

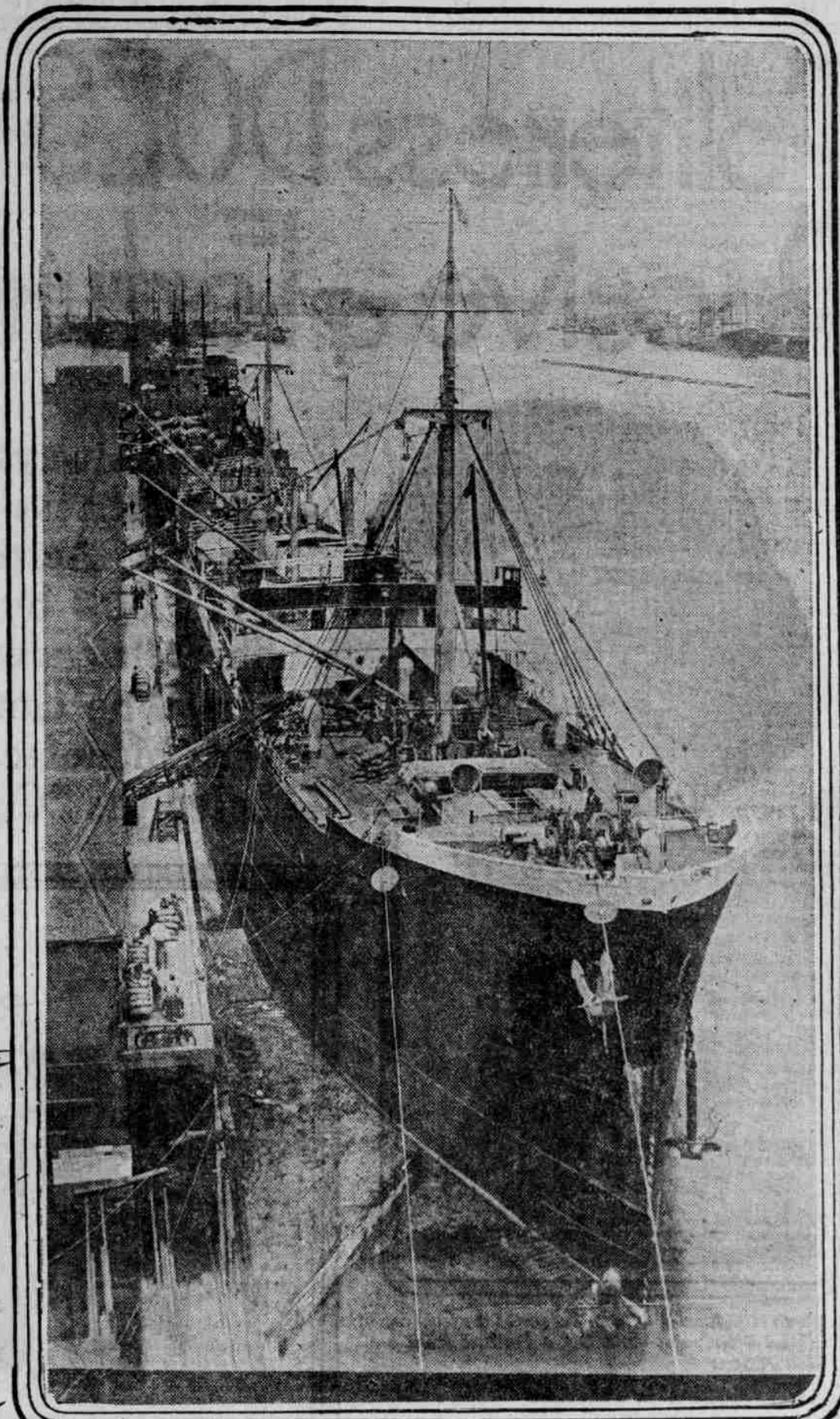
World's Bread Supply Guarded at Source



Columbia River Grain Grades High in Foreign Lands



Grain Inspection Laboratory of Public Service Commission. Above - Taking Sample.



