

# IMPRESSIONS OF AMERICA.

# WHEAT MARKETING.

## Return of Mr. W. M. Anderson.

## DR. RICHARDSON'S REVIEW.

No. 1.

Mr. W. Moffat Anderson, of Brighton, returned this week from America, where he had spent 18 months in studying engineering. Mr. Anderson, who holds the degree of Bachelor of Engineering in the University of Adelaide, was awarded the Angas engineering scholarship in 1922, which enabled him to proceed to England and America for further training. He left Adelaide in January, 1922, and visited England. For six months he remained in the United Kingdom, where he was associated with the London firm of contractors, Messrs. S. D. G. Somerville and Company, which, at that time, was building a bridge over the Lancaster Canal.

### A Huge Organization.

Realizing that America offered a larger field for study, Mr. Anderson crossed the Atlantic, and during his sojourn in the United States travelled over much territory. From New York he went to Boston, and accepted a post in the engineering division of the Stone & Webster Engineering Corporation. The company is one of the largest engineering organizations in America. It builds steam-power stations, city and intersuburban railways, industrial plants, warehouses, and buildings; manages public utility and industrial companies; reports on industrial projects; and finances industrial and public utility properties, and conducts an investment banking business. The head office is at Boston. During a recent "boom" period, 800 men were engaged "inside" in executive and draughting work, while "outside" 12,000 were toiling on various undertakings. That firm, Mr. Anderson stated, was to a certain extent typical of American engineering establishments. It worked largely on a "cost plus" basis, that is, the job was done, and the quotation made afterwards, with a percentage allowed for profit. If an order were received for a 10-story building in, say, El Paso, Texas, a complete staff would be sent to that town, and the executive there would manage the whole business, reporting progress to the Boston office. Large and small contracts were undertaken in all parts of the United States for such firms as the Westinghouse Air Brake Company and the Victor Talking Machine Company, and innumerable factories and offices were erected for Mr. Henry Ford.

### A College Coliseum.

From Boston, Mr. Anderson travelled to Cambridge, Mass., where he was employed by the Morton C. Tuttle Company, of Boston, another well-known engineering firm. Later he rejoined Messrs. Stone and Webster, and was present during the construction of a vast stadium for the University of Pittsburg, the Newcastle of America. About 12,000 students attend this institution, and it is proposed to build in the spring a magnificent 52-storied building to replace the present obsolete one. The stadium, which encircled the sports ground, was constructed in the shape of the Roman Coliseum, cost about £400,000, and will seat 70,000 people. In order to finance the building shares were sold, entitling the purchaser—not to a free seat in the stadium—but to preferential treatment if he desired to hire a seat. From Pittsburg the young South Australian returned home.

### Spirit of Co-operation.

Discussing conditions in the United States, Mr. Anderson said he had been impressed by the spirit of co-operation that existed between employers and employees—good work was given for good money, and both sides were satisfied. Speed was the salient consideration in almost every undertaking, and the rapidity with which buildings were erected was amazing. Most of the buildings were of steel and concrete, although terracotta was used a great deal for decorative purposes. "My experience with the Americans was very pleasant," he remarked. "They appeared to like Australians. Except among the more educated classes, there was a great deal of ignorance regarding the Commonwealth. I met many Australians. At Boston I spent some time with Mr. R. Wigg, of Adelaide, and also ran across Mr. R. C. Robin at Philadelphia, and Mr. R. C. Jenner, who was with the Philadelphia Electric Company. I also met Mr. and Mrs. B. H. Gillman and Mr. C. B. Anderson. Prohibition is a difficult thing to talk about," he added, in response to a question. "It is far from perfect, but I think it is removing temptation, to a certain extent. One rarely sees drunkards in the streets, although spirits can always be obtained if one knows how. In Pittsburg beer saloons trade quite openly."

The following article on the marketing of wheat, written by Dr. A. E. V. Richardson, director of the Waite Agricultural Research Institute, appeared in the January issue of the Victorian journal of the Agricultural Department:—

Wheat is grown in Australia for the home market and the foreign market. A small portion of the crop, amounting to from 28,000,000 to 30,000,000 bushels, is consumed locally, whilst the balance is shipped principally to the United Kingdom. Small quantities of wheat and flour are shipped to South Africa and the East.

In Australia each State has hitherto sold its wheat separately on an f.a.q. (fair average quality) basis, which is a standard sample struck by the corn trade section of the Chamber of Commerce each harvest. This standard sample is said to be prepared by mixing representative samples of wheat from a number of railway-stations, in parts proportional to the amount produced in the districts supplying the station. The f.a.q. sample thus obtained is then used as the standard of quality for local sales, and is used as the basis of sales and arbitration on foreign markets.

