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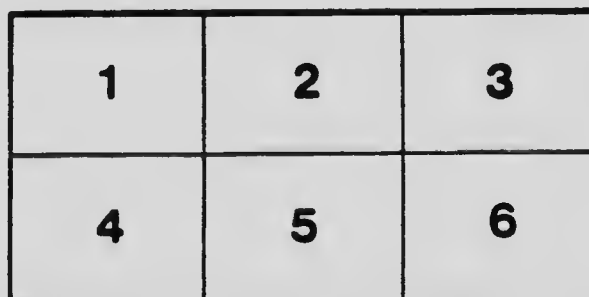
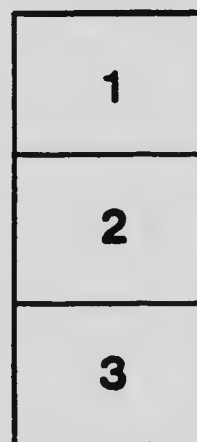
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# Read! Investigate! Judge and Act!



Type of vessel now trading between Port Arthur, Fort William and Montreal, or possible to trade, even with a deepened Welland Canal. Capacity 3300 tons, average wheat rate 6c per bushel.

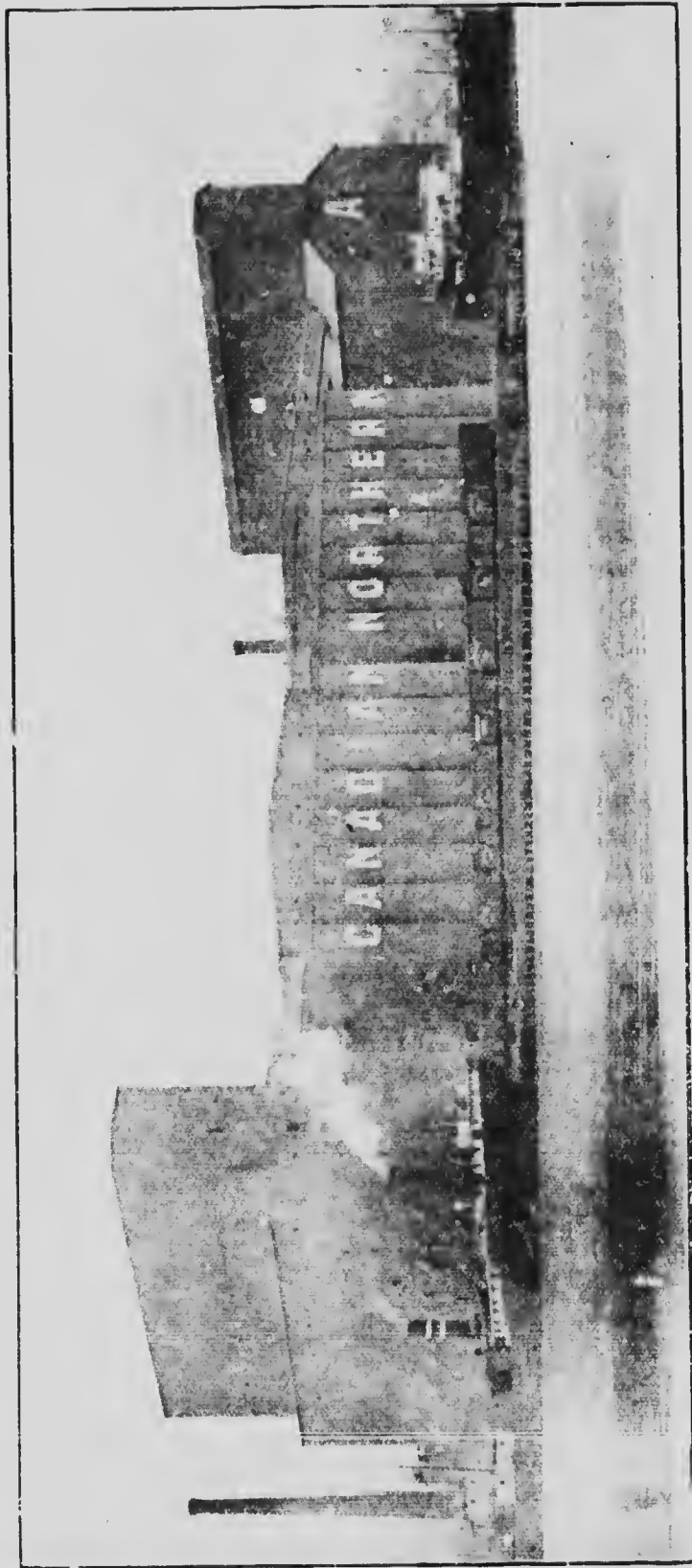
## THE WELAND CANAL OR GEORGIAN BAY CANAL WHICH ?



Upper lake type of vessel now trading between Port Arthur, Fort William and Buffalo and possible for trading between Port Arthur, Fort William and Montreal, via the proposed Georgian Bay Canal. Capacity 12,000 tons, probable wheat rate 2½ to 3c per bushel.

ISSUED BY THE PORT ARTHUR BOARD OF TRADE

THE CANADIAN NORTHERN RAILWAY ELEVATOR, PORT ARTHUR The World's Greatest Elevator



Operated by the Port Arthur Elevator Co. ( Storage capacity 9,500,000 Bushels One of the Fourteen large terminal Elevators situated at Port Arthur and Fort William



1913  
no. 90

## INTRODUCTION

The Port Arthur Board of Trade takes great pleasure in giving to the people of Canada the able article on Canada's canal problem, lately written by Mr. Redden, of this city. Mr. Redden is no stranger in dealing with Canadian problems, as shown by his numerous letters to the press in reference to the remedies necessary for the eradication of the evils existing in the old system of the handling of Canada's western grain trade, which letters extended for over a year previous to the adoption of the present Grain Act by the Canadian Parliament. This new grain policy of the Canadian Government embodies all the remedies he advocated as the true and only solution for the regulation of the western grain trade. His equally clear and convincing article on Canada's canal problem deserves consideration.

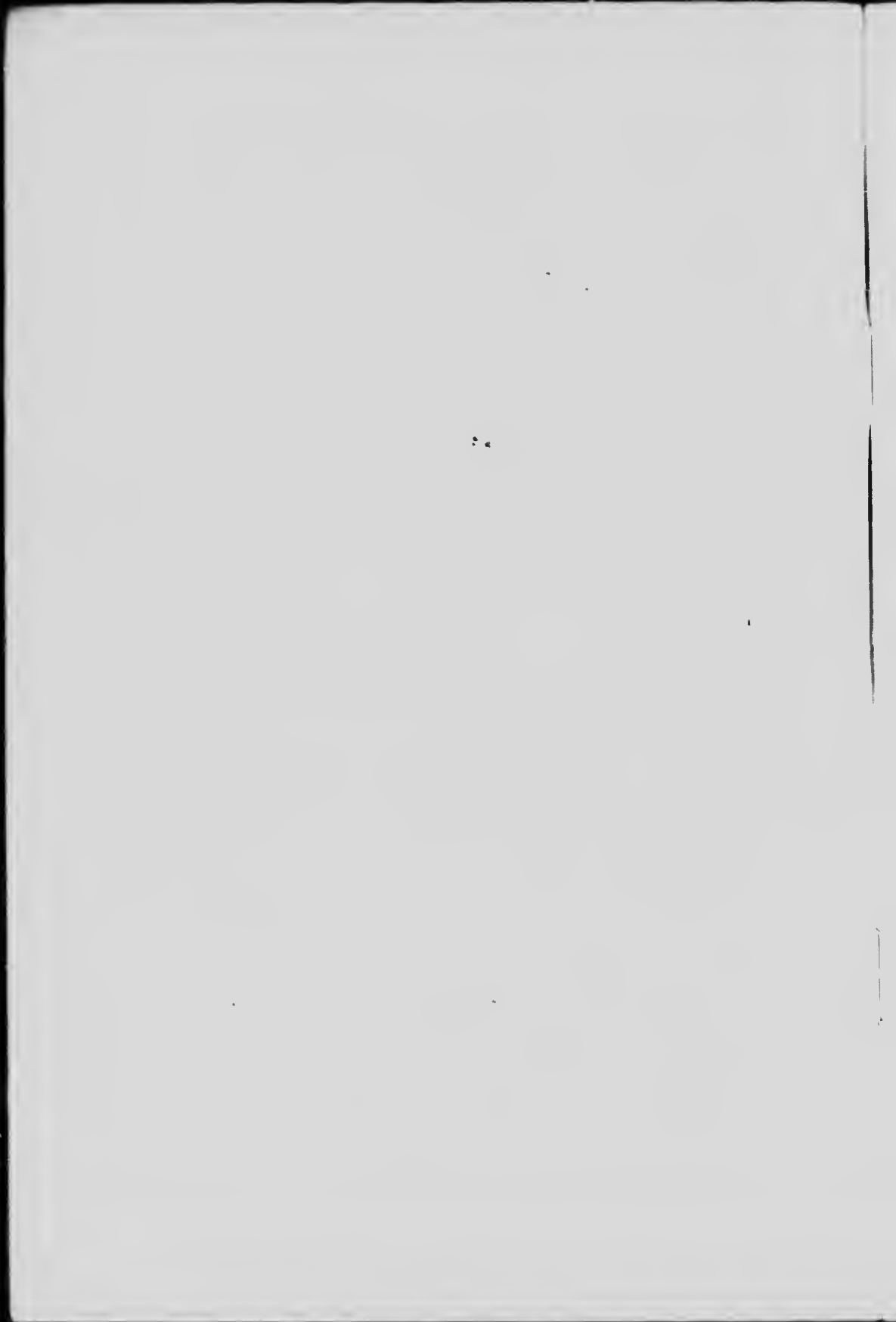
We at the head of the Great Lakes are in a position to judge, dispassionately, of the merits or demerits of Canada's two water routes from her Western Provinces to the sea, for it is immaterial to us, from the standpoint of self-gain, which route the products of the West take after passing through our terminals, and we can consequently view the canal question free from all selfish motives and purely from a national standpoint.

