

H. F. No. 603.

A CONCURRENT RESOLUTION RELATING TO  
GRAIN INSPECTION.

*Resolved*, by the House, the Senate concurring: Whereas, the Senate and House of Representatives, of the Tenth Legislative Assembly of the State of North Dakota, adopted a certain concurrent resolution, copies of which were duly transmitted to the Speaker of this House and the President of the Senate of this Legislature, and, whereas, such concurrent resolution contains certain charges, and makes certain requests affecting the grain interests of this state and the State Grain Inspection and Weighing departments, and, whereas, such charges and requests call for a reply from this Legislature, so far as the same affect this state, its grain interests and its grain inspection and weighing departments:

*Therefore, be it Resolved*, That the following is the reply of this Legislature to the several resolutions contained in the said concurrent resolution, transmitted by the North Dakota Legislature:

*Reply to Resolution "First."*—There is not now nor has there been at any time any opposition on the part of any legal authority of this state and particularly on the part of the Minnesota Inspection Department, to the establishment of what said resolution first terms an "equitable grain inspection law at Superior, nor has anything been done by any legal authority on the part of the Minnesota Inspection Department to prevent a competitive market at Superior.

*Reply to Resolution "Second."*—The Minnesota Inspection and Weighing Laws were enacted in 1885 in response to a demand from the grain producers of this state; these laws have been amended and improved from time to time until today they are considered by the grain trade, to be the best and most efficient laws of their kind in vogue. Minnesota Inspection and Weighing Certificates are accepted the world over as prima facie evidence of what they stand for.

The Minnesota Inspection and Weighing Laws have proved themselves acceptable to the grain producers of this and other states, and as there is no discrimination practiced on the part of the officials in charge of our inspection system, it naturally should follow that our laws in this respect, should prove equally acceptable to shippers from all points. No complaint

of this nature has come from South Dakota or any other state.

As to "grain hospitals," so-called, otherwise known as mixing houses; they are by no means inimical to the grain trade. The function of a grain hospital or mixing house, is to improve the condition of low-grade grain, which in its original condition, might be unmerchantable. Instead of being an injury to the grain trade, and to the producer, who finds himself with a damaged crop on his hands, the grain hospital or mixing house, is a benefit. It can hardly be considered a crime to improve the commercial value of any deteriorated commodity. Minnesota mixing houses have improved the condition of hundreds of thousands of bushels of Minnesota and North Dakota wheat, and it follows quite naturally that the owner or operator of such a mixing house is entitled to a just reward for his labor, and this he received in the higher price which he obtains for the better grade of grain that he has established. The business is perfectly legitimate from both a legal and commercial standpoint. No mixing of grain is permitted in any of the public terminal elevators of this state.

We are, therefore, constrained to respectfully decline the request to amend our inspection laws in this request.

*Reply to Resolution "Third."*—No evidence of any kind is at hand that would prove the implied charge in this resolution, that a few persons control the storage capacity of terminal elevators in this state to the detriment of the many. There is nothing in our Minnesota laws that prevents the erection and operation of Terminal Elevators by any person or persons, so disposed. We here again must decline to accede to a request for a change in our laws.

*Reply to Resolution "Fourth."*—Evidence submitted to this Legislature shows that the suction draft so-called does not in a material manner affect the weight of grain and the dockage taken. With a view of correctly ascertaining the effect of the suction draft, a sub-committee of the committees on Grain and Warehouse of this Legislature made a careful inspection of this apparatus, while in operation, and found it working satisfactorily. No grain whatever is drawn from the conveyors by this draft; it absorbs and collects only the very fine light dust, which is a menace to the health of the employes and a dangerous explosive in case of fire. As to the weight of such dust, the committee ascertained that from