The grain offered for sale by the farmer at the local railway-station is compared with the standard staple fixed by the Chamber of Commerce. The agent will accept all samples equal to or above the standard at current prices, but makes a dockage on all wheat below the standard, according to the extent to which it falls short of the standard. Thus all wheat equal to or above the standard receives a uniform price.

This system of marketing on a single standard may be convenient for traders in a young country with a limited export trade, but it cannot be a permanent feature of a country with a big export surplus. Sooner or later some method of classifying the grain into grades according to quality must be adopted. With the introduction of a system of bulk handling, some such classification becomes necessary.

### Bulk Handling.

Bulk handling of wheat is in operation both in the United States and in Canada, and its introduction has greatly aided rapid transportation, and the payment for grain on the basis of its grade and quality.

The elevator has immensely facilitated the handling of wheat and other grains, due to the fact that threshed grain can be handled almost like water. In America and Canada wheat is run directly from the threshing machine into tight waggon boxes holding from 50 to 100 bushels, and hauled directly to the elevator, where it is automatically dumped and elevated by power machinery. Country elevators usually have a capacity of from 15,000 to 30,000 bushels, while terminals vary from 1,500,000 to 3,000,000 bushels, and are made of steel or concrete.

The value of wheat varies with its quality, and with the purpose for which it is to be used.

The principal characteristics which aid in fixing the grade are (1) weight per bushel, (2) plumpness, (3) soundness, (4) color, (5) freedom from dust, foreign seeds, and other matter, and from (6) a mixture of the different types of wheat.

These characteristics vary so in degree that they are difficult of measurement and definition. Consequently grade requirements have been couched in obscure terms, and the responsibility for their interpretation has been left largely with the grain inspectors.

### Handling Wheat in America.

In the United States and in Canada all wheat of the same grade is stored in bulk in elevators without preserving the identity of individual lots, and general receipts are issued for the specified amount of grain of a certain grade lodged with the elevator company. These receipts can be delivered in fulfillment of contracts, and when grain is withdrawn from storage a specified

amount, instead of a specified lot of a particular grade, is delivered by the warehouseman. The principal commercial grades of wheat officially recognised at Chicago and New York are as follow:—

- 1. White winter wheat, No. 1, 2, 3, 4.
- 2. Red winter wheat, No. 1, 2, 3, 4.
- 3. Hard winter wheat, No. 1, 2, 3, 4.
- 4. Spring wheat, No. 1, 2, 3, 4.
- 5. Durum wheat, No. 1, 2, 3, 4.
- 6. Pacific Coast red wheat, No. 1, 2, 3, 4.
- Pacific { Pacific Coast white wheat, No. 1, 2, 3, 4.

In addition there is wheat of "rejected" grade or "no grade," which means wheat that was too poor, too wet, or too smutted to be placed in any grade. In general, No. 1 wheat must weigh 60 lb. or more; No. 2, 58 lb.; No. 3, 56 lb.; No. 4, 50 lb. or more.

The grain trade of Canada is governed by the Canada Grain Act. For many years Canadian farmers were dissatisfied with the treatment they received from the Elevator and the Railroad Companies.

They accused the Elevator Companies of unjust weighing, faulty grading, and paying prices that were too low, and exacting charges that were too high. The dissatisfaction led to the passing of the Canada Grain Act, which includes provision for the construction of railway platforms, the operation of elevators, the distribution of railway trucks, and governs the trading between the farmers and commission men.

The farmers, however, did not merely agitate for legislation. They organised a "Grain Growers' Association," which, in addition to carrying on campaigns for legislation, created an agency for selling grain. This company has now the greatest commission business in Winnipeg, the centre of the grain trade of Canada, and has purchased and built a large number of country elevators as well as two terminal elevators. Experience has shown that the wheat-growers of Canada can operate their own country elevators, and that they can build up an organisation capable of handling the grain from the time it leaves the farm until it reaches the miller or exporter.

In Canada all grain received at the elevators is inspected and graded according to quality, and the farmers are paid a price per bushel according to its grade.

Wheat for milling purposes varies in value according to—

- 1. The amount of impurities, such as oats, barley, weed seeds, chaff, &c.
- 2. Its condition—whether smutty, damp or musty.
- 3. Its grade, i.e., its plumpness, weight per bushel, and capacity for producing high-grade flour.

