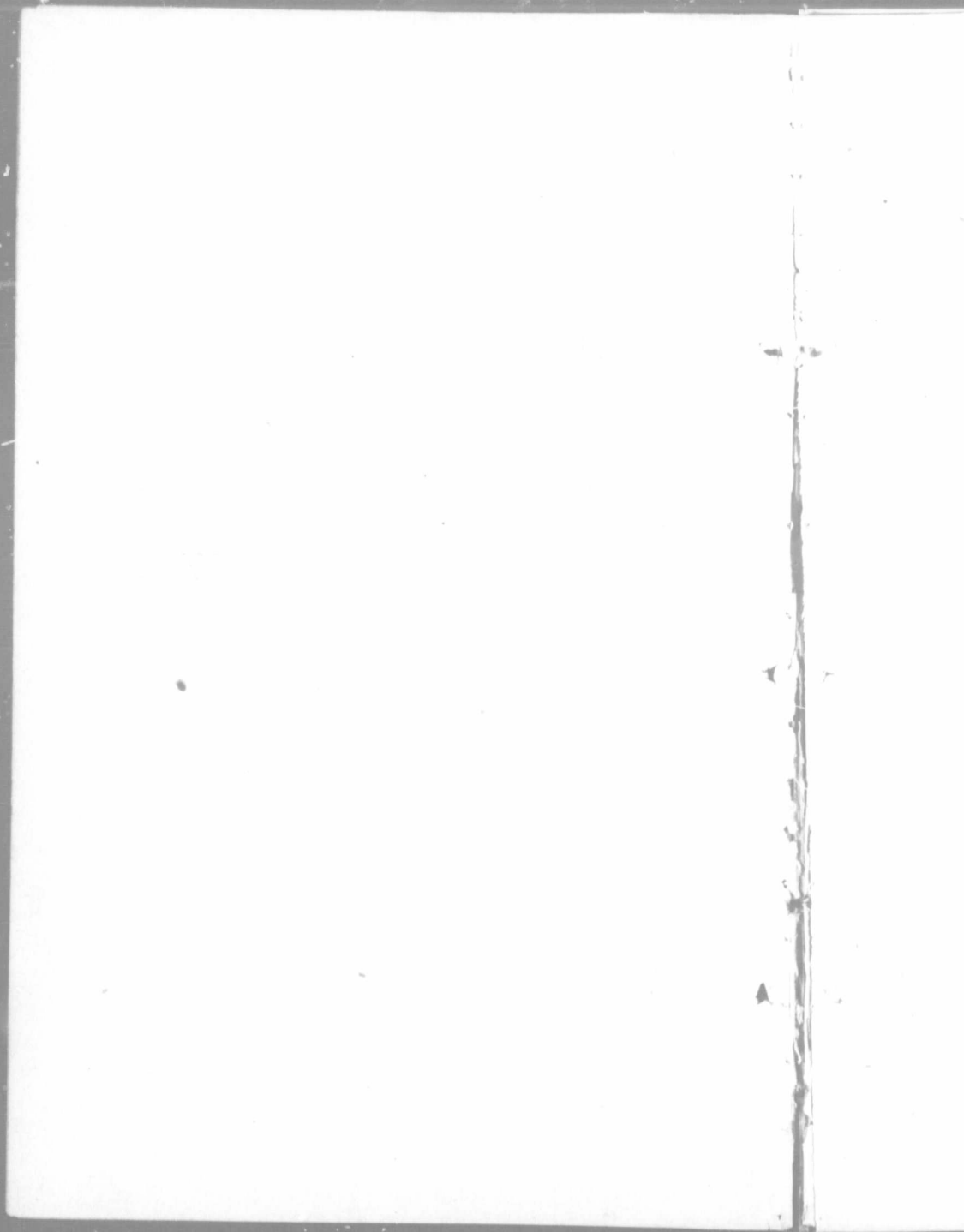


ANNUAL REPORT
OF
THE BOARD OF TRADE
OF THE
CITY OF OTTAWA,
FOR THE YEAR 1865.



OTTAWA:
PRINTED AT "THE DAILY CITIZEN" OFFICE.
1866.



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At a General Meeting of the Board of Trade of the City of Ottawa, held in the City Hall on Thursday, 1st February, 1866,

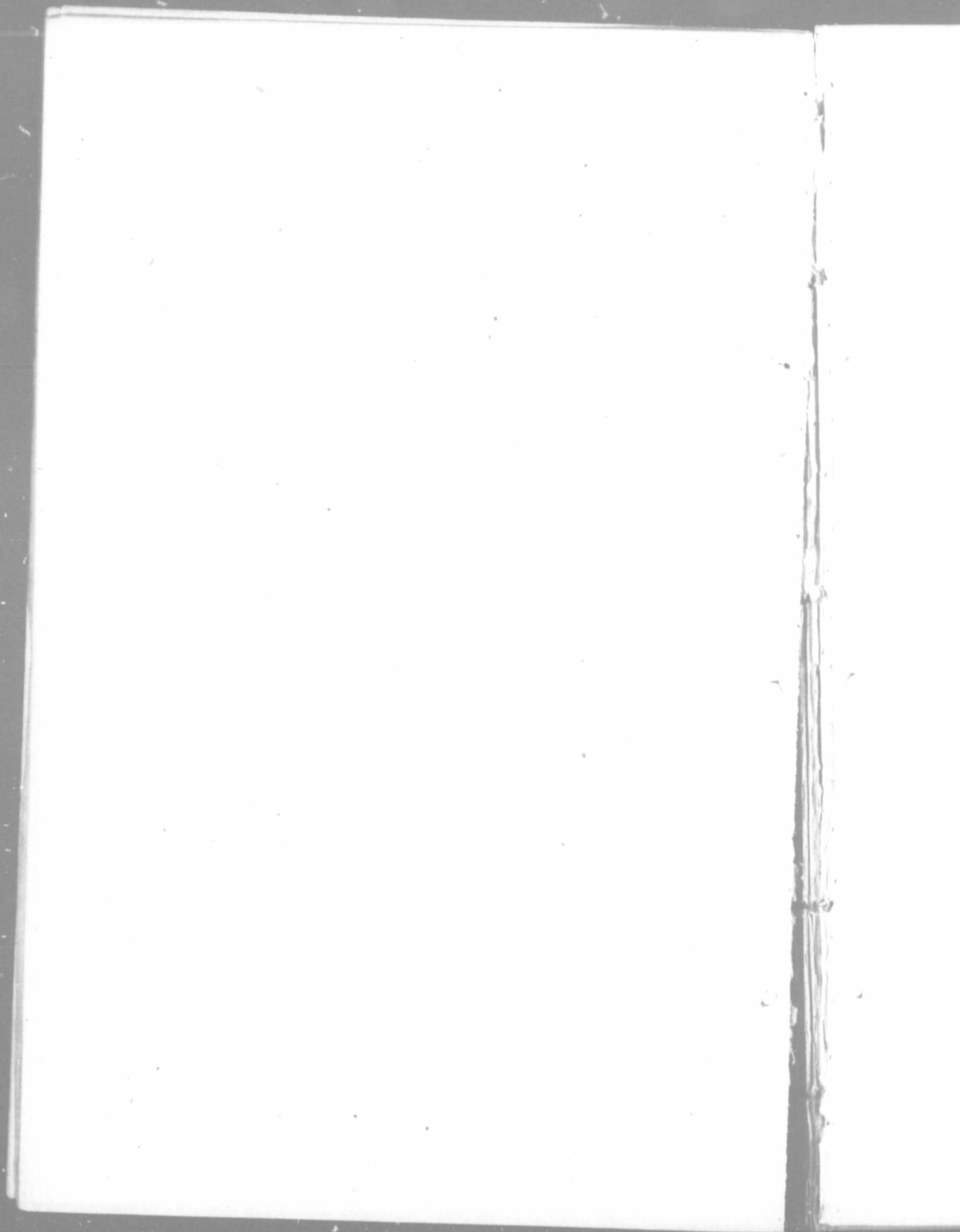
It was moved by the Hon. Jas Skead, seconded by Thos. Patterson, Esq., and

Resolved, That the yearly Report now laid on the table be referred to a Committee, composed of Messrs. Griffin, Alex. Scott McGillivray, Howell, and R. W. Scott, to report on same to Special Meeting of Council, who shall order it, or such portions of it to be printed, as they shall think advisable.

At a Special Meeting of Council of Board of Trade held in City Hall on Tuesday, 6th March, 1866, E. McGillivray, Esq., Vice-President in the chair, it was

Resolved, That the full yearly Report be published as submitted.

G. H. PERRY, Sec.,
pro tem.



REPORT
OF THE
Council of the Board of Trade,
FOR THE
CITY OF OTTAWA,
Year ending 31st. December, 1865.

The Council of the Board of Trade desire to lay before the Members, and their fellow citizens, a statement of the Trade of the City, and the Province generally, and a Report of the proceedings of the Delegation appointed to attend the important Commercial Convention at Detroit, with their opinion of the working of the Reciprocity Treaty, and the apparent effects its total abrogation will be likely to produce.

As the present transition state of our commercial relations is naturally the subject of considerable anxiety and grave speculation, it appears the best mode of exhibiting our actual progress, true position, and future prosperity, would be by carefully analysing our actual Trade Returns for the whole period during which the Reciprocity Treaty has been in existence, up to the close of the year 1865.

A statement of this description naturally covers the individual progress of our own community; and its actual effect thereon, or otherwise, will be, of course,

commensurate with that of the Province of which we form a part, with this exception, that we have had the control of the great staple trade, and consequently our imports are subject to less fluctuation proportionately, or ought to be, than that of other localities unprovided with such a steady agent for consumption.

The following table of Imports and Exports have been compiled from the Public Accounts. It does not, however, measure the whole Import trade of Ottawa, because a very large per centage pays duty in Montreal, Prescott, or Brockville, and will not appear on the Collector's Returns at this Port.

Statement of Imports and Exports, and amount of Duties collected at the Port of Bytown, now the City of Ottawa, from the year 1854 to 1865, both years inclusive.

Year.	Exports.	Imports.	Gross Duties col.
1854.....	\$140,000 00	260,501 65	37,287 38
1855.....	132,184 25	211,147 92	27,369 05
1856.....	106,440 02	384,923 92	36,624 25
1857.....	36,335 85	283,527 65	35,883 30
1858.....	88,592 00	320,156 00	43,523 85
1859.....	118,157 00	401,756 00	60,386 32
1860.....	398,225 00	381,329 00	62,760 96
1861.....	192,192 00	464,146 00	67,418 97
1862.....	271,624 00	442,813 00	45,393 19
1863.....	318,772 00	402,366 00	42,880 27
Half year 1864.....	166,410 00	264,141 00	30,208 05
1865.....	185,927 00	378,675 00	54,860 17

The change in the Fiscal year, commencing in 1864, necessarily leaves the last six months unaccounted for. But the Returns, as made, show most extraordinary fluctuations, which must depend on some cause, or be governed by some agent or law, because trade is no matter of mere caprice. Starting, in 1854, with an expenditure of \$140,000, and an Import of \$260,501, in 1863, we have

an Export Trade of \$318,772, and an Import of \$402,366—the population of the city in 1854 being about 8,000, in 1863 over 15,000—so that we must look to other causes beside the facilities afforded by the Reciprocity Treaty for the increased development of trade.

With regard to the tremendous fluctuations in our Export trade which this latter exhibits, it is not easy accounting satisfactorily therefor. At the period of its greatest depression a high tariff was and had been imposed on Imports, and the commercial crisis then at its culmination in the United States, naturally limited the market by reducing the demand. This is the more probable from the sudden falling off and the gradual improvement in succeeding years; but it furnishes an argument against submitting our market to the control of foreign influences, whose mercantile operations produce such results.

The total Exports and Imports of the Province for the same period would be as follows:—

Year.	Exports.	Imports.	Duties coll.
1854.....	\$23,019,190 15	40,529,325 35	4,899,004 94
1855.....	28,188,460 05	36,086,169 25	3,525,782 48
1856.....	32,047,016 90	43,584,387 23	4,508,882 09
1857.....	27,006,624 00	39,430,598 35	3,925,041 18
1858.....	23,472,609 00	29,078,527 00	3,381,389 51
1859.....	24,766,981 00	33,555,161 00	4,437,846 12
1860.....	34,631,890 00	34,441,621 00	4,758,465 42
1861.....	36,614,195 00	43,046,823 00	4,768,192 89
1862.....	35,596,125 00	48,600,633 00	4,652,748 72
1863.....	41,831,532 00	45,964,493 00	5,169,173 21
Half year 1864.....	13,883,508 00	23,882,216 00	3,068,568 08
1865.....	42,481,151 00	44,620,469 00	5,663,377 80

Taking this as a criterion, it does not show such a wonderful amount of progress as might be expected. The gross amount of Exports and Imports in 1854 was \$63,548,515; in 1865, \$87,101,620, showing an increase

of \$23,553,105, equal to the whole export trade of the former year. But the population of this Province has increased from 2,750,000 in 1854 to 3,600,000 in 1865, a fact which would of itself account for a large part of the whole increase.

The conclusion is, therefore, forced on us that, while Reciprocity enabled us to deal with our neighbors in such commodities as we required, and were able to produce, it gave us no actual development beyond what should naturally belong to our own steady accumulation of capital, and in many instances by navigation laws, and the withholding from us by the other contracting parties of the right of navigating their internal waters on fair terms, retarded such progress materially.

It is well understood that capital accruing from the profits of labour is intrinsically the most valuable; and, as the carrying trade is one means by which such capital could be most extensively acquired, anything, therefore, interfering with the development of that trade naturally retards the progress of the country. A large proportion of our Import trade passed over the territory of the United States in bond, but they were the carriers thereof.

The action of their navigation laws effectually shut us out from all participation in their carrying trade, nor would they allow us to manufacture their own grain, so that as far as this province is concerned the abrogation of the treaty had almost become a necessity of its future prosperity.

If we desire commercial development, we must get rid of all trade restrictions at once. Our interest demands that we should sell in the dearest and buy in the cheapest market, and to secure our trade a discriminating duty against all goods passing over foreign lines of Railways or Canals, would appear to be a necessity of our position.

At present we are not manufacturers—in a general sense we merely produce raw material. By a slight modification of our excise system we can purchase from Great Britain all articles we do not manufacture cheaper than elsewhere. It is our interest to attract foreign capital for investment, and no surer means exist than an equitable fiscal system for that purpose.

Under the Reciprocity Treaty large quantities of our Agricultural produce passed into the hands of the people of the United States, who manufactured and sent it to Europe, or whatever was the most profitable market, thus securing from us the profits of carriage, manufacture and sale; and all this was obtained by the “bonding system,” and the protection afforded their own forwarding interests by the retention of their exclusive privileges of navigation.

The people of these Provinces can easily acquire all the profits their neighbours reaped, but it must be by a system totally different from that hitherto pursued. We cannot afford the free navigation of our Canals to a people who will not award us an equivalent privilege.

True policy would dictate the opening of this carrying trade to competition, but if exclusiveness becomes the rule on one side it must necessarily follow on the other.