We have also brought before our eyes almost daily, with a greater force than the best of government statistical blue books can give, the great leak in the main artery of Canadian transportation. We refer to the large number of American vessels that leave these upper lake ports of Canada every year, loaded with hundreds of thousands of tons of Canadian freight consigned to European countries, routed via American lower lake ports, for storage and transshipment by American railways to American seaports. We also see here the importation of hundreds of thousands of tons of American soft coal brought in by the same vessels, and all because the present canal route of Canada from the sea and her eastern coal area is totally inadequate for the passage of large vessels. If the passage of large vessels were possible it would mean a cheaper transportation of freight than the American route could make possible, and it would retain to Canada the routing through her own channels, to and from the sea, of the millions of tons of freight which now are routed through American channels.

It is for these reasons that the Port Arthur Board of Trade, realizing as it does the great benefits Canada will derive from the building of the Georgian Bay Canal, publish Mr. Redden's article, fully confident that the canal question will be realized as a most vital one and be dealt with by the Government at Ottawa without further delay and in a manner which will rebound to the greater prosperity of our own country.

**PORT ARTHUR BOARD OF TRADE.**

March 1st, 1913



# THE WELAND CANAL ROUTE CONDEMNED

## The Building of the Georgian Bay Canal Absolutely Necessary in Order for Canada to Hold the Transportation of Freight Through Canadian Channels

For years there have been discussions as to the merits of the above routes, and Canadians as a whole seem to favor the building of the Georgian Bay canal, but a small section of Ontario seem to think that the deepening of the Welland canal is all that is necessary, and that the building of the Georgian Bay canal is uncalled for. It seems that the Government, from its action in setting aside a sum of money for preliminary work for the enlargement of the Welland, agrees in this view, a view which, if persisted in, and if it results in the deepening of that canal, will deal Canada, in its transportation of Canadian freight by Canadian vessels and railways, a deadly blow from which it will be impossible for it to recover, and will crush any prospects of a fuller development of an inter-provincial trade.

For years the United States has been securing a stronger grip on the Canadian traffic of the upper lakes, culminating last year in its vessels carrying close to 40 per cent. of the east bound grain traffic from Canadian ports, and the greater part of the west bound coal traffic, the latter traffic alone last year amounting to over 3,000,000 tons.

There was once a period when this condition was non-existent. In the early days of Western Canadian development the presence of United States freight vessels at the docks of the twin ports of Canada on Lake Superior was almost as rare as the presence of United States vessels is today on the ocean highways of the world, and this condition was chiefly because the vessels of each country were of similar size and earning power, and Canada's waterways to the ocean, suitable to the vessels of that period, enabled her to compete successfully for western traffic, both

Canadian and American, such as it was at that period.

### CONDITIONS CHANGE

Conditions changed. Owing to a tremendous development of the United States iron and steel industry, a development which demanded an ever increasing supply of the high grade iron ore found in Minnesota and other places on and at the head of Lake Superior, a demand which in 1910 meant the passing through the Sault canal east-bound of 4,516,314 tons of this ore, a class of vessel was developed which today reaches the size of the largest ocean freight vessels, carrying cargoes up to and over 12,000 tons. It was not alone the development of the United States steel trade which enabled the building of this splendid type of vessel, but the development of the western part of the continent in general and which resulted in great demands for coal and other freight from eastern lake ports. This west bound coal trade alone, to Canadian and United States ports, which passed through the Sault canal in 1911, amounted to 15,275,680 tons, of which over 3,000,000 tons went to Canadian ports. In this splendid lake trade of iron and coal, bound from United States ports to United States ports, Canadian vessels could not, owing to the coasting laws of the United States, join and share or reap any benefit from it or from its development, by being enabled to build vessels of similar size as used in the United States lake traffic. The size of Canadian vessels was confined to the requirements of the Canadian trade, principally from Montreal and Intermediate ports to the twin ports of Port Arthur and Fort William on Lake Superior, which meant vessels at the early period of approximately 600 to 1,000 tons, and today of



approximately 2,200 tons canal capacity, but which on deep water can carry approximately from 3,300 to 3,600 tons. There are a few Canadian lake vessels which can carry over this amount, but very few, perhaps in all less than ten, and they are confined to the upper lakes, where they eke out scanty earnings, compelled to keenly compete against the hundreds of large United States vessels which have almost a monopoly of the coal trade from United States ports to Canadian ports, the only possible return cargo available to the few large Canadian vessels. So today the traffic on the upper lakes, emanating from both Canadian and United States ports, is practically held by United States vessels, simply because of their large carrying capacity necessitated by their large trade, and which results in the ability to give cheaper transportation than the smaller size Canadian vessels.

#### WILL BE PERPETUATED

Will the deepening of the Welland canal alter this? Most decidedly not; but it will, in fact, perpetuate it for all time.

There is one fact that must be borne in mind when judging of the merits of either the Welland or Georgian Bay canal, and that is that the benefits of the canal improved or built will largely go to the country on the shores of which the best storage ports are situated. By the deep Welland canal the United States have these ports. Some may say Canada has, at the lower end of Lake Ontario, in Prescott and Kingston, as good storage ports as the United States. Not quite. And Canada cannot compete with the United States, for she has not the west bound traffic by this route, which might enable her to build large vessels and constantly keep them in commission, carrying as cheaply as the United States vessels. The most profitable vessel for Canada, with a deepened Welland canal, will still be the 2,200 ton canal draught type of vessel suitable for return cargoes of package freight from Montreal and intermediate ports, practically the only available west bound freight for Canadian vessels by that route.

The United States have at Oswego

and Odgensburg ports which are only 324 and 361 miles respectively from Atlantic seaports, as against 447 miles via Buffalo to New York, and they will become great storage ports for western grain until such time as it is required for shipment during the winter by rail to New York, Portland or other United States seaports, or even in summer, provided it was not shipped during the winter, by the St. Lawrence to Montreal, for shipment to Europe if that route was required.

#### AN EXAMPLE

Now, as an illustration of the kind of competition Canadian vessels would give to the United States vessels, provided the Welland canal is deepened: Two vessels leave Port Arthur together for eastern lake and river ports, and each of a type which prevails on the upper lakes at the present time, and will prevail with the deepening of the Welland canal—each type representing the results, after years of experience, of what is considered the most profitable freight vessel of the country represented. The Canadian vessel is of canal size and has a cargo of approximately 75,000 bushels of wheat, billed to Montreal, at the rate of six cents a bushel, is loaded down to the St. Lawrence canal draught of fourteen feet, and has cost in building about a hundred and fifty thousand dollars. The United States vessel is of the upper lake type, has a cargo of approximately four hundred thousand bushels of wheat billed to Oswego at 2½ cents per bushel, is of 19 feet draught and has cost in building approximately \$400,000 and can be loaded or unloaded inside double the time it takes to load or unload the smaller boat with ore, grain or coal. These vessels pass on down the lakes together, pass through the deepened Welland canal and down Lake Ontario, until they reach Oswego, to which port the cargo of the United States vessel is billed. On a little over 2½ times the cost of construction and very little more than the Canadian vessel costs in operating expenses, the United States vessel has carried close on six times the amount of cargo, or practically, in other words, the United States vessel could, for the same distance, carry for less than half

the rate that the Canadian vessel could afford to carry freight for, and still make a profitable earning for its owners. But this is not all. The United States vessel is at her destination, which is only three hundred and twenty-four miles from an Atlantic seaport, whereas the Canadian vessel has still over 200 miles to travel, mostly through river and canal navigation, during which 22 locks have to be negotiated, before she arrives at Montreal, her destination, and which is approximately only 27 miles less distance from a winter seaport than Oswego. Is it at all doubtful whether the United States will secure all the benefits of a deepened Welland canal?