car No. 53348 (Milwaukee), weighing 63,090 lbs. there was collected a total waste of 4 lbs. and 7 oz. The sub-committee viewed the removal of the grain from this car from the time the doors were opened until the contents of the same were deposited in the hopper scales at the top floor of the elevator. As to ascertaining the value of dockage, as a commercial commodity and accounting for the same to the owner of the grain from whom it is taken, the preponderance of evidence suggests that such a system is impracticable. The solution of this problem, however, ought not to be of a serious nature. If producers in the first instance and primary elevators in the second instance, would clean the grain before loaded in cars for shipment, there would be very little dockage to account for at terminal points. It is difficult to conceive of a remedy for a condition at terminal points which has its inception at the primary market or with the producer himself. It seems that many producers persist in marketing unclean grain, without any regard to the commercial value of the dockage, and as long as they are ready and willing to donate such dockage, as their grain contains, rather than go to the expense of cleaning the same, there can be no recourse.

Our Minnesota dockage of grain is applied under the most liberal rules to the shipper, who is given the benefit of any doubt there may be as to the amount of dockage to be taken; there is nothing to indicate that our system of dockage is generally unsatisfactory to the grain producers of our own state, and as the dockage is applied to all grain coming to our terminal markets without discrimination, it should prove equally acceptable and satisfactory to the shippers and producers of North Dakota. The average dockage per bushel for wheat for ten years in this state was 19.8 ounces. Surely this amount of dockage cannot be called excessive.

We are, therefore, again obliged to decline the amendments of our laws or the enactment of new laws for the further regulation of grain dockage in this state.

*Reply to Resolution "Fifth."*—There was established in this state under the provisions of our Grain and Warehouse laws a system of car inspection for "bad order" cars many years ago. This system has been improved upon until it stands in the front rank of all such inspection systems that are in operation in the large grain markets of this country.

Section 2082 of the Revised Statutes for Minnesota for 1905 reads as follows:

“Section 2082—Inspectors to examine cars. The chief inspector of grain and any deputy or officials serving under him, before opening any cars containing grain, upon their arrival at any of the several places designated by law as terminal points in this state, for the purpose of inspecting the same, shall first ascertain the condition of such cars and determine whether any leakages have occurred while said cars were in transit; also whether or not the doors are properly secured and sealed, making a record of such facts in all cases, and recording the same in a proper book to be kept for the purpose. After such examination shall have been duly made and recorded and the inspection of such grain has been made, the said officials of the State Grain Inspection Department above mentioned, shall securely close and reseal such doors as have been opened by them using a special seal of the said grain inspection department, for the purpose. A record of all original seals broken by said officials and the time when broken, also a record of all state seals, substituted therefor, and the time when such state seals were substituted, together with a full description of said seals, with their numbers, shall be made by the said officials.”

All cars arriving at our Minnesota terminals loaded with grain, are twice inspected as to the condition they arrive in, and a report is made of all defective or bad order cars, and the consignee to whom such car or cars were shipped is notified of such facts. The records of the inspection and weighing departments show all bad order cars that have been received. Our Minnesota system of patrolling the railroad yards and prohibiting the stealing of grain from cars is the most complete of any system of its kind and costs the State Grain Inspection Department of this state approximately five thousand dollars per annum. We cannot conceive of any reason therefore, why we should enact any new laws or amend any existing law in relation to this subject.

In conclusion, we respectfully make these representations and bring them to the official notice of your honorable Legislature: On the 11th, 12th and 13th days of December, 1906, there was held in the City of Chicago, under the auspices of the Grain Dealers' National Association, a congress for the purpose of considering the advisability of adopting uniform national grades. After having agreed to adopt such uniform national grades, subject to the ratification by the several grain exchanges, there represented, there was adopted

a standard of uniform grades for grain, which are practically the official grades that are now in force in this state. This congress reflected the business judgment and experience of practical grain men, many of whom had devoted a lifetime to the business of purchasing, handling or inspecting grain at the large grain centers of the United States.