Our most material interests are bound*up in those of the Mother Country, but during the twelve years Reciprocity has been in operation, our trade with her has been gradually passing into the hands of the people of the United States, as the following tables will clearly shew :—

Year.	Imports from Gt. Britain.	Imports from U. S.
1850.....	\$ 9,631,921.....	\$6,594,861
1851.....	12,048,133.....	8,365,765
1852.....	10,671,133.....	8,477,693
1853.....	18,489,121.....	11,782,147
Amount carried forward, ..	\$50,840,308	\$35,220,466

Amount brought forward..	\$50,840,308	\$35,220,466
1854.....	22,963,330.....	15,583,101
1855.....	13,303,460.....	20,828,676
1856.....	18,212,934.....	22,704,601
1857.....	17,559,025.....	20,224,651
1858.....	12,287,053.....	15,635,565
1859.....	14,786,084.....	17,592,816
1860.....	15,859,980.....	17,273,029
1861.....	20,386,937.....	21,069,388
1862.....	21,179,312.....	25,173,157
1863.....	20,177,572.....	23,109,362
Half-Year 1864.....	11,290,240.....	10,426,572
1865.....	21,035,871.....	19,589,055
	<hr/>	<hr/>
	\$260,472,106	\$264,380,430

Before the negotiation of Reciprocity, the Imports from the United States were just two-thirds of those from Great Britain. The year after the treaty came into operation the position of the trade was reversed, the Imports from Great Britain being only two thirds of those from the United States, and this relative proportion remained undisturbed till last year, when the Imports from the United States were only a little over 90 per cent of those of Great Britain, a fact which can only be accounted for by the restrictions the Government of the United States imposed on the trade.

The value of the carrying trade to the people of the United States can be measured by its magnitude; and the folly of allowing a continuation of the "*bonding system*" is apparent if we consider that by giving them exclusive possession of our freight business we are actually paying the importer a premium to ship through New York or Boston, instead of any port on the St. Lawrence, and as a consequence no surprise should be elicited by the fact of ocean freights ruling higher from Canadian than United States ports.

Years.	Value of goods passing thro' the U. S. in bond.
1854.....	\$ 5,347,081
1855.....	4,463,774
1856.....	4,926,922
1857.....	5,582,644
1858.....	2,057,024
1859.....	4,546,491
1860.....	3,041,877
1861.....	5,688,952
1862.....	5,508,427
1863.....	6,172,485
Half-year 1864.....	7,925,177
1865.....	6,511,771
	<hr/>
	\$61,772,625

In twelve years the transportation of sixty-two millions of dollars worth, with all the contingent profits thereon, remained in the hands of the people of the United States. Nor does that advantage cover the whole question. In the sixteen years which elapsed between 1849 and 1865, Canada imported from the United States \$264,380,439 worth of goods, of which the sea-going and internal marine of that power transported *seven-eighths*.

Without entering more elaborately into this question, enough has been shewn to prove that the Reciprocity Treaty as a step in the direction of Free Trade, benefitted this Province by allowing our people to buy certain manufactured articles cheaply; but it by no means fulfilled the other condition of enabling them to sell in the dearest market, and therefore its abrogation, beyond unsettling existing relations, will entail no particular loss on our commercial interests. Any measures that would enable us to become our own factors, shippers and carriers, would be of infinitely greater advantage to our interests than the Reciprocity Treaty about to expire.

First amongst them would be a system of Emigration based on Public Works, which our comparatively isolated mercantile condition will render necessary, as the Inter-

colonial Railway, enabling us to have access to winter ports on the St. Lawrence or the Maritime Provinces; the enlargement of the St. Lawrence and Welland Canals; the construction of the Ottawa works, necessary to open the navigation between the Lower St. Lawrence and Lake Huron; the construction of the Central Canada Railway, and the improvement of all our internal lines of communication.

Secondly. Such a modification of our Fiscal system as will enable our consumers to obtain the necessaries of life, food and clothing, at the least possible cost, and

Thirdly. The adoption of such Tariff regulations as would leave the St. Lawrence comparatively if not positively free, so as to encourage shipment of our whole imports thereby, and to confine it exclusively to British built and registered shipping.

It does not appear advisable to legislate specially for measures of this description. During the progress of trade contingencies will be constantly arising to which tariff regulations must be adapted, so as to meet each particular or especial case, and they necessarily possess an elasticity which could not be obtained by mere legislative enactments. The Council of the Board of Trade, therefore, dissents from the opinion that the trade between these Provinces and any other country can be regulated by mere legislation.

As the navigation of the Ottawa is open between this city and Montreal, and by the Rideau Canal Lake Ontario can be reached, the amount of Tonnage on those lines is a subject of considerable interest. The Trade and Navigation Returns for 1865 give 239,530 tons as the quantity passing St. Ann's Locks, and 323,141 tons as the amount passing the Rideau and Ottawa.

Now, as the St. Ann's Lock is the outlet of the Ottawa Canals, it follows that the quantity passing the Rideau is 83,611 tons, a very small proportion indeed of the trade which should pass along that channel.

The communications of the city with the Frontier is confined to a single line of Railway. A charter exists for a direct line between Montreal and some point on Lake Huron, and it would be a matter for the consideration of the community whether it would not be advisable to take steps towards rendering its provisions available for more direct communication with Montreal and with the Upper Ottawa.

Within the city limits there have been manufactured during the year 1865 ninety-five million feet, Board Measure, of Lumber, and on the Ottawa River two hundred million feet.

The quantity of Square Timber manufactured on the Ottawa and tributaries amounted to very near 17,000,000 cubic feet.

Other branches of industry generally are in a healthy condition. During the autumn the removal of the Departments of the Government to this city consummated the obedience of the people to the decision of their Sovereign, and Ottawa has become in reality the capital of Canada.

The proposed abrogation of the Reciprocity Treaty of which the Government of the United States had given notice early in the year, led to a grave consideration of the consequences amongst the mercantile community of the States, and a series of resolutions introduced at a meeting of the Board of Trade of the City of Detroit, on the 28th of February, 1865, by H. P. Bridge, Esq., led to the design of a Commercial Convention, and circulars were issued by

the President, Joseph Aspinall, Esq., to the various Boards of Trade and Chambers of Commerce of the United States and British American Provinces, inviting their co-operation in carrying out the proposed design, on the second Tuesday in July.

While this matter was under deliberation, it was proposed by J. G. Worts, Esq., President of the Board of Trade of the City of Toronto, to summon a Convention of the Provincial Delegates to meet in that city on the 21st June, for the purpose of taking into consideration the line of policy which should be adopted at the meeting to be held in Detroit.

A general meeting of the Board of Trade held in this city on Saturday 3rd June, appointed Hon. Jas. Skead, J. M. Currier, M. P. P., Allan Gilmour, A. H. F. Bronson, Edward Griffin, Edward McGillivray, C. T. Bate and G. H. Perry, as Delegates to attend the Provincial Convention at Toronto and Detroit, and represent the mercantile interests of this city.

During the interval which elapsed, at the suggestion of the Hon. James Skead, a large plan of "*The communications of the Western States with the Sea Board*," was prepared by George H. Perry, Esq., C. E., as well as a memorandum of the position which the British American Provinces occupied with respect to the question of Reciprocity and Transit, entitled "*British North America at the Detroit Convention*" of which 400 copies were printed.

The Honble. James Skead and George H. Perry Esq., C. E., attended the Convention at Toronto, on the 21st and 22nd June, as representatives of the Ottawa Board of Trade, at which meeting the policy which governed the subsequent proceedings of the Provincial Delegates was shaped and adopted.

As a measure of necessity the proceedings were secret, but it was decided that no active part should be taken in the organisation of the Detroit Convention, nor in the decisions which it should arrive at, except to influence them by the irresistible logic of facts, for the reason that two parties in the States were at issue as to the policy of the Treaty, one for, another against its continuation.

Any action on the part of the Delegates, while it might give a momentary preponderance to the party most favourable to their interests, would militate strongly against its final success, by affording its opponents an opportunity for complaining of an unfair victory, gained by foreign influence, and would involve the Provincial Delegates and the cause they advocated in the interminable political intrigues which would naturally surround this question.

The fruit of this policy is to be found in the conclusion the Convention arrived at, the powerless attempt of the enemies of Reciprocal trade having hastened the decision at which the unbiassed judgment of the commercial class in the United States unanimously arrived, and which would have been greatly prejudiced in the minds of the people of that country, if secured by the votes of Provincial delegates.

A very full report of the proceedings of this Convention has been sent to each Board of Trade: its contents are as follows:—

OFFICE OF THE BOARD OF TRADE,

Toronto, 21st June, 1865.

MEMORANDUM OF MINUTES

MEETING OF DELEGATES FROM THE BOARDS OF TRADE OF THE PROVINCE, IN CONVENTION ASSEMBLED.

DELEGATES.

- PRESENT.—From Quebec, Messrs. A. Joseph, H. S. Scott, Wm. Withal.
- “ Montreal, Hon. Thomas Ryan, Hugh Allan, Peter Redpath, E. Atwater, S. G. Smith, Alfred Brown, Henry Lyman, Thomas Cramp, J. L. Beaudry, D. Masson, J. McLennan, W. J. Patterson.
- “ Ottawa, Hon. Jas. Skead, and Geo. H. Perry.
- “ Kingston, John Shaw and R. M. Rose.
- “ Cobourg, A. Fraser.
- “ Toronto, Hon. Wm. McMaster, T. G. Worts, Robert Spratt, Chas. Robertson, D. M. Smith, Wm. Elliott, Danl. Crawford, E. Wiman.
- “ Hamilton, Jno Young, Donald McInnes, Adam Brown, William Irvine, John Proctor, Wm. Osborne, Henry Parker.
- “ St. Cath's, Wm. McGivern, — Norris, Wm. Grant, Jas. Douglas, C. Yale.
- “ London, C. P. Smith, C. Hunt, Frank Smith, H. Strathy, Thos. Churcher.
- “ Stratford, W. J. McCulloch, John A. Scott, James Kyle, S. L. Roberts J. S. Rutherford.

The Meeting was organized by appointing J. G. Worts, Esq., President of the Board of Trade, Toronto, Chairman, and Charles Robertson, and Wm. J. Patterson, Esqrs., Secretaries.

On motion, the following gentlemen were appointed a Committee to Draft Resolutions for submission to an adjourned Meeting of the Convention, to be held at Ten o'clock, A. M., 22nd inst., viz. :—

Hon. Thos. Ryan, Hon. Mr. Skead, Hon. Mr. McMaster, Messrs. Hugh Allan, Cramp, Redpath, Hunt, D. McInnis, Brown, Joseph Rose, Worts, Spratt, A. M. Smith, Scott, Young and Perry.

On motion of Mr. Redpath, it was ordered, That the expenses which may be incurred in carrying out the objects of this Convention be met by the different Bodies represented in proportion to their respective numbers, and that the same be assessed by the Secretary of the Board of Trade, Toronto.

On motion of Mr. Cramp, a Committee was appointed to proceed to Quebec to confer with the Members of the Provincial Government, to endeavour to obtain information for their guidance upon such matters relating to the Convention as are most specially under the control of the Executive. The Committee to be composed of Hon. Thos. Ryan, Hon Wm. McMaster, and Hon. Jas. Skead.

Adjourned till 10 A. M. to-morrow.

22nd June.—The Convention assembled, the Secretary called the Roll of Delegates, who answered to their names. Five Delegates were introduced from St. Catharines and two more from Toronto, making the total number present fifty.

The Minutes of the previous Meeting being read, and confirmed, Hugh Allan, Esq., reported the following Resolutions from the Committee :—

RESOLUTIONS

ADOPTED BY THE BOARD OF TRADE CONVENTION OF TORONTO.

Toronto, 22nd June, 1865.

I.—That the Hon. Thomas Ryan be President of the British North American Delegation to the Detroit Commercial Convention ; that Peter Redpath, Esq., President Montreal Board of Trade ; A. Joseph, Esq., President Quebec Board of Trade ; J. G. Worts, Esq., President Toronto Board of Trade ; Hon. Isaac Buchanan, President Hamilton Board of Trade ; Edward Berry, Esq., President Kingston Board of Trade ; Hon. James Skead, President Ottawa Board of Trade ; Charles P. Smith, Esq., President London Board of Trade ; William McGivern, Esq., President St. Catharines Board of Trade ; John Sutherland, Esq., President Cobourg Board of Trade ; and one Member of each Delegation from the Maritime Provinces, be Vice Presidents, and that W. J. Patterson and Charles Robertson, Esqrs., be Secretaries.

II.—That the Reciprocity Treaty although in some important respects incomplete, as regards the interests of British North America, has, on the whole, been mutually advantageous, being based on sound Commercial principles ; and that an effort should be made to obtain the sanction of the Detroit Convention to a renewal of the Treaty ; and to in-

clude in such sanction the modifications which may be found advisable to further international interests, and which are not inconsistent with Imperial policy.

III.—That this Convention will urge upon the Government of Canada the importance of immediately enlarging the Welland, and deepening the St. Lawrence Canals, and it will favor the construction of such new routes through Canada for the transportation of Western produce to the seaboard, as may be found requisite for the wants of that extensive traffic, and not inconsistent with the financial position of the country.

IV.—That the present Committee be continued as an Executive and Statistical Committee, whose duty shall be to collect facts and information upon the subjects likely to come under debate at the ensuing Convention ; and with whom all Members of the Convention from British North America are requested to communicate.

V.—That the following subjects in connection with the Reciprocity Treaty be made special topics for enquiry, and for modification, if deemed expedient by the Provincial Delegates when assembled at Detroit.

1st.—The extent of advantage gained by the United States through the privilege of fishing in Colonial Waters, as compared to the concessions made to British North America in this respect, taking into consideration the operation of the large bounty paid by the United States Government to their own Fishermen.

2nd.—That there are many articles the growth and produce of British North America, which may with advantage be added to the list of Free Goods ; and that the respective Boards of Trade of the Province be requested to send a list of such articles as they may suggest for Reciprocal Trade with the United States, to the Board of Trade of Toronto, for the guidance of the Delegates to the Detroit Convention.

3rd.—That special notice be taken of the fact that the clause in the Reciprocity Treaty, by which the United States Government engaged "to urge upon the State Governments to secure to the subjects of Her Britannic Majesty the use of the several State Canals on terms of equality with the inhabitants of the United States" has proved wholly inoperative, inasmuch as all American State Canals have been strictly closed against our vessels, while we have admitted their vessels on terms of complete equality with our own.

4th.—That British and Colonial built ships ought to be admitted to United States Registration in the same manner as United States vessels are now admitted to British Registration ; and that an extension of privileges in the Coasting Trade should be mutually conceded.

VI.—That when the Board of Trade and Corn Exchange of any city are both represented in the Convention at Detroit, the vote of their Delegates, when taken, shall count for only one vote.

The Resolutions were read and discussed *seriatim*. After some amendments they were unanimously adopted by the Convention.

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MEETING OF THE EXECUTIVE COMMITTEE.

HUGH ALLAN, ESQ., CHAIRMAN.

After the adjournment of the Convention, the Executive Committee met and appointed a Central Committee in Toronto, under the Presidency of Mr Worts, President of the Board of Trade, and another in Montreal, under the Presidency of Mr. Allan.