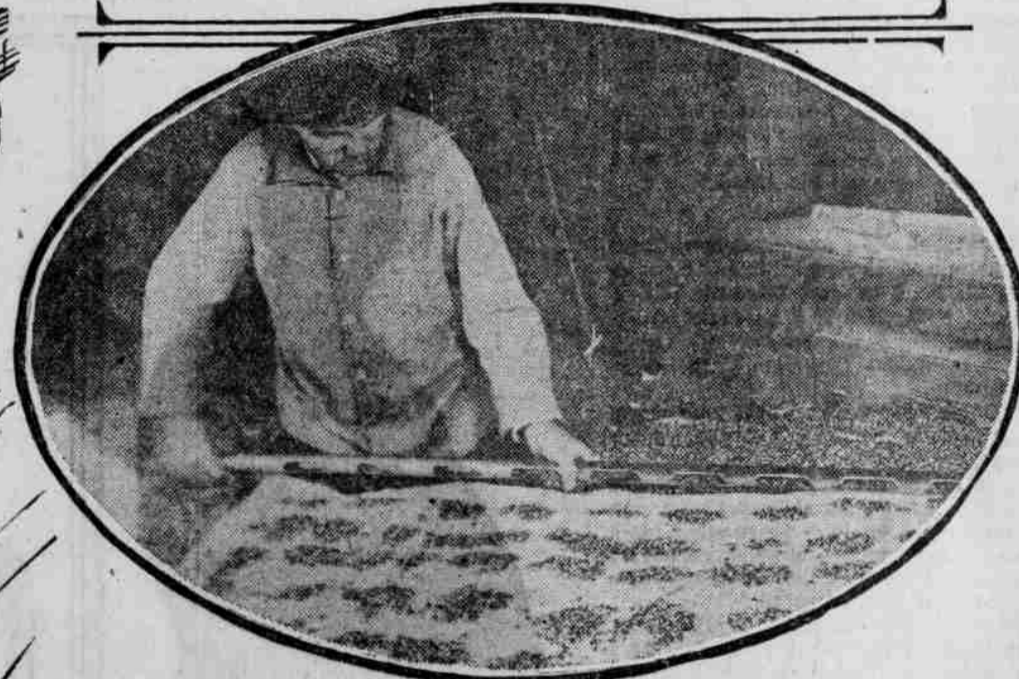
Steamers Swiftscout and Formosa Loading 800,000 Bushel Cargo of Grain.



Unloading Bulk Grain.



Testing Grain for Moisture.



Grain Sampler Testing Contents of Car.

BY DEWITT HARRY.

PHENOMENAL gains in grain shipments from this port have served to open people's eyes as never before to the importance of this industry. However, it is extremely doubtful if one person in a hundred has any comprehensive idea of how grain exports are handled. It is an accepted fact, about which few persons bother, that some standard must be set for the grading of grain, for it stands to reason that there must be different varieties of wheat and other grains. What are these standards? Who is responsible for them? How are they established and how maintained?

It might here be said that the real backbone of the grain export industry is proper grading. Wheat is bought in Portland by agents on the other side of the globe. It stands to reason that these men thousands of miles away have no means of inspecting their purchase. They must know what they are buying, and here is where grain inspection serves the local dealer. With accepted standards the foreign purchaser knows just what he is purchasing. He has the privilege of inspecting sample with the assurance that the parcels he buys will be up to the standard of the samples. In the case of Portland it might be said that the usual cargo dispatched from this port is often found on arrival at destination to even be superior to regulation grade samples.

Record Is of Best Here.

This is the finest kind of a record for any community to have, that their product is better than the average and that their agents supply more than is bargained for. It is this most excellent reputation that has resulted in Portland's achieving its prominence in the grain exporting field, the class of merchandise purchased here is dependable. Any grain dealer, no matter in what part of the world he has his trade, knows that a Portland cargo will be fully up to grade

or a little better. He has confidence in the port.

Eternal vigilance is the role adopted by the state public service commission, which has charge of most grain inspection on the Columbia river. The state inspection forces work in conjunction with the federal inspectors and grade all the grain that arrives in the port, the grading being for local purchase and then later for export. It is their duty to watch shipments so closely that unscrupulous dealers and growers cannot mix their lots and send in cars that, while appearing to have a high grade of grain, are really filled with poorer stuff. The fruit dealer long ago tried the same game with his boxes of berries, placing the big ones on top and the smaller ones or spoiled fruit below. The same thing is possible with grain shipments if the cars are not closely inspected.

Primary Market Is Aim.

With Portland now fighting to be declared a primary grain market, and standing in sixth place or better as an exporting center for the entire United States, the importance of holding the grades at par or above is evident. The present-day grades are a far cry from those of the old days when the first cargo from this port was called "Walla Walla hard" on the English board reports. Nowadays the grades are all white wheat with even the club classification dispensed with. There are three sub-classes of white wheat, hard, soft and western and the name "Walla," given a black eye by smutty and dirty cargoes of years gone by, has been dropped completely. If Portland can win its fight and become a primary market it will mean the listing of the weekly visible supply of wheat and flour on the Chicago exchange and these figures will be published and broadcasted by the big market. It will put Portland on the map with a rating as a real market center, and with the continued increase in grain shipments and the indications for

even a larger and better market in the future, the chances for this rating are excellent.