#### WELLAND BENEFITS U. S.

For comparison as to the probable difference in the summer routes via Montreal and Oswego, we will take the rates prevailing this season to New York from Buffalo, a port which is 123 miles further away from an Atlantic seaport than Oswego. In the summer, for direct delivery to ocean vessel at Montreal the cost for transporting wheat by the Canadian vessel will average 6 cents plus elevator charges at Montreal. The cost by the United States vessel, 2½ cents plus railway transfer charges to New York of 4½ cents and most likely no elevator charges, for the G. T. R. export grain rates from the storage ports of the upper lakes to Montreal by rail, include cost of elevation from lake steamer to elevator with 30 days' storage therein and also same concessions at Montreal, as also does the C. P. R. export rate from similar lake storage ports, and the United States railways will not be behind in this respect. So by the two routes in summer there appears only ½ cent profit in favor of the Canadian route, for the transfer from lake to ocean vessel at Montreal will cost at least ½ cent per bushel. Even if we allow 1 cent extra for terminal shipping charges which are said to exist in New York, if conditions are as they are today, that possible margin in favor of the Canadian route will be eaten up in greater cost of insurance on the ocean and in greater ocean freight rates than prevail at the United States seaports.

So even in summer there would be,

with the deepened Welland canal, but very little difference between the two routes, especially with keen United States railway and vessel interests at work.

But what is the result, if both cargoes which came down the lakes together are for storage and to be exported during the winter, which a great part of the grain shipped from the twin ports of Port Arthur and Fort William between the harvesting of the crop and the closing of navigation on the lakes is? It means that the wheat by the United States vessel reaches the United States Atlantic seaboard at New York at an approximate cost of seven cents, plus storage, from the head of the lakes. The grain from the Canadian vessel reaches an Atlantic seaport at a cost of six cents, plus rate to West St. John or Portland, and storage—a vast difference in favor of the United States route.

Is it hard to figure out which country will secure the benefits of a deepened Welland canal?

The conditions which would exist with a deepened Welland canal exist today, to a less extent, on the upper lakes. Buffalo receives the vast amount of storage and other grain simply because it is the cheapest and most convenient route. Last November there were given out figures by the government which went to show that the grain went that route for some unknown reasons, as the rates prevailing showed the Montreal route to be vastly cheaper than via Buffalo. The rates given out by the government as prevailing at that time were from Port Arthur and Fort William to Montreal 4½ cents per bushel wheat, — to Buffalo 3½ cents per bushel, plus 5½ cents to New York, which appeared very convincing, and we will assume they were correct figures at the time given, although actually they were not co-existent. But what were the real facts behind the figures, provided the grain to both places was for storage until such times as a market could be secured for it in Europe. Providing the Montreal grain was shipped after November 25th, when ocean navigation usually ends at that port, the rate of 4½ cents from Port Arthur would have to be supplemented by a rate of say, 4

cents from that Port to St. John or Portland, making a total through rate of about 8½ cents per bushel, plus storage, from Port Arthur to the seaboard. The cargoes to Buffalo at 3½ cents per bushel included storage in the vessel until such time as it was required for shipment, and plus 5½ cents per bushel to New York meant a through rate of 9 cents to New York from Port Arthur, with no further storage charges, which is quite a difference in favor of Buffalo, especially if the Canadian routed grain had three or four months storage to pay of from 2 to 3 cents per bushel, and this rate of 5½ cents from Buffalo to New York was during the summer cut down to 4½ cents for foreign grain, and it must not be forgotten that Buffalo has two other great ocean ports adjacent to it, namely, Philadelphia and Baltimore, where it is claimed the terminal charges are less than at New York. Is it strange that vast amounts of grain for storage go to Buffalo?

**CONFUSION OF RATES**

Now we will take the rates prevailing to and from Canadian transfer and storage ports on the upper lakes and see how they compare with the rates via Buffalo to the winter seaports. From the head of the lakes to Goderich, Port McNichol, Depot Harbor, Tiffin, Midland or Owen Sound, when the rate is, we will say, 2 cents per bushel for wheat and which is considered a fair one, the rate to Buffalo although approximately a distance of three-fifths further, is invariably less, but for comparison will use the same rate. From these Georgian Bay ports the export rate via C. P. R. to West St. John is 5 cents per bushel, plus 9-10 cents for elevation, which includes 30 days' storage, that is practically an 8 cent through rate. To Portland by this same railway, the rate would be 5 cents per bushel. No mention of elevator charges is made in the government statistics, but no doubt the same 9-10 cents or its equivalent will be there, thus making practically an 8 cent per bushel rate, the through rate to Portland. Via the Grand Trunk from Georgian Bay ports the rate per bushel wheat to Portland or St. John will be no doubt the same,

and these are generous rates when we consider that these Georgian Bay ports are approximately 700 miles from the closest winter seaport. From Buffalo the rate was 5½ cents per bushel, making a through rate of 7½ cents per bushel, or less (as for instance one period of last November when rates to Buffalo from Port Arthur were 1½ cents per bushel, to Georgian Bay ports at same period, 3 cents per bushel, and to Montreal, 7 cents per bushel.)

From the storage ports of the upper lakes to Montreal during the summer the rail rate is the same as to winter ocean ports, namely 5 cents with storage of thirty days and delivery to ocean steamers, making a 7 cent through rate. \*Via Buffalo the rail rate was during the summer 4½ cents per bushel, with less ocean rates and insurance and invariably a less lake rate to Buffalo than prevails by Canadian vessels to Georgian Bay ports, which should nullify any excess in terminal shipping charges than prevails at Montreal. If the grain is stored beyond the time allowed with the rail rate there will be extra charges. This storage charge is, by the Buffalo route, greatly minimized in the winter by the large freighters on their last trip holding their cargoes for a premium above the regular rate, until such time during the winter as they are required for shipment to the seaboard. Thus these large steamers, some of them holding over 400,000 bushels, become practically storage elevators, supplementing Buffalo's storage capacity, as was illustrated last winter when 8,300,000 bushels out of a total of 15,600,000 bushels winter stored grain at that port, was held in these vessels.

**ANOTHER FACTOR**

One great factor which would tend to drive the Canadian export trade to Buffalo or Oswego with a deepened Welland, is that Canada has not got, and never will have by the Welland canal route, sufficient vessels to handle the enormous quantity of grain shipped in early spring, and in November and the first part of December, from Port Arthur and Fort William. Even if rates via Buffalo or Oswego were higher, the grain at that period of the year would be com-

pelled to go there; but the great reason at the present time why the grain goes via Buffalo is because it is evidently the cheapest route to Europe.