Resolved,—That the Boards of Trade West of Kingston, be requested to communicate with Toronto, and those of Kingston, Ottawa, and Quebec, with Montreal; copies of the Resolutions passed at this Meeting to be communicated by the Secretaries to the Board of Trade within their jurisdiction respectively requesting information from each on all subjects which they may desire to be taken up for discussion at the Detroit Convention; also requesting them to designate such persons (being Delegates) as they consider most proper to advocate particular interests at the said Convention. The following names were suggested to speak on the special interests designated:—

Mr. Worts and Mr. Hunt,	On Produce and Provisions.
Hon. Mr. Skead,	On Lumber and the Products of the
	[Forest.
Mr. Perry,	On Canals and Water Communication.
Mr. Redpath,	On Manufactures.
Mr. McLennan,	On Forwarding and Inland Shipping.
Mr. Brydges, Mr. Shanly, Mr. } Swynyard and Mr. Cumberland }	Railways.
Mr. Berry,	On Ship-building.
Sir. William Logan	On Minerals.
Mr. Isaac Buchanan,	On Commercial Questions.
Mr. Hugh Allan,	On Ocean Navigation.
M. Thomas Rimmer,	On Fisheries.

The Secretary was instructed* to write the President of the Board of Trade, Detroit, requesting him to secure a suitable Room for the use of the Canadian Delegates, where they could assemble for the transaction of their business. It was

Resolved, that the President of the Convention, and Members of the Committee residing in Montreal be authorized to decide on all questions requiring immediate action in reference to the foregoing subjects.

Ordered that copies of the Resolutions passed at this Convention be sent to each Board of Trade represented here.

The President then briefly addressed the Meeting, thanking them for their attention to the business brought under their notice.

The Hon. Mr. McMaster moved, seconded by Mr. Redpath, "That Mr. Worts leave the Chair, and that the same be taken by the Mayor of Montreal."

Mr. Redpath then moved, seconded by Mr. Joseph, "That a vote of thanks be tendered to Mr. Worts for his courtesy, dignity and efficiency in the Chair."

After which the Meeting adjourned.

CHAS. ROBERTSON,

Secretary.

During the interval which elapsed between the Toronto Convention and the Meeting at Detroit, your Delegates were actively engaged in making the necessary preparations, and in collecting and arranging the requisite information. They have to thank the Corporation of this City for the great interest manifested, and the very substantial pecuniary aid afforded towards defraying the expenses incidental to the great interests which your Delegates represented.

At Detroit these interests were represented by Hon. Jas. Skead, E. Griffin, E. McGillivray, J. M. Currier, M.P.P., Thos. Hunton and George H. Perry. Business engagements prevented the other Members of the Delegation from attending.

The proceedings of this Convention, which met on 11th July, in the Rooms of the Board of Trade, in the City of Detroit, are matters of history. Your Delegates furnished a large plan 12 feet in length by 7 in width, showing the existing communications by Railway and Canal from the Mississippi on the West, to the Gulf of St. Lawrence in the East, and From the Ohio River in the South to the Northern Shores of Lake Superior in the North, all British North America except the Red River Settlement, and the whole of the Eastern and Western States with Statistical Tables, and an explanatory profile of the Ottawa navigation. Over 300 copies of the memorandum entitled "*British North America at the Detroit Convention,*" were distributed, and it so accurately defined the position of the Provinces on this question as to merit the notice of the Hon. Mr. Hamelin, Ex-President of the United States, the most acrimonious and bitter enemy of Reciprocity.

A Preliminary Meeting of the Provincial Delegates (those of New Brunswick, Nova Scotia, and Prince Edward Island having joined the Canadian representatives) was held on the morning of 11th July, when the policy adopted at the Toronto Convention was confirmed, and it was a subject of regret that Newfoundland was alone unrepresented, owing, no doubt, to want of convenient means of transport.

The Convention commenced its sittings on the forenoon of the 11th, and consisted numerically of 481 mem-

bers, all told, of which 132 were Provincial Delegates, and 349 from the United States.

In accordance with the programme laid down at the Toronto Convention, the Provincial Delegates declined taking any active part in the permanent organization of the Detroit Convention, or of its after details by voting, confining themselves to the task of furnishing information, rebutting injurious allegations, removing prejudices, and showing that the benefits of the Reciprocity Treaty were strictly with the United States and not comparatively with the Provinces; but that as business men they were aware that it was necessary to pay a price for commercial development, and that they were satisfied this outfall should belong to their immediate neighbors.

The only question of interest directly affecting British North America was contained in those of Reciprocity and Transit; and as the motion to abrogate the Treaty had come from the United States Government, it was deemed most advisable the commercial representatives of that nation to express an opinion on the policy of that act, unaffected by an interference on the part of parties so interested as the people of the Provinces naturally were.

When the various Committees were appointed, the following members of the Provincial delegations appeared in their places to give information and assistance, but neither voted nor prepared Reports.

The Committee on Credentials had as representatives from Canada, Peter Redpath, Esq., Montreal; J. G. Worts, Esq., Toronto; Hon. A. E. Botsford, St. Johns, N. B.; W. H. Steeves, do.; T. J. Archibald, Esq., Halifax, N. S.; W. J. Stairs, do.; Hon. Geo. Coles, P. E. Island; Fred. Brecken, Esq., do.

Vice Presidents were chosen from the Provinces :—
 Hon. Joseph Howe, Nova Scotia ; Hon. W. Park, New
 Brunswick ; Hon. Thomas Ryan, Canada ; Hon. W. Mc-
 Master, do ; Hon. George Colez, P. E. Island.

The Committee on Transit were the Hon. Malcolm
 Cameron, Quebec ; John McLellan, Esq., Montreal ; W.
 McGivern, Esq., M.P.P., St. Catharines, and George H.
 Perry, Esq., C. E., Ottawa.

Your representative on this Committee had the
 honor of opening the case for Canada, at the request of J.
 McLellan, Esq., and the paper from which the Statistics
 furnished was drawn, is to be found amongst the proceed-
 ings of that body. Another highly valuable paper was
 furnished by Mr. McGivern, while Mr. McLellan supplied
 information which eventually decided the question ac-
 cording to the Canadian view.

On Reciprocity, the Provincial Representatives were
 Hon. J. Howe, Nova Scotia ; Hon. Thos. Ryan, Montreal ;
 J. G. Worts, Esq., Toronto ; Henry Fry, Esq., Quebec,
 and John Boulton, Esq., St. Johns.

On Weights and Measures, Mr. Irvine, Hamilton ;
 Mr. Rose, Kingston ; Mr. Spratt, Toronto ; Mr. Leonard,
 London ; Mr. Grant, Quebec ; Mr. Currier, Ottawa ; Mr.
 Lyman, Montreal ; Hon. John Steeves, New Brunswick ;
 Mr. B. N. Salter, Halifax ; Mr. Breasher, P. E. Island.

All the details connected with those Committees
 have appeared in the account of the proceedings of the
 Convention, published under the auspices of the Board of
 Trade of Detroit, and a copy of which has been forwarded
 to this Board.

The statements were very courteously received, and as the votes of the Convention were unanimously cast in favor of the negotiation of a new Treaty, the presumption is that they contributed in some degree to the result.

At the opening of the Convention no such conclusion was deemed possible, and the change of opinion can only be accounted for by supposing that the real facts of the case were brought for the first time fairly before the Commercial Representatives of the United States as business transactions, stripped of all political coloring, or diplomatic side issues.

A most disgraceful attempt at political interference was promptly put down by the good sense of American merchants, and by the prompt contradictions of Edward McGillivray, Esq., and the Hon. Mr. Currier. The latter gentleman made a most telling speech in rebuttal of the United States Consul General, Mr. Potter's insinuations and misrepresentations.

Those gentlemen who have rendered good service to Provincial interests were the Hon. Thomas Ryan, President of the Provincial delegation, whose cool, dignified bearing, great suavity and patience elicited the approbation of those most opposed to Provincial interests, and to whose skilful management a great deal of the success attendant thereon is to be attributed. The Hon. Malcolm Cameron, by one of the best speeches on the occasion, adroitly turned the tide of opinion in favor of the Provincials, a great deal of angry feeling being indulged in by the American Representatives, who had been gradually lashing those irritating political questions to the verge of acrimony.

The speech of the Hon. Joseph Howe was undoubtedly the great event of the Convention. It was that of a statesman and a philanthropist, and carried conviction to the most obdurate and prejudiced. John McLennan, of Montreal also materially advanced Provincial interests. His connection with the forwarding trade naturally gave great weight to statistics admirably arranged and well put, and it was to be regretted that the crowded state of the room where the Convention was held, and the want of order prevented his being heard by the whole assembly, and finally brought his address to a premature close.

Your delegates have not been disappointed at the difficulties which have politically beset the question of negotiating a new Treaty. The principle that the Commercial and Political elements in the United States are totally distinct and have separate interests, was well understood and ascertained during the Convention, and it was repeatedly reiterated by the members of the delegations from the various cities of the States, that the action of the Convention could not and would not influence the action of their Government, the episode of Mr. Consul General Potter was evidence enough of that fact.

The good effected by the Convention was then that of putting the whole question at issue fairly before the world—disabusing the Commercial mind of the United States of the errors and misrepresentations put forth by the politicians and press of that country, exhibiting not only the justice of the Provincial course, but ascertaining its positive strength, and establishing the fact that the abrogation of the Treaty would be an evil of very minor magnitude to the people of British America.

It may also have the effect of directing attention on both sides to what may truly be called the "Science of

Commerce," and it undoubtedly established the fact that some more general knowledge of the laws by which it is governed is required than those involved in the act of buying and selling.

The intercourse between both nations has been considerably benefitted by the Convention, its tendency being to give both people a more thorough insight into the character of their neighbors, and a better appreciation of their business capacity and abilities, while it has demonstrated to the people of the Provinces the necessity for a closer union of interests which are individually identical.

Your delegates have to express their sincere gratitude to the President of the Detroit Board of Trade, the President and Members of the Detroit Convention, and to the citizens for the kindness and hospitality accorded during their stay.

They have also to refer to the very liberal treatment received from the officers of the Grand Trunk Railway for free conveyance of the delegates to and from the Convention; also to the Great Western Railway and the Ottawa and Prescott Railway Company.

A very valuable paper on the lumber trade was furnished the Convention by the Hon. Jas. Skead; it is published at page 263 of the Proceedings; and another on the "River Communications of the British American Provinces," by George H. Perry, C. E., to be found in the Proceedings at page 243. Under existing circumstances it might be advisable to publish these papers and such other information on these subjects as may be deemed advisable along with this Report.

The Convention terminated its sittings on Friday evening, 14th July.

As the large plan noticed as being prepared for this Convention attracted considerable attention, and as a wish had been expressed by a member of the Milwaukee Board of Trade for a copy, it was deemed advisable by the Hon. Jas. Skead to present copies to Chicago, Milwaukee, the Hon. D. C. Littlejohn, of Oswego, W. McGiverin, Esq., M.P.P., of St. Catharines, and a copy was prepared for Hon. Mr. Skead to leave in the Legislative Council Chamber during the Session of Parliament.

All these plans were prepared by Geo. H. Perry, Esq., C. E., aided by the liberality of the Hon. Mr. Skead; and it is believed that the plan prepared for that gentleman, and placed by him in the hands of Hon. Mr. Ryan, and by him taken to England, has been the means of exciting considerable attention to the Ottawa navigation project; at all events it did good service in Hon. Mr. Skead's hands during the session.

On the fifth of September, Lieut. General Sir John Michel, K.C.B., Vice-Admiral Sir James Hope, G.C.B., and suite arrived in Ottawa after having passed up French River, through Lake Nippissing, over the height of land, down the River Matawan and the Ottawa. On their arrival the Lieut.-General sent to George H. Perry, Esq., C.E., asking to see the plans prepared. At that interview Mr. Perry placed in his hands a copy of the plans, and prepared two others on a large scale of the French and Matawan Rivers and the junction of the Ottawa and St. Lawrence. A copy was also forwarded to Vice-Admiral Sir James Hope to Halifax. Up to the present no acknowledgment has been received from the Boards of Trade of Milwaukee or Chicago for the plans sent, although it has been ascertained that the parties duly received them.

In concluding this Report, the Council would remark that your local interests have been urged with great vigor

and effect, and it will remain for their successors to give attention through the present year to the great questions affecting not only this locality but the whole Province—these are a comprehensive scheme for emigration, the Intercolonial Railway, winter ports on the St. Lawrence, the enlargement of the canals, construction of the works necessary to open the Ottawa navigation, internal lines of communication, the extension of commerce and modification of our fiscal regulations, the establishment of free trade with Great Britain, and a close enquiry into the causes which have rendered our great lines of water communication unproductive, especially the reason why the commerce of the Rideau canal is so far below its capacity, and the possibility of establishing a trade in coal through it from the Pennsylvania coal fields. The lumber trade should demand a portion of attention commensurate with its importance.

Large as this programme undoubtedly is, it hardly covers the vast amount of objects of interest and utility which the affairs of the Province presents, yet it offers a fair field for exertion.

All which is, nevertheless, respectfully submitted.

BRITISH NORTH AMERICA

AT THE

DETROIT CONVENTION.

The Commercial Convention, to be held at Detroit on 11th July, purposes to discuss the important subjects of *Commerce, Finance, Communications of Transit from the West to the Sea-board, and Reciprocal Trade between the United States and British Provinces.*

A sufficiently important programme to warrant close and careful study of the various objects to be achieved, by the investigation of the different subjects of which it is composed, the whole of vital interest to the welfare and happiness of two great nations, and destined to influence their future career in no ordinary degree.

The political and commercial interests of the British North American Provinces are indissolubly bound up in those of the Empire of which they form component parts, and each year's experience tends to draw more tightly the bonds which bind them together. Nor is this much to be wondered at. Their traditions, laws, language, Government, and even commercial transactions, are founded on English precedent and precept, and their material interests are as identical as those of any shire in her realm.

Under the auspices of the Imperial Government a treaty of Reciprocal Trade was negotiated in 1854, by which the raw products of these Provinces were admitted duty free to the markets of the United States, while similar privileges were secured to the latter power, together with very extensive fishing rights in British waters, for which no equivalent was obtained.

Interpreted by the United States authorities in a very narrow and illiberal spirit, the Treaty was, nevertheless, maintained by the Imperial

Government as an advantage, although the balance of Trade, so called, was decidedly against the Colonies at the outset, and has since continued so.

For reasons best known to themselves, the United States Government, acting under a provision of the Treaty which requires a year's notification before it can be terminated, gave notice to the Imperial Government of their intention to abrogate it, and the termination may be looked for in April, 1866.

As the abolition of this Treaty would completely isolate the United States in a commercial point of view; and as the high customs dues she is compelled to levy for revenue purposes will amount to positive prohibition as far as her own people are concerned, a very commendable desire is expressed by her commercial men to investigate the whole data on which her mercantile system is founded, and, if possible, devise measures more in consonance with the principles of modern civilization than those which the present position of affairs foreshadows.

Hence this Convention at Detroit, at which the representatives of the commercial interests of British North America are invited to be present,—more it is to be presumed, in the character of parties about to receive overtures than in that of parties making them—because they have found no fault with the Treaty, nor is it by any act of the Imperial Government, or theirs, it is about to terminate.

