

PROJECT TO MAKE GREAT LAKES ANOTHER MEDITERRANEAN

Western States Favor Plan, but Many in New York Fear Effect on Barge Canal—Improvement of St. Lawrence Would Yield 2,000,000 Horse Power—Outlet for Wheat Fields

OPENING up the St. Lawrence River to connect the Great Lakes and the Atlantic seaboard, with the thought of making the Great Lakes accessible to ocean-going steamers, is a project now being considered by the Governments of Canada and the United States.

who oppose this enterprise say that the cost would be much larger than the estimated \$250,000,000. But the project, even if the cost should go somewhat beyond estimates, would pay for itself over and over again, its advocates assert, in the lowered cost of transportation, and in the sale of the horse power created in the St. Lawrence.

There would be a transportation saving of 5 cents a bushel on wheat, it is asserted. This would not only be a direct saving, but would result in an immense stimulation of farm production. Large areas not now within the margin of profitable cultivation in tributary States would be brought into production.

According to advocates of the project, nature suggested a second Mediterranean in the laying out of the Great Lakes. But it was only a rough sketch, with a chain of barriers between the open sea that seemed to make the suggestion ironic.

Thus far the East has only heard a faint echo. The International Joint Commission, authorized by the last Congress "to investigate what further improvement of the St. Lawrence River between Montreal and Lake Ontario is necessary to make the stream navigable for ocean-going vessels," held meetings in New York the other day without any attention from the newspapers; but from now on, the undertaking in its vast double scope—an ocean highway from the lakes to the sea, the creation of 2,000,000 horse power in the St. Lawrence—will inevitably be forced on the East as an issue that can no longer be overlooked.

In the West States Enthusiastic. The big driving force behind the enterprise, since the war the conception had taken strong hold of the business men in that section; and now untiring energy converging from many sources, industry, commerce, agriculture, will push the undertaking to the States. The member States of the Great Lakes-St. Lawrence Tidelwater Association are: Illinois, Michigan, Iowa, Montana, Colorado, Indiana, Wisconsin, North Dakota, Idaho, Nebraska, Ohio, Minnesota, South Dakota, and Wyoming.

In 1843 one old gray horse and a cart did all the transportation around the falls at Sault Ste. Marie. The next year the first shallow canal was begun. In 1919 90,000,000 tons of freight passed through the Sault Canal. It is pointed out as an example of how the West has grown, how improved water transportation has helped it so far.

The next investment already made for the larger project, it is pointed out, was in deepening the shallows in the St. Clair flats and in the Detroit River, connecting Lake Huron and Lake Erie. This cost \$16,000,000. With the completion of that improvement the way for ships drawing twenty feet was opened from Duluth, at the western end of Lake Superior, to Buffalo, at the eastern end of Lake Erie.

This brings the proposition to the improvement of the St. Lawrence. From Lake Ontario to tidewater is 180 miles. This distance falls into two sections: first, the international boundary, over which the commission has jurisdiction, a distance of 113 miles extending from Lake Ontario to St. Regis. The remaining distance to Montreal is in Canadian territory and, if the project is carried through presumably will be improved by the Canadian Government. Of the total distance it is estimated that 135 miles are nearly all navigable for ocean-going steamships. This leaves 45 miles to be improved in which the large item of expense is the rapids. One of the estimates of the cost of these improvements is: Lake Ontario to International Boundary, \$100,000,000; from the international boundary to Montreal, \$100,000,000.

The cost of the Panama Canal was something over \$400,000,000. Original estimates were much lower, and those

would also be developed. It is asserted, affecting the cost of living by the economies introduced by water transportation. Doubling the railroad tracks between the West and the East, if the money could be raised, would not solve the problem of transportation. It is argued, as the heart of the difficulties is at the terminals. These are the necks of the bottle, and here is where the congestion banks up. In both 1918 and 1919 emmer barges stopping the movement of other than urgently needed freight were the weapons used. Enormous expense attends the increase of terminal facilities.

Electric Power for East. Now for the by-product of the new ocean route—2,000,000 horse power. The total horse power developed at Niagara is 650,000. At \$15 a horse power the value created would be \$30,000,000 a year, and half of this would belong to the United States. The horse power would be one-third of the total installed generating capacity of all the plants engaged in producing electricity in New York State. Most of this new horse power would come to New York, and this advantage is to be laid before New York and the lower New England States in the campaign now beginning.

