

The House adjourned at 1 o'clock.

AFTERNOON SESSION.

The Speaker took the chair at 3 o'clock.

HURON AND ONTARIO SHIP CANAL.

Mr. WIDDIFIELD presented the report of the Special Committee on the Huron and Ontario Ship Canal, of which the following is a synopsis:—The report commences with a recital of the circumstances which led to the appointment of the Committee, and a resume of the business done at its various meetings. Then follows a brief history of the project, and of the various efforts to secure for it Parliamentary recognition in the old Canadian Parliament, the Dominion Parliament, and the Legislature of Ontario. The report concludes as follows:—“Your Committee have also had under consideration the important question of the practicability of the scheme. It appears from Parliamentary Reports and other documentary evidence submitted, that such eminent engineers as Messrs. Kivas Tully, John Hawkshaw, A. M. Kendal, Walter Shanly, Col. R. B. Mason, and the late William Skyes, have at various times reported in favour of it. The great difficulty in the way in the past appears to have been the deep cuttings which would be necessary in passing through the “Oak ridges” in the township of King. In order to reach the level of Lake Simcoe this cutting would have to be 197 feet deep at the highest point of the ridges. The wonderful advancement of engineering science appears, however, to have largely overcome this difficulty. Your Committee have had before them Mr. Frank Turner, C. E., who gave full explanations concerning the hydraulic lift-lock, which seems to be peculiarly adapted to cases of this kind. From his testimony, which was supported by ample documentary evidence, your Committee find that hydraulic power has been used in connection with floating docks for a number of years, and that the hydraulic lift-lock as applied to Canada is by no means a mere theoretical engineering problem, but has been practically and successfully tested on the canal at Anderton, on the river Weaver, in Cheshire, England, for three years past. By means of the hydraulic lift-lock the quantity of excavation in the Oak Ridge cutting would be reduced three-fourths, the number of locks required on the canal would be diminished in even greater proportion, there would be absolutely no waste of water at all except that resulting from evaporation, and the total cost of the undertaking would be decreased by one-half, or from forty, the original estimate, to twenty millions of dollars. This assuredly places the project for the construction of the Huron and Ontario Ship Canal in a very much more favourable position. In the documentary evidence submitted in support of Mr. Turner's views as to the practical utility of the hydraulic lift-lock, it appears that such a high authority as Sir William Armstrong regards it as an unqualified success. Mr. Sidingham Duer, A. I. C. E., of England, who, in conjunction with Mr. Edwin Clark, M. I. C. E., designed and constructed the lift-lock at Anderton, also confirms this view, and asserts that he “has no fear about the lifting of ships of any size.” Mr. David Roberts, C. E., of Toronto, gave similar testimony.

The evidence adduced before your Committee on this point has satisfied them that the hydraulic lift-lock cannot only be adapted to the Huron and Ontario Ship Canal, but will be the means of overcoming the principal obstacle in the way of its construction. The enterprise itself is one of vast importance to the people of this Province, and deserves every consideration at the hands of the Government and your honourable House. Your Committee are precluded by the rules of the House from recommending an appropriation for a re-survey of the proposed route, but they trust the time is not far distant when such a survey will be made, and this great public work, which will open up a direct highway for the conveyance of the products of the fertile prairies of the West and North-West to the markets of Europe, will be in process of construction. Your Committee, in conclusion, desire to express their high appreciation of the indefatigable exertions put forth by Frederick O. Capreol, President of the Huron and Ontario Ship Canal Company, in behalf of this project during the past ten years. The sacrifices he has submitted to, and the indomitable energy he has displayed in promoting an enterprise fraught with great moment to millions of people, are deserving of both commendations and success. His statement as to the position of the undertaking together with the evidence adduced before this Committee, above referred to, is herewith submitted with the suggestion that the whole be printed and distributed for the convenience and information of members of your honourable House. He had always been one of those who believed in the practicability of the scheme of constructing a canal from the Georgian Bay to Lake Ontario. The length of the canal proposed to be built was ninety-seven miles, but the portion that would require to be excavated was, however, only about forty miles long. The scheme was not by any means a new one; it had been favourably reported upon to the House in 1857, and had ever since been before the country. In 1869 a Committee under the chairmanship of the late Chief Justice Harrison prepared an exhaustive report, recommending a liberal land grant in aid of the scheme. In 1875 the charter of the Company was renewed for ten years. He thought there could be no doubt that the construction of the canal would be an immense benefit to Canada, and especially to Ontario. The vast grain-bearing territory in the West had, for the natural avenue of its productions to the markets of Europe, the water highway afforded by the great lakes and the St. Lawrence River. If the length of the route could be materially shortened, as it would be by the proposed canal, its advantages would be very much enhanced, and would be so great as to secure for Canada almost a monopoly of the carrying trade of the West. From Chicago, which, though one of the most important, was only one of the many ports that would be contributory to the canal, were shipped only 78 bushels of grain; twenty years later 20,000,000 bushels, and last year the trade had reached the proportions of 119,000,000 bushels. From Milwaukee in 1877 there were shipped 32,000,000 bushels, making a total from those two ports alone of about 150,000,000 bushels a year. Those figures would give some faint idea of the resources of the West, but the capabilities of that part of the continent were still undeveloped. The annual value of the grain exported from Western sources was \$68,000,000, and the sum was swelled by other agricultural products to \$207,000,000. If they could bring that trade through Canadian territory Ontario would practically have the control of the commerce

