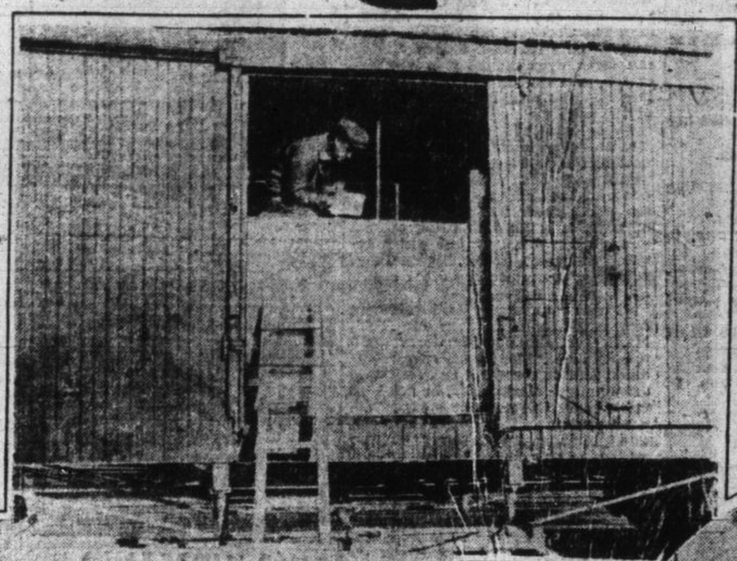
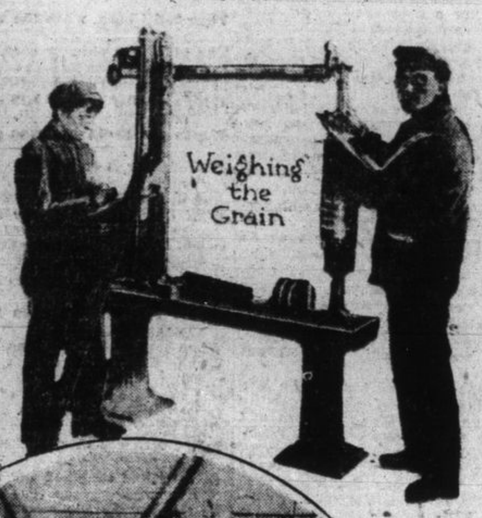
HANDLING CANADA'S GRAIN

Collecting Samples

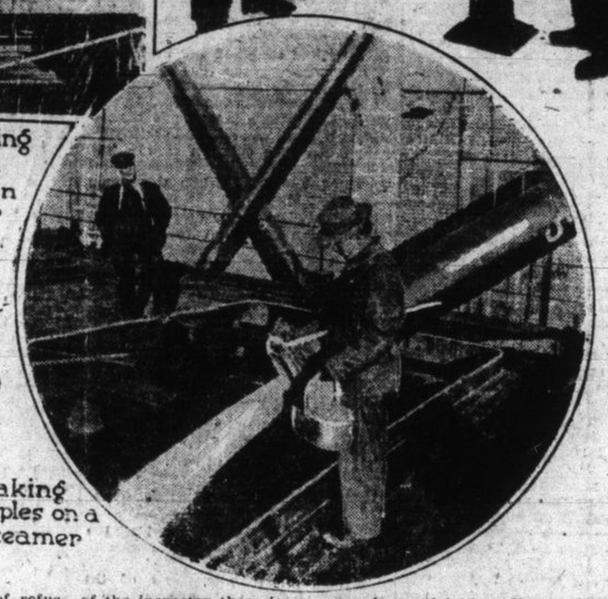




Weighing the Grain

Grain Shipment in Winnipeg Yards

Measuring Depth of Grain in Car



Taking Samples on a Steamer

Even more than California looked to her gold camps, more than Washington turns to Alaska, all Canada anxiously watches, day by day, the progress of her annual prosperity as registered by the barometer of her prairie crops. The grain crop is like a huge river of gold, which rises through the spring and summer and then bursts its bounds, running in torrents to the sea; and flowing with this stress of golden grain, comes an era of prosperity which finds expression in development of all kinds. Canada has for years, pursued an active legislative and constructive policy, in keeping abreast with the ever widening development of its agricultural resources in the west. Each year has seen an immense additional acreage under the plow and each fall has shown vast additions to the bulk of the crop. This has been particularly true of the grain in western Canada. Rails have been laid in all directions, so that one of the biggest items in the Canadian Pacific's annual budget has been the extension and construction of branch lines tapping newly developed country.