Furthermore, a delegate convention recently held in London, England, after due deliberation, approved of Manitoba and Minnesota Inspection of Grain to the exclusion of any other systems.

We submit that the action of these bodies in determining and approving standard uniform grades are highly complimentary to our Minnesota system of official inspection of grain and suggest that in the event of a National Grain Inspection system, Minnesota grades will be adopted as the standard grades of the Nation.

As illustrating our Minnesota System of Inspecting and Weighing Grain, at terminal points, we transmit herewith, Exhibit "A" showing in detail "HOW GRAIN IS HANDLED UNDER STATE SUPERVISION."

*And be it further Resolved*, that the Secretary of State be requested to send a copy of these resolutions to the Honorable President of the Senate and the Speaker of the House of the State of North Dakota, one copy to each of our Senators and Representatives in the Congress of the United States, one copy each to the Secretary of State of the States of North Dakota and Wisconsin, one copy each to the President of the Senate and the Speaker of the Assembly of the Legislature of the State of Wisconsin, and one copy each to the Presidents of the Boards of Trade of Superior, Wisconsin, and Minneapolis and Duluth, Minnesota.

Approved March 6, 1907.

## EXHIBIT "A" TO H. F. No. 603.

## HOW GRAIN IS HANDLED UNDER STATE SUPERVISION.

As long as grain will be in demand by the world at large, and as long as humanity depends upon grain for its bread, a deep interest must centre in all that pertains to the cereals in general that contribute the supply that fills this enormous demand. Agriculture must be recognized as the prime sustaining principle throughout the world, and especially does Minnesota and her sister states enter into the scheme of furnishing to the world's garnerers the tremendous supply required.

One of the most extensive branches of the state service in the State of Minnesota is the State Grain Department that determines the grades and weighs the grain that is shipped to the terminal markets. Notwithstanding the fact that the state has been doing this work for more than twenty-one years, there is yet much that the general public, many of whom are directly and vitally interested, do not understand or comprehend about this very important service.

We have received many letters asking for information as to the methods of the department, and many enquiries have been of the most ridiculous nature; for instance, it has been asked if we weighed grain in car loads by running a train of cars all coupled together over a track scale in the railroad yards. Also the question has been asked if the empty car is actually weighed to determine the tare weight, or if it is the stencil weight on side of car that is taken.

This article has been written with the end in view of telling in detail, step by step, how the work is performed from the time a car load of grain reaches the terminal inspection track until it has been weighed under supervision of the state.

## THE INSPECTION.

When a carload of grain reaches the terminal market it is placed by the railroad company upon special tracks called "inspection tracks," which are provided in each railroad yard.

A state sampler is on hand in the morning as soon as it is light enough to see, and he first takes a record of the car number and initials, and also records the number of the seal that he breaks in order to enter the car. He then takes a hollow brass tube, called a "probe," and by plunging this probe

down through the grain to the bottom of the car in several places, he secures a fair sample of the grain throughout the whole load. The sampler then re-seals the car and keeps a record of the state seal applied.

A sample of the grain is also taken by a Chamber of Commerce sampler, which sample is given to the consignee of the car. A complete seal record is also kept by the Chamber of Commerce sampler.

The sample that has been thus obtained by the state sampler is placed in a sample sack together with a ticket on which has been placed the car number and initial. The sample is then taken to the state inspection office, where under a proper light it is carefully inspected by expert inspectors who have made a special study of the particular kind of grain which they inspect. The grade and dockage, if there is any dockage, is then determined by means of apparatus adapted to the work consisting of finely adjusted scales and sieves of different kinds.

If the shipper or consignee is not satisfied with either grade or dockage on the car in question, it is his privilege to call for a re-inspection. The case is then carefully reviewed by the Chief Deputy Inspector or the Asst. Chief Deputies. In case the parties interested are still dissatisfied, an appeal can be called for, which means that the merits of the case would then be considered by the State Board of Appeals, a board of three members. The grade and dockage as determined by them is final.