from the Western part of America to Europe. And if it were deemed necessary in the future to bring about another Reciprocity treaty with the United States, the possession of the canal would be an immense lever in obtaining it. Another advantage would be that it would connect the terminus of the Pacific Railway with Lake Ontario. It would induce immigration both to Ontario and to the new territory lying to the West. The expenditure of \$20,000,000, the sum which it was supposed the canal would cost, would, supposing the sum were to be expended at the present time, go very far towards relieving the commercial depression. From a military point of view the advantages presented by the scheme were also very great. But the most important feature was the shortening of the route from the West to the markets of the world. A cargo of grain shipped from Chicago through the Sault, Ste. Marie Canal, Lakes Huron and Erie, and the Erie Canal, via New York to Liverpool, would traverse a distance of 4,600 miles. The same cargo passing through the proposed canal, and going by the St. Lawrence canal via Quebec, would only have to traverse a distance of 3,766 miles, a saving of no less than 834 miles. (Hear, hear.) Even compared with the Welland Canal the gain in distance was very great. From Chicago to Quebec by the Welland Canal was 1,500 miles, while by the Huron and Ontario Ship Canal it would be 1,180 miles, a saving in distance of about 320 miles. These decreases in distance in this fast age represented a very large sum of money. The amount of grain conducted through the Erie Canal in 1874, the last year for which he had returns, was about 12,000,000 tons. A very large proportion of the work connected with the moving of that vast quantity of grain would be diverted to the people of Canada by the construction of the Huron and Ontario Ship Canal. In the same year the cost per ton of shipping grain from Chicago to Liverpool was \$16 60, while the estimated cost, after making due allowance for tolls by the proposed route, would be but \$12 65, a saving of \$2 95 per ton. The gain upon moving the same amount of grain as had been moved through the Erie Canal in 1874, if it were conducted by the way projected, would be \$36,000,000. It had been estimated that the saving would be greater, that it would be about \$100,000,000, but even if it only amounted to one-fifth that sum, the gain to the country in one year would be sufficient to defray the expenses of this great national undertaking. The saving in time was equally as great as in money. By way of the Erie Canal a cargo occupied twenty-six days in going from Chicago to Liverpool, while by the canal from the Georgian Bay to Lake Ontario it would take but fifteen days and a half. From the figures he had given he thought it was quite clear that not only was this great work imperatively demanded by the interests of the country, but that it would pay. The question of the practicability of the scheme had been raised. It had been considered feasible by eminent authorities when engineering science was not so highly developed as at present. The great difficulty in the way of constructing the canal was the existence of the Oak Ridges in the township of King. The greatest depth of cutting that would be required there would be one hundred and ninety-seven feet, and the length of the cutting would be about nine miles. But these difficulties could be to a great extent overcome by advances in civil engineering. The invention of the hydraulic lift-lock had been an immense step in the direction of cheapening the cost of the construction of canals. The new lock was in use at the present time at Anderton, on the River Weaver, in England. It was true that it had only been applied on a small scale hitherto, but if the principle were once fully established there was scarcely any limit to its capabilities. A large amount of testimony had been submitted to the Committee, and they had come to the conclusion that the hydraulic lift-lock was specially adapted to the nature of the country through which the canal would pass. The application of the lock would do away with three-fourths of the cutting in the ridges in the township of King, and would decrease by more than three-fourths the cost of overcoming that difficulty. By the use of the lift-lock there was absolutely no loss of water, except that resulting by evaporation, whereas under the old system a constant supply of water was necessary. According to the estimates of Mr. Frank Turner, a qualified engineer, and others, the application of the new locks to the canal would decrease the cost one-half. It had been estimated that the sum that would have to be expended under the old system was \$40,000,000, while under the new it would only be about \$20,000,000. (Hear, hear.) He would like to see members of the House dismiss all prejudices from their minds in the consideration of the question, and if they did so he had no doubt they would come to the conclusion that the scheme was feasible and would be beneficial. He thought that the Government might properly make a small grant to complete the survey of the route. The question was not a party one; it was a national, even an international, one, and he trusted that the Government would see their way to countenance the scheme to the extent of granting a small sum towards the completion of the survey. (Cheers.)

Mr. CALVIN said that his experience in the carrying trade had been that craft had to be built to suit the water on which they were to float. He prophesied that if the canal were built to-morrow it could not be put into operation, for the reason that boats sufficiently strong to stand the voyage across the Atlantic could not be taken through it. It was idle to talk of constructing canals in the present age, when railways were so much more reliable and economical. The peninsula—the necessity for getting around which the canal was designed to obviate—was already traversed with railways, which did away with the need for any other mode of communication. He would not vote to set apart fifteen cents for a survey. (Hear, hear.)

Mr. MORRIS said the matter was beyond all question one of national importance, and he hoped the suggestions embodied in the report would be concurred in. A great deal of very important and interesting evidence had been taken by the Committee, which it was desirable to have printed, and he suggested that the rules of the House should be set aside so as to allow of the immediate printing of the report.

Mr. DEROCHE said that there was a general impression that the scheme was a hair-brained one of Mr. Capreol's, but from the investigations of the Committee he had come to the conclusion that such was not the case. Undertakings such as this had almost universally been voted impracticable at the outset. It had been proven to a demonstration that the Atlantic could not be crossed by steam, but the event had shown that the prediction was a false one. The advantages which the canal would present to the Province were incalculable, and were such that it was quite possible that Toronto might be made