That it had serious faults is undeniable, and no better opportunity can occur than the present for the rectification of those errors, which the experience of eleven years has demonstrated to exist; but as the first step to unrestricted Free Trade between Great Britain and the United States, it was, perhaps, one of the most skilful and statesman-like Treaties ever devised.

If Commerce is the interchange of the surplus products of one country for those of another, and if its effects are to enable the *producer* to sell in the dearest and buy in the cheapest market, then unrestricted Free Trade is one of the necessary conditions of its development, by releasing both labor and capital to find an outlet where both can be most profitably employed.

And this is more eminently true where all are producers to a considerable extent—where manufactures are in their infancy, and production is altogether confined to agriculture.

In dealing thus with the questions before us in their most simple form, the trade between Great Britain, her Provinces and the United States, will be chiefly confined to agricultural products and manufactures.

The geographical position of the British North American Provinces places the control of the communications of the *grain producing States* in the power of the Imperial Government; and as will be shewn further on, the facilities afforded can be extended to the utmost possible development of these States. And if proper or fair trade regulations existed between the two powers, Great Britain would become the best and most valuable customer the Western States could ever hope for in the article of their surplus produce.

During ordinary seasons she spends £26,000,000 stg., for breadstuffs alone, and a bad harvest entails an outlay of £40,000,000, the proportions in which it is drawn from various countries are as follows:

Russia	19½ per cent.
Prussia	31½ "
Denmark	11½ "
Other Countries	2½ "
Mecklenburg	8½ "
Hansetowns	4½ "
France	6½ "
Turkey and Principalities	5½ "
Egypt	2½ "
United States	7½ "

As a general rule the prices of grain of all kinds are lower in the United States than in any of those countries enumerated. It is evident then, that a *high protective tariff*, while serving a mere class interest—the *manufacturers*—has inflicted an injury, deep and lasting on the whole community, by restricting the development of its standard interest—*agriculture*—and retarding the full settlement of the Western States. It gives in other words, the farmer the option of selling in the cheapest and buying in the dearest market, thus reversing the plainest of all commercial axioms.

It has been asserted that it costs the western farmer six bushels of grain to fetch one to market—the absurd fiscal regulations practically denying him a choice of route—and he really pays a large proportion of the revenue of these States through which he is forced to send his grain to the sea-board.

If the Detroit Convention will endeavor to bring about a remedy for this state of affairs, and, by the establishment of an enlightened commercial policy, shew the world that the American merchant understands the true mercantile interests of his country, the Provinces will offer singular advantages in transit which can be obtained in no other direction.

First--they offer the unrivalled canals on the frontier, which place Chicago within 4,081 miles from Liverpool. Secondly--they offer one line of direct railway route by which the cargo can be placed on the sea-board within 2,800 miles from Liverpool. Thirdly--they offer facilities for the construction of other channels by water, of which the Ottawa and Lake Huron is the chief. Fourthly--they furnish illimitable water power for the manufacture of grain on its downward passage. And, lastly--they are blessed with that indispensable temperate climate, without which the transmission of grain or flour in bulk would be impossible. The routes through the Provinces are shorter and cheaper than in any other direction, and could not fail to draw the traffic in grain largely to the Western States; especially when it is known that a fair average price for wheat in England is *sixty shillings* sterling per quarter of *eight bushels*, or $\$1.87\frac{1}{2}$ per bushel.

To the western farmer a steady market at 70 cents per bushel would be a real boon; the cost of transmission to Liverpool by existing Provincial canals, 45 cents; insurance, tolls, profits, &c., 35 cents. Total cost by St. Lawrence canals, $\$1.50$. Difference in favor of western producer, $37\frac{1}{2}$ cents per bushel.

The proposed Ottawa canals, when completed, could carry a bushel of grain, covering all expenses liberally, including *two cents* per bushel for tolls, at a round cost of 54 cents between Chicago and Liverpool, or a total (at which it could be profitably sold) at $\$1.24$.

Assuming the price of flour at the rate per bushel of wheat, of $\$1.87\frac{1}{2}$, and that five bushels will produce one barrel of flour, its cost at Liverpool would be $\$9.37\frac{1}{2}$; it could be manufactured on its downward transit to the sea-board, and profitably sold in the English market, by the St. Lawrence route, at a cost of $\$8.00$, and by the proposed Ottawa route, at a cost of $\$7.00$. Any person acquainted with the trade will be satisfied that the sums stated are more than ample; in fact they embrace a maximum rate which could be reduced in each case at least 20 per cent.

If sufficient inducement could be held out to the shipper in the shape of return freight, no doubt would be entertained of the direction which the British grain trade would take. At present it is almost solely confined to New York, because English manufactured goods undersell American in almost every department, notwithstanding restrictive protectionist tariffs, and therefore vessels are glad of the opportunity to turn the voyage to account both ways; but a further rise in duties will entirely destroy this trade. It is therefore the interest of the western producers to take such measures as may secure more outlets than those now in working order in the United States, and the British Provinces offer unrivalled facilities in water communication.

The St. Lawrence canals now in operation opens the navigation between the gulf of the same name and the great lakes. They are composed of two great sections, the St. Lawrence canals proper—which consist of *seven* distinct artificial channels, of an aggregate length of 43 miles, with 27 locks, overcoming the elevation of 234 feet 9 inches, at which Lake Ontario stands above the general level of tidal water—opening an uninterrupted navigation from the sea-board to the head of the lake. The locks on those canals are each 200 feet in length, 45 feet between the quoins, with 9 feet of water on the lock-sills. They are capable of admitting vessels 180 feet long, 40 feet beam, drawing 8 feet of water, and of 300 tons burthen. They are open for 220 days each season, and their full capacity, at *six* lockages per hour, is equal annually to 9,504,000 tons, or 4,752,000 tons downwards.

Between the head of Lake Ontario and foot of Lake Erie, the Welland canal—the second section of those great works—enables the natural obstacles interposed by the Niagara Falls to the navigation of the upper lakes to be overcome. Its length is 28 miles of continuous navigation. It has 27 locks, by which the difference of 330 feet between the levels of Lake Ontario and Lake Erie are overcome. Those locks are 150 feet in length, 26½ feet between the quoins, with ten feet of water on the sills. They can admit schooners of 142 feet in length, 25 feet beam, drawing 9 feet of water, and of 350 tons burthen, but the St. Lawrence canals limit the capacity of the Welland by their lighter draught.

The distance between Chicago and Montreal by this route is 1,348 miles, of which 1,145 are lake, 132 river, and 71 miles canal—the whole being opened by the admirable system of artificial navigation described. From Montreal to Quebec by river is 150 miles, and thence to Liverpool 2,585—the whole distance between that point and Chicago being 4,081 miles.

Next in importance is the proposed Ottawa canal, following the course of the river of the same name, from the head of the Lachine canal (the last of the sub-divisions of the St. Lawrence, which it will use in common) for a distance of 305 miles. It ascends the River Matawan for 40 miles, crosses a summit between Upper Trout Lake, the source of that river, and Lake Nippissing by an artificial channel *three miles* in length, uses the latter sheet of water as a summit level reservoir of 560 square miles in area, and 33 miles of its length as a navigable channel; the outlet by which the surplus waters of its catchment basin are discharged is reached, and a descent of 60 feet, in a distance of 49 miles on the French River, places the *voyageur* on the shores of Lake Huron, 430 miles from Montreal, and 500 from Chicago. Its navigation consists of 30 miles canal, 370 miles river, 530 lake. Its locks are designed to be 250 feet in length, 50 feet between quoins, with 12 feet water on sills—calculated to admit vessels of 230 feet in length, 48 feet beam, drawing 11 feet of water, and of 1,000 tons burthen. Its capacity at *six lockages* per hour, for a season of 220 days, would be 31,680,000 tons, or 15,840,000 downward movement as a maximum. There would be an upward lockage of 60 feet, and a downward of 622 feet, making a total of 682 feet, or 68 locks. This is destined to become the *premier* route to the Western States, because nature has interposed less real obstacles to the creation of artificial channels than in any other direction. It is adapted to the class and style of vessels which must eventually carry the traffic of the great lakes—screw propellers—because the season is limited in which the produce of the Western States can be got out, and the value of speedy trips will be better understood when a trade commensurate with their development has been created.

The distances between Chicago and Liverpool by this route are as follows:—To Montreal, 930 miles; Quebec, 150; Liverpool, 2,583—total, 3,563 miles. As it penetrates the centre of the great lumber region of Canada, a return freight is a certainty. Any quantity of sawed lumber could be obtained at almost any point above French River, and it could be delivered for many years to come at \$12 per M feet B. M. at Chicago if the canals were built; whereas prices for the same material now range from \$23 to \$25 per M. Canada exports to the United States about 120,000,000 feet B. M., of which five-sixths are taken from the Ottawa valley, which can furnish double the supply for the next two centuries.

As a proof of the entire facility of this project, the present state of the communication between Montreal and Lake Huron may be cited as

a conclusive example. The Ottawa River between Montreal and mouth of Matawan River has a length of 305 miles, as follows:—Canaals. Lachine and St. Ann's, 9 miles; Carillon and Grenville, 12 miles—total, 21 miles; obstructed in whole or part by rapids, $23\frac{1}{2}$ miles. Open navigation, *three to twenty fathoms* water, $260\frac{1}{4}$ miles. The Matawan River is $40\frac{1}{2}$ miles in length, of which $11\frac{1}{2}$ miles are obstructed in whole or part— $29\frac{1}{2}$ miles open navigation—*five to twenty fathoms* water.

At the head of Upper Trout Lake, a summit or height of land interferes between it and Lake Nippissing. It is $4\frac{1}{2}$ miles in length, and its greatest elevation is only 10 feet above the water surface; in fact a cutting at one point *five* feet in depth, for 1,500 feet, would send the water now flowing eastward to the Ottawa, westward to Lake Nippissing. This latter lake is about 60 miles in its greatest length, and 20 in its greatest width. It covers an area of 560 square miles, and drains a valley 9,000 square miles in extent, in which another lake (Temin-gamangue) of about 350 miles in area, acts as a compensating and regulating reservoir, and is connected with Nippissing by the Sturgeon River. Lake Nippissing is 632 feet above the level of the sea; between the point at which the proposed canal joins it and that from which its effluent, the French River, goes out, is a distance of 31 miles. French River, from Lake Nippissing to its confluence with Lake Huron, has a length of 49 miles, of which *five* and *three-fourth* miles are obstructed, and *forty-three* and *one-fourth* miles open navigation, with a general depth of *four fathoms* water. At its entrance a magnificent harbor is formed by the Bustard Islands, and the southern projecting sweep of the eastern shore, with six fathoms water clear up to the banks.

The series of waters described traverse a country rich in mineral wealth and the natural products of the forest. It contains mines of iron (black magnetic oxide) of a purity of 72 per cent.; lead, copper, plumbago and antimony. Its forests of pine are inexhaustible. It furnishes over 600,000 tons of freight in this article already, and could readily supply *five* times that amount; barely *twenty per cent.* of the timber available being now taken out of the forest, owing to the want of a market for *dimension* stuff.

The Ottawa drains a valley of over 87,700 square miles. Its average discharge of water amounts to 5,818,674 cubic feet of water per minute, and its channel averages a width of *half a mile*.

The Matawan drains an area of 950 square miles, equal to a discharge of 60,607 cubic feet per minute. Width of channel, *six to eight hundred feet*.

The French River is the outlet to the drainage of 9,000 square miles. It discharges 477,370 cubic feet per minute. Width of channel, *eight hundred to two thousand feet*. Between Montreal and the mouth of the French River there are *twenty falls*, at which the motive power of those rivers can be rendered available. On the French River the power available, after making allowances for water at the rate of 12,500 cubic feet per minute—for navigable purposes—would be equal to 40,707 horse-power—the fall 60 feet.

As Lake Nippissing would be the navigable summit level, the whole surplus waters of the Matawan may be taken as available for manufacturing purposes—its fall of 148 feet would give 12,745 horse power for manufacturing purposes.

The Ottawa, with an average available discharge of 1,000,000 cubic feet per minute, and a total available fall of 350 feet, would have 497,159 horse power available for manufacturing purposes, making a total of 550,611 horse power on the route, which presents a feature of manufacturing and commercial usefulness, in this particular, wholly unique and unequalled by any other series of rivers on this continent.

As the unit of motive power used is 44,000 lbs. raised one foot in height per minute, some definite idea may be formed by bearing in mind that a single run of stones, $4\frac{1}{2}$ feet in diameter, used in manufacturing flour, will absorb *four* horse-power.

Eminently adapted as this navigation is for the manufacture of bread stuffs, it presents unusual facilities for the establishment of another branch of industry—the manufacture of cotton—which could be imported via the Illinois canal, opening a profitable trade with freight both ways, as the distance between Chicago and St. Louis, on the Mississippi, is only 340 miles by that route, and thence to New Orleans, 1,248 miles—making the total distance between Montreal and Chicago 2,518 miles.

It will thus be seen that these Provinces presents not only many advantages to the producer in the Western States, but they furnish him with the proper outlets for his surplus produce and inducements for the creation of a fair mercantile reciprocity or unrestricted free trade.

The outlets which can be created, if additional inducements are given, or if the magnitude of the traffic called into existence will warrant the outlays, are by no means confined to the Ottawa River. The Georgian Bay and Lake Huron proposed canal would be fully equal to the Ottawa in freight capacity, if constructed according to proposed designs, but it will involve over *eighty* miles of canal, and 805 feet of lockage, and can furnish no motive power. As the capacity of the Ottawa navigation can be doubled by adding a second series of locks, the united values of all the means of water communication through Canada would be fully equal to *fifty millions of tons* annually to the sea-board, while the Richelieu navigation, with 12 miles of canal, and 77 of open river navigation, with an up lockage of 84 feet, would enable 3,168,000 tons of freight annually to be placed in Lake Champlain.

A canal has been proposed by the Provincial Government from Caughnawaga to Lake Champlain, capable of passing vessels of 850 tons. Its capacity, during 220 days of navigation would be, at six lockages per hour, 13,464,000 tons up, and the same down; but its capacity would be restricted by the Champlain canal, which, including its junction with the Erie canal, is 73 miles in length, with an up lockage of 55½ feet, and a down lockage to the Hudson of 150 feet, equal to 205½ feet. It has 20 locks, each 90 feet long, 15 feet wide, with 4 feet water on the sills. It admits vessels of 50 tons, and its capacity annually is equal to 792,000 tons each way, or one-half the capacity of the Richelieu canal. It is barely possible that this canal could be enlarged so as to have Lake Champlain for a summit level, otherwise it would be useless labor to enlarge the Provincial canals leading into that sheet of water.