The law making the state department was passed at the 1917 legislature. The purpose was to prevent fraud in the handling of grain and hay, establishing and preserving standards for grain and hay, regulating warehousemen, millers, shippers and buyers of grain and hay, and prescribing penalties for the violation of the law. All standards in use and effect by the United States department of agriculture, or hereafter to become effective, were adopted as standards to establish grades.

Law Expanded by State.

During the four years of the life of the department numerous changes in the law have been made to meet the growing requirements of the trade. "hold tracks" have been provided by the railroad companies for inspection at the request of the public service commission; scales installed for weighing, and anyone desiring can secure a certified weight certificate for any commodity desired.

A flour laboratory has been installed,

where the analysis of flour can be obtained and certificates issued that are accepted in all the markets of the world.

The department is also checking and weighing cargoes of flour, certifying to quality and condition; weighing incoming cargoes of hemp, rubber, copra, sulphur, oil, seeds, flax and in fact any commodity, upon request. The commission has an expert scale mechanic on the force of inspectors and all scales over which certified weights are made by the department are inspected and sealed as accurate, thereby supplying a much needed want to the port facilities.

Inspection points made by the public service committee are Portland and Astoria. All cars of grain upon arrival in Portland or Astoria are reported to the department by the railroad making the line haul, and are placed upon the "hold track" for inspection. After inspection is made the car is either diverted to some out of town point or placed at warehouse or mill for unloading. Eighty-five per cent of the cars of wheat received is in sacks and 15 per cent in bulk. The amount of bulk wheat shipped depends

entirely upon the price of sacks, as the farmers and country warehouses are not provided with suitable facilities for handling bulk grain, and when sacks are cheap they resort to the old sack method, when sacks are high and an additional expense to handle in bulk is justified in spite of facilities then they ship in bulk.

On the sacked cars two men are supplied by the department to sample and weigh the load. The sampler remains with the car, takes the seal record, car condition, and secures any information pertinent to the shipment which might be of assistance in settling claims for shortage if any there be. He also takes a sample from each sack as it is unloaded, separating different kinds of wheat if the car be mixed, or if the same contains any inferior wheat, damaged wheat, smutty wheat or inseparable foreign material. The weigher weighs this wheat in lots from information of the sampler, keeps and totals the weigh sheet and enters any remarks given him by the sampler. The sample is then taken to the office and grading room for analysis and certificate, and held for 60 days to give any aggrieved persons an opportunity to appeal the grade.

U. S. Supervision Tests.

The United States supervision bureau has supervision over the work of sampling and grading, issuing licenses to the inspectors who make the grades, and hearing appeals both in intra-state and inter-state shipments.

Bulk wheat is sampled in the car before the wheat is moved, with a 60-inch bulk grain tryer, with a hollow center divided into ten compartments, which is probed into the car five times at each end and the center of the car, laid out on a cloth and examined by the sampler, to

ascertain if there has been any attempt made to plug the car with some inferior or damaged wheat as is sometimes attempted. The wheat is then placed in the sample sack and air tight container and taken to the office with identification preserved as on sacked grain. The sample is graded in the same manner as sacked grain and certificate issued. The fee for weighing, sampling, and grading a sacked car of grain is 6c per ton, and a bulk car 4c per ton. Portland received almost as many cars of grain during the first six months of the 1921-1922 crop year as it did during the whole 1920-1921 crop year.

Increase Here Notable.

The increase in the receipts at Portland is attributed to the Columbia basin rate case decision. The increase to Portland from the Columbia basin affected by the decision being 146 per cent over 1920-1921 receipts, and those receipts were the greatest since Portland became an exporting center. The receipts at Puget Sound Points have decreased correspondingly and during the past six months Portland has received nearly twice as much wheat as all Washington state points put together.

The department supervises the loading, weighing and grading of all export shipments of wheat from the ports of Astoria and Portland, issuing certificates of weight and grade on the same under the federal grades. There was exported during the crop year 1921, 24,731,891 bushels of wheat. Out of this total exported 91 per cent went to European points, 5 per cent to the orient and 4 per cent to South America. The total amount of wheat exported for the first six months of the 1922 crop year was 23,197,337