two sessions to-day and one or two to-morrow. That will carry it along quite a ways. In the meantime we can hear the witnesses who are here.

Mr. Donnelly: We can hear the witnesses who are here, Mr. Chairman. It seems to me we could go on with their examination, and we can clear some of the ground and get it ready for further examination. We may as well do as much as we can in this thing this morning. We are here anyway.

Mr. Thorson: I merely raised the question for the purpose of having it discussed by the committee.

Hon. Mr. Motherwell: I think, Mr. Chairman, we might very well go on. The witness is here, and we might as well use him.

\section*{T. A. Russell, called and sworn.}
[Mr. T. A. Russell.]

The Chairman: I quite appreciate the circumstances that have lately arisen. I simply wish to say that as far as I am concerned I am in the hands of the committee. The officers of the Massey-Harris Company, however, are here and are prepared to go on. In view of the fact that the International Harvester Company has been here and that I personally suggested to the Massey-Harris Company that they be given an opportunity, I think probably we should go on.

Mr. Spence: We can make it snappy enough, and not waste too much time.
The Chairman: Mr. Graham, I will turn the proceedings over to you.

\section*{By Mr. Graham:}
Q. Mr. Russell, you are president of the Massey-Harris Company, Limited; is that the correct name of the company?-A. Yes.
Q. And who are the two officers associated with you in giving information to the committee? Would you kindly name them and give their positions in the company?-A. Mr. Dingle, comptroller; and Mr. Stewart Lee, Canadian sales manager.
Q. Would you give the initials, too, for the record?-A. G. R. M. Dingle and S. S. Lee.
Q. What is Mr. Dingle's position with the company?-A. Comptroller.
Q. Comptroller of the company?-A. Yes.
Q. And Mr. Lee, as you say, is Canadian sales manager?-A. Yes.
Q. The head office of the company is where?-A. In Toronto.
Q. Would you kindly refer to the replies to the questionnaire on page 1 of your general information, Mr. Russell, please-or rather page 1 of your section 1, general. I wanted to know the names of any subsidiary companies of the parent company, Massey-Harris Company, Limited, first in Canada?-A. None.
Q. In the United States?-A. Massey-Harris Company, Racine.
Q. Of Racine?-A. Yes.
Q. When was that particular company formed?-A. 1928.
Q. I understand that that was an amalgamation of your Batavia plant and the Racine plant?-A. Yes.
Q. When was the Batavia plant acquired?-A. In 1911.
Q. And was it never incorporated into a company?-A. It was a separate company.
Q. What was the name of that?-A. Originally it was the Johnston Harvester, and then after we took it over it was the Massey-Harris Company, Incorporated.
Q. You told us that was purchased from the Johnston Company?-A. The Johnston Harvester Company.
Q. What was the purpose of your company in acquiring the Batavia plant in 1911?-A. Largely, I believe, the important export business which they had.
Q. The important export business?-A. Yes.
Q. What line, Mr. Russell, did the old Johnston Harvester Company make? -A. A general line, mostly haying and harvesting goods.
Q. You mentioned the export business that they had. That is to where?A. To practically all over the world, to the same countries as Massey-Harris Company itself.
Q. By that you do not mean that they had any particular privilege in the matter of tariffs or anything?-A. No.
Q. You simply mean their regularly built up trade?-A. They had made a good line of implements, had a good line of foreign trade, and had a domestic trade as well.
Q. They had a domestic trade as well?-A. Yes; particularly in the eastern United States.
Q. Can you tell us how much your company paid for the Batavia plant?A. I cannot, no. Was it asked in the questionnaire?
Q. No, I do not think so.-A. Then they may not have it here.
Q. In your section 5, Mr. Dingle, I am instructed by Mr. Macdonald that the question was put in the questionnaire but it was not answered. Is that correct, Mr. Dingle?

Mr. Dingle: I think almost everything was answered in the questionnaire, Mr. Graham.

Mr. Graham: I am instructed, Mr. Dingle, that the question was not asked in the questionnaire. If you would prefer to take time to give us that information and what the consideration was that passed between the parent company and the Johnston Harvester Company in payment on account of purchase, would you kindly do that, Mr. Dingle, at your leisure?

Mr. Dingle: I can do it just in a moment. Did you want to know the actual cash we paid for it?

Mr. Graham: No. I want to know the consideration that passed between the parent company and the Johnston Harvester Company for the plant, whether it was cash or otherwise.

Mr. Dingle: We paid in cash, \(\$ 2,736,110.50\) for shares. We bought them in lots. We did not buy them all at one time. There was a minority interest.

Mr. Graham: Your method of purchase was to acquire a controlling interest in the outstanding shares of the company?

Mr. Dingle: Exactly. We did not have full control, one hundred per cent control, until the close of 1927 . That is the first time that their statement was consolidated with ours.

Mr. Graham: Do you know, at the time you purchased the capital stock outstanding, what the par value of the Johnston Harvester Company was? What I am trying to get at is whether you paid a premium in the acquiring of that stock?

Mr. Dingle: The par value was about \(\$ 2,750,000\).
Mr. Graham: So that, roughly speaking, you paid par.
Mr. Dingle: Roughly speaking, just under par. There was a difference of \(\$ 13,889.50\) less than par.

Mr. Graham: The Racine plant, you have already told us, was acquired in 1928. Would you give us the history of that, Mr. Russell?

Witness: As I know it, it was the J. I. Case Plough Works; they had a very satisfactory tractor, and we required a tractor in Canada.

\section*{By Mr. Graham:}
Q. They made, if I remember correctly, the Wallis Tractor?-A. They were known as the Wallis Tractors. That was one of the main reasons for the negotiations which led to the acquiring of that company. They were making mostly tractors and tractor implements, tillage goods, etc., so the negotiations resulted in the taking over of the Case Plough Works. Immediately that was done, it was combined with the Massey-Harris Harvester Company of Batavia in the one company, Massey-Harris Company, Racine, and operated as one unit with head office in Racine from that time.
Q. What method was pursued in acquiring that company?-A. I think Mr. Dingle can answer that better than I can.

Mr. Dingle: First of all, we bought the assets for a consideration of \(\$ 1,262,500\) cash. Massey-Harris Harvester Company, Incorporated of Batavia, our other entity over there, owed the parent company in Toronto for cash and goods supplied \(\$ 3,987,500\).

Mr. Graham: Yes?
[Mr. T. A. Russell.]

Mr. Dingle: Then there was a stock interest in the Massey-Harris Harvester Company, Incorporated, which we owned, the par value of which was \(\$ 2,750,000\). Adding that up equals a total stock valuation of \(\$ 8,000,000\) of the consolidated company in the United States.

Mr. Graham: And that, you mean, was the transfer of assets from the Batavia division, the assumption of the liability to the head office in Toronto of the actual purchase price of the Racine assets. Then the new consolidated company was incorporated at that amount.

Mr. Dingle: \(\$ 8,000,000\).

\section*{By Mr. Graham:}
Q. Mr. Russell, what other subsidiary companies have you in other parts of the world?-A. In England, Massey-Harris, Limited, Manchester.
Q. Yes.-A. In South Africa, Massey-Harris (South Africa) Limited, Durban. In France, Compagnie Massey-Harris, Marquette; in Belgium, Massey-Harris, Belgium, Brussels; Denmark, Massey-Harris, A.S. Copenhagen; Germany, Massey-Harris, M.B,H., Berlin.
Q. Just tell us, for the information of the committee, what those initials are-A.S.-in the Copenhagen company?-A. I think that has to do with incorporated or limited.
Q. And M.B.H. in Germany?-A. As far as I know, it stands for the same thing, limited.

Mr. Whitehead: Limited liability.
Mr. Graham: That is true of Germany, too-M.B.H.?
Mr. Whitehead: Yes.
Witness: Those are all really separate companies, but are operated in our structure on the same basis as branches.
Q. Now, when was the separate Massey-Harris Limited set up in Manchester, England, in what year?-A. I don't know; we have been doing business for 60 years in England, I think originally as a branch, but later, due to development of company laws, it was changed into a subsidiary company. We can easily ascertain that for you.
Q. In South Africa?-A. That is comparatively recently. We operated for a number of years selling to an outside distributor, not a part of our company; we took it over about twelve years ago.

Mr. Dingle: 1924.
Witness: Incorporated the company at that time.