It is well established as a practical fact that western produce has outgrown and is outgrowing all available channels to the sea-board—its greatest outlet, the Erie canal, has been enlarged to the utmost its hydraulic powers will bear. Theoretically, it is assumed that 300 lockages per day can be passed, and this will require 18,000 cubic feet of water per minute, and the supply is only about 25,000 cubic feet—therefore *building a ship canal round the Falls of Niagara* will be no relief to the surplus freight of the west, as it must go through the Erie canal to reach the sea-board. Nor will the enlargement of the Illinois canal remedy matters. It is almost, if not entirely, physically impossible. First, for want of sufficient supply of water at summit level, and, secondly, the impossibility of making Lake Michigan the supplying reservoir. Even if completed it could not become a channel for the transmission of breadstuffs, and the passage through an inter-tropical climate would destroy the material.

The Erie canal, at the rate of *ten* lockages per hour, for a period of 220 days each year, with vessels of 200 tons, can send down 4,880,000 tons, and a like quantity up. The various railways leading from Chicago can probably do as much more, so that 10,000,000 tons exhausts the available outlets of the United States.

In addition to our canals we have the Grand Trunk Railway, equal to 1,000,000 tons annually, the Great Western equal to a like amount, the Northern Railway the same, so that the total facilities offered by Canada would be little short of *sixty millions* of tons of through freight annually. It remains to be seen whether the full advantage will be taken of those facilities by a wise and liberal commercial policy, or whether class interest will prevail to the extent of retarding the development of a country which its advocates declare can produce 400,000,000 bushels of wheat annually, and all other grain in proportion.

If a liberal reciprocal commerce will be the result of the Detroit Convention, no limitation can be put to the trade arising therefrom. Beneficial as it will be to British North America it will be many hundred times more so to the Western States, and by giving them the best chance of saving the vast outlay Great Britain yearly makes for food enable the producer to bear the heavy fiscal burthens a long and severe struggle has entailed on the country.

Whatever the result may be, British North America will go to the Convention without soliciting as a boon what her manifold advantages must secure eventually as a matter of interest.

THE TRANSIT COMMITTEE.

DETROIT, July 13, 1865.

The Transit Committee met this morning at the Biddle House.

The resolutions of Mr. Littlejohn being under consideration,

Mr. McGiverin said :

In addressing the Committee on behalf of Canada, he desired to submit for their consideration the advantages of the various transit routes through Canada to the sea-board. As the discussion of the Reciprocity Treaty is precluded from this Committee, as well as the trade relations between the two countries, the field for discussion becomes comparatively limited, feeling, as he did, that the navigation of our rivers and canals, the traffic over our railways, and the Reciprocity Treaty are so intimately connected with each other that it was difficult to separate them. But, as another Committee had been named to consider the commercial relations, he would endeavor to place before them the advantages Canada offers as a competitor for a portion of the vast and rapidly increasing commerce between the Western States and Europe. We had constructed canals connecting the great grain-producing country bordering on the western lakes with tide-water, at an outlay of nearly twenty-five millions of dollars. We had constructed a magnificent railway system, extending from the extreme western section of Canada to Portland, in all involving an expenditure of one hundred and three millions of dollars. We had the Great Western Railway, with its branches, connecting Michigan and New York; the Buffalo and Lake Huron, from Goderich to Buffalo; the Northern Railway, from Collingwood to Toronto; the Welland Railway, from Port Colborne to Port Dalhousie; and the

Grand Trunk Line, from Sarnia to Maine—all these routes having been thrown open without any restriction to the commerce of the west, and he should have stated that the producer in the west has enjoyed privileges and advantages not conceded to the Canadian producer and the Canadian merchant, viz: that freight has been and is now being transported at much lower rates for the people of the United States than for our own people. In the same way discriminating tolls in favor of the United States have been imposed. Whilst the western shippers can transport grain from any western port to Montreal, at reduced rates, passing through both canals, the people of Canada, bordering on the shore of Lake Ontario, have to pay full rates of tolls through the St. Lawrence canals. As this question had to be discussed in a purely commercial sense, it became his duty to point out to this Committee what seemed to him the superior advantages of the St. Lawrence waters for the shipment of produce to Europe. He called their attention to a few facts which will serve to convince every one that the natural water communication to the ocean must afford superior advantages to artificial routes through the United States.

On the 10th September, 1861, sixteen thousand bushels of wheat were purchased at Chicago, of which ten thousand bushels were shipped *via* the St. Lawrence, and six thousand *via* New York.

ST. LAWRENCE ROUTE.

	DAYS.
Shipped at Chicago 13th September, arriving at Port Colborne 18th.....	5
Passed over Welland Railway same day; shipped at Port Dalhousie 19th September, arrived at Montreal 22nd.....	3
Detained one day at Port Dalhousie.....	1
Shipped at Montreal, per steamer, 22nd, and from Quebec 29th, arrived at Liverpool on 5th October.....	10
	18
Detained between Quebec and Montreal.....	8
In all.....	26

CHARGES.

	CENTS.	CENTS.
Freight to Port Colborne.....	16	
Welland Railway.....	2	
Port Dalhousie to Montreal.....	8	
Montreal to Liverpool.....	26	
	—	52
Insurance from Chicago to Montreal.....	2½	
Insurance from Montreal to Liverpool.....	1½	
Charges at Liverpool and Commission.....	11	
Per bushel.....	—	67

NEW YORK ROUTE.

	DAYS
Shipped at Chicago 13th September, arrived at Port Colborne 8th.....	5
Passed over Welland Railway same day; shipped at Port Dalhousie 25th September, arrived at Oswego on the 26th September.....	1
Detained at Port Dalhousie six days.....	6
Shipped at Oswego 26th September, arrived at New York 6th October.....	10
Shipped at New York 10th October, arrived at Liverpool 3rd December.....	54
	70
Detention.....	10
In all.....	80

CHARGES.

	CENTS.	CENTS.
Chicago to Port Colborne.....	16	
Welland Railway.....	2	
Port Dalhousie to Oswego.....	4	
Oswego to New York.....	11	
New York to Liverpool.....	25½	54
Insurance from Chicago to New York.....	2½	
Insurance from New York to Liverpool.....	2½	5
Charges in New York.....	3	
Charges and Commission in Liverpool.....	11	14
Per bushel.....	73	

Were the proposal, which has long been favorably entertained, of enlarging the Welland, and enlarging and deepening the St. Lawrence canals carried out, it becomes apparent that the freight could be conveyed from Chicago to Liverpool in much shorter time, and at a reduction of at least twenty cents per bushel from the figures quoted. The people of Canada are alive to the great and important interests involved in the enlargement and improvement of our canal system. The rapid growth of the west has brought into existence a class of propellers, with a carrying capacity of thirty to thirty-five thousand bushels of grain, which cannot, from the small single locks, and want of sufficient depth of water, pass through our canals; this class of vessels are necessarily compelled to discharge their cargoes at Buffalo. The several Canadian Boards of Trade convened a meeting at Toronto, and unanimously agreed to urge upon the Canadian Legislature the importance of enlarging the Welland and St. Lawrence canals to admit vessels of one thousand tons burthen, or possibly larger. He thought he was warranted in stating to this Committee that the Government policy is to consummate such a desirable object.

In reply to a member of the Committee as to the size of the proposed locks and depth of water, Mr. McGiverin stated that it had been generally

understood that both canals were to have locks two hundred and fifty feet by fifty feet, drawing thirteen feet of water. He regretted, as representing Canada, that the consideration of the Reciprocity and the Transit questions had not been submitted to the same Committee, but as that could not now be arranged, he would close his remarks for the present by expressing the hope that the consideration of the several questions in which Canada was interested would be viewed by the people of the United States free from prejudice; that whatever may have occurred to temporarily mar the good feeling which has hitherto existed, he felt convinced that the great mass of the Canadians were strong in their desire to renew and perpetuate the Reciprocity Treaty and cultivate the most friendly commercial relations. It should be borne in mind that in every free country the right of liberty of speech was acknowledged, and before condemning all of Canada for the aspersions of a minority they should bear in mind that there are two great parties in the United States whose views differ as widely as do those in Canada.

Reserving the privilege of again appearing before the Committee, should it desire any further evidence, Mr. McGiverin closed his speech.

Mr. G. H. Perry said :

The River St. Lawrence is the natural outlet of the surplus waters of the great lakes. It drains an area of 600,000 square miles, of which 355,000 belong to Canada. Ninety miles above the highest point at which it is affected by the tide-waters its channel is interrupted by a fall of forty-five feet known as the Lachine Rapids. The head of this fall is six miles above the city of Montreal, and from that point the river is obstructed by a series of similar rapids for the distance of one hundred and seven miles. To render the navigation of this noble river available, the Provincial Government have constructed a series of canals, varying in length from three-fourths of a mile to eleven miles, of uniform size and dimensions, the lock chambers being two hundred feet in length by forty-five feet in width, with a depth of nine feet of water on the sills of the locks. They are capable of admitting vessels one hundred and eighty-six feet in length, forty-three feet beam, and drawing eight feet of water, of a capacity of three hundred tons burthen. The machinery and all appliances are of the most durable description of material, and all that art and science could effect for the purpose has been laid under contribution for the purpose of rendering the navigation perfect. In these climates the navigation is necessarily limited by the shortness of the season, but these canals are available for two hundred and twenty

days as a maximum, and two hundred and ten days as a minimum; last year they were opened about the 15th of April, and rarely close before the 1st of December. Taking, however, the present state of these canals, and that they can be worked to the extent of a lockage in six minutes, or ten lockages per hour, a total movement of through freight would take place amounting to 15,840,000 tons for the season, and an upward movement of 7,920,000 tons, and a corresponding downward movement, as the maximum of usual effect. These canals open the St. Lawrence and Lake Ontario to the head of the latter expanse of water; they overcome a fall of two hundred and thirty-four feet between the level of its surface and tidal waters, and complete the connection with the sea-board for that portion of the outlet. The communication between Lakes Ontario and Erie is interrupted by the Niagara Falls. A canal twenty-eight miles in length, known as the "Welland," renders the navigation perfect and completes the remaining link between the upper lakes and the sea-board. Its locks are one hundred and fifty feet in length, twenty-six and a half in width, with ten feet of water on the sills. This canal is capable of admitting vessels of four hundred tons, and as it is open from ten to fifteen days earlier each season than the St. Lawrence, its period of navigation will be two hundred and forty days as a maximum. Applying the same data as to the lower series of canals, it is capable of affording transit to 23,040,000 tons of freight annually, or an upward movement of 11,520,000 tons, and a downward of like amount as its maximum of greatest useful effect. This canal overcomes a fall of three hundred and thirty-five feet, and has twenty-seven locks, while the St. Lawrence canals have a length on the aggregate of forty-eight and a half miles, and also twenty-seven locks. The total fall between the level of Lake Erie and tide-water is five hundred and sixty-nine feet. It has been the intention of the Canadian Government to enlarge these series of canals to the full size which the harbors and internal waters to which they give access will permit, so that it is not at all beyond the bounds of probability, if a fair and equitable reciprocity continues between the Imperial Government and the United States, to see these canals admit vessels of *one thousand* tons, laden with the produce of the Western States, to meet the ocean steamships at Montreal. From the immense hydraulic power at command, their expansion would be illimitable, and can only be prescribed by the wants of commerce or the physical or natural obstructions in the waters to which they give access. Most of the rapids on the St. Lawrence *can be descended* by steamboats, and it has been at one time the intention of the Provincial Government to deepen the channel so as to permit *laden crafts* to descend. This would

at once double the capacity of this channel for freight. In the event of that expansion of western commerce so eloquently described by its advocates, Canada presents another route for consideration, forming a direct communication between Lakes Huron, Michigan and Superior with the ocean by the Ottawa and French Rivers. The Ottawa River bifurcates about twenty-five miles above the city of Montreal, forming the island on which it stands. The north channel, known as "Riviere des Prairies," joins the St. Lawrence at *Boute de l'Isle*, sixteen miles below the city; the south mingles its dark waters with that stream at Lake St. Louis above the head of Lachine Rapids. The proposed navigation would use its channel for a distance of three hundred and five miles above Montreal, then ascend its tributary, the Mattawan, passing a small height of land of four and a half miles in width, enter Lake Nippissing, and descend the French River to the shores of the Georgian Bay, opposite the Straits of Mackinaw, from which it is only distant by the width of Lake Huron. The whole route has been surveyed, at the expense of some \$90,000, by the Provincial Government, and its entire feasibility established. It will have sixty-eight locks, a lockage of sixty feet upwards from Lake Huron, and six hundred and twenty-two feet downwards to tidal waters. Its length will be as follows: Ottawa River, three hundred and five miles; Mattawan, forty and one-half miles; height of land, four and one-half miles; Lake Nippissing, thirty-one miles; French River, forty-nine miles. Total, four hundred and thirty miles. Its present condition has twenty-one miles of canal, including the Lachine, and forty-four miles obstructed. The open navigation actually existing is three hundred and sixty-five miles, of from five to twenty feet in depth. The locks are designed to be of the largest possible size—two hundred and fifty feet long, fifty feet wide, with twelve feet of water on the sills, calculated to admit vessels of two hundred and thirty feet in length, forty-eight feet beam drawing eleven feet of water, and of one thousand tons burthen. Taking the data heretofore used for the season of navigation, and admitting only six lockages per hour, the capacity of this channel for freight would be 31,680,000 tons each season—an upward movement of 15,840,000 tons, and a like downward movement, would be its greatest useful effect. Its course from Montreal is about in a straight line for the Straits of Mackinaw, and its actual canaling will be just thirty miles, including the Lachine canal. If an independent outlet is necessary, the Riviere des Prairies furnishes it, with seven miles less canal.

One hundred and forty miles to the southward of the mouth of French River, Nottawasaga Bay, at the foot of the Georgian Bay,

affords facilities for the construction of another channel to Lake Ontario. It is known as the Georgian Bay and Lake Ontario canal. It is designed to be of the same dimensions as the Ottawa and Lake Huron, and will have the same capacity of 31,680,000 tons per season; it has eight hundred and five feet of lockage to the sea-board, or five hundred and seventy-one to the surface of Lake Ontario, and eighty miles of canal. The Chambly canal, on the River Richelieu, opens the navigation between the St. Lawrence and Lake Champlain; its capacity enables 3,168,000 tons of freight to be placed annually on that lake. A comparison of the distances by each of the routes submitted would be as follows: St. Lawrence, from Chicago to Montreal, and thence to Liverpool—lake, one thousand one hundred and forty-five miles; river, one hundred and thirty-two miles; canals, seventy-one miles. Total, to Chicago, one thousand three hundred and forty-eight miles. Time—lake and river, at eight miles per hour, one hundred and fifty-nine hours; canal, at two miles per hour, thirty-five hours; lockage, five hundred and thirty-five feet at one minute per foot, nine hours. Total, one hundred and ninety-three hours. Ottawa and Lake Huron navigation—lake, five hundred and thirty miles; river, three hundred and seventy miles; canal, thirty miles. Total, to Chicago, nine hundred and thirty miles. Time—lake and river, one hundred and thirteen hours; canal, fifteen hours; lockage, six hundred and eighty feet, twelve hours. Total, one hundred and forty hours. Georgian Bay—lake, seven hundred and seventy-five miles; canal, one hundred and forty-one miles; river, one hundred and thirty-two miles. Total, one thousand and forty-eight miles to Chicago. Time—lake and river, one hundred and thirteen hours; canal, seventy hours; lockage, thirteen hours. Total, one hundred and ninety-six hours. To Liverpool from Montreal—Quebec, one hundred and fifty miles; to Liverpool from Quebec, two thousand five hundred and eighty-five miles. Total, by way of St. Lawrence from Chicago, four thousand and eighty-one miles; by way of Ottawa and Lake Huron, three thousand six hundred and sixty-five miles; by way of Georgian Bay canal, three thousand seven hundred and eighty-five miles. It will thus be seen that Canada can offer, with her canals and railways, outlet to 16,000,000 tons annually, in their present condition, as follows:

	TONS.
St. Lawrence Canal.....	7,920,000
Welland, a surplus of.....	3,600,000
Chambly Canal.....	5,168,000
Railways.....	1,000,000
Total.....	<u>15,688,000</u>

Enlarged, the same channels would be equal to *sixty million* tons annually. For any quantity beyond that it would not be possible to find freight.