The St. Lawrence is the one great source of water power for the East. Seventy per cent. of the water power of the country is west of the Mississippi; more than 70 per cent. of the stationary prime-movers' horse power is east of the Mississippi. Thus, it is pointed out, the East is rapidly using up the expendable resources of power, and if it continues unresponsive to its water-power possibilities it may soon see the transfer of some of its industries to the ambitious and energetic West.

The horse power that would be produced would be the equivalent, it is estimated, to about 7,500,000 tons a year; the amount of coal consumed per annum in New York and New England by public utility plants is placed at 7,000,000 tons. This power would be independent of coal strikes; it would, it is asserted,

the transportation on the Erie Canal would be largely increased. "I have no hesitancy in saying that of all the States bordering or tributary to the St. Lawrence waterway the greatest beneficiary of the development would be the State of New York," he said recently in Washington. "Letting loose this flood of power over its territory would cause New York to leap further to the front as a manufacturing State and its products, stimulated by cheap power, would find wider markets in all parts of the world."

"This power, in the main, would have to find a market in New York. Canada would find it to its advantage, I think, to sell much of its share of the power to New York, which is organized industrially to make use of it and to pay for it. That would mean more factories along the canal and the lake shore, profiting by low cost of water transportation as well as motor power. Each new factory would mean more business

Every farm in the West has contributed something to the upbuilding of New York, and the expansion that this project would induce in a large section of the country would have the same effect as growth in the past. The project needs to be looked at in a big way. I am sure it will be.

"No other State in the Union has the same strategic advantage in power, population, labor supply and transportation as New York and these advantages, for natural and geographical reasons, can probably never be lost, notwithstanding that the day is coming when the West will hold most of the black-coal reserves of the country in addition to its everlasting majority of the 'white coal' supply.

"Because of this situation New York cannot overlook the St. Lawrence, the greatest individual power proposition on earth. A supreme advantage is that there is no fluctuation in the flow. The lakes are a natural reservoir, guaran-

teering this. In the West, artificial reservoirs must be built to store water for the dry season, in Summer and Spring, and this enhances the cost per horsepower. "The project is sound financially. It will pay its way and more too." If some one would make a contract with me and agree to give me the pay in the water power created for the development of the waterway, I could finance the proposition in New York City without any trouble. The advocates of this enterprise are chiefly resident far west of the St. Lawrence River, and the power feature of the work is only of incidental or general interest to them in their promotion of the navigation project, but to the State of New York and portions of New England it is a matter of extreme importance."

Grounds of Opposition. There is also a negative side, not the least important of which is the position taken by many persons in New York State. According to them, the St. Lawrence project would waste money and help cripple United States commerce. In support of the first objection they assert that the New York Barge Canal, the innumerable locks and narrow waterways. The greatest speed a lake or ocean steamer could make through this waterway would be four miles an hour. The expense entailed, it is asserted, would be too stupendous to make the trip pay.

Another point opponents bring out is the fact that it is foolhardy for the lake ports to believe that their ships can make direct communication with Europe, as is maintained by the supporters of the St. Lawrence project. They are built primarily for carrying the largest cargo possible on the lowest draft of water on inland lakes. To try to operate them on the ocean would, according to the men opposed to this venture, be ridiculous. The barges of the New York State Canal, they add, have been built for no other purpose than to act as carriers of cargo through the canal waters, and as such are highly capable of meeting any cargo situation that may arise.

From the point of view of the commercial importance to the nation of retaining the service of the New York State Barge Canal, the assertion is made that the project is in its intent merely an effort to divert the trade from American cities to Canadian. Edward S. Walsh, Superintendent of Public Works of the State, elaborated this in an address recently before the National Rivers and Harbors Congress Convention.

"The exportation of the bulk of the annual Canadian grain crop through American ports is a matter of grave concern to Canadian interests," he said. "The report of the Department of Railways and Canals of Canada for 1916 shows that of 182 million bushels of Canadian wheat shipped by lake from the ports of Port William and Port Arthur during that year, only a million and a quarter bushels went to Montreal, while over 106 million bushels went to Buffalo.