\section*{By Mr. Graham:}
Q. Why was the change suggested in the South African method of supplying that market?-A. There is a general tendency all over the world, I think, to arrive at that sort of set-up, or a separate company in its own country, because of taxation and so on. It is difficult to determine-if taxation officials of the various countries have to come back to the head office books to ascertain the basis of taxation. A good many companies are now incorporated in the various countries.
Q. You place a nationalistic feeling in each of the countries in which you set up a separate manufacturing plant as the cause which compelled you to incorporate?-A. Perhaps.
Q. Would that be correct?-A. I think so.
Q. In France what year was the set-up at Marquette?-A. I think it was 1926.
Q. Is there any added reason for setting up a French manufacturing plant? -A. No; we had done business first with an agency in France, later with a branch selling goods made in Canada, and also the Johnston Harvester line
from Batavia, selling all goods made on this side of the water. We developed a very large business in France both in the Massey-Harris line and the Johnston line, largely as two separate lines with two separate sets of agencies. Following the war, France began to make it more and more difficult for any outside company to do business.
Q. By the application of quotas?-A. First by tariffs and later on tariffs plus quotas, until about 1925 or 1926 it just became impossible for us to carry on our business in France. We had the alternative of either retiring from that country, which we had served for nearly 50 years, or of putting in a factory and manufacturing in France. We put in a factory, manufacturing a line of hay and harvesting machines, and that is about as far as we have gone. In fact, there is a plant erected in Marquette, which is a suburb of Lille in the northern part of France. I think that factory was finished about 1928.
Q. The company was formed in 1926 and the factory completed in 1928?A. Yes.
Q. Now then, Belgium.-A. That is purely a sales branch selling goods very largely manufactured in France now, but one time manufactured in Canada. I think there is a tendency since the depreciation of the Belgian franc to supply some of these goods from Germany.
Q. The Belgium company is not a manufacturing company?-A. Purely a sales branch.
Q. The next is the Copenhagen branch in Denmark.-A. The same as Belgium. We have had a very fine business in Denmark, but, unfortunately, somewhat as a result of the Ottawa agreements giving us such a preference in the British market for bacon, Denmark has retaliated by making a practically impossible quota for us in the Danish market, and all goods we sell there now must either be supplied from France or Germany.
Q. Is your plant in Germany a manufacturing subsidiary?-A. It is now. We had a very fine business, just as in France, selling Canadian made implements in Germany. When the war came on, of course, all business was stopped. Our manager was resourceful and acquired a little bit of a plant and engaged himself during the war in making what spare parts he could to try to keep the machines running in the field; but as a matter of fact we were out of the German business so far as complete machines were concerned, from 1914 to about 1921 or 1922 . Then we began once more to export from Canada. Then Germany stepped in and gradually forced manufacturing in Germany. At the present time if we want to sell a dollar's worth of goods in Germany we must buy three dollars' worth of German goods in return. That is at the moment a very great hardship. We have goods like knotters, which everyone knows must be very accurate. In order to get those knotters into Germany we have to buy, as I say three dollars' worth of German goods for every dollar we export to them. Of course we must continue that business for if we transferred or liquidated it we would get marks, and we could not get them out of the country, so we just carry on putting no further money in, but what is there has to stay there. We would rather have them in bricks and mortar, and accounts and inventory than we would in marks.
Q. Do you mean that you have to take three dollars' worth of German goods for each one dollar's worth that you as a company have to sell?-A. Yes, and so does everybody else doing business with Germany.
Q. How do you satisfy that requirement? You just get what you require?A. Our purchasing agent has made inquiries as to the available supply and we buy materials in Germany that we would not otherwise buy.
Q. Steel?-A. Steel and certain items on some parts that we would not otherwise buy in Germany.
Q. Would they buy them from Canadian plants?-A. Mostly.
[Mr. T. A. Russell.]
Q. Or European?-A. No. As a matter of fact, I think if we want to buy parts in France and send them into Germany, France must buy three to one; so that we cannot use the purchases for plants in one country against another. It is an extremely difficult situation at the moment.
Q. When was the German company set up, Mr. Russell?-A. 1926 I am told.
Q. Then if you will go back over the companies, in the United States, the Batavia plant manufacturing what?-A. Principally horse-drawn implements, binders, mowers, rakes and implements of that kind.-A. fairly general line, but not touching tractor implements.
Q. No power implements?-A. No tractors and none of the heavy tillage goods.
Q. The Racine plant, what about it?-A. Its big output is tractors, and associated with that mostly tractor drawn tillage implements and cotton tools.
Q. Cotton tools?-A. Yes.
Q. What is manufactured by the English subsidiary in England?-A. The English subsidiary builds nothing itself, but we made an arrangement some three years ago with the Blackstone Company, one of the oldest and most reputable implement companies there to build for us a line of certain haying, tools which we do not make, and which are especially required for the British market. Britain grows crops of hay such as we do not know of in this country and requires in many lines heavier implements to handle it than the commercial implements made in Canada. However, we have no stock interest. We simply purchase this as a line to fill out and strengthen our position in the British market.
Q. I presume the balance for the English market would be supplied by your Canadian plant?-A. Yes, I think completely from Canada except tractors.
Q. Except tractors?-A. Tractors are brought from the United States. We have free trade between Canada and Great Britain on agricultural implements but there is a tariff against tractors because they are made in the United States.
Q. Do you serve any other markets from the English plant?-A. No.
Q. None? Take the Irish Free State.-A. We sell a little goods in Ireland, not much.
Q. None of the European?-A. None of the European.
Q. Now, in South Africa, is manufacturing done there?-A. No, wholly importing.
Q. Assembled?-A. Assembled in so far as goods are knocked down for economical shipment.
Q. That would be all?-A. That is all.
Q. I suppose you serve the demand in South Africa?-A. We handle Cape Colony and Natal, Rhodesia, north and south, Transvaal and Kenya in the north, our head office at Durban. There are usually direct shipments to these parts.
Q. In France what machines or implements are made?-A. Principally the binder, mower, and the rake, tedders and also the trusser. It is an implement not used in this country at all. It is made there specially for them, and is used for bundling straw.

\section*{By the Chairman:}
Q. Would you have the same type of binder in France that you have here? -A. We used to, of course. It was was the same binder, but about ten years ago the French and the Germans began rather extensive work on the binder, putting in a finer type of workmanship, somewhat on automobile construction, in both the binder and the mower. They were the first people to develop the oil bath mower and there have been developments of that kind. Their labour
is relatively cheaper and they put more work and finish on their products and the result was our binder which had been used extensively in France and Germany was gradually regarded as being out of date. So about six years ago we began to redesign the binder.
Q. What does your company manufacture in Germany?-A. We manufacture practically only binders and mowers. We have no capital in Germany to carry on a big full line implement business.
Q. I notice in the trade commissioner's report that your French subsidiary has been supplying the Belgian market?-A. Yes.
Q. You say there is a trend now to force you to stop that?-A. Curiously enough, Germany, despite her very difficult financial conditions seems to have better exchange conditions to do business with the surrounding countries than France, England, Canada or the United States, and generally in the Balkan States around the Danube where we once had a tremendous business, it has gone practically to nothing. In regard to such business as we can get, we have to more or less maintain service on spare parts, and that is apparently now best done from Germany.
Q. You serve Central Europe from France or Germany?-A. Yes; it was France, now it seems to be switching to some extent to Germany on account of exchange. By exchange difficulties I mean the possibility of getting money out of the country after you have sold them the goods.
Q. Do you ship much manufactured products to your plants at other places, such as Germany?-A. No, not now.
Q. I suppose you are sincerely hoping that the position will change in that central European country. Have you any expectations in that regard? -A. I am afraid that it will not in my time. I am afraid that we will never again have the export business that we once had. I think there are signs of a re-opening of business in the Balkan states such as Austria, Bulgaria, Rumania, Jugo-Slavia and Hungary. Some of these countries have very vast areas possessing fine agricultural possibilities. We used to sell 2,500 binders a year in Rumania. I do not think we have sold 25 in the last 5 years. There are some signs of these countries coming back where we could do business with them. We would prefer to do it from Canada, but that will largely depend on exchange.

\section*{By Mr. Johnston:}
Q. Do you do any business with Russia?-A. Not since 1930 when we sold them tractors made in the United States. There is no objection to their buying in the United States, but there have been objections to their buying in Canada. We have not done any export business with them since 1930 .

\section*{By Mr. Thorson:}
Q. Would there be a market in Russia?-A. I do not think so now. They have developed enormous implement factories there and I think by the present time they probably build more tractors than any other country in the world. They were not very good at first but they are keeping at it and are serving their own people, and I do not at the moment see any prospect of business in Russia.
Q. In tractors?-A. In anything in the agricultural implement line. They control their own exchange and the importation of what they use. What available exchange they have, they use to buy the things they need most, and apparently since 1930 that does not include agricultural implements.

\section*{By Mr. Donnelly:}
Q. Do they use Canadian patents for the manufacture of their machines? -A. They just took what they wanted, and they did not even bother about asking permission.
[Mr. T. A. Russell.]

\section*{By Mr. McLean:}
Q. Mr. Russell, I think you stated that you had not sold 25 binders in Roumania in the last 5 years?--A. Yes.
Q. Does someone else supply the binders, or is it that you are unable to do business on account of exchange and other conditions?-A. It is a little of both, there are countries which nave forbidden the use of binders; as a matter of fact in some countries they have carried it so far that even if a man owned a binder he was not permitted to use it. The situation is due partly to exchange and partly to this restriction in the use of implements.

\section*{By Mr. Graham:}
Q. What was the reason for doing that?-A. Employment.
Q. To make them do it by hand?-A. By hand, and also to preserve the exchange.
Q. To preserve the exchange so that there would be no outgoing of their domestic money?-A. Quite.

Mr. Graham: If the members are through I will proceed.