Mr. McLennan, of Montreal, made the following statement :

The receipts in Montreal by the Lachine canal in 1862 were :

Wheat, bushels.....	7,779,727
Flour, reduced to wheat, equal to bushels.....	3,861,985
Indian corn, bushels.....	2,661,261
	<hr/>
	14,802,923

Shipments, same season, by sea-going vessels, exclusive of vessels, to Provincial ports :

Wheat, bushels.....	6,500,795
Flour, equal to wheat, bushels.....	2,957,355
Indian corn, bushels.....	1,774,548
	<hr/>
	11,202,728

As evidence of the quantity of stuff that can be passed through the Lachine canal in its present state, though this is not all that could be done, the entire quantity of grain and flour passed in May and June, 1863, was equal to 5,361,685 bushels.

There is storage for grain in elevating warehouses on the Lachine canal to the extent of 1,040,000 bushels.

The water power now used on the Lachine canal is estimated at 5,124 horse power. The supply of water from the Lachine Rapids that may be made available when required is practically unlimited, being estimated at the equivalent of some millions of horse power.

The clearances were fifty-three steamships and four hundred and thirty sailing vessels.

Illustrating the capacity of the harbor of Montreal, it appears there were in port on the 6th of June, 1861, one hundred and seventeen sea-going vessels. There are now on the route from Montreal to Great Britain eight mail-carrying steamships (carrying also freight) and ten freight steamships.

The average cost of grain freight from Chicago to Montreal, during the last three years, has been fourteen cents, and from Montreal to Liverpool eighteen cents; from Chicago to Liverpool, per bushel, thirty-two cents.

Comparative tonnage of American and Canadian vessels passing through the Welland canal in 1863 :

3,425 Canadian vessels, tons.....	521,503
3,474 American "	503,233

As evidence of the value of the route in respect to climate and the conservation of grain he would state that during five years that he has been actively engaged in the grain trade between Chicago and Milwaukee and Montreal, he has had but one cargo of wheat out of condition. The quantity handled during each season has ranged from two hundred thousand to five hundred thousand bushels.

The estimated full capacity of the Welland canal is equal to the passage downwards of one hundred and fifteen millions of bushels of grain in the course of the usual season of navigation, about two hundred and twenty days.

After further discussion, the question was taken on Mr. Littlejohn's resolutions, and they were adopted.

Duncan Stewart, Esq., of Detroit, presented the following additional resolution, and asked that it be added to those already adopted :

Resolved, That in the event of the negotiation of any Treaty of Reciprocity between the United States and the British Provinces, our Government should be careful to secure in such a Treaty a guarantee of sufficient depth of water to enable screw steamers of not less than one thousand tons cargo carrying capacity to pass from Port Colborne, Canada West, to tide-water.

Mr. Littlejohn—I think the other resolutions cover the entire ground. So there can be no need of the one just offered.

Mr. Stewart—One of the other resolutions states that it gives us pleasure to learn that the Canadian Government intends to enlarge its canals. The west is done with intentions, and demands unmistakable action. If the intention to enlarge yields us pleasure, a guarantee that will secure enlargement must largely increase that pleasure, therefore I will now take the liberty to present some few figures to show the advantage of deep water down the St. Lawrence, and I will be as brief as possible in their presentation.

I take the ground that, as regards the commerce of the lakes that seeks an ocean outlet, Port Colborne, which is the entrance to the St. Lawrence outlet, and Buffalo, which is the entrance to the Erie canal outlet, *via* New York, are the two starting points of competition. All points west, north-west, and south-west that use the lake route to the sea-board stand in precisely the same relative condition to these two important points. The question now arises: By which of these two outlets can the west reach those markets of the old world where its products are most in demand in the speediest and cheapest manner? This brings us at once to an examination of the advantages and disadvantages of each of these great channels of communication. At the present moment all the advantages are on the side of the route through the State of New York. With a proper enlargement of the Canadian canals the case would be reversed, greatly to the advantage of the entire west. I will examine the question on the basis of an enlargement of the Canadian canals as compared with our present facilities *via* New York. I will take up the Erie canal first, and examine it as to time, cost of transportation, incidental expenses, etc.

The Erie canal, as you are all aware, joins the waters of the western lakes with those of the Hudson River. It enters Lake Erie at Buffalo and the Hudson River at West Troy. Its length is three hundred and fifty miles. It has seventy-one locks; they are seven feet deep, one hundred and ten feet long, and eighteen feet wide. Boats of improved build can navigate it with two hundred and twenty net tons of cargo. The boats are towed by horses, and the average rate of speed is one and an eighth miles per hour. At this rate of travel it requires twelve days and twenty-three hours—say, in round numbers, thirteen days to pass the canal. This is the case if no break occurs or accident happens; but as all canals, as well as other means of transport, are subject to breaks and delays, I will only use the actual time needed to reach tide water in my calculations. One day more will place boat and cargo in the harbor of New York, which is one hundred and fifty miles from West Troy, making the entire distance five hundred miles. No gentleman interested in the Erie canal will, I think, venture to say that I have not made a fair statement of the case. I will here remark that if in my figures and calculations any errors have crept in, I will be most glad to be corrected, as my intention is to make a dispassionate statement, and carefully avoid straining either facts or figures. The charges on a bushel of wheat intended for shipment abroad are, from Buffalo till it is put aboard ship at New York, as follows: Canal tolls paid to the State of New York, six and a half cents per bushel; shipping charges at Buffalo, one-quarter

of a cent per bushel; elevating charges at Buffalo, one and three-quarter cents per bushel; measuring at New York, half a cent per bushel, and shipping charges there, one cent per bushel; in all, ten cents per bushel. This is entirely independent of the freight. For the past ten years the average rate of freight has not been less than nine cents per bushel additional. We are thus able to lay down as a rule that the lowest possible average figure at which a bushel of wheat can be delivered on board ship at New York, *via* Buffalo, and from that point, is nineteen cents. Here, again, I will call the gentlemen interested in the Erie canal to bear witness to the correctness of my figures, and the moderation of my estimate as regards the average cost of freight. The figures are correct. The estimated average rate of freight is under, and not over, the mark; so that, in all things, I present the most favorable aspect that can by any possibility be presented of the Erie canal outlet to the ocean. The summing up is both short and simple: Time from Buffalo to New York, fourteen days; cost on a bushel of wheat, nineteen cents. This tells the whole story as regards the Erie canal.

I now turn to the water route through Canada, and the great advantages a moderate enlargement of the canals would secure to us. The canals are as follows:

	LOCKS.	MILES.
Lachine canal.....	5	8½
Beauharnois canal.....	9	11¼
Cornwall canal.....	6	11¼
*Farra's Point canal.....	1	0¼
*Rapide Platte canal.....	2	3¼
*Iroquois Junction and Galops canal.....	3	7¼
In all.....	26	43½

The Welland canal, connecting the western lakes with Lake Ontario, has twenty-seven locks, and the canal is twenty-eight miles in length. It follows that the number of locks which must be passed to reach the ocean by the St. Lawrence river is fifty-four, or seventeen less than there are on the Erie canal. The number of miles on the canal between the sea-board and the lakes in this direction are seventy-one and three-eighths miles, or, in round numbers, seventy-two miles, which is two hundred and seventy-three miles less than the Erie canal. I would earnestly impress two great facts on the minds of the members of this Committee, more particularly on the minds of the gentlemen from the west: that there is twenty-five per cent. fewer locks on the St. Lawrence route than on the Erie canal, and that there are five miles of canal on the latter

* Known by the name of the Williamsburg canal.

route for every one mile on the former. No further argument is required to prove which of these ways nature designed as the great highway from the west to the outer world beyond the ocean. Man, with all his wonderful powers, creative genius, and perseverance, will never fail to be right if he follows where nature leads. In this particular case let us lay the lesson to our hearts.

I now come to a comparison of distances :

	MILES
From Port Colborne to Kingston	188
" Kingston to Montreal.....	180
" Montreal to Quebec.....	190

Making the total distance from Port Colborne to Quebec five hundred and forty-eight miles, or forty-eight miles more than from Buffalo to New York; but as the distance from any given point west of Port Colborne is twenty miles less than to Buffalo, the actual difference is reduced to twenty-eight miles between the great starting points of competition for the ocean trade and tide-water. I trust the Government of Canada will give us fourteen feet depth of water all the way from Port Colborne to Montreal. If they do not give it to us now they will have to commence another enlargement within twenty-five years. Suppose, however, that for the present we must rest contented with twelve feet six inches, this would admit of propellers of a carrying capacity of 30,000 bushels of wheat reaching tide-water without breaking bulk. While jaded horses, driven by semi-savages, whose blasphemous expressions shock every feeling of decency every time they apply the whip with merciless severity to the sides of the tired animals placed in their charge, drag the canal boat along at the rate of one and an eighth miles per hour towards tide-water on the Erie canal, the magnificent screw steamers of these inland seas would be proudly plowing their way through the pure waters of the St. Lawrence at an average rate of eight miles per hour, including the time required to pass the canals, reaching tide-water at Quebec in two days and twenty and a half hours—not consuming three days in the passage; whereas fourteen days would be required *via* the Erie canal, making a saving of eleven days in favor of the St. Lawrence; or, in other words, running the distance in less than one-quarter of the time necessary on the New York outlet.

I now come to the cost of transportation. A propeller, or vessel, carrying 30,000 bushels could net twenty-five to thirty per cent. of her cost every year with an average freight of five cents to Montreal, and six cents per bushel to Quebec. Allow that the Canadian Government

charged two cents per bushel for tolls on the entire length of the canals, and that the elevator charges at Quebec and Montreal were half a cent per bushel, including ten days' storage and re-shipment, the entire cost from Port Colborne to Quebec, and putting the wheat on board ship, would be eight and one-half cents for all charges, against ten cents of incidental charges *via* Buffalo; or one and one-half cents per bushel less than the charges other than freight on that route. Add the average freight of nine cents from Buffalo to New York, and we have a saving of ten and one-half cents per bushel to the western farmer in the difference of the two routes to the Atlantic. This statement as to the saving of time and expense is a most astounding one, and one not readily to be believed by those not practically acquainted with the details of the business, but I stand here to-day before the assembled mercantile wisdom and experience of one-half of the United States, and the combined talent, wisdom, and commercial experience of the British Provinces of North America, and solemnly declare that I am correct in every detail and particular of the statements I have made; and I further am convinced that no gentleman on this Committee can upset either my reasoning or my figures. I know that of which I speak.

I have examined with care and impartiality the highways to the sea from the west. I have placed your cargoes on ship-board at Quebec and New York; now let me examine further the balance of the way to Liverpool from either point, and carefully note the result. The distance from Quebec to Liverpool is two thousand five hundred miles; from New York to Liverpool is three thousand miles—making in favor of Quebec a distance of five hundred miles, or fully two days' sail, assuming that freight steamers would make an average run of ten miles per hour from either point to Liverpool. Add this two days to the eleven days saved by steaming down the St. Lawrence, instead of towing by horses down the Erie canal, and we have a total saving of thirteen days between the west and Europe—enabling us to reach the ports of the Old World in not much more time from Port Colborne than it now takes us to reach New York from Buffalo. The entire time required to make the passage from Port Colborne to Liverpool being thirteen days—allowing two days for transshipment at Quebec—our wheat and other products would reach Liverpool with more certainty in fifteen days than they now have of reaching New York in fourteen days.

The gentlemen of the Committee will have remarked that I do not speak of the screw steamers from the lakes crossing the ocean. I do so deliberately, because I consider that, with twelve feet six inches to

fourteen feet water down the St. Lawrence, it will always be more profitable to transfer at Montreal or Quebec than attempt to cross the ocean with lake-going steamers. The reason of this is that, in reaching Quebec, they need not put on board fuel for more than a run of two hundred miles at a time, thus saving a vast amount of freight room; whereas in crossing the ocean they must put fuel on board for the run of twenty-five hundred miles, and a surplus to cover contingencies. It would be unwise to have that surplus less than two days' run—enough to run three thousand miles. Every gentleman who has any experience in this business will see at once that it would take fifteen times more tonnage room for fuel to cross the ocean than it would take to run down the river. In going down the river there would be no need to have over twenty-five tons of coal on board at any one time, including the surplus, because twenty tons would be sufficient to run a screw steamer of one thousand tons cargo capacity, with a low pressure engine, two hundred miles, leaving nine hundred and seventy-five tons for cargo and twenty-five tons for coal—only two and one-half per cent. of the carrying capacity being reserved for fuel; whereas for the ocean voyage it would be unsafe to leave port with less than two hundred and fifty tons of coal, or twenty-five per cent. of the carrying capacity—leaving only seven hundred and fifty tons for freight room. I think this clearly demonstrates the economy of a transfer of cargo at either Montreal or Quebec. On the other hand, I think that cargoes by sail, intended for a foreign market, should not be transferred, but that the sail vessel should be towed with promptness from Kingston to open sea navigation below Quebec, and then left to the use of her sails. A sail vessel of one thousand tons burden would make money rapidly for her owners by carrying wheat to Liverpool from Port Colborne for the rate it now costs to put it on board ship at New York from Buffalo.

I hope these dry, practical details are not wearying or tiring the patience of the Committee. I have been as brief as possible. I have not been, I know, eloquent, fanciful, or entertaining, but I do hope that I have been clear and intelligible enough to be understood.

The benefits, not only to the United States and the Canadas, but to the world at large, cannot be over-estimated. Deep water down the St. Lawrence will open a new phase in the world's history. It will be a fresh starting point on the road to increased prosperity and greatness of the two great members of the Anglo-Saxon family. A feeling of sincere friendship and respect will take the place of unworthy passion; unfounded prejudice will disappear. The petty malice, engendered by mean jealousy

will no longer beget strife and breed distrust. We will stand before the world in our true character; foremost in deeds of Christian charity and benevolence, foremost in all good works, foremost in all that tends to elevate mankind, and foremost in the championship of civil freedom and equal rights. I believe the measures that will be adopted by this Convention will bring all these things to pass.

