

# Marketing Your Grain

A Series of Articles Showing the Various Stages and Steps by which the Grain Crop of Western Canada is carried from the Farm to the Foreign Market

## Article IV.—Weighing and Terminal Storage

The following account of the weighing system and terminal storage was written by Dr. R. Magill, chairman of the board of grain commissioners:

Accurate weights are as important to shippers of grain as accurate grades. As the grading gives the price per bushel the shipper receives for his grain, so the weighing fixes the total amount. It must be admitted, however, that Canada has been more successful in regard to grading than in regard to weighing.

It is true that weighing grain appears to be a much easier matter than grading it. To read the weight on a scale is simple compared with estimating the quality, condition and admixtures of grain. The one appears to be a purely mechanical process that can be done by anyone who is able to read, the other requires accurate observation, expert knowledge and sound judgment.

This, however, is not a fair statement of the case. In fact, the successful organization of a weighing department in Western Canada is a much more difficult task under the conditions than is presented by inspection.

1. Grain is received into about 2,500 country elevators, and it is weighed in every elevator. Inspection, on the other hand, is concentrated at a few strategic points.

2. The men who weigh the grain in the elevators are employees of the elevator companies. The men who grade the grain on the other hand are employees of the state. This is a radical difference between the two. In weighing, one of the interested parties does the actual work, in grading neither does it. In the terminal elevators there is present an employee of the state to supervise the other weighman, but even this is radically different from the method of inspection.

### Weighed in Elevator

3. The grain is weighed, as a rule, after it goes into the elevator, while it is graded before it goes in. Further, if the grade given by the inspector is challenged, there is an opportunity for reinspection and appeal, but if the weight given be challenged, there is rarely, if ever, such an opportunity. A lot stored by itself separately could be reweighed, if there has been no leakage between the receiving pit and the scale, or between the scale and the bin, but in all other cases, and these are the majority, the grain is binned with other grain and it cannot be reweighed.

These differences between "weighing" and "grading" as actually carried on are fundamental, but they are not the only difficulties in the way of a satisfactory weighing department.

The scales in the country elevators are approved and inspected by the Inland Revenue Department, and this work of systematic scale inspection is very difficult. There are so many elevators that the Department of Inland Revenue would do well if it managed to secure one good inspection of each scale per annum. But one inspection is totally inadequate to the needs of the work. A scale may be very easily and readily put out of order, and there may occur some condition in the elevator that would render the weight unjust, even tho the scale were right. Further difficulties arise from the possibility of car damage and leakage, of pilfering and of variations between the scales, both of which have been inspected and approved.

As stated above, the scales are inspected by the Inland Revenue Department.

If you haven't got a copy of the Canada Grain Act, get one for your own protection. They are free upon application to the Department of Trade and Commerce, House of Commons, Ottawa. After you get a copy read it, and after you have read it, read it again.

ment, and the actual weighing is done by the operator of the elevator.

The Canada Grain Act, however, has some sections framed with the object of protecting the shipper. Section 158 provides that "persons interested in the weighing of grain at any country elevator shall have free access to the scales while such grain is being

official certificates of weight are given there.

The chief weighmaster has charge of all the weighing, under the board of grain commissioners. His authority in matters pertaining to weighing is similar to that of the chief inspector in matters pertaining to grading.

By an arrangement made by the



Unloading a car of grain at the terminal elevators. The shoveller may be seen (inside the door) and the inspector taking a sample.

weighed." The shipper, therefore, can supervise the weighing if he chooses to do so. Again, the act provides a penalty for falsifying or misstating the weights (section 240), and in section 175 it provides for an investigation by the board of grain commissioners.

Investigating the weight of a lot of grain after the grain has been stored

ministers of the two departments concerned, the chief weighmaster is also the scale inspector at the terminal point. In this way he has authority both as regards the scales and the weighing. The conditions for accurate weighing are, therefore, better at the terminal than at other elevators. The scales are larger and more frequently examined.



Weighing the grain. The scales are at the top of the terminal elevators and the weights are checked by government weighmen.

with other grain, or has left the elevator altogether, is, however, a most unsatisfactory affair.

### Weighing at Terminal Elevators

While there are state weighmen at some other points (mills and public elevators), it is at the terminal elevators that the state has done most in the matter of weighing; the weighing department has its headquarters there, and

The elevators are also more frequently examined for leakages, etc. The records are better kept, and the actual weighing, tho done by an employee of the company, is supervised by an employee of the state.

When a car reaches the elevator siding, it is examined for defects or leakages, and a record is kept if such are found, of the car number and the con-

dition. A seal record is also taken. The depth of the grain in the car is measured and recorded, and the load line noted. The grain is then unloaded, elevated to the hopper above the scale, and weighed by the company's weighman under the observation of the government weighman. A draft ticket showing the amount weighed is punched by the scale register. A record of the weight is taken, and upon this the certificate of weight is issued.

### The Lake Terminals

The terminal elevators have up till the present been all built at Fort William and Port Arthur. They are called "terminal," not because they are situated on Lake Superior, or because they have been built at the lake terminal yards of the railway lines, but because the inspection of western grain ends at them. The grade given as it leaves the elevators at these points is the final grade, the grade on which it is sold and delivered, both in Eastern Canada and the foreign markets. Eastern inspectors have nothing to do with the grading of western grain—they are restricted to the eastern product. In the Winnipeg Grain Exchange contracts are made on the basis of delivery at Fort William and Port Arthur, and as in the trading so in the grading. The point of delivery, and the point of final inspection are at the large elevators at these points.

And these points are well fitted to be terminal points. They are points at which the railway lines and the lake steamers can most easily meet. They are, therefore, and will remain the chief transportation artery between East and West. It is sometimes said that Canada has pursued a mistaken policy in building the large terminal elevators at the head of the lakes, and that she should build them rather at the Atlantic ports. This view forgets two most important conditions, that of inspection, and that of alternative markets and routes. It would be very difficult and expensive to have the inspection and delivery at the Atlantic seaports, and to store grain at these ports pending sale would limit the seller to European markets. Inspection of western grain can be done more efficiently and more economically at Fort William and Port Arthur, and grain stored there can be sold either in Eastern Canada, the United States or Europe, and be shipped thru either Canadian or United States channels.

### Capacity of Elevators

Fort William and Port Arthur are well situated for both purposes. Hence the terminal elevators for east-going grain have been built there. And these elevators have grown both in number and capacity with the trade. The following is a list of them, showing capacity of each:

Fort William	
	Bushels
The Grand Trunk Pacific	6,000,000
The Western	1,000,000
The Consolidated	1,750,000
The Fort William	1,750,000
The Ogilvie	1,100,000
The Canadian Pacific "D"	7,350,000
The Grain Growers' Grain Co.	2,500,000
The Eastern	2,235,000
The Empire	1,750,000
Port Arthur	
The Dominion Government	3,250,000
The Port Arthur	9,500,000
The Horn and Co.	750,000
The Thunder Bay	1,500,000
Total capacity	40,435,000

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