\section*{By Mr. Graham:}
Q. With respect to these subsidiary companies, what is the relationship and financial set-up as between them and the parent company?-A. They are all wholly owned subsidiaries.
Q. They are all wholly owned subsidiaries of the parent company?-A. They are operated as branches.
Q. They are operated as branches; I am not speaking now of the United States?-A. No.
Q. Other than the United States all of these are operated as branches; their financial results and their assets are included in the consolidated statement?A. Yes, in the consolidated balance sheet.
Q. That is not true of the United States subsidiary?-A. It is included in the consolidated balance sheet, yes.
Q. It is included in the same way?-A. Yes.
Q. What is the distinction between the United States subsidiary and the European subsidiaries?-A. They have a very complete set-up in the United States operating their own engineering department, designing their own goods, doing their own purchasing; and of course subject always to the control and policy of the management at head office.
Q. You mean it is a much more separate entity?-A. Well, as a matter of fact, the European business and the American business are getting closer together in type of control.
Q. By the parent company?--A. Because naturally our purchasing agent in France has to buy in France almost completely, and in Germany; both our engineering departments in Europe take care pretty largely of their purchase requirements, and to some extent the French unit takes care of engineering for Germany.
Q. Where would the engineering department be located?-A. At Marquette near Lille, in the north of France.
Q. You consider the French subsidiary the more important?-A. Yes, we control all the other European operations from there.
Q. Now then, what plants have you in Canada?-A. We have four: Two in Brantford and one in Toronto-these three are operated; we have one in Weston which is idle. It was acquired for the manufacture of tractors. Tractors now enter Canada duty free and this plant has been idle for a number of years. We have another plant in Woodstock, the old Bain wagon works which made wagons and sleighs, and as these lines are declining in importance we have closed that plant and incorporated the work formerly done at Woodstock in Toronto and mainly in Brantford.
Q. I notice that you call one of the Brantford plants Verity?-A. That was the old Verity plough works originally in Exeter, Ontario. They were moved to Brantford and for a time operated as a separate company and were subsequently incorporated as part of the Massey-Harris Company. These works also include what was formerly known as the A. Harris \& Sons Company.
Q. These plants are fairly close to each other?-A. They are not contiguous, but they are very close.
Q. And I suppose the same head office staff serves them?-A. The same superintendent operates both factories.
Q. You have already told us about the United States. In Germany you have a head office at Berlin but the manufacturing plant is at Westhoven I notice?-A. Yes, it is a suburb of Cologne on the Rhine.
Q. I notice with regard to branches that you have two in Saskatchewan, one in Ontario, two in Alberta, one in Manitoba, one in British Columbia, one in Quebec and one in New Brunswick?-A. Yes, at Moncton, New Brunswick.
Q. Would you tell me the distinction that you make between transfer points and branches?-A. A branch is a more or less complete unit with its manager and accounting staff, and its collections and so on. A transfer point is really a warehouse operated by a shipper for the receipt and despatch of goods and parts to the territory contiguous to that in which it is located, and its sales work, collections and so on are operated from the branch in which that transfer point is located.
Q. Now, to complete the Canadian picture as to transfer points, you have three in Ontario-one at London, Chatham and Ottawa; one in Quebec, at Quebec City; one in Manitoba, at Brandon; three in Saskatchewan, at Yorkton, North Battleford and Swift Current; and you have one in Alberta at Lethbridge -and this one you have at Minneapolis should be down below in section 2?A. That is right.
Q. That is correct, isn't it?-A. Yes.
Q. I notice that some of these were formerly classed as branches?-A. Yes. Since the depression for reasons of economy we have changed two or three that were former branches-Brandon, Yorkton and Swift Current-they are now transfer points.
Q. As a measure of economy?-A. For purposes of economy.
Q. I presume the number of transfer points which are indicated is made partially necessary at least by the practice of the Massey-Harris company in absorbing the local freight from the transfer point-is that correct?-A. Yes, we divide the territory into zones, and all the points appearing in a particular zone have the same freight charged to them. In other words, take Swift Current-goods are sent to Swift Current and shipped out from Swift Current to a point local to Swift Current and the freight is the same there as at any other point surrounding Swift Current-is it not, Mr. Lee?

Mr. Lee: Within that zone.
Mr. Graham: By the way, how many zones are there in Saskatchewan? We were told the other day that there were two, B. and C.

Mr. Lee: Yes, that is, two price lists.
Mr. Graham: Is that correct in Saskatchewan?
Mr. Lee: Yes.
Q. It is the same with your company as with the others?

Mr. Lee: Yes.

\section*{By Mr. Graham:}
Q. Now then, I notice that you have six branches in the United States and I presume each of these discharges similar functions there?-A. Well, yes and no; we really do not cover the whole of the United States.
[Mr. T. A. Russell.]
Q. You do not attempt to?-A. We do not do it. We have picked out what seemed to be the leading centres and have attempted to do business in the territory surrounding them; but we are really not a serious factor over a section of the United States.
Q. By the way, just incidentally, is the United States market supplied at all from the Canadian plant?-A. To some extent, yes.
Q. You do not know just what percentage?-A. Well, it varies of course from year to year, in that the important implement that we make for the United States market is the combine.
Q. The combine; that is, your reaper-thresher?-A. The reaper-thresher, and rather than build it in two places we continue to supply it from Canada; and the per cent would vary with the importance of the combine sales; we have had some years in which we did not build any combines, the stock on hand being adequate; other years a fairly large number.
Q. The United States for a number of years at least has allowed free entry of farm implements?-A. Yes.
Q. Would there not be some Massey-Harris large drills and cultivators?A. I can tell you the exact machines we shipped there for a few years back. If you will go on I will have Mr. Dingle look that up for you, because I brought that statement with me.
Q. Yes. I would like to have the committee get the benefit of your experience in the implement industry, Mr. Russell. What is the difficulty which prevents the Canadian manufacturer from entering the free United States market?-A. Well, of course, there would be particular disadvantages. One would not like to build up a big business in Canada shipping to the United States.
Q. Why?-A. It is too apt to be changed over night, as has happened to so many farm products.

Some Hon. Members: Hear, hear.

\section*{By \(M r\). Graham:}
Q. That is to say, that while the tariff on it at present is off the United States might suddenly decide to change?-A. Their whole political history would indicate that if anything began seriously interfering with their business they would quickly curb it or stop it. In addition to that I must say that we find a very definite prejudice against Canadian made goods in the United States, more so than we think our people feel towards American goods. We are accustomed to American importations but our competitors in the United States do not hesitate to draw the attention of the farmer to the advantages of buying at home and helping employment, and point out that the United States is the greatest manufacturing country in the world and why should they buy abroad. So that, frankly, from my period of experience I would not like to build up a very big business on this side.
Q. Would it not be the richest, most substantial and stable market in the world?-A. Quite, it is; but one would have to serve it from there if he is going to become any factor in it.
Q. But, in the matter of tariffs; in all these other countries to which you have exported have you not been faced with similar conditions with respect to tariffs and quotas?-A. Of course, they have done that.
Q. So that that difficulty is always present in any large export business?A. Oh yes, you are always running up against that possibility. I think it is a little more marked in the United States, owing to what has been their general policy. We once did an enormous business in Australia. For 60 years that was one of our best branches, and in 1929 over night by reason of conserving the exchange in that case largely, they went through the line of implements, and the importation of implements of a kind made in Australia in any shape or form was forbidden. The duties on the balance were drastically increased.

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That put this company in the position that it either had to leave the business it had cultivated for a half century or acquire a factory there or get out. We could not have our dealer carry on with half the line of implements or parts that they were used to. In our case we made the best deal we could with the largest local manufacturer. Now we do not ship to Australia more than about 4 per cent of what we used to ship ten years ago.
Q. I notice, by the way, Mr. Russell, that you do not include McKayMassey Harris?-A. No. We are a minority stockholder in McKay-MasseyHarris. That is shown as a stock investment and is not broken down.
Q. Not as a subsidiary, no.-A. I have this statement. I do not know why I could not find it before. The principal item, of course, is the reaper thresher. But last year we had our Batavia plant closed for economy reasons, or were only running to a slight extent. We shipped quite a number of binders. We also had a newer binder in Canada than they had in the United States, and we wanted to introduce it there before going into manufacture; and we shipped some binders there.
Q. Where would you ship the others to?-A. We would ship them to whatever points they said, ship them perhaps to Kansas City or whatever branch called for them.
Q. Would you market those through your American subsidiary?-A. Yes. We charged them to the American subsidiary. We also shipped quite a number of mowers. We made the mowers for the United States in that year.
Q. Could you give us, or would it be confidential, the exact number?A. I do not mind. We shipped 565 binders last year. We are not doing that this year. They are making them now. We shipped 1,415 mowers. The reason for the mower is that we developed an entirely new mower using steel gears, using what we call the oil bath mower, which holds the oil in it like the transmission of a motor car. That was developed in Canada. We tried it for a year in the United States and shipped it from here before we started manufacturing it there. They are making them, with the exception of a very few, this year. You were talking about drills. Last year we shipped 320 ; the year before, 64; the year before, none; the year before, 30. The rest are small items.
Q. Cream separators at all?-A. Yes. We do not make cream separators in the United States. I think that is the item of 491.
Q. 491 cream separators?-A. Yes. Not many.
Q. I should like to go back for a moment to the question as to why our Canadian companies have not sought larger export in the United States. It is true, of course, that outside of the British Empire you would have to face the competition of the large American manufacturers in those countries?-A. Yes. We would be very disadvantageously placed in the line of American business. The great American business in agricultural products would centre somewhere between Indianapolis and St. Louis, and Kansas City-in that territory. The great number of American plants are located in that district, the Moline district; and we would be bringing steel and coal in, carrying it up to Canada and shipping it back. While it is true they are free of duty, there is a charge for every customs entry, if it is only the smallest thing. It would not be feasible to figure on a business on such a basis.
Q. I just cannot get this point. You have to bring your steel and coal up here?-A. To quite an extent.
Q. And make it into machinery?-A. Yes.
Q. And meet the International Harvester Company, say, in the Argentine? -A. In the Argentine?
Q. Yes.-A. Yes.
Q. Why cannot you meet them in the United States, if you get my point?A. Well, there is a great difference. There is no prejudice in the Argentine against us and we are able to compete. It costs us no more to ship to seaboard
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in Canada for the Argentine - perhaps a shade less-than it does from the Harvester plant situated in the middle west. But United States as against Canada, it would be quite markedly different.
Q. In the freight?-A. In the freight.
Q. Well, it would be in certain sections, but in others it would not.-A. Well, in important sections. There are practically no important ones where it would not.
Q. I may come back to that a little later, but I think you have given the information that I would like to have. Now we will go on to your branches elsewhere than in Canada and the United States. You might just kindly read them into the record.-A. Well, you want to deal with the French ones? What about Great Britain?
Q. Just start in and give them?-A. I would rather start with Great Britain.
Q. All right.-A. What would you like to know about that?
Q. Give us the branches and where they are located?-A. Well, the British business is now handled through Manchester where we have a large warehouse.
Q. Yes?-A. And do a very moderate amount of assembling. We maintain two places for the transfer of goods, one in London serving the south of England and one, I think, in Glasgow. It is a self-contained organization. It is one of the nicest businesses we handle in that we carry over practically no goods. When we sell them to a dealer, they are sold. We sell to dealers.
Q. It is in England you are speaking about?-A. England, Scotland and Wales.
Q. I notice in England, from the trade commissioner's report, that a dealer over there is allowed to handle a good many agencies for products?-A. Yes. It is rather different that way. The exclusive agency arrangement which prevails in North America is almost non-existent there. If you go in to an implement agent, he will sell you an International binder if you want one, or a Massey-Harris binder, if you want one.
Q. Would that not be a substantial economy in the method of distribution? -A. I do not know. There is a great deal of argument about that. I would be interested in the opinion of farmers as to whether they think it would be better that way or not. I am quite sure that it would not be as well done. I do not think it is applicable to Canada. That is only my opinion?
Q. Yes, certainly.-A. England is a small country. Everything can be delivered next day from Manchester to almost any point in the British Isles, and these dealers do not have to carry and could not carry stocks of parts to service, for example, Ruston Hormsby, Lister International and the whole groups of goods they will sell. They just could not carry the parts, so they rely on us to carry the parts. That would not be feasible in Canada at all.
Q. Do you not do that in Canada, though?-A. Yes. But no dealer tries to carry Massey-Harris parts, International parts, Cockshutt parts, Deere and Oliver and so on. That is what he would have to do if he were selling all lines of the goods.
Q. But it just strikes me, if it was simply a mere matter of quantity as to whether there would not be a great saving of overhead?-A. If a man bought \(\$ 25,000\) worth of machinery in Canada from a branch or agency he would buy all Massey-Harris; and we carry there an adequate stock of Massey-Harris parts and we do not carry and cannot carry parts of others. If he bought \(\$ 25,000\) worth of goods, as in England, spread between International, Ruston Hornsby, Lister and the whole group of British manufacturers, he would not have enough parts of any of them to give service. That is not important with him, because over night he gets them from London or Manchester or Glasgow.
Q. As is required?-A. Quite.