Elevators form a chain across the plains until soon they will stretch from the Atlantic to the Pacific oceans. They have been built by the Canadian Pacific, by the Dominion government, by private corporations, by individuals and by co-operative organizations. Most of the big terminal elevators are located at Fort William and Port Arthur, because these are most convenient points for distribution of grain. Canada's method of grading grain is considered as good as, if not better than, any other method in the world. Governing the handling, marketing, buying, selling, grading, weighing and transportation of grain, the Grain Commission of Canada is supreme in the Dominion. The government elevators are operated under the direction of this body. In Canada all grain is sold according to grades established by law. The inspectors are government appointees, and decide the grade of all grains passing out of the country. Almost all of the grain of Manitoba, Saskatchewan and Alberta is handled through interior elevators. Some of these are owned by the farmers; but most of them are owned by grain dealers and milling companies.

A farmer may deliver his wheat to the elevator and receive cash for it, or, if he prefers to hold his wheat for a time, with a prospect of obtaining a better price, he may store it in the elevator and secure a storage ticket setting forth that he is entitled to a stated number of bushels of wheat of a certain grade. Or, if he prefers to load his grain into a car without dealing with the elevator, he may do so. Loading platforms from which a farmer may load directly into the car, have been erected at nearly all shipping points in order to facilitate the handling of grain. There are 2,558 elevators licensed in the provinces of Manitoba, Saskatchewan and Alberta. Their total storage capacity is estimated at 81,720,000 bushels.

For several years the farmers were generally dissatisfied with the treatment they received from the elevator companies. They accused the elevators of all sorts of malpractice; of unjust grading and weighing; of exacting charges that were too high; of not cleaning the grain; of refusing to give special bins; and of pooling profits; killing competition and forming monopolies. This dissatisfaction led to legislation. This legislation has been codified in the Canada Grain Act, and it includes provisions about the construction of platforms, the operation of elevators, the distribution of cars, and the trading between the farmers and the track-buyers and commission merchants.

The act provides for both the construction of new and the improvement of existing platforms. In regard to the distribution of cars, the act is based on the principle that every shipper of grain is to count for one and nobody for more than one. The elevator company and the individual farmer are treated equally. Each is entitled to a car in turn and nobody is entitled to more than a car. The machinery for the application of this principle is prescribed, the car order book, and the method of using it. Provision is made for special cases, such as elevators that are in danger of collapsing, seed grain, dump and heating grain.

It is obvious that in the weighing and grading of grain, the greatest of care must be exercised that the interest of the producer, buyer and consumer be protected, therefore, the government has provided capable men to handle both the grading and the weighing. As has been stated above, there are so many different grades of grain that to put it into its right division is no easy task, and on the decision of the government inspector hangs the price that is to be paid for it. The inspector must also guard against dishonesty on the part of the farmer, the elevator man and the buyer. From the decision of the inspector there is one appeal. The farmer, after having his grain graded for the first time, can have it graded again, and from the second decision there is no appeal unless he cares to present his case to the survey board. This is final. The grading of grain cannot be easily done in the railway yards. Uniformity is essential to good grading, and if different inspection offices were placed in different railway yards, uniformity could not be so well maintained. The actual grading, therefore, and the issuing of the certificates, are done in offices rented by the government in the building of the Grain exchange Samples are taken from the car. The other details necessary for the issuing of the certificates are collected in the yards, and both the samples and the details are taken to the inspection office in the grain exchange.

As the grade is given by the inspector upon the samples presented to him, and as he does not see the car from which the samples has been taken, it is essential that a fair average sample be secured. The trains reach Winnipeg every day in the week, and every hour of the twenty-four. Sampling is done, therefore, by night as well as day, and on Sundays as well as other days. The samplers work together in gangs in shifts of eight hours. Usually the gang consists of fourteen men, four of whom are track foremen, eight are samplers, one is a car opener and one a car scaler. A train consists of about 45 cars and the gang should finish with it in less than one hour. The car opener leads off opening the car doors and placing an empty sample bag in each car.