### SOME STATISTICS

Now for a few figures from Government returns as published in "Canal Statistics" of the Canadian Government for 1911, as to how the Canadian ports are holding the export trade from being diverted to Buffalo. From Port Arthur and Fort William there were shipped to Montreal in 1909, through the Canadian canal at Sault Ste. Marie, 10,517,266 bushels of wheat; in 1910, 13,185,370 bushels of wheat; in 1911, 12,761,666 bushels of wheat. From the same ports to Georgian Bay transfer or storage ports in 1909, 13,384,400 bushels of wheat; in 1910, 12,753,200 bushels of wheat; in 1911, 9,881,234 bushels of wheat. From the same ports to other Eastern Canadian ports than Georgian Bay or Montreal, in 1909, 10,149,633 bushels of wheat; in 1910, 9,603,400 bushels of wheat; in 1911, 11,880,666 bushels of wheat. From the same ports to Buffalo, in 1909, 12,341,334 bushels of wheat; in 1910, 15,693,363 bushels of wheat; and in 1911, 27,945,655 bushels of wheat. And this government canal report is summarized as follows: In 1909, 21.9 per cent. of the total wheat passed through from Port Arthur and Fort William went to Montreal; in 1911 this had decreased to 20.1 per cent., in 1909, 27.9 per cent. of the total wheat passed through from Port Arthur and Fort William went to Georgian Bay; in 1911 this had decreased to 15.6 per cent. In 1909, 21.1 per cent. of the total wheat passed through from Port Arthur and Fort William went to Canadian ports other than Montreal and Georgian Bay. In 1911 this had decreased to 18.7 per cent. In 1909, 26.7 per cent. of the total wheat passed through from Port Arthur and Fort William went to Buffalo. In 1911 this had increased to 43.8 per cent., and in the present year it has every appearance of going far above the 50 per cent. mark. During the same period the total shipments of wheat passing through the Canadian canal at Sault Ste. Marie from Port Arthur and Fort William increased 35 per cent., or ap-

proximately from 46,000,000 bushels to 62,000,000 bushels. Besides the above figures there passed through the United States canal at Sault Ste. Marie in 1909, about 9,000,000 bushels of Canadian wheat, and in 1911 about 2,000,000 bushels of Canadian wheat of which the destination could not be obtained, but no doubt if those particulars had been obtainable they would have been similar to those of the Canadian canal. The figures quoted give a fair idea of how Canada is holding her east bound traffic by the present Welland and St. Lawrence canal route. Now, I will give a few figures as published in the grain statistics of Canada for 1911, to show what share Canadian vessels are receiving of the United States routed grain from the Canadian ports of Port Arthur and Fort William, and for convenience will give the figures only in millions, excepting the last year quoted: In 1907, of 15,000,000 bushels of grain shipped from Port Arthur and Fort William to United States ports, only 4,000,000 bushels were carried by Canadian vessels. In 1908, out of 19,000,000 bushels shipped, only 2,000,000 bushels were carried by Canadian vessels. In 1909, out of 23,000,000 bushels shipped, only 4,000,000 were carried by Canadian vessels. In 1910, out of 23,000,000 bushels shipped, only 3,000,000 bushels were carried by the Canadian vessels, and in 1911, out of 38,694,334 bushels of grain shipped from the Canadian lake ports of Port Arthur and Fort William for United States eastern lake ports, only 1,545,469 bushels were carried by Canadian vessels. Will this present condition be changed by the deepening of the Welland canal? Most emphatically, No!

### MAKE BAD WORSE

The Welland barrier being down will but accentuate it, for it will allow the fleet of over 350 United States upper lake freight vessels, which are capable of carrying from 150,000 to over 400,000 bushels of wheat, to go a little further by water, and by doing so cut down a little more the rail haul from United States lake storage ports to the Atlantic seaboard, and also cut down by 90 miles, according to a pamphlet issued by the Federation of the Boards of Trade and Muni-

capalities of Canada, the rail haul from United States "hard" coal mines to the lake ports, where can be reached these large and cheap carrying lake freight vessels. The deepening of the Welland canal simply means the turning over to United States interests, for all time, the control of the transportation of freight upon the Great Lakes.

Now, a great many believe that the Welland canal route has been a factor in the cheap transportation of freight. It has, but never to the extent it should have been if it was the cheap route so many people believe it to be. If we look back through the records of the Welland canal we find that, in 1873 there passed through it 1,506,484 tons of freight, of which 656,208 tons were from United States ports to United States ports. Since that remote period developments, both in Canada and the United States, have been stupendous. At the period when this showing was made the Great West, both of Canada and the United States, was practically uninhabited; Fort William was a Hudson's Bay Company's trading post; Port Arthur, as such was unknown. Winnipeg and Vancouver were practically unhorn; the former but a small village and known as Fort Gerry, and that great Empire builder, the C. P. R., still of the things unborn and undreamed of. During all these years development after development rapidly passed each other until we see today, in both the Canadian and United States Great Wests, new empires, pulsating with life and energy, the Canadian West alone last season shipping out 95,182,011 bushels of grain, of which 70,185,069 bushels was wheat over the Great Lakes.

#### WELLAND CANAL'S RECORD

And what do the records of the Welland canal show after nearly forty years of such stupendous growth and progress, a route which, if it was as cheap as it is claimed it is, should have shared in this wonderful increase? There passed in 1911, 2,537,629 tons of freight, of which 485,355 tons were from United States ports to United States ports, and if we go back to 1902 we find that only 665,387 tons passed, of which 269,029 tons were from and to United States ports.

What do these figures prove? That the traffic on the Welland canal from 1873 to 1902 had decreased over 100 per cent, and not once, the records show, during that long period of nearly 30 years, had they exceeded the figures of 1873. From 1902 the figures increased until 1911 when the increase over 1873 was practically only 70 per cent., and this increase has been caused by the package freight vessels brought into existence by the demands of the Canadian West for manufactured goods from Eastern Canada, delivering grain as return cargoes at a cheaper rate than otherwise would have been possible, on account of their small carrying capacity, on a one-way cargo basis, and being thus enabled to compete with the Buffalo route.

Such deliverance and such an increase in the Welland canal records otherwise would have been impossible. This east bound freight through the 14 feet depth of Canadian channels to the sea will be governed, increased or decreased, by the increase or decrease of west bound cargoes, and the deepening of the Welland canal will not furnish these cargoes, for Canada's share of west bound cargoes, then, as now, by that route, will be limited to package freight, including in this term manufactured steel and cement. Will the Georgian Bay canal alter such conditions, conditions which are practically driving the export trade of Western Canada through the United States, via Buffalo and other of its ports?

The Georgian Bay canal will change these conditions, which exist, and will exist, on the Welland canal route, to the detriment of Canadian interests, and if, as the Hon. R. L. Borden has said, "our object is to keep Canadian trade in Canadian channels and to continue, as much as we can, the policy of making the trad run east and west," it is the Georgian Bay canal which should be built, as it alone will enable such desires to become realities.

As far back as 1876 the possibilities of the Georgian Bay canal were recognized by the leader of affairs in Canada, for in that year the Hon. Alexander MacKenzie, member for East York, stated:

"The very first year I was in par-

liament I was one of a committee appointed to investigate the question of canal navigation of the upper Ottawa, and from that time I have been perfectly satisfied that the valley presents the greatest facilities of any route upon the continent for the transportation of the products of the Northwest to the Atlantic ocean, or rather, I should say, to the head of Atlantic navigation."

The magnificent possibilities of this route have been recognized by many of the best men not only in Canada but of other countries. Here are the opinions of its possibilities as expressed by some of the leading men and papers of the United States, as printed in a pamphlet issued by the Federation of Boards of Trade and Municipalities of Canada:

*Who*  
**New York Herald** — "No effective competition with this route appears in any way possible. When in operation the Buffalo route will be hopelessly outclassed, and the St. Lawrence will then solve and control the transportation conditions of the continent."

**The Chicago American**—"The proposed Georgian Bay canal, if placed in operation, will deprive the United States of millions of tons of freight annually, and deeply affect our markets."

**The New York Sun** — "The actual transportation distance from the Soo to New York, by way of Lake Erie and the Erie canal, is about twice as great as that from the Soo to Montreal via the projected Georgian Bay route. It is estimated that the cost of transportation of wheat to tide-water would be reduced by at least 2½ cents per bushel. Between this route and its 21 feet of navigable depth, and the \$101,000,000 gutter across New York State, the odds as a business enterprise are emphatically in favor of the Georgian Bay canal."

**Edward Hungerford, in Harper's Weekly**—"There is no question in the minds of the men who have examined this Georgian Bay canal proposition as to the effect its completion will have on the decreasing commercial supremacy of New York. It will cripple the elevators at Buffalo, and proclaim the Erie large canal the most atrocious and expensive farce

yet placed on the backs of the greatest of all the States. It will of itself provide the direct and simple water route for the grain of America's golden West to the densely populated nations of Europe."

**New York Sun**—"Canada holds a trump card in the Georgian Bay canal and is preparing to play it. To the Sun the advantages of the Georgian Bay canal are so obvious that it does not for a moment consider the possibility of the Canadian government stalling off the work under any pretext."

**J. Paule Good, in Report to Chicago Harbor Commission**— This scheme is of the greatest significance to Chicago, giving her practically a great circle route to Liverpool, saving 774 miles over the present journey by way of New York."

**Herbert Quirk, Author and Expert Writer on American Waterways** — "When Canada has completed the Georgian Bay ship canal she will destroy American commerce from the lakes to the sea, and the death knell of our merchant marine on the lakes will have been sounded."