\section*{By Mr. Cleaver:}
Q. Do you not maintain parts depots all over Canada?-A. We do, but not in England. They buy their goods, their parts-
Q. The fact that you maintain parts depots over Canada would rather answer your argument in regard to the agents not having the stock?-A. We could not do it in Britain.

Mr. Graham: Mr. Cleaver's point is: Suppose you kept a sufficient number-we are not trying to say how many-of depots of supply throughout Canada. Then the dealer would be in the same position in the areas served as it is now by your transfer point, as the English?-A. No. We do not need the transfer point, except to start with. These three zones will give them the service just as fast as they want it. But I am speaking of the farmer outside of, say Dumfries who writes in for a part. He cannot get it from his dealer.
Q. He carries some?-A. Oh, some fast-moving parts. He will carry knife sections and things of that kind. He would not have any important parts there, because his business is divided between too many companies. So, consequently, the dealer wires in, and out comes the part and he gets it next day. In Canada our dealer does not handle anything but our parts, so we are able to stock him. Does that answer what you have in mind?

\section*{By Mr. Cleaver:}
Q. No. What I had in mind was this: In Canada if you had depots all over the country, why could not the dealer wire your depot and not have to stock the larger parts?-A. Well, I would be very interested in having your views on that. There is no subject, as a practical operator, that I would like to have discussed more than this very question of the carrying of spare parts. We are carrying spare parts at about one thousand points in the three prairie provinces. It is a terrible expense. Nobody guesses right about spare parts. You are bound to have far too many of some and run out of others. They have to be audited to make sure that the goods are there or that he is making the return from them. It is a most costly business, and when I came into the business actively five and a half years ago, one of the things I said we were going to cut down was this cost of distribution. I took the ground that many of these points which were about ten miles apart, just an hour's drive with horse and buggy were unnecessary now that we have motor cars. I was going to reduce these from three or four, to one. Now, I have not been able to do it for a number of reasons. First of all, a territory that has not been looking any good for four or five years suddenly blossoms out and does a good business, and should not be left without an adequate service there. Consequently, if you take away the agency from the man who has been handling your goods, he loses his means of livelihood, and this creates a new problem. What does he do? He gets some other agency and start in our place, and our position is weakened. I have not been able to make much headway with this problem and if those of you who live in the west and have experience with it have any opinions on it, I would treat them with great respect, because we all regard that as one of our major problems.

\section*{By Mr. Graham:}
Q. I notice, just to sort of round out that discussion, that in Holland there is one company which operates on a cash basis. Do you recall that?-A. I don't know the details about that.
Q. I notice that the trade commissioner reports a very substantial portion of the business is going to that company because of the much lower price at which they can sell.-A. Well, of course, the nearest we come to a cash business
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is Great Britain. If all our business was like Great Britain, there would not be a lengthy argument as to how we did business. We sell to a dealer, and if he orders ten binders, he takes ten binders. That is the end of that. He pays for them in full whether they are sold or not sold. We do not carry over five per cent of our accounts at the end of the year in Great Britain. In looking over our statement the other day I saw that our losses over a period of years were about \(\frac{1}{10}\) of one per cent of our sales. Great Britain is the finest territory we handle from the standpoint of no waste, no notes unpaid, no stocks carried over to depreciate. If the business could be handled on that basis, it would be a lot better for both farmer and factory.

\section*{By Mr. Thorson:}
Q. Mr. Russell, you were speaking about the expense of distribution. Would it be possible to eliminate some of that expense if there was co-operation in distribution between the various companies?-A. Well, that is one of those things, this co-operation business; you are damned if you do and you are damned if you don't. It is very difficult to know just how to co-operate with your competitors; and up to now we do not, except to compete with him. It is one of the reasons I do not like to see the duty reduced. I do not like to see this Canadian business divided among eight concerns instead of four. There are four concerns manufatcuring in Canada. There are four, large and important United States concerns, who were gradually getting pushed out of the Canadian market. It seems a perfect tragedy on a morning in collection time to see eight men starting out with eight automobiles who have got to be paid by somebody, to collect accounts.

\section*{By Mr. Graham:}
Q. Were they not always there?-A. They were gradually getting less and less important.

\section*{By Mr. Thorson:}
Q. What efforts have you made in the direction of co-operation in the matter of distribution?-A. None, I guess. I would be glad now, on that point, however, to discuss it. I think I did, once, when I came with the business and was green at it, go to Colonel Cockshutt who had been in it all his life, and ask him if it was feasible for them and us to join in a certain amount of co-operation, particularly on collections.

\section*{By Mr. Perley:}
Q. Is there any co-operation with the American companies in their own country?-A. In the United States?
Q. Yes.-A. Oh, no.
Q. There is just as much cutthroat business in their country?-A. Yes, just the same. I had an opinion perhaps in a district one collector could collect for the Cockshutt and for ourselves, but there was a fear if it was a Massey-Harris man that the Cockshutt would not get an even break and so on; and after discussing it in a friendly way and trying to arrange it, nothing came of it. If anyone thinks it is feasible we would like to see it, because I have our figures for collection cost here the last few years and I should like to give them to you shortly, if you have to have them. They are terrific; they are a terrible burden.

\section*{By Mr. McLean:}
Q. You said a moment ago there were four companies in Canada and four in the States?-A. Yes.
Q. I can think of only three in Canada at the present time?-A. The Deere company is not a large manufacturer in Canada; they have a plant.
Q. What were the three you had in mind?-A. I had in mind the International Harvester, Cockshutt, Deere and ourselves. Deere makes some of the goods.