With deep water down the St. Lawrence, no interest will be more benefitted than the lumber interest. Instead of ruin, swift and sure, overtaking this branch of our industry, new life, animation and vigor will be imparted to it if the treaty is renewed, with a deep water clause affixed. With boundless, and almost inexhaustible forests of valuable timber, pine is the only kind that is of any present value. Let ships of one thousand or fifteen hundred tons load at the wharves of our lake cities, and, as if by magic, oak, black walnut, white wood, maple of all kinds, white ash, tamarac and spruce, would at once become ten times more valuable than they are at present. The cabinet-makers of Europe would furnish a market for your fancy woods; the West Indies would take every oak stave you could turn out, sending back, in return, her sugar, molasses, and other rich products, which, being purchased from first hands, and landed, without any extra charges but the freight, at your own doors, would enable our merchants to sell these products at greatly reduced rates, thereby adding to the comfort and happiness of the great mass of the people. The railways of Great Britain would give you a limitless market for your spruce and tamarac of small growth for ties; and the wealthy cities of London, Liverpool, Manchester, Glasgow, Dublin, Bristol and Birmingham would become competitors with Chicago, New York and Boston for your best qualities of white pine. An open market with all the world will pay the owners of timber lands better than a limited home market; and with the class of vessels named, to carry the products of our forests to foreign lands, the rates of freight would be as low to any of the ports of Great Britain as they now are from any given point west of New York or Boston, while the prices to be obtained abroad would be much better than attainable in either of these markets.

I know it will not be considered patriotic to draw trade from our own cities, and the cry will be raised that all this tends to enrich another country rather than our own. All I have to say is, that if the State of New York and cities of New York and Buffalo cannot do the business of the west as cheap as any one else can they must expect to lose it, and deserve to do so.

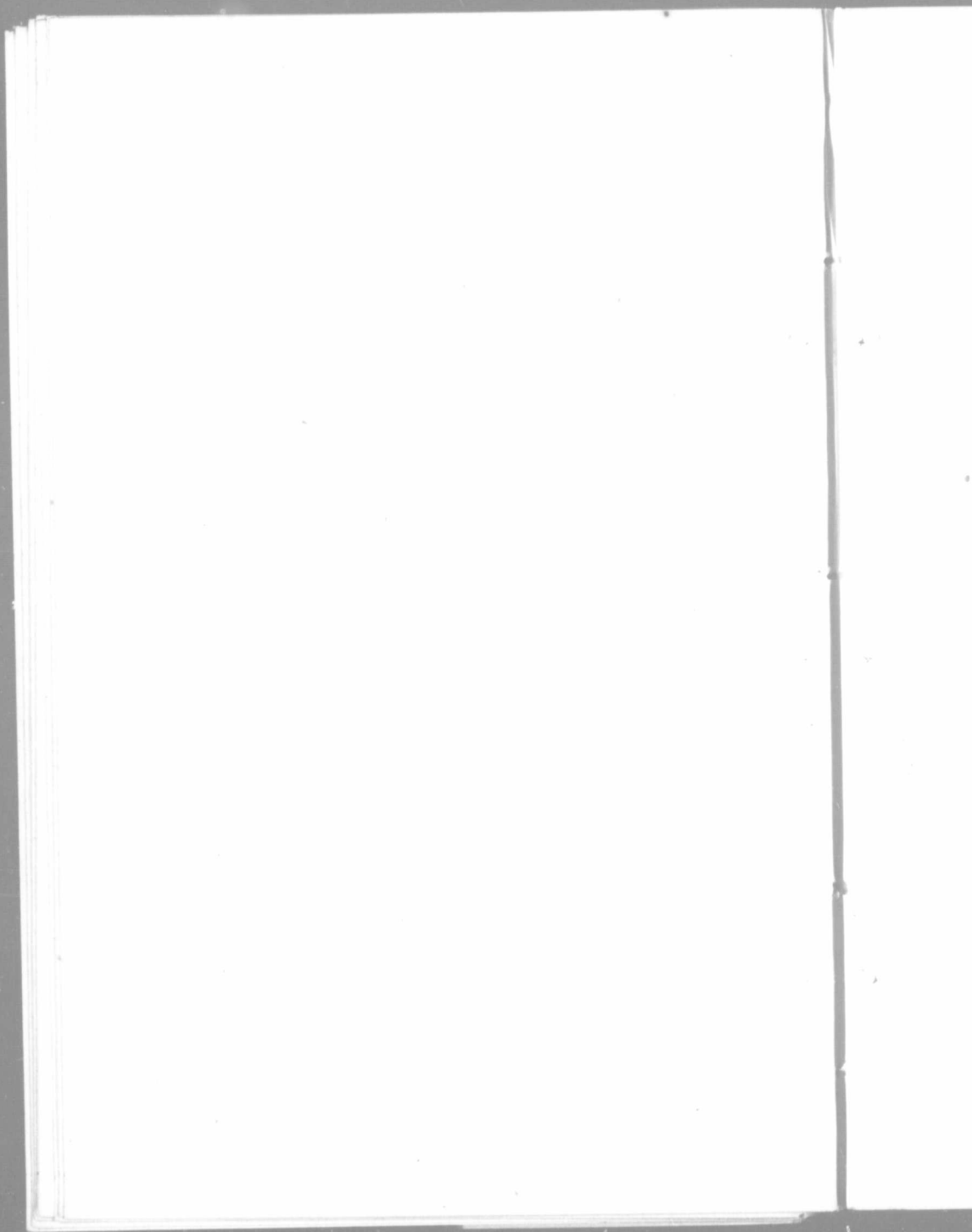
The west means to do her business where she can do it to the most advantage; and if our Canadian friends afford us such facilities as will enable us to reach tide-water for a lower rate of freight and canal tolls than the incidental expenses incurred passing through the State of New York, my humble opinion is that they will secure the business.

Which party is most deserving of our consideration? Men who profess feelings of friendship for us, and call themselves our fellow-citizens, yet retard our prosperity, and charge us double what is fair or reasonable for every service they do for us, because we are in their power, or those who present themselves as strangers, but offer us advantages which our friends refuse to grant us.

A few more words and I am done. Some years ago the farmers in certain portions of the west could not obtain over eight cents per bushel for their corn. Some professors of political economy say this was the result of a great crop, and nobody to eat it. This is a grave mistake; there were hungry men enough to eat up the whole of it! Nobody to eat! The want of transportation facilities ate it all up! That year forwarders got in many instances twenty cents per bushel from Chicago to Buffalo; and the canal rates rose as high as twenty-five cents from Buffalo to New York. In plain English, the farmer of Illinois had to give the carrier the price of five and a half bushels of his corn to get him to carry one bushel from Chicago to New York, a distance of fifteen hundred miles by water. Twenty-five cents, including canal tolls, would have laid the same corn down in Liverpool, had there been a chance to navigate the St. Lawrence with vessels of one thousand tons or upwards, and the owner of the craft would have been richly remunerated at that price; but on top of the forty-five cents to New York from Chicago were the charges at that point, and another charge of twenty cents per bushel to cross the ocean, making the charge from Chicago to Liverpool not less than sixty-seven cents per bushel, when it would never have exceeded thirty cents had the right kind of vessels been able to pass down the St. Lawrence. This would have enabled the farmer to get forty-five cents for his corn, instead of eight cents, per bushel. With sixty bushels to the acre, the amount secured in the one case was four dollars and eighty cents; in the other it would have been twenty-seven dollars. This is no fancy sketch; it is a positive fact. After such a statement I will leave it to the Committee to say whether or not the west has not just reason to complain of insufficient outlets to the seaboard. With these facts placed before our Provincial friends, I trust they will go on and improve their lines of communication whether the

treaty is renewed or not. They can offer such inducements for the trade of the west as will draw a large portion of it into their harbors, in spite of unfriendly legislation or unfounded prejudice. I have never known one single American merchant, and I have had some experience among them, who would give me twelve and a half cents per barrel to carry flour to Buffalo from Detroit if the Grand Trunk or Great Western Railways would carry it for twelve and one-eighth cents; or who would give an American vessel eight and one-tenth cents per bushel to carry a cargo of grain to Kingston if a Canadian craft stood ready to do it for eight cents. And this is the correct principle in trade. Trade knows no country or color; she will agree with those from whom she can obtain the best bargain. These are simple facts, which I hope will be duly considered by the gentlemen of this Committee.

The resolution was then put and carried, every member of the Committee voting for it, except Mr. Prosser, of Buffalo.



THE RIVER COMMUNICATIONS
OF THE
BRITISH AMERICAN PROVINCES.

Commerce demands a ready market, and an open, direct, and easy highway thereto. The natural streams of any country form its primary means of communication between the interior and sea-board. They are, where thoroughly available, the cheapest and readiest means of transit, for agricultural and natural produce, and their connection by artificial channels is the direct step towards trade extension.

Placed in competition with railways or macadamized roads, as modes of conveyance for all descriptions of heavy freights, they are much more available for the wants of commerce; and no country dependent upon the latter accessories alone for transit, if its interior is far removed from the sea-coast, can ever become an active commercial centre.

The limited capacity of railways as conveyers of freight is due to the difference between motive power as applied to land and water. In the first case the haulage has to be effected over a comparatively rough surface of great length. The inertia of the whole load has to be overcome, and its actual weight, as it were, lifted from the surface. As there must be a limit to the width of bearing surface that is attained on railways, by a gauge or width between the rails of five feet six inches as the medium, and consequently the capacity of conveyance is necessarily limited thereby, a railway car forty feet long, ten feet wide, on the outside, carries generally about ten tons, and *ten* of those cars is a good load for an ordinary locomotive.

On the other hand, a canal boat, with an engine of seventy horse power, one hundred and fifty feet long, thirty-five feet beam, and drawing

nine feet of water, will take three hundred to three hundred and fifty tons, according to stowage (or three to four railway trains), and will not require as many hands or as costly machinery as the railway.

The question of speed is a more serious matter. It is in favor of the railway, but at a cost of material by no means, nor in any case, commensurate with the sacrifice of material by which it is gained. It will be, on the part of the railway, about thirty per cent. of gain; but while the canal can accommodate four to five million tons annually, working in this climate only two hundred and twenty days, the railway with three hundred and twelve days' work, can hardly accommodate one million and a half tons.

The question before the Convention is, "The best means of communication with the sea-board," and the problem it involves can be only solved by the natural and artificial water-bays passing through the British North American Provinces.

It is said the destinies of a country are determined by its physical geography. If such be the case—and to a considerable extent it must be true—then a great future is before the empires bordering the great lakes, penetrating from the north-east to the north-west, through seven degrees of latitude and twenty-three of longitude. Those magnificent reservoirs present a length of over two thousand miles, and a coast navigation of over double that distance.

Draining an area of 600,000 square miles, the disposition of those great reservoirs and their outfalls are as follows: Beginning from the sea-board, the River St. Lawrence, from Point des Monts, at the head of the Gulf of St. Lawrence, in N. lat. 49 deg., 18 min., W. long. 67 deg., 13 min., to Kingston, at the foot of Lake Ontario, in lat. 44 deg., 15 min., long. 76 deg., 22 min., is six hundred and ten miles in length, varying from one mile to thirty in width, and diversified with islands and scenery of the most magnificent description.

Lake Ontario is one hundred and eighty miles in length, and fifty-eight miles in greatest width; it is two hundred and thirty-four feet above the level of the sea, and its greatest depth is six hundred feet; it covers eight thousand two hundred square miles of area. At its western extremity it is joined to (or, rather, receives the surplus waters from the upper lakes through) Lake Erie by the Niagara River, on which the magnificent falls of the same name are situated, and which render it

unnavigable. Its length is about thirty-two miles, and its width varies from *two miles* to eight hundred and fifty feet. The most westerly point of Lake Ontario is in 43 deg., 20 min., N. lat., and 79 deg., 52 min., W. long.

Lake Erie has its eastern extremity in 41 deg., 53 min., N. lat., and 78 deg., 50 min., W. long.; its western in 41 deg., 41 min., N. lat., and 83 deg., 32 min., W. long. It is two hundred and fifty miles in length, sixty miles in width, two hundred and four feet greatest depth, and covers eleven thousand eight hundred square miles of area. It is five hundred and sixty-nine feet above the level of the sea, and is joined to Lake St. Clair by the Detroit River, twenty-four miles in length, from one and one half miles in width to twenty-six hundred feet.

Lake Saint Clair has a north and south course. Its lower or southern end is in 42 deg., 25 min., N. lat., 82 deg., 55 min., W. long., and its northern end in 42 deg., 55 min., N. lat., and 82 deg., 20 min., W. long. It is the smallest of the lakes, as well as the shallowest, being only twenty miles in length by twenty-five miles in width, with an extreme depth of eight to twenty feet. It covers three hundred and ninety-two square miles of area, and is connected with Lake Huron through the St. Clair River, which is twenty-eight miles in length, and about one mile average width.

Lake Huron has a general north and south course. It is divided into two parts by the Manitoulin Islands, the eastern division known as the Georgian Bay. Both cover an area of twenty-eight thousand five hundred square miles. The lake is two hundred and sixty miles in length, one hundred and sixty-six miles in greatest width, and seven hundred and five feet greatest depth. Its southern end is in 43 deg. N. lat., 82 deg., 25 min., W. long.; and northern in 46 deg., 21 min., N. lat., 84 deg. W. long. It is joined to Lake Michigan on the west by the Straits of Mackinac, in 45 deg., 50 min., N. lat., 84 deg., 48 min., W. long.

Lake Michigan lies nearly parallel with Lake Huron. Its general course being north-east and south-west, it describes a long curve, not unlike a large cucumber in shape. Its southern extremity is in 41 deg., 37 min., N. lat., and between 86 deg., 28 min., and 87 deg., 30 min., W. long. It is two hundred and thirty miles long, eighty-two miles in width, nine hundred feet greatest depth. It is nearly on the same level as Lake Huron, the latter being five hundred and seventy-two feet above the sea, and the former five hundred and seventy-four feet. The area is twenty-one thousand two hundred square miles.

Lake Superior—the largest of all the lakes—is joined to Lake Huron by the River St. Mary's. The length of this river, from the foot of St. Joseph's Island, is forty-five miles. It is broken by rapids, known as Sault Ste. Marie, and the navigation is continued by a canal of large dimensions, in the territory of the United States. The width of the river is over one mile. The size of canal locks, three hundred and fifty feet long; seventy feet between the quoins; twelve feet water on sills. Length of canal, one mile. The lake is four hundred and twenty miles in length, one hundred and sixty miles in width, and one thousand feet in greatest depth. Its southern extremity is in N. lat. 46 deg., 28 min., and 84 deg., 32 min., W. long., and its north-western in N. lat. 46 deg., 40 min., W. long. 92 deg., 20 min. Its level is six hundred feet above the sea, and area 52,800 square miles.

Having thus described that great series of lakes and rivers by which the surplus produce of an area of 800,000 square miles of the richest and most productive soil on this continent must reach the sea-board, it will now be necessary to detail more particularly the artificial means already in existence for overcoming the natural obstructions to their complete navigation, and what facilities exist for the construction of other artificial channels of equal or greater capacity, and more than commensurate value.

Between tidal water at Three Rivers and the foot of Lake Ontario a difference of level of two hundred and thirty-five feet has to be overcome. It is concentrated in the one hundred and six miles which intervene between the foot of the Lachine Rapids at Montreal and the summit of the Galops Rapids. In this distance there are seven distinct canals, of an aggregate length of forty-three miles, as follows:

Lachine canal, at the city of Montreal, eight and one-half miles in length, having *five* locks, each two hundred feet long, forty-five feet between the quoins in width, nine feet water on sills—(those are the dimensions of the locks throughout the whole of the St. Lawrence canals). The height of lift to be overcome is forty-four feet nine inches.