**R. Isham Randolph, Secretary of the Inland Waterways Improvement Commission of Illinois, in the Chicago Record-Herald**—"While we have been agitating the question of a south-end outlet from the Great Lakes to the seaboard, Canada has quietly gone ahead and spent \$750,000 in making surveys and preparing plans, estimates, and a report upon an eastern outlet to the sea, that is shorter, cheaper and more direct than any other. It is a pretty safe assumption that the great bulk of lake freight destined for the seaboard will take the shortest, quickest route over which it can go, cheaper than any other route because it can be shipped from any lake port to the seaboard terminal without breaking bulk. The situation of the Georgian Bay canal gives it a decided advantage over all other waterways leading to an ocean port."

**Cy Warman, in Collier's Weekly**—"The entire Northwest is upon the eve of still greater development, and unless Canada lays out to participate in the transportation of the traffic that is to come out of this development, she will be left utterly out of

the running. In addition to the enormous traffic originating in the American Middle West it is no stretch of imagination that a volume equal to this will within the next fifteen years be coming down the lakes from the Canadian West. To capture, to have and to hold, this business is the first aim of those who advocate the construction of the Georgian Bay canal. If the present government does not undertake this task, their successors will."

**New York Engineering News** — "From an engineering standpoint, disregarding for the moment political boundaries, there can be no doubt that the Ottawa route is by far the best for a deep waterway from the upper lakes to the sea; so far as export traffic from the Northwest to Europe is concerned, it offers by far the best possible route."

**J. A. Letcha, in North American Review**—"While our wheat supply comes from Dakota and Minnesota, Minneapolis can control the milling industry. But the day a great ship canal is built from the ocean to the British Northwest will see the milling interests removed to the Canadian side of the river, destroying the Minneapolis milling business just as certainly as that of Rochester was destroyed by the development of our western wheat fields."

If this were not conclusive enough evidence of the feeling of Americans, we have the official proposal made

by Mr. Stevens, the Superintendent of Public Works for the State of New York in 1908, to meet the competition of the Georgian Bay canal by abandoning the 12-foot Erie canal from Buffalo to Syracuse, and constructing at 21-foot waterway from Oswego to the Hudson. The following is quoted from the Senate documents of the State of New York for that year:

"At the inception of the barge canal the purpose was to restore to New York the traffic which had been taken away as the result of a better system of Canadian canals. The barge canal may be suited to compete with the present type of Canadian canals, but the Dominion Government has foreseen the need of a different type and has undertaken to supply it in the so-called Ottawa-Georgian Bay route. Canada in the race for commerce

must be dealt with as a rival. The simplicity of the Georgian Bay route, taken in conjunction with the methods which that government applies to the solution of any project to enhance the glory of the Dominion, threaten, if they do not insure fully, the completion of this waterway before the barge canal under the present system of construction can be completed. Commerce once lost under such conditions, if not forever lost, would be hard to regain. Your honorable body (the New York Senate) should therefore, without delay, memorialize Congress to join with New York in making that portion of the barge canal from the Hudson River by way of the Mohawk River, Onedia Lake and Oswego River a ship canal of the type contemplated in the government surveys of 1900. The cost to the State would not be greater than will be the cost of the lesser waterways, and the benefits to result, not only immediate, but for the future, a hundredfold. If this plan can be brought to fruition, it is my belief that not only would New York be in a commanding position as far as commercial shipments go in the event of the completion by the Dominion Government of the Georgian Bay canal, but it is not impossible that, if the construction of the ship canal across New York State were authorized in the near future the construction of the Georgian Bay canal would be abandoned altogether, for the time being."

These views of our neighbors we will not dispute, as they are exactly what a host of Canadians also believe. As already pointed out, one great factor by the Welland canal route, to the non-increase of Canadian lake shipping, in proportion to Canadian lake freight, is the impossibility of securing sufficient west bound cargoes for vessels necessary for the Canadian east bound trade, and this inadequacy of vessel space at the spring and late fall season would, more or less, drive the wheat via Buffalo, even if the rates were higher by that route.

By the Georgian Bay canal it is almost an impossibility that the west bound cargoes would not increase, for in the coal mines of Eastern Canada would be found the remedy for de-

iciency of such cargoes. It is claimed by some that the Nova Scotian soft coal could not compete with the United States soft coal at western points, but it may be pointed out that it competes very successfully in the Province of Quebec, where 2,000,000 tons were used in 1910, and should, consequently, especially with a paternal government watching over it in the matter of tariff, compete just as successfully at all western points. A little more on the rate to Montreal from Nova Scotia coaling points would bring the coal to the upper lakes where approximately three million tons of United States soft coal was unloaded last year at Canadian ports. The manufacturing industries and transportation companies of Central Canada are at the present time absolutely dependent on the United States for their coal supplies. Would it not be a wise move to furnish the means, by a deep water channel to Canada's eastern coal area to minimize such dependence, for a great part of Canada's manufacturing life? For the benefit of those who believe that Nova Scotia coal will not, with the Georgian Bay canal in existence, be able to compete with United States coal at upper lake ports, I will quote from two pamphlets on "Canada's Cheap Coal, etc.", lately written and distributed by J. Lawrence-Hamilton, M.R.C.S., of England:

"It is stated that large wholesale consumers of coal in Manchester have now (Oct., 1912) to pay 10 shillings a ton wholesale even in large quantities, whilst it is claimed that Nova Scotia (an Atlantic Canadian Province) can put a superior class of coal at Manchester at a profit at an estimated price of 7s. 3d. a ton, or upwards of 25 per cent. cheaper than that from the local colliers near Manchester."

Another extract from the same pamphlet:

"Nova Scotia, an Atlantic Canadian Province, has recently offered to supply the South Metropolitan and the Gas Light and Coke Companies with Canadian coal at lower prices than these London companies are paying colliery owners in the United Kingdom."

And still another extract from the

same source as to the quantity available:

"The Atlantic Provinces of Nova Scotia and New Brunswick are estimated to contain at least 3,500,000,000 tons of bituminous coal."

Now, a few extracts of quantity of coal sold or used by Nova Scotia mine owners in 1908, 1909 and 1910 and value of same, as published by the Department of Mines of Canada. In 1908, 6,652,539 tons of a value of \$13,582,476. In 1909, 5,652,088 tons of a value of \$11,354,643, and in 1910, 6,431,142 tons of a value of \$12,919,705, or practically at an average of \$2.00 per ton. With such evidence is it not reasonable to believe that Nova Scotian coal can compete, with a deep and cheap waterway, at the upper lake ports with United States coal which is selling at approximately \$4.00 per ton, and to some customers as high as \$5.00 per ton?

At these ports is met the vast quantities of grain and flour destined for Eastern Canada and European points, and this class of freight is not spasmodic, although heaviest in early spring and late fall seasons, but flows eastward through the full summer season. The grain shipments of 1911 show that the following quantities of grain were shipped monthly, by water, during the season: March, 102,706 bushels; April, 5,859,478 bushels; May, 11,951,152 bushels; June, 4,923,895 bushels; July, 6,948,383 bushels; August, 9,006,335 bushels; September, 5,175,968 bushels; October, 16,403,321 bushels; November, 27,864,371 bushels; December, 6,513,258 bushels. So it can be seen that vessels in the coal trade could rely on return cargoes during all the season. Now, for the sake of argument, we will suppose that the Nova Scotian coal cannot compete on the upper lakes with the United States product and thus cannot furnish the return cargo which those who are antagonistic to the Georgian Bay canal claim is essential to its success. It is quite possible they may be wrong, but even if right in their contention, it is not a sufficient reason for preventing the construction of the canal, for it is a canal which will allow wheat to be delivered at Montreal, on a one-way cargo basis from Port Arthur and Fort William (also Chicago and Du-



luth) for less than three cents per bushel, instead of the average of between 6 and 8 cents per bushel as at present; in other words preventing the Western farmer from receiving 3 cents per bushel more for his wheat than he does while his grain is routed via the Welland and St. Lawrence canals or by Buffalo.

The grain trade will not furnish all of the possible return cargoes for coal vessels. The present great manufacturing prosperity and prestige of the United States can be credited to a great extent to the magnificent iron ore deposits of that country on the shores of Lake Superior. Canada has in the same locality and opposite the United States, deposits just as good, and according to some authorities, a vastly greater quantity. As the United States has become through these deposits, one of the great steel manufacturing nations of the world, there is no reason why Canada, in the course of time, should not become as great or greater.