\section*{By Mr. Johnson:}
Q. You spoke of a system for doing business in the Old Land?-A. Yes.
Q. Under that system are you able to sell your machines at a lower cost to the farmer than you are in this country?-A. Well it does not work out that way because, of course, there are expenses of shipping. I have the actual figures here. Can you tell me what they are Mr. Dingle?
Q. I was not concerned so much about the actual figures?-A. We might as well give them to you when we have them. Again exchange enters in. The pound has been down, as you know, to \(\$ 3\), and up to \(\$ 5\) and something. At the present time it is pretty close to \(\$ 5\). Let us take our No. 33,18 section oil bath mower. We deliver that to the customer's station in Ontario at \(\$ 103\); in Great Britain it is \(\$ 128.96\). I have the other figures for Durban and New Zealand. We do not sell mowers in the Argentine.
Q. The same mower?-A. The same mower, made in the same factory. Then, take the binder. That sells in Ontario for \(\$ 247.50\) and in Great Britain \(\$ 306.60\). The price is higher in Durban and New Zealand. We sell very few binders in the Argentine. Others are in about the same proportion. As you see, these have to be shipped and unloaded in warehouses over there.
Q. My point was this, Mr. Russell, if you adopted the same system of distribution in Canada that you had in the Old land, under that system would it be possible to sell machines at a materially less cost?-A. Either that or we would make some money. We are making money on our English business and have consistently lost money on the Canadian business for the last six years. I think we first of all would endeavour to get into the black figures and then it would result in lower prices.
Q. That would indicate there is something wrong with the distribution system in this country?-A. I don't know. Nothing has a keener interest for us. The binder season is very short, about a month. We have to be ready. We must not fall down on the farmer in having the product; we must not fall down on parts. He has not the money to pay for it; that is all right. And the dealers are having a difficult time. Under those conditions I do not know that there is any way that we can serve western Canada particularly at the moment other than the way we are doing. We carry parts. The farmer cannot pay cash for the machine and if he does not get the machine he cannot cultivate his land.
Q. Suppose the inducement to pay cash were greater; that is, the man buying for cash would get a substantially better price?-A. Now, we have tried that.
Q. You would have a greater number of people paying cash?-A. I hope so. We have started with the province of Ontario. We are selling them parts at a lower price than they could get by our carrying the parts for them and giving a commission. If that works we afe going to extend it. I am sure over a long pull cash would result in bigger discounts; a bigger discrimination would result in a more cash business. We made quite an experiment in that in the years 1932 and 1933. I have the figures here.

\section*{By Mr. Thorson:}
Q. It was not a very good year for experiments?-A. No, although I believe it was a good year for the farmer in a way. It was in the very lowest period of sales. Judging by what the charts show what the farmer buys and pays for and what he gets, the years 1932 and 1933 were the lowest. And we offered that year in Canada and in no other territory in the world, a 10 per
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cent discount below the ordinary cash price on our implements; 10 per cent on any payment he made in the year, and we allowed a 10 per cent discount on bills receivable and interest. We carried that for two years in Canada only. The amount that that came to as a contribution towards that situation was \(\$ 469,000\), nearly half a million dollars. The sales, of course, as everyone knows, were disappointingly small; they were the smallest of any period in the company's history for years. But we are not discouraged about that. I listened to the discussion here the other day. Some of the committee thought there was not enough inducement for cash. Some of them thought the amount we were charging for time business was too high. I don't know who is right. We are doing what we think is right, and that is my answer to it. If one would judge from the experience of 50 years in Canada we are about right. For many many years the farmer paid his accounts well. He admitted his responsibility and he paid for it. For five or six years he has not been able to. In some cases the moral risk has not been so good. The prices we are charging to-day for time business measured by experience of the last six years, is too low. There is not enough difference. I do not know how the rest of you feel, but we have faith in western Canada. We feel that it is going to come back, and the extra amount we are charging for time sales is based on the hope and belief that over the long period we will return to better conditions. Whether we are right or not, I do not know. I would be glad to have anyone say we should charge less or more. We are doing what we think is right; we may not be.

\section*{By the Chairman:}
Q. On your time sales, what responsibility rests on the local agent?-A. None, so far as his having to make it up is concerned. He is not an endorser.
Q. With regard to his commission?-A. With regard to the commission, the practice is the local agent is held responsible for the portion of his commission covered by the unpaid balance of his sale. That is, if a man buys a machine and he pays \(\$ 50\) on it, and then falls down on the balance of the payments the agent only receives his commission on the \(\$ 50\), although he may have been paid his commission on the whole thing originally.
Q. He is charged back?-A. He is charged back with the other amount.
Q. Suppose the machine is resold?

Mr. Lee: He gets commission on the resale.

\section*{By Mr. Mitchell:}
Q. Who absorbs the trade-ins?-A. The agent. He sells the trade-in machines.

\section*{By Mr. Donnelly:}
Q. You have agents who assist the local agents as well?-A. General agents, yes.

\section*{By Mr. Perley:}
Q. Coming back to the tractor business, when did you discontinue making tractors in Canada, what year?-A. Somewhere around 1923 or 1924.
Q. Why did you discontinue?-A. Well, it is pretty difficult on our small market to build a machine like a tractor with no tariff on it; I think it is impossible. To-day we should like to build a tractor in Canada. As a matter of fact, the Cockshutt company and ourselves during the past year considered whether in the interests of standardization, quantity and so on, we could get together on a tractor in which a lot of the essential parts were the same and make it. We concluded we could not; that the volume was not big enough in the Canadian business alone even with the two companies. They are buying American tractors, and we are making ours in the United States.

\section*{By the Chairman:}
Q. You did make a tractor in 1923?-A. Yes, known as the Massey-Harris tractor. It was a copy of an American tractor and we made it in Canada.

\section*{By Mr. Perley:}
Q. Was it not practically the Wallis tractor?-A. No, it was the Parret tractor, called after a man, and we made it in Canada. We should like to make a tractor in Canada, because we would enter the British market free, where we have to pay a duty on the American one. There are two or three other places it would be an advantage. It is possible the two companies could get together when business comes back, but to-day we cannot get together, because business-I don't need to tell you that-is still pretty small. Our business dropped off to less than 25 per cent of what it was in all lines. It is now back to about 50 per cent. If we can return to the figures of the sales from 1925 to 1930 in the years to come, it might be worth while for a couple of Canadian firms to see whether they can co-operate in making an Empire built tractor.

\section*{By Mr. Perley:}
Q. The Americans have a pretty good business in tractors to-day, the John Deere company?-A. Oh, excellent.
Q. Owing to the free entry of tractors below \(\$ 1,400\), and that keeps you out of the Canadian market?-A. We are in the Canadian market; we import them from the United States.
Q. I am talking about manufacturing the whole implement in Canada?-A. That is a highly controversial subject, and I do not want to get into it. We have not thought it was practical to do it.

\section*{By Mr. Cleaver:}
Q. You were going to give us your collection costs a moment ago, when you were interrupted. Would you care to do that now?

\section*{By Mr. Ward:}
Q. Before we pass from the company sales, I should like to ask this question: Did your company offer at any time any real encouragement to the farmer to pay cash?-A. You were not here when I spoke about the cash price less 10 per cent discount?
Q. That was on the part payment plan?-A. No, on anything.
Q. Surely you could have offered more than 10 per cent for a complete settlement in cash?-A. I do not know how.
Q. There is a point there?-A. You cannot force your time payment buyer. Somebody held us up the other day and said we were charging 18 per cent on money. I assumed he must have figured it out, and he must be right. Now, the most important thing to-day in western Canada is not the price of the goods, it is being able to get the goods to the man that has not got them. That is my firm conviction. What good is it to a man to offer a binder to him for \(\$ 200\) instead of \(\$ 275\) if he has not got the \(\$ 200\) ? Is not that the position in western Canada?
Q. Are we to understand that there is only 10 per cent of a difference between time and cash sales?-A. I shall give you the prices here. The cash price on a binder in Winnipeg is \(\$ 270\); on one October pay - \(\$ 278\), and he pays interest also at 7 per cent-on the money that is not paid. That is \(\$ 8\) plus interest on the money that he has actually borrowed. If he takes two Octobers it is \(\$ 8\) more again - \(\$ 286\). I do not know if any of you have any conclusions about this. It would be very interesting to all of us in the industry. That is
[Mr. T. A. Russell.]
about where we think we can justify it. A man is paying \(\$ 8\)-and, remember, on that too he may buy the binder in July and he pays interest on two-thirds of it from July to October-that is interest at the regular rate, and he pays \(\$ 8\) more.
Q. Suppose-I put this question to the International people the other daythat you could divorce from your mind entirely all thoughts of time sales, what could a binder be sold at if they were all sold for cash?-A. It would be definitely lower than present prices; it could be definitely lower than present cash prices.
Q. More than 10 per cent?-A. More than 10 per cent? Well, I am inclined to think if you could count on that going right along it would be lower than 10 per cent.
Q. It would not be 25 per cent or 30 per cent?-A. Oh, no.

\section*{By Mr. Perley:}
Q. The volume of business would not be as great?-A. That was pointed out, it was qualified the other day in that hypothetical question: suppose you got the same business?

\section*{By Mr. Ward:}
Q. You think in the long haul you would not get the same amount of business?-A. Do you come from western Canada?
Q. Yes.-A. Do you think we would?
Q. I know many farmers who started as homesteaders and always paid cash.

Mr. Donnelly: I think we have altogether too much time and credit.
Mr. Ward: I think so too.

\section*{By Mr. Leader:}
Q. Did I understand you to say that you had given a privilege to the buyers of machinery during the last few years of a 10 per cent reduction below the cash price?-A. That is correct, yes.
Q. And it was not very successful for the reason that the farmer did not have the money to pay. The question I would ask is, have you considered, or do you still extend the same privileges to the farmers of western Canada at the present time?-A. No.

The Chairman: In order to keep the record straight, that was for a limited period, was it not?

Witness: For two years.

\section*{By Mr. Leader:}
Q. I understand that. I am about to suggest this: don't you think it would be good business to extend this privilege to the farmers when times are such that they can pay cash-that you could do some business. You admit that you could not do it in the last few years on account of not having money, and yet you express faith in western Canada and believe that, perhaps, times will get good in western Canada and farmers will be able to pay. I suggest it would be good business on your part and on the part of other machinery companies to extend this privilege to farmers in good times when they can pay for what they want instead of just holding out this privilege which cannot be accepted because the farmers have not got the money. I suggest that you continue this business of allowing the farmers a 10 per cent reduction below cost price if they can pay cash?-A. I would like, of course, to do it but, unfortunately, in the figures we have the cost of making and distributing just make it prohibitive. We have lost over a million dollars a year for the last five years in the Canadian business alone. It has got the company practically to a weakened position.
Q. You feel it is good business of the company to withdraw that privilege of 10 per cent?-A. I think we had no option. I may be wrong, but I think we had no option.