The rules that govern the grading and dockage of grain are established at the beginning of each grain year by the members of the Boards of Appeals, consisting of six members, three at Minneapolis and three at Duluth.

Another particular duty of the Inspection Department during their work in the railroad yards is to make an examination of each car of grain for any leaky conditions that might exist, making a record of same in their record books.

When the grade and dockage has been finally determined, a certificate of inspection is issued by the State Inspection Department.

After the inspection has been completed and the car load of grain is sold it is set to mill or elevator for unloading.

## THE WEIGHING.

Again the car load of grain comes under the direct supervision of the State Department, for the State Weigher at once makes a careful examination of the car to detect any bad order condition, and a most complete record is made of any such condition found.

This inspection of the car for leaky conditions having been thoroughly done, he then takes a complete seal record of the car before the seals are broken by the unloading concern. In case the mill or elevator company to which the car has been set for unloading should break the seals for private inspection before the car has been placed on the unloading track, they also keep a record of the seals broken and applied.

At the larger elevators in the system where the weighing is done on hopper scales in the cupola, two men are employed, one being stationed upstairs where the weighing is done, and the other man supervises the handling of the grain downstairs. This downstairs man, called a supervising weigher, sees that the cars are swept properly; sees that all the grain has been elevated from the unloading pit before the signal is given to weigh the grain, and he must also know that each car is placed at the particular elevating leg corresponding with the number of the scale upstairs on which scale the weigher has been advised the car is to be weighed on. It is this downstairs man who also keeps the seal record.

After the examination of the car has been completed and the seal record secured, the car is placed at the unloading pit where by means of powerful steam shovels the grain is unloaded. It is elevated directly to the garner which is the large receiving hopper located just above the scale hopper. After the scale has been properly balanced and closed, the grain is drawn down from the garner into the scale hopper.

The grain is then carefully weighed by the State Weigher, and the original entry of weight is made according to law in the record book provided for the purpose.

He then takes a specially arranged ticket, and by means of the type-registering device with which all scales are equipped on which state weights are given he obtains a type-printed record.

He then checks this type-printed record with the figures that he first recorded in the weight record book, and if they

do not agree, it is evident that his attention would be immediately called to the fact, and it is his duty to at once go over the work before the grain has been dropped from the scale, to account for the apparent difference in the records.

Since an incorrect record cannot be obtained from the type-register, provided it is not actually out of order, it is practically impossible for error to enter into the work of weighing under the present system.

However, no man would assert that mistakes cannot possibly be made in some part of the operation, for as long as man is fallible an error will occasionally occur.

Another check upon the work is the fact that all through the weighing operation the State Weigher has not been alone in the work, for the mill or elevator weigher has been present all the time and as a result the two men are enabled to compare their work and figures as an extra precaution against mistakes.

When the shipper of a carload of grain obeys the law by placing a card in the car giving the shipping weight, an immediate investigation is made if there is an apparent discrepancy between the state weight and the shipping weight, and it is very plain that such an investigation made while the grain is still held in the scale hopper is of more value than when made a few days or weeks after the weighing has been completed and all the circumstances surrounding the case may have been forgotten.

When there is no shipping weight ticket placed in the car, the State weigher has no means of knowing the amount of grain the shipper has loaded into the car, and consequently he does not know if a shortage or overage should actually exist.

Where track scales are used instead of hopper scales, the loaded car is uncoupled from all other cars, placed upon the scale platform and weighed. Then when the grain has been unloaded, the empty car is weighed to obtain the tare weight. This tare weight is deducted from the gross weight to determine the net weight. A complete record of the work is kept the same as in hopper scale weighing, and the work checked by the type-registering device previously mentioned.

The State Weighing Department thoroughly investigates all claims that arise in the work, and no effort is con-

sidered too great if in the end a just settlement can be obtained.