These samples are sent to the inspector's office where the real work of grading is done. Good light is essential to grading, and inspection begins at nine A.M. and ends at 3P.M. Inspection turns mainly on three points; the quality of the grain, the conditions, and the admixtures. The quality depends on soundness, color, weight and percentage of hard wheat, the condition depends upon moisture content, which, in doubtful cases is tested mechanically, heat, etc., the admixtures are tested by a process of sieving and weighing called "setting the deckage." In this process either the clean grain or the resulting screenings can be weighed. Both are accurate. At Winnipeg the screenings are weighed, while at Fort William the clean grain is weighed, therefore, in re-grading, one is a check on the other. A grade ticket is placed on each car, after it has been graded and when received at the elevator determines into which bin the grain shall be placel. On arrival at the elevator, records are made of leakages in the cars and damages of any kind, so that the interests of the shipper are fully protected.

The grain is graded as it is taken from the elevators and run into the steamers. In order to eliminate delays, this grading is necessary. An inspector, with assistants, is placed in charge of the grading, and is held responsible for the grading out. The grain is sampled at three places. If any grain is seen at any of these places which is not up to the required grade, the stream is stopped instantly, and all three samples are sent to the inspection office for examination. Equal care is taken by the government to make the weighing of grain as accurately and cause for as few disputes, as to the grading. The elevators are all tested by government inspectors, who periodically inspect them.

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MAKES AN APPEAL

THERE ARE MILLIONS OF POLES IN ACUTE MISERY.

Prince Radziwill Describes Terrible Plight Of Starving Refugees In Devastated Region.

Petrograd, Feb. 3.—In spite of the fact that several commissioners are at work investigating the devastation which Poland has suffered during the German invasions, the misery of its millions of inhabitants is still acute. The destruction is so universal that it hardly seems possible that it was the work of human agents.

Normally Poland is a pleasantly rolling country, not unlike the American middle west; fertile agriculturally, developed, productive and prosperous with its landscapes checquered with well groomed farms and patches of wood. It is now bleak and scarred, almost every house is in ruins, and the mutilated roads are full of half starved, half frozen people, who have no homes and no possibility of escaping from the charred remnants of what once were their habitations.

"I am afraid," said Prince Radziwill to the Associated Press, "the world has been so busy giving its help to unfortunate Belgium that our [illegible] so far off from the western world, cannot expect a full measure of sympathy.

"It is not promises of help or contributions to be made after the war that are now needed, but immediate assistance for the starving peasants, who are in a frightful condition, and whose condition is steadily growing worse with the march of winter and the scarcity of food and clothing."

Was Personally Attended by Dr. A. W. Chase

Before He Became Famous as the Author of Dr. Chase's Receipt Book.

Here is a letter from an aged gentleman who consulted Dr. Chase, long before his Receipt Book attained a world - wide circulation or his family medicines became known to the ends of the earth.

MR. O. D. BARNES.

Like most people of advanced years his kidneys were the first organs to break down and when doctors failed to help him he remembered the physician who cured him of pleurisy in his younger days.

Mr. O. D. Barnes, R.F.D. 1, Byron, Mich., writes:—"About fifty years ago, when living in Ann Arbor, Dr. A. W. Chase, the famous Receipt Book author, was called on to treat me for pleurisy. Ever since that I have used and recommended Dr. Chase's Medicines, and have two of his Receipt Books in the house.

"Some time ago a cold settled in the kidneys, causing backache, frequent urination, dizziness, and affected the eyesight. My appetite failed and I could not sleep nights. Two doctors failed to do me any lasting good, so I started using Dr. A. W. Chase's Kidney-Liver Pills and Nerve Food. The result have been highly satisfactory to me. Appetite improved, I gained in weight, sleep and rest well, and feel strong and well. My kidneys resumed their natural functions, and I believe that my cure was due to Dr. A. W. Chase's Kidney-Liver Pills and Nerve Food. I am 78 years old, superintend work on my farm, and can turn in and do some work myself."

Dr. Chase's Kidney-Liver Pills. One pill a dose, 25 cents a box. All dealers or Edmanson, Bates & Co., Limited Toronto.

A Necessity.

Maud—Do you enjoy the new dances?