\section*{By Mr. Donnelly:}
Q. With regard to the tractors you are referring to, you said you would not make tractors in Canada because of the limited market. How many tractors would you have to make in Canada in order to make money and sell them at the price you are selling them now?-A. Oh, I think we ought to have a business of about five thousand a year.
Q. How many do you sell now?-A. In Canada?
Q. Yes.-A. We will not sell a thousand.
Q. If you were going to manufacture only a thousand and sell them in Canada, you would have to get a bigger price?-A. Yes. That is what I am afraid of.
Q. Therefore, you would have to have a duty?-A. Yes.
Q. What would you have to sell a thousand dollar tractor for?-A. It would be higher.
Q. The only method by which you can make a tractor would be to get a bigger price for it?-A. You are, perhaps, familiar that the legislation of 1930 provided for a tariff on tractors which would be imposed if some manufacturer came along and was in a definite position to manufacture in that way. I have never felt yet it was quite economical on the size of the market we had to try to take advantage of that. It would take a very big cash investment, and speaking for our company, I thought we had plenty of hay down and had better get some of it in.

\section*{By Mr. Cleaver:}
Q. Could we have the collection costs that you have been going to give us now?-A. Our collection expense of the last ten years has been \(\$ 2,500,000\).

\section*{By the Chairman:}
Q. Is that the expense of collecting?-A. Collecting.

By Mr. Donnelly:
Q. For collecting how much?-A. We collected by that effort \(\$ 23,000,000-\) an average of \(10 \cdot 7\) on the collections; and that resulted from net sales of \(\$ 78,000,000\). The cost of collection was 3 per cent of our sales, cash and time, and 10 per cent on the cash collected.

\section*{By Mr. Cleaver:}
Q. Have you the figures over the last five years?-A. Yes. I will add that in the six years we wrote off-
Q. I will come to that in a minute if I could get your collection costs over the five year period.-A. Mr. Cleaver, there is just the difficulty-I do not know whether our figures will tell you what you want, in this way, that our collection costs, say, in 1933 relate to collection costs on paper of all preceding years still not collected. So it is very difficult to relate these. This ten year periodyou take ten years-and say there were about five years of very good sales and five years of very bad ones.
Q. Five years of normal and five years of abnormal sales?-A. Five of abnormally good and five of abnormally bad. When you get to five years, if you are going to relate them to the sales of the same period, I think you are unduly hard on the business done in that five year period.
[Mr. T. A. Russell.]

\section*{By Mr. Fraser:}
Q. Are you referring to Canadian business alone?-A. Yes.
Q. Can you take your figures, say, on a binder at \(\$ 278\) and break it down in manufacturing costs, overhead, cost of collections, cost of write-offs for bad debts, so that we can see a break-down of certain figures?-A. Yes, I have it. I have it also not only for the binder, because the binder is only one implement. I think the comptroller has it for twenty-five respective machines.
Q. May I interject that whether it is a binder or a tractor or not we all know that the ultimate cost is made up by about five different factors. Now, I understand that what Mr. Leader is trying to figure out is where the cost is excessive or where the price is excessive. It must be in one of the factors, whether it is manufacturing or bad debts or distribution or whatever it is Have you got a break-down of the figures so that the committee would know where to put their finger on the discrepancy?-A. Yes, I have that here, Mr. Fraser. Answering Mr. Cleaver, during the last five years shows a collection cost of \(\$ 993,000\).

\section*{By Mr. Cleaver:}
Q. And the percentage?-A. And the cash collected in that period was \(\$ 7,600,000\), and the percentage \(12 \cdot 3\). I do not think there is any use in trying to relate them to sales.
Q. No?-A. Because I think it would be unfair.
Q. Have you your losses through bad debts in the last five years?-A. Yes. I know that by heart. That is \(\$ 1,557,000\). It is six years.

\section*{By Mr. Donnelly:}
Q. Have you the eastern business separated from the western?-A. Yes.
Q. I would like to have that?

\section*{By Mr. Cleaver:}
Q. And what is the percentage of losses?-A. If you related that to sales, the relation to it of the ten year sales was 3 per cent.
Q. Have you the relation to the five years?-A. Oh, yes, I have. I did that last night, for six years, \(\$ 28,000,000\) of sales, and add that loss, 5 per cent- 5 per cent on bad debts, and 10 to 12 per cent on the collection expenses.
Q. And if you related it to the same governing factor as you related your collection cost, it would be closer to 20 per cent, would it not? You say your collection cost is \(\$ 993,000\), you lost \(\$ 1,557,000\), relating it to the same analysis figure there?-A. Yes, but-
Q. In order that the true relation in the final analysis- -A. The bad debts of one and a half million relate not to the \(\$ 28,000,000\) of business done in the last six years but to a tremendous lot covered from 1930, 1929, 1928 and 1927 - to relate them, I think, would be unduly hard on the business.

The Chairman: Now, gentlemen, can we get back to where we were before this cross-examination started. Of course, I do not want to interfere with any questions.

\section*{By Mr. Leader:}
Q. I would like to bring out a point here, following along the line of the questions I asked a moment ago. You state, Mr. Russell, that the cost of collection for the last ten years was \(\$ 2,500,000\) ?-A. That was for ten years.
Q. Yes, I said fen years; and that your losses for five years were \(\$ 1,500,000\) ? -A. In six years.
Q. In six years. Those added together, including the cost of collection, would make a loss of \(\$ 4,000,000\) ?-A. Right.
Q. And you have collected \(\$ 10,000,000\) over the same period? That would indicate, if those implements were all sold on a cash basis and there were no
losses or no costs of collection, you could sell them for 40 per cent less than you are now charging?-A. First I would try to avoid this \(\$ 1,000,000\) a year loss. Perhaps you would not blame me for that.
Q. Yes, but it is your contention that you should charge for these implements a high enough price to take care of the loss that your company has suffered?-A. No. We have suffered them. The main answer to this- I do not think the main answer to this is going to go to any one place any more than the answer to the farmers' problem is going to any one place. We thought we had to get back in 1936 to the prices we charged in 1930, as one step, and our prices have been slightly raised all over the world. There is a continual bearing down pressure on cutting out expense at the same time and an attempt to improve costs of manufacture with improved equipment. And, after all, the biggest result of all is going to come when your men are getting prosperous and are buying as you ought to buy. Now, we are going to have to work together on this, and in a short time; and I think our greatest contribution remains still to have confidence in Canada agriculturally and to loan you money when-not you but the farmers-when nobody else will loan them money, because we have some facilities to realize on his asset-the used machine and the repossessed machinewhich the banker or other loaner could not realize on. Practically I think that is the answer. We will work together-I may be wrong-I have confidence that in two or three years we will work it out together.

\section*{By Mr. Fraser:}
Q. On that point. As world conditions improve, following your synopsis, prices are going to increase; prices of your raw materials are going to increase, labour costs are going to increase; naturally you are going to have increased prices of farm implements?-A. We are afraid of that.

\section*{By Mr. Johnston:}
Q. You may have increased volume; how would that affect cost?-A. I would just like to show you three things that have a relation to cost. People use the word cost as though it were a definitely ascertained item. You can no more ascertain the item of cost with respect to a particular implement than can the fellow who tries to say what it costs you to raise a bushel of wheat. You men know what a fool question that it. You may have some estimate of what it will cost you to raise an acre of wheat, but when it comes to the cost of raising a bushel that is quite a different matter. Now, the ordinary method of getting the cost is as follows: everything that is direct, definitely allocated to the making of the implement in the shape of material is one item, that is the material; and the next is what is called direct labour, that is the direct labour of the man who actually works on the making of the piece or the assembly; then the balance is the overhead, and that includes the sweeper, the inspector, the foreman and the foreman's clerk, insurance, taxes, oil, belts and pulleys and all these miscellaneous things that it is very difficult to allocate and say they belong to this.
Q. That is the manufacturing overhead?-A. The manufacturing overhead, first. You then take these three, direct materials, and direct labour-and then you arrive at a percentage which by years of experience gives a normal rate of overhead; 100 per cent, or 200 per cent or 500 per cent. Now, that sounds like a lot, 500 per cent; but you take in a drop forge where there is very little labour, where the man merely holds the piece under a trip hammer, and where you have all your overhead in a very expensive type of machine, and you get that result. Anyway, you arrive at the average. In 1935 on the 25 machines we estimated the cost using the normal figure of \(\$ 1,859\)-that was the straight factory cost. Now, the actual factory cost was not that, it was \(\$ 1,859\) plus \(\$ 62\). To this must be added the cost of engineering expense, interest on
[Mr. T. A. Russell.]
borrowed money, administrative expenses, branch expense and other similar charges, with the result that at the end of the period our total costs were increased by \(\$ 603.40\) over the estimated or normal cost. Now, our prices are set not on the actual cost-if in our list of 25 implements we did not make provision for that \(\$ 603\) we would either have to go out of business or increase prices. After that there is another tremendous uncertainty. By the first day of May in each year-and it applies similarly to other implements-the president of the company must decide how many binders are going to be made for the western Canada trade. At that time the seed is not in the ground, but if he is going to have them that is the last day he has on which he can order them. We have sold over 10,000 binders in Canada in a year, and we have sold less than 1,000. Some of us (Mr. Lee, the general manager, and I), have to determine how many we will make. We will say that we decide to make 5,000 binders for this year and then the cost-I will just give you a case that happened last year. We shipped binders to a dealer in a territory who said he had 33 sold the day the machines came out, but a man goes out into his field and sees it full of rust, with the result that we only delivered 3 out of the 33. Now, suppose that out of the 5,000 we make we only sell 2,500 and carry the other 2,500 over until the next year, with interest and insurance, and if they are stored out of doors as they sometimes are in local agencies they have to be cleaned up and reconditioned next year and that adds to your cost by some 12 or 15 per cent. So that when we speak of cost you will understand that cost is no more relative with respect to an implement than it is with respect to a bushel of oats or wheat.