When a claim is presented alleging a shortage, it is at once placed on file. The records are then carefully checked over to see if an error has been made in transposition of numbers, addition of drafts or by actual mistake in recording a wrong figure or set of figures. Then this type-registered ticket which has been carefully preserved for reference is examined and compared with the figures as given in the written record.

The record of the work at the unloading station is thoroughly gone over for the time covered by the date that the car was weighed, involving a study of the condition that surrounded the weighing. The seal records are also completely checked up to find if such a condition should exist as a broken seal, no seal or faulty record.

Special work has been done involving travel of several hundred miles to test scales or check up the work of loading, when some especially serious case has demanded.

A close supervision is kept over all the scales on which state weights are given, and this work does not mean ordinary care in the use of the scales, but means a complete and severe test up to full capacity of every scale in the system.

Scale experts are employed whose sole duties are to test the scales and keep them adjusted to the government standard of weights. Nor does the state supervision cease at the testing of scales, but takes up the details of proper scale construction, elevating machinery and all apparatus that enters into the handling of the grain before it is weighed.

When the state weigher closes his report for the day it is mailed at once to the State Weighmaster's office, where it is necessary that the report be on hand by 7 o'clock a. m. on the day following the weighing.

At this office a busy scene is witnessed each day as the representatives of the many commission firms check over the daily report sheets to learn the weight of their cars as ascertained by the State Weighing Department on the day previous.

The records being clear and perfect, an official certificate of weight is issued bearing upon its face the car number,

initial, contents and state weight, together with the time and place of weighing. This certificate is stamped with the seal of the office of the State Weighmaster and forms the basis of settlement between seller and buyer in the matter of weight.

To obtain a state certificate of weight, it is necessary to present a request in writing. Should any bad order conditions be found in the records it is also written in the remark column of the certificate of weight.

Another very important branch of the state weighing service is the system of watching or patrol, whereby the cars loaded with grain are continually watched while going through the terminal yards, to detect any leaking conditions that might exist as well as to guard against pilferage.

The terminal railroad yards are usually located in outlying districts where the vigilance of watchmen is especially needed. Many times leaking cars are found and reported by these special watchmen that would not show to be in leaky condition except when in motion, for cars often leak in the yards when being switched about and do not show evidence of leakage when set for unloading.

Much has also been accomplished in the way of protecting the property of shippers from pilferage, a loss against which the country shipper of grain would be powerless if it were allowed to exist.

Since these special watchmen cover the whole terminal system wherever cars containing grain are handled, they are a further check upon the work of seeing that cars are properly swept at the unloading stations by which they are continually passing during their yard work.

These special watchmen are regular deputy weighers assigned to this patrol service, and they are empowered with police authority.

It is amazing to consider the enormous bulk of grain that is handled in the Minneapolis terminal alone, for during the grain year ending August 31st, 1905, there were 259,996 cars weighed. If these cars were made up into a solid train, allowing 40 feet as the length of each car, the train would extend from New York City to a point 232 miles west of Bismarck, North Dakota, and each car would contain 1018 bushels, or more than is produced by the ordinary Minnesota farm.

The state stands as an arbitrator between the seller and buyer; it treats both with equal fairness; it is disinterested as to the financial interest involved, its only care being to see that justice is done.

The State Weighing Department does not hold the very unsatisfactory position of being a mere figure-head in the handling and weighing of the immense volume of grain that pours into the terminal market, but, supported by law, it aims to be an active and energetic factor in the work of securing correct weights, making constant effort toward the improvement of the service by the adoption of the most modern equipment and by the application of the experience that years in the development of the work has given.

The state weighers who do the weighing are each under a substantial security bond of \$5,000, and while they are thus held liable for the results of their work, still they are wholly independent, not knowing to whom a single car of grain belongs which they weigh, and they also know that the tenure of their office is not dependent upon the good or ill-will of mill or elevator people at whose industries they might be stationed.