As to the possibilities of this steel trade which Canada should strive for, I will quote again from Mr. J. Lawrence-Hamilton's pamphlets:

"The Pittsburg district has many miles of mills. Its steel works and blast furnaces already employ upwards of 75,000 men. Its Westinghouse industries employ upwards of 3,000 mechanical engineers. The Carnegie Steel Company and the United States Steel Corporation employ upwards of 1,000 mechanical engineers and metallurgists. The American Bridge Company employs upwards of 1,000 structural engineers. Recently one of its large steel factories required an extra branch, so it built additional mills in the Pittsburg district and erected a new adjoining town with houses to accommodate some 25,000 people. With a population of 1,072,488 people, the Pittsburg district has already 3,601 factories employing 336,000 persons, absorbing £30,000,000 a year to pay."

"To supply Pittsburg with an all-water route to the Panama canal and to the Pacific coast the United States government have already voted £5,200,000 to improve, widen and deepen the Ohio river and its tributaries."

Would it not be a wise policy for the Canadian Government to furnish

the means by which these conditions at Pittsburg would, in time, be duplicated in Canada. No time should be lost in making possible this development, for the value of iron and steel and iron and steel goods imported into Canada in 1910 amounted to \$59,592,197, of which \$47,827,368 was paid to the manufacturers of the United States, and which amount from the United States shows an increase over the year 1909 of over 50 per cent., the figures for that year being \$31,406,732.

The one thing essential to such a consummation is a deep and cheap waterway from the rich ore deposits of Canada to her coal area, and this the Georgian Bay canal would furnish. The United States takes this ore by water for over eight hundred miles and thence by rail to the furnaces, situated in the coal district. Canada can carry her iron ore likewise, to her coal or cheap electric power area.

On the route of the Georgian Bay canal the mineral possibilities are great, and therein lie Canada's opportunity in having sufficient freight to create vessel space; so that at certain periods of the year, when certain trade requirements call for extra vessel space, such as the grain trade in early spring and late fall, these ore and coal vessels could be switched off their ordinary freights at which they would be used during the summer, piling up at terminal points not only sufficient for the ordinary requirements at such points, but creating a surplus for winter use, and in order to be able to handle the grain trade when that matured. This is what is done in the United States today, and it is this iron ore and coal trade which has developed the splendid lake shipping of that country. By the Georgian Bay canal, Canada's development along similar lines is just as sure. The creation of such large capacity vessels will not disturb the present modern package freighter, for it belongs to a different class altogether, necessitated by the requirements of the trade they are in, and their route, westbound, would be mostly by the Welland route, whose fourteen feet of water would enable them to practically "fill up" with package freight, and it must not

be forgotten that the workshops of Canada will be mostly, as now, situated on her waterways. Eastbound, these modern package freighters could load to their full capacity, namely 110,000 to 120,000 bushels wheat, instead of the 75,000 bushels possible by the fourteen feet of water via the Welland canal and the St. Lawrence, and go down by the Georgian Bay, thus increasing their load and earning capacity on the down trip over 25 per cent. and enabling them to reap as much benefit from a 3 cent rate or less as they would by a 4 cent rate via the Welland, without altering their design for the present Welland and St. Lawrence canal requirements.

*Lines  
away  
to St. Lawrence*

C<sup>o</sup> course navigation by the Georgian Bay canal (equally with the St. Lawrence canals) would not be open as long as the Sault locks, but from the statistics of over 27 years, it would be open as long as Montreal was open for ocean navigation. After that date the vessels could assemble on the upper lakes and trade from Port Arthur to Georgian Bay and other ports and carry as long as the Sault canal was open, namely to about December 15th of each year, thus enabling Canadian grain to be carried by Canadian vessels as long as navigation on the upper lakes was open.

#### STORAGE CARGOES

Another feature making possible the development of larger vessels on the Canadian route, is that such vessels can during the winter months be used practically as storage elevators and earning revenue as such. A 400,000 bushel capacity lake vessel laid up for winter, holding her cargo in storage, as is done regularly at Buffalo, is equal to a \$100,000 grain elevator proposition. Some of the vessels on the Georgian Bay canal route could lay up on their last trip to Montreal, holding their cargoes.

Some may say that vessels could not be moved in winter to unload at elevators. Montreal is no colder, I believe, than Port Arthur, where loading on vessels for storage is practically carried on all winter, the large towing tug James Whalen being quite capable of negotiating all passages for vessels to and from the elevators.

Montreal becomes by this route the

first class storage port of inland waters, being only 297 miles from Portland, 335 miles from Boston and 483 miles from West St. John, against the 447 miles to New York from Buffalo, the nearest to an Atlantic seaport of any United States lake port open to large vessels with the non-deepening of the Welland canal. Montreal would thus, with the Georgian Bay canal, become the greatest grain port, not only of the continent, but of the world. Montreal would also become a great receiving port for vast amounts of freight from Europe destined for Western United States points to be shipped to Chicago, Duluth, and other lake ports by the cheap water route, and which formerly had been "routed" via New York, Boston, or other United States seaports. This would all tend to create more vessel space available for grain, which is now sometimes lacking at Montreal, and which increased vessel space available would tend to cheapen ocean rates.

#### ENORMOUS WATERPOWER

The possibility of great developments along the Ottawa river, with the Georgian Bay canal in existence are undeniable. Mr. W. F. Tye, President of the Canadian Society of Civil Engineers, is of the opinion that the waterpower alone would justify the construction of the Georgian Bay canal. In a paper last year he stated:

"The construction of the Georgian Bay canal will develop a very large amount of waterpower. It is conservatively estimated that the Ottawa and its tributaries will give 3,000,000 horsepower, equivalent in power requirements to the mining of 40,000,000 tons of coal per annum. This waterpower, unlike coal, can never be exhausted, and with the enormous horsepower of the Ottawa and its tributaries, and the low grade ores of the Ottawa valley, it is easily possible that in years to come, the great manufacturing center of this continent may be transferred from the Ohio valley to the Ottawa. There is no reason why it should not, if the people of Canada have the enterprise to make it so.

"For such reasons as these I believe that the construction of the

Georgian Bay canal is a national necessity. I do not mean to say that the construction of the Georgian Bay canal will at once transform the Ottawa valley into a great manufacturing center, but it will make it possible, as with abundance of iron ore, the abundance of the cheapest and best power in the world, with a deep draught canal permitting ocean freighters to penetrate into the heart of the Ottawa valley, there seems to be no reason why it should not become in time as great a manufacturing district as any in the world."

With such promise of development, why should there be any hesitation in choosing and bringing to a successful completion this most magnificent of Canada's water routes to the sea?

#### THE PANAMA ROUTE

The solution of the Western freight problem will not be by the assistance of the Panama canal, as that route will never be a great factor in the transportation of western grain, for if we take the rates from Calgary, the nearest section of the wheat belt to the Pacific, we are encountered with an 11.7 cents per bushel wheat rate to Vancouver, and this rate cannot be materially decreased, for the one-way load will, more or less, exist. This will necessitate a higher mileage rate than is permissible to the great lakes, from where that great freight, coal, which the eastern prairies are deficient of (and the western part has) is brought back as return loads to the West. Also package freight practically all emanates from the East and not from the West, all tending to cheap rates east on wheat. At Vancouver will be met at least 1 cent per bushel elevator charges, plus at least about a 20 cent per bushel ocean rate to Liverpool via Magellan Straits, making a total of at least 33 cents per bushel from Calgary to Liverpool, and with a higher rate of insurance than via the Great Lakes. Via the Panama canal, with its anticipated canal tolls this rate might be cut down 5 cents per bushel, but even that is questionable.

From Calgary eastward to the Great Lakes we have approximately a rate of 14 cents per bushel on wheat plus an average 1 cent per bushel elevator charges, plus an average 6½

cents per bushel lake freight to Montreal, and we will say even New York, Philadelphia or Baltimore, and plus generally from those ports, a 4 cent to 6 cent rate to Liverpool, making a total rate from Calgary, the extreme western fringe of the grain area via the Great Lakes route of approximately 27 cents per bushel, but with the Georgian Bay canal in existence, of say 24 cents or less. So even under present conditions the great grain route would, with the Panama canal opened, still be via the Great Lakes, even without considering the great factor which will play an important part in the routing of grain, irrespective of rates,—the danger of heating of grain cargoes in transit via the southern route, which competent authorities claim is possible with western grain. As to the feasibility of this Pacific route I can do no better than quote Mr. Lanigan, C. P. R. Freight Traffic Manager, before the Railway Board at Ottawa:

"If it (the grain) was carried free to Vancouver for export, it would not result in a trade being developed under present conditions, owing to the high cost of sea carriage and insurance."