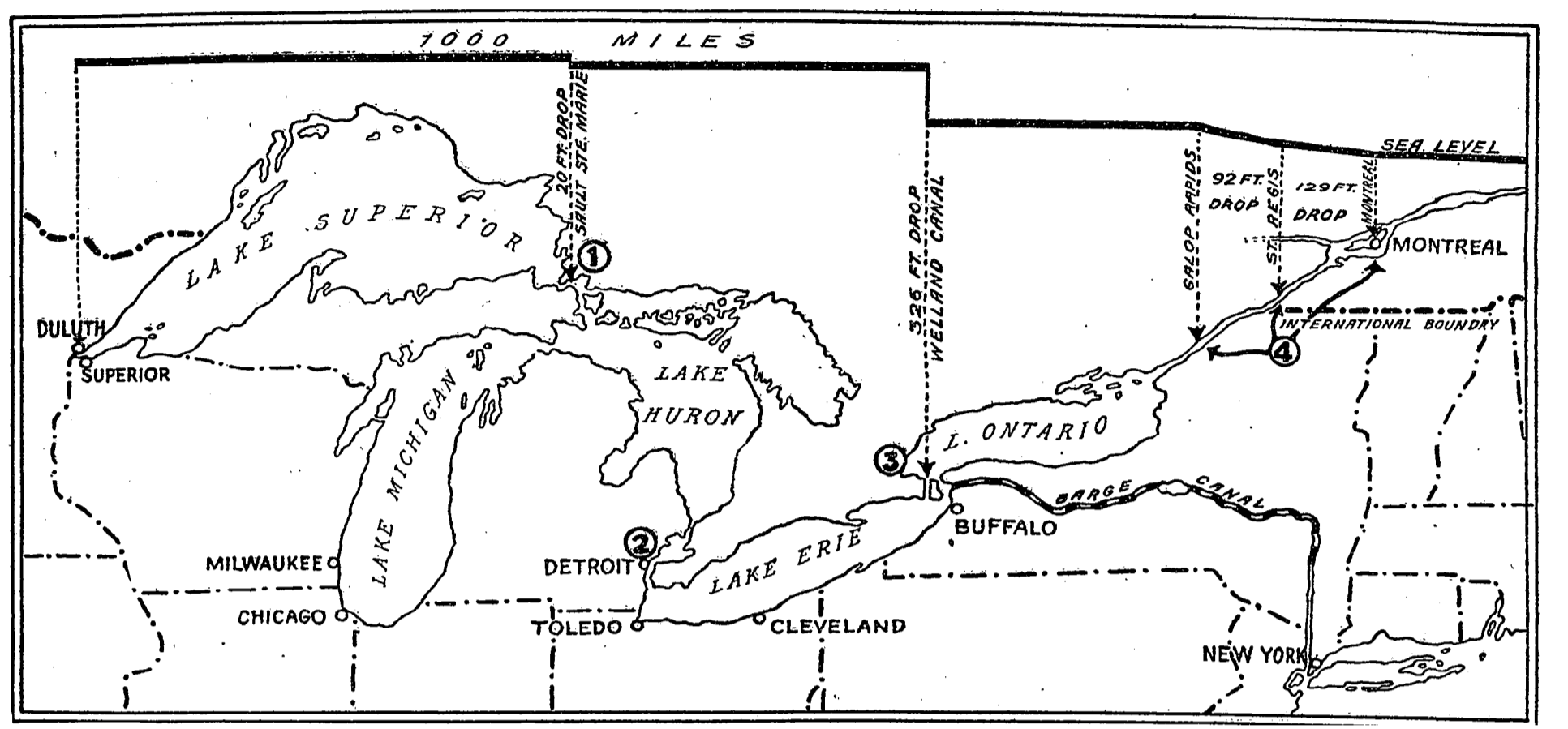
"For a great many years Canada has striven unceasingly to devise some plan that would control the grain situation. Splendid modern elevators were erected at Montreal in the hope that such facilities would attract the business. "An improvement of the Welland Canal permitting the passage of deep draft lake vessels into Lake Ontario was undertaken in the hope that the big ships would sail past Buffalo and down to Prescott, only 119 miles from Montreal.

"A ship canal from Georgian Bay to Montreal was projected with a view of appreciably shortening the route from the head of the lakes to seaboard and diverting the ships from Lake Erie. "A railroad from the Canadian grain fields to Fort Nelson on Hudson Bay was undertaken, and this was of such importance that during the war, while Canada was tearing up tracks elsewhere throughout the Dominion and shipping them to Europe, new rails were being laid north to Hudson Bay and over a million dollars was spent on the work.

Fears Canadian Ambition. "During all of the time Canadian interests were devising ways and means to control and divert the lake grain commerce, the State of New York was working on a project that Canada well knew would be the controlling factor in the grain traffic. For fifteen years New York State had been engaged in the reconstruction of its canal system. During this reconstruction period commerce on the New York canals, particularly the grain commerce, had greatly declined. Canada had benefited by this condition. It is peculiarly significant that the greatest increase in grain exports through Montreal was had while the New York Canal route was practically out of commission.

