

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 III.—Inspection

The only book on the grain trade in Canada is one recently published by C. B. Piper, of Winnipeg. Mr. Piper has had long experience in the grain trade, and last winter delivered a series of lectures on the subject to the students at the Manitoba Agricultural College. He has gone into the inspection system very fully, and his facts have been carefully revised by the best authorities. The following account of the inspection system is from Mr. Piper's book:

Inspection is for the purpose of determining the quality of the grain. This is necessary to fix its value. Most grain producing countries sell on sample, thus fixing quality and value by personal examination and appraisal. In only two or three countries is the quality determined by classification into defined grades by which accepted standards are fixed for both producer and consumer. In Canada this is officially done by a department working under authority from the Dominion government. This gives high value to the certificates which are issued on inspection, so much so that they are accepted on foreign markets where it is customary to buy on sample.

Apart from the desirability of establishing standards of quality for purchase and sale, inspection is really necessary because of our system of handling grain in bulk. To obtain the full benefit of bulk handling it is necessary to bin different parcels together in order to economize elevator space. Such bulk binning is only possible when the grain has been graded according to quality. In turn, uniform grades could not be maintained without bulk binning which gives close averages. Thus the inspection system and bulk handling are both necessary and beneficial to each other.

Theory of Inspection System

The whole system of inspection in Canada is based upon the classification or grading of grain according to physical qualities. A fair average of each particular grade must be maintained throughout the year. This is so well done in practice that there is little or no complaint considering the vast amount handled. Occasionally a shipper may complain about the grade of a particular shipment, but as a rule such complaint is not material. Also, in some year when crop conditions are unusual, it may be necessary to form new classifications which may not at first be satisfactory to the trade because they are not fully understood. An example of this occurred in the fall of 1912, when about four times as much flax was harvested and threshed as in the preceding year, which in turn had produced the largest flax crop on record. Notwithstanding the supposedly ample preparations made by the terminal elevators, this sudden multiplication of quantities temporarily swamped their cleaning facilities, thus stopping the unloading. The congestion became so bad that the railways had to stop flax loading in the country. This was causing serious loss, and to relieve the situation the grain commission ordered flax to be shipped without cleaning when cleaning was impossible.

By law grain is divided into five general classes, namely, statutory grade, commercial grade, no grade, rejected and condemned.

A statutory grade is that which is defined by law and is constant from year to year. It does not vary with the different crops. Thus one year's crop of wheat may consist largely of 1 Northern simply because there is a large proportion which qualifies under the legal definition. Another year there may be little or no 1 Northern, simply because crop conditions have been such that very little of the wheat will measure up to the legal standard for that grade.

Commercial grades are applied to wheat and oats of quality which cannot be defined by law, because the characteristics vary from crop to crop, but which should be standardized by type samples recognized in the trade. This is done by a group of experts known as the Standards Board, appointed by the grain commission under the Canada Grain Act, and which meets once a year in Winnipeg, usually during October, to fix the commercial grades for the new

two classes notations are made "rejected" or "rejected mixed with heated," respectively.

"Condemned" means grain which is in a heating condition or is badly burnt.

Altho the Grain Act makes each of the foregoing classifications a separate grade, in the trade the first two groups of statutory and commercial grades really constitute the primary classifications, and the next two groups of "no grade" and "rejected" are used as modifications of the first two. Thus the term "no grade" and the term "rejected" or its substitutes, either separately or in combination, become qualifying or restrictive terms written with the ordinary statutory or commercial grade which the grain would otherwise receive. Condemned grain is a separate and single grade, but when applied to wheat which would otherwise grade 1, 2 or 3 Northern it becomes "condemned No. 1," and to wheat which would otherwise grade No. 4, 5 or 6 it becomes "condemned No. 2."

Grading Not Accurate Test

All grades are theoretically based on consumption value. In practice, how-

The statutory grades of wheat are 1 Hard, 1 Northern, 2 Northern and 3 Northern. The Standards Board generally sets three commercial grades, No. 4, No. 5 and No. 6, and there may be a grade of feed below No. 6.

No. 1 Hard is the only grade which never has any modifications. Unless such wheat is absolutely sound and good in every particular it does not receive that grade. Also "Feed" is normally of such low value that except under unusual conditions it does not take any of the modifications which would change its value.

To illustrate the modifications of the various grades, wheat of the proper weight and soundness to grade 1 Northern may take any one of the different classifications as follows:

1 Northern.
No grade 1 Northern tough.
No grade 1 Northern damp.
Smutty 1 Northern.
Rejected 1 Northern.
Rejected 1 Northern mixed with heated.
No grade tough smutty 1 Northern.
No grade damp smutty 1 Northern.
No grade tough rejected 1 Northern.
No grade damp rejected 1 Northern.
No grade tough rejected 1 Northern mixed with heated.
No grade damp rejected 1 Northern mixed with heated.
No grade tough smutty rejected 1 Northern.
No grade damp smutty rejected 1 Northern.
No grade tough smutty rejected 1 Northern mixed with heated.
No grade damp smutty rejected 1 Northern mixed with heated.

These modifications apply generally to all grades of spring wheat. However, there is no rejection for seeds in No. 5 and 6, as sufficient dockage to cover all foreign matter is permissible.

The same modifications apply to the grades of winter wheat from L.A.R.W. to No. 4 inclusive, except that there is no classification of "no grade damp" in the L.A.R.W. grade and such grain is classified "no grade 2 A.R.W. damp." Winter wheat below No. 4 is included in spring wheat classifications.

Total Number All Grades

In practice, including the single grade 1 Hard and two divisions of condemned, we have 150 classifications of spring and winter wheat. In the same manner there are 25 classifications of oats, 20 of barley and 13 of flax. Each of these classifications is distinct and has its own value in the trade. The total of 208 makes quite a comprehensive list, and somewhat complicates the warehousing in terminals. This, however, is a great simplification over the classifications used up to the fall of 1912. Under the old system there were between five and six hundred separate classifications, there being about 360 of wheat alone.

When Inspection is Final

The Grain Act states that Winnipeg inspection shall be final. In only three

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Weighing the grain for test weight per bushel and setting the dockage, in the chief inspector's office, Winnipeg.

ever, the grading has drifted away from the theory because the tests are not scientific and apply to the physical qualities, such as variety, purity, weight and appearance. Condition and dockage are also considered. Then, too, the system of average for the different grades destroys to a large extent the value of standards for consumption. Different crops may produce different values in the same grades. For instance, 2 Northern wheat will sometimes be almost as valuable intrinsically as 1 Northern and in other years of little more value than 3 Northern. A system based solely on milling tests would correct this, but would probably be very difficult in application.

"No grade" means grain which has excessive moisture being tough or damp. "Rejected" grain is that which is unsound, smutty, dirty, smutty or sprouty, or which contains large admixtures of other kinds of grain, seeds or wild oats, or which from any other cause is unfit to be classed under any of the recognized grades. In practice grain is rejected under three classifications: (1) Smut, (2) seeds or other grain, and (3) mixed with heated. When rejected because of smut, the word "smutty" is used instead of rejected. For the other