The Hudson's Bay route, on account of climatic conditions, will also be overwhelmingly handicapped, and it is becoming to be realized that that route will be more or less impracticable.

The great solution of the western freight problem is simply increased railway outlets to the twin ports of Port Arthur and Fort William on Lake Superior, to connect there with a deep waterway, practically an ocean highway, which for nearly eight months in the year will carry cheaply the millions of tons of the future products of Western Canada and the United States to the markets of the world.

#### A CHEAPER RATE

The building of the Georgian Bay canal will make possible a 2¼ cent per bushel rate from Port Arthur to Montreal, as predicted by Captain Norcross, a recognized authority on such matters. And why should not that rate be possible when wheat is very often carried from the head of Lake Superior to Buffalo by the great

ore vessels for less than a cent a bushel? It is practically the same distance to Montreal via the Georgian Bay canal.

The low freight rate charged by these most modern freight vessels is made possible by the quick handling of cargoes at the docks they frequent. It is no unusual thing for these large vessels to be loaded with ore or wheat in half a day, and one record achieved last season by one of these vessels was in going past the piers leading into Duluth with a cargo of 11,000 tons of coal and passing these same piers outward bound with 11,000 tons of ore in less than 48 hours afterwards.

The facilities which make this almost unbelievable feat possible we have already at the head of Canadian navigation, and we can have them elsewhere on the Georgian Bay route, thus making possible in Montreal the very lower of transportation rates, rates which, by a deepened Welland canal, would forever remain a dream, being utterly unobtainable.

The deepening of the St. Lawrence canals with the Welland would not do, for by lowering the Welland barrier we make Oswego, with its short rail haul to the Atlantic the premier grain storage port of the lakes, for the winter shipments to the seaboard, and, with its contemplated deep water canal, 148 miles shorter than the Erie canal at Buffalo, and a possible  $3\frac{1}{2}$  cent rail rate to the seaboard, a premier summer port, assisted greatly by the cheap lake rates which will be made possible to it by the large United States vessels, as instanced last season to Buffalo from Port Arthur and Fort William when wheat was carried in May, June, July, August and September for  $\frac{7}{8}$  cents per bushel, according to the "Grain Statistics" of the Canadian Government for 1911.

#### MONTREAL WOULD BENEFIT

By the Georgian Bay canal Montreal becomes the great port of the continent, and enabling the western grain to be carried by Canadian vessels to direct ocean connections in summer, or for storage and transfer by shortest rail route to Atlantic sea ports in winter.

The feasibility of the canal is

acknowledged. It is practically an open waterway, for out of its 440 miles of length, 346 miles will be free channels of 300 to 1000 feet and over, 66 miles will consist of improved channels, and only 28 miles of artificial channels, including locks and approaches, and only 25 locks as against the 48 of the present Welland and St. Lawrence route. The proposed canal is the most direct route from the head of the lakes to Montreal, placing Port Arthur from that point 934 miles, instead of 1223 miles via the Welland canal route, thus making possible from Liverpool to the head of the lakes a water route of approximately 4,000 miles, which, with rail connections of 430 miles, connects with the great grain areas of the West and the city of Winnipeg, the heart of the grain trade of the world. By the Panama route there is a haul of about 650 miles from the western fringe of the grain area to Vancouver where begins, approximately, 8,500 miles of ocean transportation, via Panama, or 14,500 miles via Magellan Straits. Can there be any doubt as to which route the products of the West are destined to go?

#### FUTILE OBJECTIONS

It has been claimed by some that the insurance rates on vessels and cargoes via the proposed Georgian Bay canal would be prohibitive. To those it may not be amiss to point out that the insurance rates on vessels and cargoes via the present Welland and St. Lawrence canal route, with its 48 locks, is prohibitive. Surely they would be more so on a route with only 25 locks, and practically the same, if not better, class of open channel navigation. The navigation on the Georgian Bay canal outside of the locks will be similar to that on the Detroit and St. Marys rivers, where accidents to vessels are so rare. In reference to the speed limit of from 6 to 9 miles per hour which is claimed will be only permissible, and which is used by some as against this route, it may also be pointed out to them that even if six miles per hour was the average speed over this route it would still be the route above all others. It is the depth and size of load permissible, and the results therefrom, and

not speed which will count.

Another bone of contention is the water supply available at the extreme summit level of Trout, Turtle and Talon Lakes, the opponents of the canal claiming that there would be a supply of water sufficient to float over the summit only a minimum of the anticipated tonnage of the future. It may be pointed out to those opponents also that "at high level is not necessary. If the Lake Nipissing high level is taken, it is claimed, and with reason, seeing that it drains a basin of over 4,000 square miles, that there will be sufficient water for all time and for whatever tonnage may be offered. True, it will cost \$10,000,000 more, but it will also do away with two locks, making 25 locks instead of the 27 necessary with the using of the higher summit levels. Even if the canal should cost double its estimated cost of \$110,000,000, it would be a cheap investment for Canada for the result obtainable by it.

Canada, heretofore, has had very unsatisfactory results from her canal expenditures by the old route of the Welland and St. Lawrence, which with the Sault canal, have already cost \$80,000,000, with over \$4,000,000 annually for interest, operating expenses, etc., and she only enjoys 20 per cent. of the traffic through them, the United States having the balance of 80 per cent.

By the Georgian Bay canal this will be changed, for Canadian interests will be the predominant interests, for the trade will be to a Canadian terminal.

The possibilities of this route in the creating of an interprovincial kinship and good feeling, by the creating of trade relations between the ex-

treme Atlantic seaboard and intermediate points and the West, are altogether lacking by the Welland canal improvements, and for this reason alone the Georgian Bay route should be chosen as the one for development. We want to make Canada one in feeling and desire, and nothing will promote this more than profitable interprovincial trade relations.

Every dollar spent in the Georgian Bay canal will benefit Canadian carriers, shippers and ports to the fullest extent, without opening the way for diversion of traffic to United States routes.

#### CANADA WOULD SCORE

With the Georgian Bay canal in existence Canada will hold sway as the great factor in the transportation of western freight, both United States and Canadian, through Canadian channels and terminals to the sea, for nearly eight months of each year, and almost equally so for the remaining four, for Canadian freight.

The boundary waters of Canada will, and must remain forever subject to the joint control of our neighbors and ourselves. But nature has given us, in the Ottawa and French rivers, the means of providing ourselves with a great, independent, national deep waterway, and most Canadians strongly believe its immediate development to be the only truly national waterways policy for this country. And, in the words of the late Joseph Tasse, M.P. in the House of Commons in 1885, "The government that will accomplish this work will be a patriotic, a far-seeing government, a government that will deserve to be commemorated in Canadian History."

JOSEPH REDDEN.

Port Arthur, October, 1912.

# SOME MORE ANENT THE GREAT CANAL PROBLEM

Mr. Joseph Redden deals Further with the Subject and Answers Some of his Critics, making a Good Case.

Editor of The Evening Chronicle:—

Since the meeting of the Board of Trade on Thursday evening, at which the Georgian Bay Canal was under discussion, I have been asked by numerous citizens questions in reference to the coal of Nova Scotia and the probabilities of its being able to compete with the United States product at the head of the lakes, and also reasons why both canals should not be built.

On the coal question I secured what statistics were procurable from what should be reliable sources, and those used in my article lately published, are as given in the statistics of the Dominion Government and from the pamphlet of Mr. Lawrence-Hamilton, which had previously been published in "The Financier," of London, England. Mr. Lawrence-Hamilton claims that Nova Scotian mine owners were in October of this year contemplating the entering of the British market and competing with British coal, and also made the statement that it was claimed that Nova Scotia coal could be sold down at a profit at 7s. 3d. per ton, which is equivalent to about \$1.80 per ton, and this after a voyage of 2600 miles. Are we not justified in using these figures, seeing that they came from a man of such repute and were published in a paper of such standing as the London "Financier"?

If Nova Scotia mine owners can deliver coal at \$1.80 per ton after being transported 2600 miles, surely they could deliver at the same price after a voyage of only 1600 miles to the head of the lakes.