The Chairman: It is getting on towards one o'elock and if Mr. Graham has any other points he wants to clear up perhaps he would proceed with them.

Mr. Ward: I think this is quite the most fundamental contribution which has as yet been made to our deliberations.

The Chatrman: Very well, if the committee wish.
Mr. Ward: If I gather anything from what Mr. Russell says it is that they are suffering from lack of business, that they are not making enough binders or drills and all the rest of them. And one of the main reasons why they are not is because a growing percentage of our farmers are becoming business farmers. As Mr. Russell says, they are not buying, and they are not buying because they are business people and know that they cannot pay for them. In my own neighbourhood where there has not been a crop failure for 45 years we are not buying binders, we are not buying drills, we are not buying ploughs, because we cannot pay for them. An increasing number of farmers are taking an inventory of their business and they know they cannot pay \(\$ 280\) for a binder. I have been in need of two binders for my farm for the past six or eight years, and I have not bought them and have no intention of buying them because I know that the returns from my farm will not pay for them; and whether it is a binder, or a drill or a plough, the farmer to-day is not going to buy until he knows he can pay for them. And there is the point. I think we must by some means or other find a way to get cheaper machinery. Thousands of farmers who have not had crop failures in recent years feel just the way I do about it, we must have cheaper machinery or we will not buy it.

Mr. Donnelly: I would just like to ask one question: When the auditor made a statement to us some time ago we were told that questionnaires had been sent out to the different companies and they were to be returned to us here and the replies I presume were to appear in our report. I understand that a number of these replies have been received. Are they going to be made available to us so that we will have them printed, or are they to be distributed, or what is to be done with them?

The Chatrman: The examination which is being carried on at present is based on these questionnaires. I do not think it is necessary to have them printed in our record but they will certainly be filed with the committee together with the replies. They are the property of the committee and if they are filed with the committee they will be available in case we do not finish our work at this session.

\section*{By Mr. McLean:}
Q. I would like to ask a question. I did not get a full answer from Mr. Russell. In speaking of the price of binders in Winnipeg you said that \(\$ 270\) was either all cash, or two-pay?-A. That was the cash price, and the \(\$ 278\) was the one October.
Q. Did you say \(\$ 278\) was one pay?-A. That was part cash and the balance in the following October.
Q. The all cash would be one-pay; and I wanted to get the two-pay and the three-pay?-A. That would be \(\$ 270, \$ 278\) and \(\$ 286\).
Q. The \(\$ 270\) would be all cash. The \(\$ 278\) would be two-pay?-A. One-pay -the balance in one payment in October.
Q. Yes, the \(\$ 270\) is all cash?-A. Right.
Q. The \(\$ 278\) is two-pays?-A. Mr. McLean is right; he deposits his money when he buys the machine and makes another payment the following October.
Q. And the \(\$ 286\) is the three-pay price; the deposit and two payments?A. We call it two-pay.
Q. I know, but I want to get it accurately?-A. Quite.
Q. What would the first payment be on a two-pay purchase?-A. \(\$ 90\).
Q. The cash would be \(\$ 90\) ?-A. It would be 40 per cent on the binder.
Q. 40 per cent of \(\$ 278\) or \(\$ 270\) ?-A. It would be on \(\$ 278\).
Q. That would be \(\$ 111\), and the balance would be \(\$ 167\); so that there is only \(\$ 8\) of a difference?-A. Plus the interest on the \(\$ 167\).
Q. Plus the interest, of course; but the principle involved is that the farmer only gets a discount of about 4 or 5 per cent?-A. Yes, that is on short time.
Q. But then, the risk of not getting paid is almost as great as if he promises to make it in two falls?-A. What is happening now, unfortunately-in the old days we used to sell binders, our agents sold them all through the year in great volume-but owing to this very unfortunate experience of the last five or six years the farmer is waiting now till he knows whether he is going to need a binder pretty well.
Q. True?-A. And then when he has bought one-I have in mind this particular territory where we had 33 sold and finally delivered only 3 .
Q. That is right?-A. Our dealer insisted that we have these binders out at his delivery point.
Q. Quite so, but I wanted to get that information. There is one other question I would like to ask before we leave this. Mr. Russell, you told me that the practice in Britain was that of selling to dealers who had reasonable financial standing who took them off your hands and sold them with the result that you had no more trouble with them. Has it ever occurred to you, or would you now consider it as perhaps desirable for the future, to apply that system in Canada-not in the last five years when the farmer was only getting 20 cents a bushel for his wheat, but say down to 1930 when many farmers were quite able to pay if they were in need of implements. Do you think it would be possible to sell either through a co-operative agency or through local agencies, or would it be wise in your opinion to build up the kind of trade in Canada that you have in Great Britain?-A. That co-operative stuff as you know has been tried quite a few times here with rather terribly poor resultsbut where the dealer is sound-I have not lost hope of our being able to work towards that-the dealers being sound and able to assume the responsibility of earrying on their own financing.
[Mr. T. A. Russell.]
Q. You have given that some thought for quite a few years?-A. We have. Mr. Ward asked a question that gets right at the bottom of things. No one realizes this more than we do, the absolute necessity of some improvement in the farmers' position. You have seen the two curves in the chart which was submitted to you, and you noticed back a piece where there was a terrible spread between the farmers' price and this; that is drawing together, and there was a period some years back when they were together. I hope they will get together again. Now, the implement company can make some contribution, and I am a firm believer that we as manufacturers if we are going to exist are pretty nearly faced with two or three definite conditions; that we are going to have to pay more wages, we are going to have to make increasingly better goods, and somehow or other we are going to have to try to serve the farmer at less cost to us. Those are some of the things we have got to do, but there is only a certain distance we can go. I do not see how we can go further under present conditions when you consider this: The greatest market in the world is the United States and the printed report of the American production shows that they made in one year \(\$ 320,000,000\) of goods. Now, that is as much as 20 years of business in Canada for everybody here, including the Harvester company. \(\$ 16,000,000\) is about what we have been running for the last five or six years; or, take it on the biggest period we have had, when I think we ran up to about \(\$ 40,000,000-\) was it?

The Chatrman: Over \(\$ 50,000,000\) I think.
Witness: In one year they sold more than we do in five. Conditions are pretty bad for a company serving Canada; and yet to-day our prices on Canadian made implements are not very greatly different from those in the United States. I was surprised myself to find that they were so close. We can do something; but when we talk about figures-like big percentages-I am afraid, and I say it with regret, that does not enter the picture.

\section*{By Mr. Fraser:}
Q. May I ask just one question. You are now going to divide the market, as you said a little while ago, among eight different companies instead of four?A. Yes.
Q. In the Canadian market?-A. Yes.
Q. Is that going to have the tendency to increase your cost-I am not talking about price-of distribution, collection costs, and general overhead between the set manufacturing cost of the machine to farmer?-A. Well, it is my view, and that is why I feel so badly about it, that it is inevitable, with four other companies competing for a market which is circumscribed to a certain amount, that each will get a share of that market and therefore the four of us will each have a smaller share, and it will tend somewhat to increase the factory cost, the administration and sales costs, the distribution costs, and the collection costs, expressed in percentage of volume of business done.
Q. And ultimately the cost to the buyer?-A. And ultimately, I am afraid it will make it more difficult for us to reduce the price.

Mr. Thorson: Unless you get together.

\section*{By Mr. Needham:}
Q. Following up what Mr. Ward said regarding the situation of the farmer with regard to buying machines, there is a serious situation there?-A. Yes.
Q. There are more farmers actually taking inventories to find where they stand at the end of each year than ever there were before; I think I am safe in saying in the district I come from there is not 5 per cent of the farmers with full equipment or anywhere near what you would call full equipment of ma-chinery?-A. Quite.
Q. And on talking with them,--last year particularly,-you find they do not know what to do; they cannot see any daylight ahead to go and invest another two thousand or three thousand dollars which they should do?-A. Yes.
Q. There is just one of two things to do. They are just going to carry on as long as they possibly can, tie their machines up with binder twine or baling wire and so on and reduce their crop or something. They are just at their wits end. They will not invest or go into debt?-A. Of course, my experience of many years in manufacturing-and I may say that we just watch the crop reports and the conditions with the same interest as you do-is that things never turn out as good as you think they are going to in good times; and they never turn out as. bad as they look as though they might; and that somehow or other the people who keep on sweeping the street in front of their door and doing the job, ultimately, some way, in a way you could not foresee it, come through; and I think we will do that yet.
Q. What do you think is the basis of your manufacturing for the coming year? You know your average being sold year by year, and know that in the last six years anyway the percentage has dropped so much; you must have a fair idea as to what machines are normally required. I know when I was an agent, I kept a ledger; I knew, when a man had bought a plough, in so many years that man was in the market again for a plough, and could tell every day where to go for a sale?-A. I went down recently to Weyburn, and in that district in 1934, after five years of crop failure the question was, "How long should we go on earrying parts and an organization and servicing that territory? Should we pull out?" I went down there. I came back. I could not recommend pulling out of that country. Nobody could; because nobody could tell to-day within 50 per cent the number of binders that will be required in Weyburn, Arcola and Shaunavon districts. We may have a crop like that old crop that built those fine old farm homes out there, and we may have another wash out. Who can guess it?
Q. What percentage increase has there been in your parts sales in the last five years compared with the five years previously?-A. None.
Q. No increase in parts sales?-A. No. Machines are being built better and the parts sales are not as big.