George—I would, I think, if some one would get up a non-skid show for men.

As a result of Russian submarine activity the German warships are no longer moving about in the Baltic Sea with their former freedom.

Austria will shoot as rebels and traitors all Roumanian inhabitants of Transylvania or Bukowina who are captured while serving as volunteers with the Russians.

He is a poor sign painter who is unable to make a name for himself.

EXPOSITION—COMPLETE

Ready in Every Detail For Opening on Scheduled Date.

G. T. Bell, passenger traffic manager of the Grand Trunk and Grand Trunk Pacific railways, has received a telegram from A. M. Mortensen, chief of the traffic department of the Panama Pacific International Exposition, informing him that the big fair will open at San Francisco on time, and complete in every detail, on Feb. 20th. This will set a new mark for international expositions, which have usually failed to be ready on the date announced for the opening.

It was in April, 1900, that a mass meeting of the citizens of San Francisco the first step was taken in the organization of the exposition, and a sum of $7,500,000 raised by public subscription, which, with contributions from other parts of California, later made up a total of $20,000,000. Actual construction work began Oct., 1911, and President Taft issued the official proclamation of the celebration, inviting all nations to join therein on Feb. 2nd, 1912.

Didn't Pick Them.

A prisoner in one of the Irish police courts the other day was asked his occupation. He mentioned several callings he followed from time to time.

"And among all other things," inquired the prosecutor, "do you pick pockets?"

"No," he retorted, "I don't pick them; I just take them as they come."

Lt.-Col. A. D. Shillington, Ottawa, who has charge of a hospital in France within twenty-five miles of the firing line, writes that more men are brought there with frost bites than anything else, and many amputations are necessary.

The council of Greater Berlin has appointed 12,000 special constables to guard the bakers' shops of the city against any irregularities on the part of the public.

PITH OF THE NEWS.

Condensed Items By Telegraph And From Exchanges.

M. S. Schell, ex-M.P., was nominated by the South Oxford Reform Association as candidate for the House of Commons.

If necessary, in the conquered parts of Belgium and France, Germany will seize everything made of copper.

A number of cargoes of food stuffs are to be sent in American ships to the German population from German friends in America.

At Sault Ste. Marie, Ont., Andrew McNamara, father of George, Howard and Harold McNamara, of the Shamrock hockey team, is dead.

In London, Ont., 2,500 military shoes have been sent for repairs. The shoes were found to be unserviceable through poor workmanship.

To make room for dormitories for the 39th Battalion volunteers, 26,000 cases of canned goods will be shipped westward from Belleville canning factory.

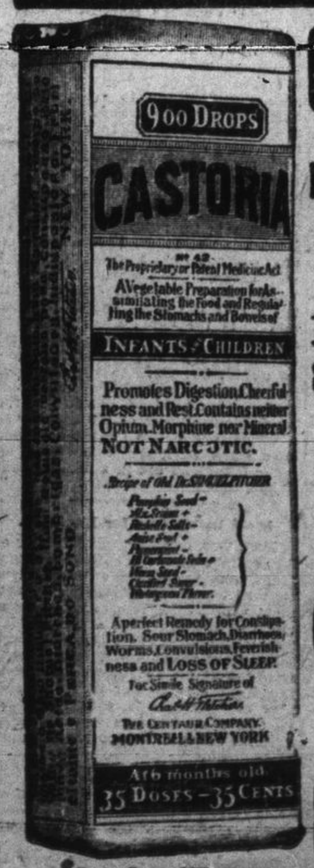
The Ontario government will recommend James Irwin Hartt, M.P.P. for East Simcoe, to succeed the Hon. Dr. Preston as conservative whip.

H. F. Boehmer has been recommended to the dominion government to be postmaster of Berlin, to succeed C. F. Niehaus, who is resigning after eighteen years.

On the Island of Sardinia the price of wheat has reached about $10 per quintal (220.46 pounds) which exceeds the price during the crisis in 1898.

By a contract closed between Thomas A. Edison and the Cambria Steel company, the former is given the right to build a plant to take the benzol out of coke gas.

At Grand Rapids, Mich., seven workmen employed in clearing away the ruins of the Brown and Sehler factory building, destroyed by fire two weeks ago, were killed on Monday, when one of the walls collapsed.



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