Then again we have the statistics of the Dominion Government, which show that the coal in Nova Scotia

is sold during the three years of records given at a value of \$2.00 per ton. I have been informed during the past week by one of the oldest and most experienced captains of the lakes, one who is in command of one of the large vessels in the coal trade, that coal could be delivered from Nova Scotia to the head of the lakes via the proposed Georgian Bay Canal at a profit to the vessels engaged at a rate of \$1.00 per ton, on a one-way cargo basis, and as a return load for vessels carrying wheat, for a great deal less.

The testimony of Capt. Norcross in reference to a paying freight on wheat to Montreal bears this out. Thus, taking the price of coal at the home market as given in government statistics, plus the freight to the head of the lakes, we get a cost of \$3.00 per ton, or less. Coal is sold here in car lots at approximately \$4.00 per ton. Are we not justified in believing that coal from Nova Scotia could find a market at the head of the lakes?

At the most it is only an adjustment of tariff, and if ever a tariff for protection was justifiable it would be in this case, when such tremendous possibilities for the greater development of Canada are at stake.

But leaving the possibility of return loads of coal aside, the fact remains that the Georgian Bay Canal is the only canal for Canada to development in order to retain her western traffic. The importance of a deeper Welland Canal in making perfect the United States canal system to her seaboard is fully realized, if not by Canadians, at least by Americans, for the Superintendent of Public Works for the State of New York, and whom I quoted in my article on the canal question, further stated in his report, according to the

pamphlet issued by the Federation of Boards of Trade and Municipalities of Canada, "That once the deep water canal from Oswego is completed a connection from Lake Erie to Lake Ontario can be safely left to the Federal Government."

So that the deepening of the Welland Canal by the Canadian Government simply means that Canada will in her generosity save the United States \$40,000,000 or \$50,000,000 in perfecting that country's canal system to her seaboard, which might, with Canada not deepening the Welland, be deemed not worth the expending of such an amount by the United States, with the Georgian Bay Canal in completion with its 2c. to 3c. rate to the seaboard. In reference to the building of both the Welland and Georgian Bay Canals, which some kindly disposed persons advocate, I must say that those who view this possibility must view this canal question very lightly. No country, no matter how rich, can afford to throw away fifty or one hundred million dollars so wantonly. Either canal, with double locks properly equipped, could handle from fifty to seventy-five millions of tons of freight in a season, which will be more than sufficient for the requirements of Canada for many, many years. To claim that two deep water canals are necessary is absurd.

When I wrote my article I viewed each canal from a purely national standpoint and with the intention of finding out which canal would retain Canada's western trade, which is so fast disappearing through United States channels. If the Welland Canal route were found not defective in this respect there were no need of the Georgian Bay Canal and if the Welland Canal route were defective it would be the height of folly for Canada to spend one dollar for its improvement, with another route possible without such defects.

The question to ask oneself in this great national problem, one of the greatest that the people of Canada have ever had before them, for it means the holding or losing by Canada of the transportation from these twin ports to the seaboard of her

western freight is: Will the contemplated improvements of the Welland Canal retain to Canada her trade in her own channels to the seaboard, without any possibility of diversion to the United States? Then apply the same question to the Georgian Bay Canal, and investigate. These are the two questions I considered and investigated, and the evidence I gathered was overwhelmingly, to my mind, in favor of the Georgian Bay Canal. That evidence I laid before the public in my article and left it for them to judge.

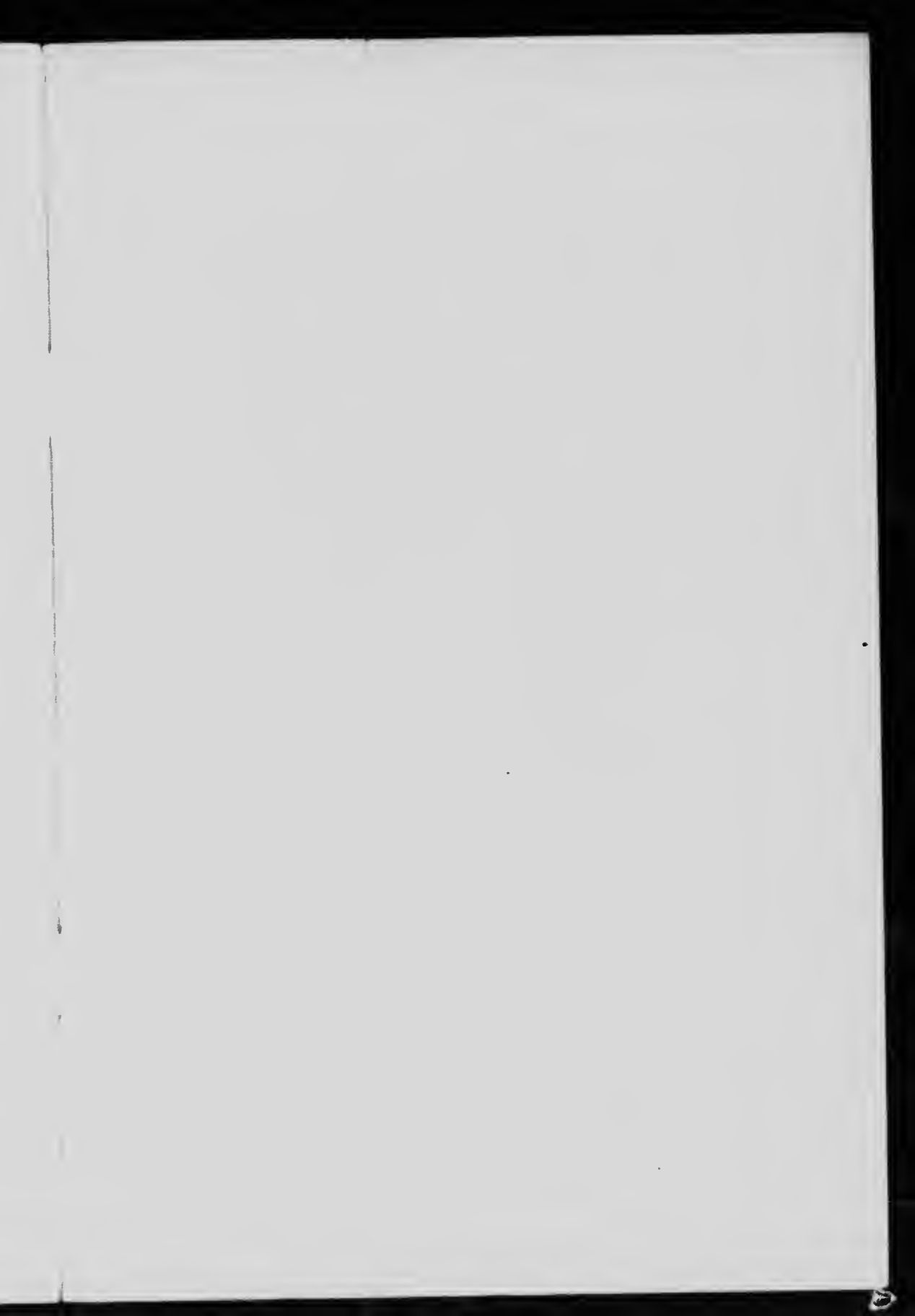
The Toronto papers say, build the Welland Canal first and then the Georgian Bay Canal. If the Welland Canal is deepened there will be no Georgian Bay Canal, for the damage to Canadian transportation will have been done, and it cannot be undone, and the deepening of the St. Lawrence canals will be the only and most rational thing to accomplish. Canada may by this retain some of the direct summer traffic, but she loses practically all grain for storage and for winter delivery to the seaboard.

Toronto and other cities on the Welland and United States route are unfortunately placed, but will, when they realize the great danger to Canada's future in the proposed deepening of the Welland Canal, submit themselves to the building of the canal which will be for the greater glory and development of Canada, and not sacrifice Canada in a desire for a possible greater development for themselves in the deepening of the Welland Canal.

Canada only needs one deep water canal, and let her see to it that this canal is the one which retains to her the absolute control, for nearly eight months of each year, of the freight of half a continent, namely, the Georgian Bay Canal; which will, without a doubt, under the guidance of a wise government, make possible the development of Canadian shipping and the mineral resources of this country to their fullest extent.

JOSEPH REDDEN.

Port Arthur, Dec. 9th, 1912.









Section of Port Arthur's Docks

Coal Docks, Port Arthur, showing American vessels unloading American coal (Storage Capacity of Dock, 750,000 tons)



With the proposed Georgian Bay Canal in operation it would be possible for similar large Canadian vessels to trade from Port Arthur and Fort William and other upper lake Canadian ports to Canada's coal area and return with Canadian coal for Canadian consumption