Mr. Spence: They are more durable, and do not wear out as quickly.
The Chairman: Gentlemen, it is one o'clock. What is the wish of the committee?

Mr. McLean: I move we meet at four o'clock.
The Chatrman: It is moved that we meet this afternoon at four o'clock.
Mr. Mclean: And go on with the examination.
The Chatrman: It has been proposed that the committee rise now and meet again at four o'clock this afternoon. Is that agreeable?

Some Hon. Members: Agreed.
The Charman: Then we will meet at four o'clock this afternoon.
The Committee adjourned at 1.05 p.m. to meet again at four o'clock.

\section*{HOUSE OF COMMONS}

\section*{STANDING COMMITTEE}

ON

\title{
AGRICULTURE AND COLONIZATION
}

\author{
MINUTES OF PROCEEDINGS AND EVIDENCE AND FINAL REPORT \\ (Farm Implement Price Inquiry)
}

THURSDAY, JUNE 18, 1936
No. 12

\section*{MINUTES OF PROCEEDINGS}

Thursday, June 18, 1936.
The Standing Committee on Agriculture and Colonization met (in camera) this day at 11 o'clock, a.m.

The Chairman, Mr. W. G. Weir, presided.
Members present: Messrs. Bertrand (Prescott), Black (ChateauguayHuntingdon), Bouchard, Cleaver, Coldwell, Donnelly, Dubois, Evans, Furniss, Golding, Graydon, Johnston (Lake Centre), Leader, Leclere MacRae, McKenzie (Lambton-Kent), McLean (Melfort), McNevin (Victoria, Ont.), Mitchell, Motherwell, Needham, Patterson, Perley (Qu'Appelle), Robichaud, Thorson, Senn, Spence, Taylor (Norfolk), Thompson, Ward, Weir.

In attendance: R. T. Graham, K.C., Counsel for the committee.
The committee proceeded to consider a draft report prepared by the subcommittee. This draft report was amended and unanimously adopted as the Fourth Report of the committee.

On motion of Mr. Johnston (Lake Centre), seconded by Mr. Dubois, it was,-

Resolved,-That the Chairman of the Standing Committee on Agriculture and Colonization be authorized to write the representatives of the Implement companies and others who have assisted the committee, advising them of the committee's recemmendation, to thank them for their assistance and to ask for the continued co-operation in gathering and bringing up to date further information relative to the inquiry.

The Chairman stated that in his opinion Mr. T. W. O'Neill, employed as Legal Secretary to the committee, should receive more than the \(\$ 5\) per day which he has been paid, in view of the fact that he has had to work from 12 to 16 hours per day and on Saturdays, Sundays and holidays as well.

Mr. Graydon moved, seconded by Mr. Johnston (Lake Centre) : That T. W. O'Neill, Legal Secretary, for services rendered and overtime work done, be paid an additional \(\$ 2.50\) per day from March 21, 1936, until his services are no longer required by the committee. Motion adopted.

The Chairman filed as Exhibit No. 14 -One Copy of the Evidence of the International Harvester Company, taken in camera.

Mr. R. T. Graham, counsel for the committee filed:-
Exhibit No. 15-Questionnaire to implement companies.
Exhibit No. 16-Replies from International Harvester Co. Ltd.
Exhibit No. 17-Replies from Massey-Harris Co. Ltd., Vols. I, II and III.
Exhibit No. 18 -Invoice of Cockshutt Plow Co.
Exhibit No. 19 -Replies of Frost \& Wood.
Exhibit No. 20-Memorandum from Massey-Harris Co. re export business.
Exhibit No. 21-Massey-Harris prices, f.o.b. factory, of various implements from 1913-1936.
Exhibit No. 22-Massey Harris Company's Annual Report from 1926-1935 inclusive.

Exhibit No. 23-Invoices for raw material-International Harvester Co. Ltd.
Exhibit No. 24-Report of Lawson Shanks on implement prices in Manitoba.
Exhibit No. 25-Report from W. A. Carrothers on implement prices in British Columbia.
Exhibit No. 26-Report from H. W. Cheney, Commercial Intelligence Service, Department of Trade and Commerce, Ottawa, re implement prices in South Africa.
Exhibit No. 27-Report from H. W. Cheney, Commercial Intelligence Service, Department of Trade and Commerce, Ottawa, re implement prices for United Kingdom.
Exhibit No. 28 -Report from H. W. Cheney, Commercial Intelligence Service, Department of Trade and Commerce, Ottawa, re implement prices for Argentine.
Exhibit No. 29-Report from H. W. Cheney, Commercial Intelligence Service, Department of Trade and Commerce, Ottawa, re implement prices for Holland.
Exhibit No. 30-Report from H. W. Cheney, Commercial Intelligence Service, Department of Trade and Commerce; Ottawa, re implement prices for France.
Exhibit No. 31-Report from H. W. Cheney, Commercial Intelligence Service, Department of Trade and Commerce, Ottawa, re implement prices for Germany.
Exhibit No. 32-Digest of Provincial Legislation of Alberta, Saskatchewan and Manitoba respecting debt adjustment.
Exhibit No. 33-Provincial Legislation and the Farm Implement Industry.
Exhibit No. 34-Canada's exports of cultivators and drills to United States, 1925-1936.
Exhibit No. 35-Report of Dr. Davidson on inquiry into Changes in Quality Values of Farm Machines.
Exhibit No. 36-Economic Effects of. N.R.A.-submitted by J. B. Rutherford.
Exhibit No. 37-Package of sundry correspondence.
Exhibit No. 38 -Decision of Supreme Court of the United States re appeal of U.S.A. against judgment in favour of International Harvester Company.
Exhibit No. 39-Progress Report of Auditors re compilation of statistical evidence.

Mr. Thorson moved, seconded by Mr. Perley (Qu'Appelle),-
That a vote of thanks be tendered the Chairman for his courtesy, consideration and patience in conducting the proceedings of the committee.

The motion was adopted unanimously.
The Chairman expressed his thanks to the committee, the Minister of Agriculture, the counsel, auditor, departmental officials and the representatives of the Implement Companies for their co-operation and assistance throughout the inquiry.

The committee adjourned at 12.35 p.m.

\section*{REPORT TO THE HOUSE}

Fourth Report

The Standing Committee on Agriculture and Colonization begs leave to present the following as its Fourth Report.

Your Committee has had under consideration a resolution referred to it by the House on March 2nd, 1936-viz,-

That an immediate Inquiry be made by the Standing Committee on Agriculture and Colonization into the Causes underlying the high prices of agricultural implements, with particular reference to the advance in prices in the year 1936.

Your Committee has secured information by way of questionnaire and by oral examination chiefly from three main sources:-
1. Departmental Officials.
2. Provincial Departments of Agriculture.
3. Implement Companies.

Under the powers conferred upon it your Committee has appointed Counsel, Auditors and assistants necessary for the conduct of the Inquiry.

The Committee has held twenty-five sessions at which oral and documentary evidence was submitted to it by departmental officials, provincial government representatives and executives of implement companies.

Due to the wide scope of the Inquiry and the voluminous character of the evidence presented to the Committee and having regard to the limited time at your Committee's disposal, it has not been possible to complete the Inquiry as contemplated in the Order of Reference and to report thereon before prorogation.

Your Committee is of the opinion that sufficient evidence has been adduced or suggested to the Committee to amply justify the continuance and completion of the Inquiry.

Your Committee therefore recommends:-
1. That the Inquiry be continued at the next session of Parliament by a Special Committee of the House.
2. That such Special Committee be appointed as early as possible after the commencement of the next session of Parliament.
3. That during the coming recess of Parliament the government take into consideration the necessity of continuing such investigation as may be deemed advisable for such continued inquiry.
4. That the records, exhibits and evidence filed with or taken by your Committee be placed in the custody of the Minister of Agriculture and that such records, exhibits and evidence be made available to such Special Committee upon its appointment.

All of which is respectfully submitted.

\author{
W. G. WEIR, \\ Chairman.
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[^0]:    (1) Data for 1900-1920 from Sixth Census of Canada, Volume 5, 1921, p. XXXIX. Data for succeeding years from Canada Year Book and Monthly Bulletin of Agricultural Statistics, January, 1936. The latter represent gross annual agricultural revenue.

[^1]:    ${ }^{1}$ Wholesale prices of Canadian products of farm origin only. See prices and price indexes, 1913-1934, page 52 , and monthly mimeographs, 1934 and 1935.
    ${ }^{2}$ Basic prices from Dominion Bureau of Statistics, index weighted according to numbers of individual machines on farms, Saskatchewan Farm Management studies.

[^2]:    Average Yield $=18$ bushels

[^3]:    [Dr. E. S. Hopkins.]

[^4]:    ${ }^{1}$ Cost of producing farm crops in the Prairie Provinces, by E. S. Hopkins, J. M. Armstrong and H. D. Mitchell, Bulletin No. 159--New Series, Department of Agriculture.

[^5]:    ＊Does not include electricity

[^6]:    [Mr. F. H. Greenway.]