"The Canadian interests realized the hopelessness of their ambition to control the grain commerce as long as the New York Canal route existed. The dilemma of transportation between the Great Lakes and the seaboard. No existing route can compete with the New York Barge Canal. Confronted with this fact, Canada considered how this competitive route could be removed from the field.

"The splendid elevators at Montreal had failed to solve the question. "The Welland improvement will act as sort of a boomerang to Canada because when large lake vessels pass into Lake Ontario there New York has the port of Oswego and grain can be transported through Oswego and the Barge Canal to seaboard cheaper than through Buffalo. The Welland improvement, furthermore, had given the question of the competition for the grain harbor needed encouragement as the State will build grain elevators at that port to accommodate the expected traffic.



MAP SHOWING STEPS IN OPENING SHIP WAY FROM THE GREAT LAKES TO THE ATLANTIC. (1) Soo Canal, Collecting Lake Superior and Lake Huron, Completed at Cost of \$27,000,000. (2) Deepening St. Clair Flats and Detroit River, Connecting Lake Huron and Lake Erie, Completed at Cost of \$16,000,000. (3) Welland Canal, Connecting Lake Erie and Lake Ontario, and Avoiding Niagara Falls, Soon to be Completed at Cost of \$65,000,000. (4) (Indicated by Dotted Line) Proposed Improvements in St. Lawrence to Complete the Ship Way to the Ocean; distance 181 miles, 113 International Boundary, Rest in Canadian Territory; Cost Estimated at \$200,000,000 to \$250,000,000 Chief Problem Here Stated to be About 40 Miles of Rapids.

and in addition there are physical limits with which money cannot cope. At the peak load, as during the months the wheat is moving out, cars are caught in the congestion, backed sometimes as far west as Pittsburgh, and the whole country feels the pinch and pays the extra cost of this aggravation of the normal car shortage.

Even by using all the resources of water transportation, increase of railroad facilities to the limit attainable will be required to meet the country's needs, now unquestionably entering upon a new period of growth. The first step in taking advantage of what nature has provided in water transportation is to create a main artery that taps the heart of the 'Middle West'; that is, make an ocean highway from the Great Lakes to the Atlantic. By this route the distance from Great Lakes ports to Northern Europe would be shortened 500 miles. So the argument goes. For four months in the year the railroads would still

Derides Inland Ports. "These good people in the Northwest were not told, they did not understand, that the sole purpose of the scheme was to provide a means whereby Montreal could compete for the grain traffic with American ports. The people in Illinois in Wisconsin, and in Minnesota were not told that few, if any, ocean vessels would ever ply the waters of Huron, Michigan or Superior. Our neighbor on the north cherishes no idle dreams of seaports on the Great Lakes. What it does want, however, is the competitive advantage with the aid of the Government of the United States is a combined lake and seaport on the St. Lawrence. They hope to see the big grain carriers on the lakes sail by Buffalo and bring their cargoes to Montreal. In this manner they hope to counteract the usefulness and destroy the competitive influence of the New York State Barge Canal. Only by this means can they control the grain trade.

"The Dominion of Canada has an investment in the Port of Montreal that is trivial compared with the \$300,000,000 New York has first and last put into its waterways. Yet Canada foresees the time when this investment will be jeopardized, for the development of commerce on the New York State Barge Canal will inevitably endanger Canadian enterprise. Naturally, Canada is anxious to protect its institutions. Twenty years ago New York faced the same condition now confronting Canada. It realized the growing importance of Canadian competition, but it asked neither the aid of neighboring States, neighboring Governments, nor even the parent Government. New York, unaided, set out to provide a waterway that would protect its commerce, and, in a great measure, that of the nation.

"Having undertaken and completed the stupendous project, it now finds its waterway system placed in jeopardy by a scheme originating with those who have every reason to fear the effects of its operation and who have exhausted every means to control the grain commerce flowing down the Great Lakes.

"New York, therefore, resists to the limit of its power and resource any attempt on the part of misguided interests in the country to take funds from the Treasury of the United States for the construction of a water route competitive with its Barge Canal, unless such route be a purely domestic one. More strenuously does New York oppose and resist any proposal that would render ineffective as a competitive factor in the grain commerce, the waterway the people of the State of New York have constructed at such great sacrifice and placed at the disposal of the entire nation, without toll or restriction."

In the list of those who have endorsed the project are: Major Gen. Leonard Wood, ex-Secretary of the Interior Lane, Herbert Hoover and Secretary Daniels.