to Montreal, etc.; (c) by boat to the Bay ports and then transferred by cars to the seaboard.

Saving in Freight Charges

It does not require any stretch of imagination to figure a saving in freight rates if large steamers could load at the head of the lakes and then proceed, without interruption to the Atlantic. The quantity of grain taken, at the present time, by small steamers by this method, is negligible. The saving in freight rates is problematical at the present time on account of the freight rates not being stabilized through war conditions. Sufficient to say, that a large saving would be effected.

This scheme will permit some of our lake boats, which are too large at the present time to sail through the existing channels to participate in short trips on the coast during the winter months, rather than being tied up in the lakes all winter. If these steamers can operate twelve months in the year it will be probable that the freight rates on grain during the navigation season on the great lakes will be reduced. At the present time they have to make sufficient money in six or seven months to cover overhead expenses, etc., for twelve months. Competition will also have a tendency to reduce the freight rates. Particularly will this develop if two-thirds of the ocean going fleet decides to sail the great lakes.

Elimination of Transfers

At the present time the bulk of our export grain is handled as outlinded in paragraphs (b) and (c). This means that a bushel of grain is loaded into a steamer at Fort William, is carried by the steamer, say to Port Colbourne and then unloaded. It is then loaded either into canal barges or cars and shipped, say to Montreal, where the grain is again unloaded, as a rule, into the elevator. It is then finally transferred into the ocean steamers. This means that a bushel of grain is handled once at Fort William or Port Arthur, twice at the Bay port and twice at the Atlantic seaboard.

If a steamer could load at the head of the lakes and proceed direct to Europe, four transfers would be eliminated, four transfer charges would be saved and the grain would be delivered in better condition than at present. Transferring grain does not improve the quality of grain but has a tendency to break the kernels and reduce the quality thereof. In addition to the transfer charges, insurance charges would also be saved at these eastern elevators.

Shortages in Eastern Elevators

At the present time the majority of steamers discharging cargoes at the Bay ports have shortages. Irrespective as to who pays for these shortages they occur, and are a tax on the grain. If the steamer pays for them the steamer takes care of the shortage in the freight rate quoted. If the shipper pays for them the shipper must, of necessity, take care of them in the charges he assesses.

The weighing facilities at Fort William and Port Arthur are conceded to be the best on the North American continent. The chief weighmaster at these points, with his staff of assistants all of whom are under the Board of Grain Commissioners for Canada, have exercised such a strong supervision over the scales and the loading-equipment in the elevators, that the grain trade acknowledges, in general, the correctness of weights at the head of the lakes.

No such supervision is attempted in the eastern elevators. In fact it has been substantiated, time and time again, that the equipment and weighing facilities in the eastern elevators, are far below the standard of the weighing facilities at the head of the lakes. The result? Shortages.

If the steamers, taking on grain at the head of the lakes were permitted to proceed direct to Europe with the grain most of these shortages would be eliminated, and the exporter would be sure of receiving as correct weights as it is humanly possible to give. The saving in this regard alone would amount to an enormous sum during the crop year.

Retention of Identity

It has been the desire of many English importers, in fact their ideal, to be able to ship grain from western Canada, store in special bins at the head of the lakes, and ship direct to England, without losing the identity of the original grain purchased in western Canada or at Fort William or Port Arthur. At the present time this is impossible. Eastern elevators receive grain for transfer, and under the Canada Grain Act have the right to bin grain of the same grade together.

Grain transferred through the American elevators at Buffalo, etc., is entirely outside the jurisdiction of Canadian authority. The result is, that in ninety-nine cases out of a hundred the identity of the grain is lost. It is not necessary to point out the merits or demerits of keeping certain parcels of grain intact. Sufficient to say that farmers in the Canadian northwest have the right to special bin their grain and ship the same without contamination. The deep waterways scheme would give the exporters the same privilege.

Elimination of Shrinkage

Grain cannot be transferred without invisible waste, and a resultant reduction in the quality of grain as pointed out in No. 2. The invisible waste is, of course, problematical but expert elevator superintendents state, that on every thousand bushels of grain you transfer from a boat to an elevator or from an elevator to a car you lose thirty pounds on an average. Thirty pounds does not seem such a large amount, but when you take into consideration the enormous quantity of grain handled it amounts up to a considerable figure, when wheat is worth around \$3 per bushel. Transferring grain also breaks the kernels and reduces the quality.

Elimination of Delays to Shipments

It is a well known fact that grain is often held up in the eastern elevators waiting for ocean steamers to arrive. Delays of this kind have not only been felt at the head of the lakes but at points in western Canada. Congestion in eastern elevators soon makes itself felt in the grain business of western Canada.

The storage capacity of the head of the lakes, at the present time, is ample to take care of large quantities of grain.

Inspection at Head of Lakes

The final inspection on our western grain is made when the grain is shipped from Fort William and Port Arthur. The grade certificate issued by the Dominion government, at the head of the lakes follows the grain to its final destination.

Irrespective of the number of elevators a given parcel of grain may have been in, irrespective of the number of steamers and cars the same parcel of grain may have been in, and irrespective of the probable mixing of the said grain in transfer and in transit in eastern Canada, the inspection certificate issued at Fort William follows the grain and finds its way to the European market.

Oftentimes the inspection certificate does not coincide with the sample of grain received, and the result is a disgruntled English importer with a resultant injury to the grain trade of western Canada. Everything that can be done to improve the value of the Canadian certificate of grain on the European markets is worth while because the results would be transferred back to Canada in higher prices being offered for our grain.

Improvement of Car Supply

At the present time large numbers of cars are required to transfer grain from the Bay ports to Montreal during the period of navigation. Very few canal-sized boats load grain and carry it direct to the seaboard. The largest percentage of grain is shipped by steamers to the Bay ports and then