The Canada Grain Act defines and determines the grades. It divides grain into five general classes—1. "No grade," 2. "Condemned," 3. "Rejected," 4. "Commercial grade," and 5. "Statutory grade." "No grade" means grain that through having too high a percentage of moisture is unfit for putting in the elevators.

"Condemned grain" means grain that has been heated or bin burnt, whatever grade it might otherwise be.

"Rejected grade" means musty, smutty, or sprouted grain, or grain that contains a large admixture of impurities.

"Commercial grade" means grain which, because of climatic and other conditions, cannot be included in the grades provided for in the Act.

"Statutory grades" means grain of the highest grades which are defined by Parliament, embodied in the Grain Act, and which do not vary with the crop.

There are four of these grades for Manitoba spring wheat, three for Alberta red and white winter wheat. The statutory definitions can be changed only by Parliament; they do not vary with the crop. The commercial grades, however, are fixed by the Standards Board, and may vary from year to year.

The grain is stored in the terminal elevators in accordance with the grades, and all grain of the same grade is binned together. Buying and selling are done on the basis of grade. Any mistake in the grading of grain, therefore, may involve either buyer or seller in serious losses.

The whole of the grain inspection is carried out under the supervision of a Board of Grain Commissioners, whose offices are located at the terminus of Port William.

The introduction of bulk handling in Australia will inevitably result in some system of grading grain to take the place of the present f.a.q. sample. The f.a.q. system does not encourage farmers to produce high-class wheat.

The bulk handling system will expedite the transportation of the crop, because of the time saved in loading at the country elevators and unloading at the terminal elevators. Bags will practically be dispensed with, though they may be used in conveying wheat from the farm to the local station. The industry, however, must bear the interest on the cost of installing the system, and pay the maintenance charges of operating the elevators. Bulk handling has been in operation for several years past in New South Wales, but only a portion of the crop has been handled through the elevators.

### Wheat Pooling.

From 1915 to 1920 the Australian wheat crop was marketed by an organisation created under Government supervision. The whole of the wheat crop was pooled, and each grower received the f.o.b. price, less freight, handling charges, and dockage. The Pool was controlled by the Australian Wheat Board, comprising a Minister of the Federal Cabinet and the Ministers of Agriculture of each of the four wheat States.

The board had control of all overseas sales, all shipping and chartering of vessels, and fixed the price at which wheat was sold for local consumption. The wheat crop of each of the four contracting States was controlled by a Wheat Commission, the personnel of which varied in the four States, and an Advisory Board comprised of representatives of the shipping agents, millers, and farmers.

The Wheat Commission controlled all local sales, paid agents to handle the crop at the country stations and the seaboard, and made advances through the banks to farmers on delivery of their wheat.

The "Pool" arose because of the shortage of freight. The war, through one cause or another, put out of action or diverted for war purposes nearly one-half of the world's shipping. Freight was difficult to secure at almost any price, and as the greater part of the crop would have to be stored, it was essential in the interests of the wheatgrowers to have an

organisation with sufficient financial resources to finance the wheat crop.

That organisation was the "Pool," which had the resources of the Commonwealth and State Governments at its back. Only the Government could shoulder the responsibility of handling the entire wheat crop and taking the risk of insufficient freight and a falling market.

### Voluntary Pooling.

After 1920 wheat was marketed in two ways—(1) open market, (2) voluntary "Pool." The farmer was free to sell his wheat to private merchants at London parity, or to market it through the "Pool." In Victoria statutory authority was given to the Victorian Wheat Corporation to take control of farmers' wheat, and sell it to best advantage locally and overseas. The corporation made advances against all wheat delivered at the country stations. As the wheat was realised further advances were made. Similar voluntary pooling organisations were formed in New South Wales, Western Australia, and South Australia.

The present opinion of wheatgrowers is favorable to the system of marketing by co-operative organisations. Efforts are being made to create a single selling agency in London to act for all the co-operative pools. One single selling agency should enable the wheatgrower to obtain the full world's price for his product, but even a single selling agency cannot secure more than the buyer is able and willing to give.

### Bulk Handling of Wheat in Australia.

New South Wales installed a bulk handling system in 1920, after many years of insistent agitation for a bulk-handling scheme on the part of the growers. Though the scheme has been in operation since 1920-21, the actual amount of wheat handled by the silos forms a relatively small proportion of the total crop. The operations of the silos were somewhat restricted during the first three seasons, as the country plants were leased to the agents of the Voluntary Wheat Pool, and only Pool wheat was handled. Last year the system was handled as a general public utility open to all owners or dealers in wheat, and storage warrants were issued to owners whose grain was stored in the silos, entitling them to an equal quantity and quality of wheat shown on the warrant.