The Beauharnois canal is eleven and one-quarter miles in length, has *nine* locks, with a lift of eighty-two feet six inches.

Cornwall canal, eleven and one-half miles in length, has *seven* locks, with forty-eight feet height of lift.

Farren's Point canal is *three-fourths* of a mile in length, has *one* lock, with four feet of lift.

Rapid Platte canal is four miles in length, has *two* locks, with eleven feet six inches height of lift.

Point Iroquois canal has *one* lock, is three miles in length, has six feet nine inches height of lift. This canal is joined to the upper canal by a recently constructed link two and five-eighths miles in length, without any locks.

Galops canal is two miles in length, and has nine feet height of lift, with *two* locks.

The total length of canals would be thus forty-three and five-eighths miles; number of locks, twenty-seven, and total lift two hundred and six feet six inches. At foot of Lachine canal the surface of the river is twelve feet nine inches above tidal water, which reaches Three Rivers, ninety miles below, while fifteen feet six inches is due to the natural inclination of the surface of the river in the thirty-five miles of still water which intervene between Kingston and Montreal, equal to 1.37 inches to the mile.

At Montreal a cargo downward bound meets the ocean steamship, as the navigation of the St. Lawrence is uninterrupted to that point for vessels drawing over twenty feet of water, for which much praise is due to the energy and enterprise of the Montreal merchants.

The river above the Galops canal is navigable for large craft to Kingston, sixty-five miles, and thence to the head of Lake Ontario, one hundred and eighty miles more; but at that point a check is interposed by the Rapids and Falls of the Niagara, and an ascent of three hundred and thirty-four feet three inches has to be overcome before the surface of Lake Erie is reached.

This is accomplished by the Welland canal of twenty-eight miles in length, having twenty-seven locks, each one hundred and eighty feet long, by twenty-six feet six inches between the quoins, with a depth of water on sills of ten feet. It opens the navigation to the heads of Lakes Huron and Michigan.

The St. Lawrence canals admit vessels one hundred and eighty-six feet in length, forty-three feet breadth of beam, drawing *eight* feet of water; maximum burthen, three hundred tons.

The Welland canal admits vessels one hundred and sixty-two feet long, twenty-five feet beam, drawing *nine* feet of water; maximum burthen, four hundred tons.

As the series are limited by the St. Lawrence at present, their value as channels for freight can be easily determined. Assuming the maximum of work for the season of navigation, which may be taken at two hundred and twenty days, at six lockages per hour, or a lift of one foot each minute, we would have $6 \times 24 \times 220 \times 300 = 9,504,000$ tons, representing a downward movement of 4,752,000 tons, and an upward of equal amount.

But the limit of the capacity of these canals has not been yet reached. It is, unfortunately, governed by Lake St. Clair, which will not allow its being navigated by any vessel drawing over *nine* feet of water; therefore the capacity of the St. Lawrence canals will be attained when the first section is deepened to *ten* feet of water on the sills of its locks, and the chambers enlarged to a length of two hundred and fifty feet by fifty feet, admitting vessels of seven hundred and fifty tons. The lengthening and widening of the Welland canal to a similar capacity is a work of time and great expense.

The yearly capacity of the canals so enlarged would be equal to 23,760,000 tons annually, or a downward movement of 11,880,000 tons, with an upward of similar amount.

It would appear that, unless a large sum of money is laid out on Lake Saint Clair, those noble canals will then have attained their utmost useful dimensions.

The distance from Chicago to Montreal by this route is as follows: Eleven hundred and forty-five miles lake navigation, one hundred and thirty-two miles river navigation, and seventy-one miles of canal—making a total of thirteen hundred and forty-eight miles.

Time occupied: Lake, at eight miles per hour, one hundred and forty-three hours; river, eight miles per hour, seventeen hours; canals, two miles per hour, thirty-five hours; lockage, five hundred and forty feet, at *one* minute per foot, nine hours. Total, one hundred and ninety-five hours, or eight days and three hours.

From Montreal to Quebec is one hundred and fifty miles, thence to Liverpool two thousand five hundred and eighty-three miles; the whole distance between Chicago and this latter port is, therefore, four thousand and eighty-one miles.

The cost of transmission of a ton of agricultural or other produce would be as follows: Chicago to Kingston, twelve cents per bushel, four dollars and forty-four cents per ton; Kingston to Montreal, including transshipment, etc., six cents per bushel, two dollars and twenty-two cents; Montreal to Liverpool, twenty-five cents per bushel, nine dollars and twenty-five cents. Total cost, forty-three cents, equal to fifteen dollars and ninety-one cents, to which must be added insurance, four cents; commission, six cents; town and dock dues, three cents; lighthouse and imperial dues, three cents; making a total of sixteen cents per bushel additional, and, at thirty-seven bushels to the ton, an additional charge of five dollars and ninety-two cents. Total cost per ton to Liverpool, twenty-one dollars and eighty-three cents, or fifty-nine cents per bushel.

If the western trade contains any of the great elements its advocates claim for it—and there is no reason to doubt the gigantic proportions it might assume if all restrictions were removed by the action of the people of the United States or their Government—this route would be filled to its greatest present capacity, and a much greater reduction effected in the transmission downwards, by having return cargoes, which the route does not at present furnish.

The quantity of water passing over the Niagara Falls is equal to 14,359,844 cubic feet per minute. It is fully one-third greater at the head of the St. Lawrence canals, as the lake and rivers receive several large tributaries, and drain a vastly increased area.

Now, the canals require at their greatest enlargement 12,500 cubic feet of water per minute for actual work, and, therefore, their extension for navigable purposes can only be limited by their profitable employment.

The St. Lawrence is the only direct line of *existing* canals belonging to the British North American Provinces which can afford facilities for the accommodation and development of western commerce; and if the restrictive policy pursued by the Government of the United States was removed, a large proportion of the grain trade would seek it as an outlet, and an impetus would be given to the settlement and productiveness of the Western States, which they now seek in vain.

But the capabilities of the British Provinces are not confined to the St. Lawrence alone. There are facilities for the construction of other routes, possessing many substantial advantages over that great outlet, of equal if not superior capacity, and which the increase of western traffic will call into existence.

It must be borne steadily in mind that the great advantages those routes offer to the producer are, the *shortest, most capacious, cheapest,* and *safest route to the ocean*, and that a cargo descending the great lakes to Montreal has accomplished all those conditions, inasmuch as it has reached the head of ocean navigation by the most direct and available route in existence.

At Montreal the St. Lawrence is joined by one of its principal tributaries from the north-west, known in the days of French dominion as the *Grand River* or *Ottawa*, since, by the latter name exclusively

Twenty-five miles above Montreal it bifurcates, forming the island on which that city is built, one stream (the southern arm) flowing in front of the city, and mingling its dark brown waters with the deep blue of the St. Lawrence; the other and northern arm joins the same river sixteen miles below that city.

It is a stream of seven hundred and eighty miles in length, draining an area of 87,700 square miles, or one-fourth of the whole of the Province of Canada. Its course, for three hundred and five miles above the city of Montreal, is nearly due west, and a straight line drawn from thence to the center of the Straits of Mackinac would clearly define its course for that distance.

At this point the same river turns sharply to the northward, but the direct course is continued by a tributary which joins it from the westward—the Matawan. This stream is forty and one-half miles in length; it drains an area of nine hundred and fifty square miles, and at its western extremity the ridge which divides the Catchment Basin of the St. Lawrence and Ottawa rivers interposes.

Its greatest elevation is just ten feet above the surface water of the Upper Trout Lake, the source of the Matawan; and an excavation of fifteen hundred feet in length, by an average depth of less than five feet, would cause the waters now flowing eastward to the Ottawa to descend the western slope to the St. Lawrence.

This summit is four and one-half miles in length, at which point the eastern end of Lake Nippissing is reached. It is sixty miles in its greatest length, twenty in its greatest width, and stands six hundred and thirty-two feet above the level of tide-waters. It is the second of two large lakes which receive the drainage waters of an area of nine thousand square miles. The first, known as Lake Tamangamingue, has an area

of three hundred and fifty square miles. It is connected with Nippissing by the Sturgeon River, and with the Ottawa by a chain of lakes and a swift stream at the confluence of the Montreal river, one hundred and fifty miles above the junction of the Matawan.

The greatest length of Lake Nippissing is, from east to west, midway on its southern shores, thirty-one miles from the foot of the Portage to Trout Lake; its affluence, the French River, carries the waters of its Catchment Basin to Lake Huron, from which it is forty-nine miles distant, and which it joins at a point two hundred and seventy miles from the Straits of Mackinac, and five hundred from Chicago. Thus the whole distance between these points is nine hundred and thirty miles—viz., four hundred and thirty from Montreal to mouth of French River, and five hundred thence to Chicago—making the distance shorter by four hundred and eighteen miles than by way of the St. Lawrence and the lakes.

As time is an essential element in any system of transit limited to a certain season in each year, one of its most important advantages is found in this, the shorter route. As it is, however, the only actual advantage at present, it will be necessary to investigate all the conditions of this line of communication for the purpose of establishing its claim to be, when constructed, the shortest and cheapest and safest yet designed.

At the point where the Matawan joins the Ottawa the latter river is over thirteen hundred feet in width, and it discharges 2,511,936 cubic feet per minute on the average, its depth in the open reaches being from *five to twenty* fathoms; and from the peculiar formation through which its course is prolonged, it consists of a string of moderate-sized lakes, united by short reaches of rapids, generally in the form known as cascades, or short falls, which bear a very small proportion to the navigable portions, not averaging twelve per cent. of the length required for the purposes of communication, nor, indeed, of that of the whole river.

The Matawan discharges 65,122 cubic feet per minute, but, owing to the fact that its head waters are confined to an area of a few square miles, it will be necessary to draw the navigable supply from Lake Nippissing.

This latter lake is the reservoir of a drainage of nine thousand square miles, the upper portion of which is occupied by Lake Tamangamingue. Its discharge by the French River is equal to 477,369 cubic feet per minute. The requirements of navigation at its utmost development,

allowing six lockages per hour, would not be more than 12,500 cubic feet per minute; so that, as far as water supply is concerned, no doubt of the capacity of this route can be entertained.

The design for the proposed navigation is such as to adapt any vessel using it to the capacity of the principal lake harbors. It is stated that eleven feet of water is the greatest depth that of Chicago will allow vessels to draw. Consequently it is proposed to have twelve feet water on the sills of the Ottawa and Lake Huron canal locks, and they are to be of corresponding dimensions—two hundred and fifty feet in length, by a clear width of fifty feet, admitting vessels of two hundred and thirty-four feet in length and forty-eight feet beam, drawing eleven feet of water, and of a capacity of one thousand tons.

On the whole length of four hundred and thirty miles between Montreal and Lake Huron, on this route, thirty miles in length of artificial canal will be required, and that includes eight and one-half miles of the St. Lawrence canals at Montreal, which will be common, but not necessarily so, to both channels.

In fact there is no limitation to the Ottawa route for freight capacity, because it reaches, by the north channel—better known as the Riviere des Prairies—what may be called the head of ocean navigation, at the Boute de l'Isle, sixteen miles below Montreal, without interfering with the artificial channels of the St. Lawrence in any way; and the improvement of this north channel would lessen the actual canaling on the main route by at least *seven* miles.

The character of the north channel prescribes the nature of the works necessary for rendering it navigable, which would be four dams of very moderate dimensions, not exceeding in each case six hundred feet in length by ten feet in width, and as the city of Montreal is rapidly extending, the Boute de l'Isle will become her principal port, where the sea-going steam or sailing ships will meet the lake craft laden with the produce of the western prairies.

Throughout the whole of this proposed navigation the greatest length of artificial canal will not exceed ten miles. The works necessary in nearly every case will consist of weirs, restoring the river course to its original regime, and the only excavation requisite will not exceed 6,000,000 cubic yards beyond what is necessary for the lock sites. At the summit level the greatest length of artificial channel occurs, and it is within the limits stated.

It is manifestly evident that doubling the capacity of the channel by the erection of a second series of locks would be an achievement of no extraordinary difficulty, and would cost less than one-half the original outlay on the first series, because the weirs, the most expensive portion of those works, render the construction of the second series a matter of convenience (if the trade require it) easy of accomplishment, at the same time furnishing motive power to a very large amount, and from which a considerable revenue could be derived.

The capacity for freight at six lockages per hour, and for a season of two hundred and twenty days, during which the navigation would remain open, would be 31,680,000 tons annually, or 15,840,000 tons of a downward movement, and the same upward.

It is a navigation peculiarly adapted to large screw propellers, because the large and frequent expanses of open water and the small extent of canal along the route enables a high speed to be maintained throughout, which is unattainable in every other case.

The distance for navigable purposes between Chicago and Montreal would be as follows: Lake, five hundred and thirty miles; river, three hundred and seventy; canal, thirty. Total, nine hundred and thirty miles.

Its relation to time will be as follows: River and lake, nine hundred miles, at eight miles per hour, say one hundred and thirteen hours; canal, two miles per hour, fifteen hours; the lockage will be six hundred and eighty-two feet, of which sixty feet will be upwards and six hundred and twenty-two downwards, at one minute per foot, twelve hours. Total, one hundred and forty hours, or five days and twenty hours.

From Montreal to Quebec the distance is one hundred and fifty miles; thence to Liverpool, two thousand five hundred and eighty-three. Total distance between Chicago and the latter port, three thousand six hundred and sixty-three miles.

The cost of transmitting a ton of freight between these ports would be, by this route, as follows: Chicago to Montreal, thirteen cents per bushel—\$4.81 per ton of thirty-seven bushels; Montreal to Liverpool, twenty-five cents per bushel—\$9.25 per ton; dock dues, commission, light house and Imperial dues, sixteen cents per bushel—\$5.92; being a total of \$19.98 per ton, or at the rate of forty-five cents per bushel.

Penetrating a mineral region rich in all the useful metals, and furnishing from its inexhaustible forests a choice of return freight, the Ottawa possesses many claims to general attention; for it is by the agency of that stream alone the Western States can ever hope for full and profitable development, or the resources of the north-west territory of British North America for settlement and commerce with the outer world. It would place Fort William, on Lake Superior, within one thousand and fifty miles of Montreal, by water, from whence a railway of one hundred and ninety-two miles in length would touch Rainy Lake, which may be taken as the head of navigable water to Lake Winnipeg.

The effect of opening this region to commerce and settlement is obvious. It covers over 500,000 square miles of territory, and contains within that area large deposits of valuable coal and other minerals, as well as a fruitful agricultural country; but its chief recommendation is that it forms the intermediate plain over which the Pacific railway must be carried from the north-western slopes of the Alleghany range in Canada to the north-easterly slopes of the Rocky Mountains overlooking the valleys of the Saskatchewan.

But large as this canal project may be, it has not exhausted the resources of Canada in surface formation favorable to the construction of artificial water ways.

Lake Huron is divided, longitudinally, with two unequal portions by the Manitoulin Island, and the peninsula known as Cape Hurd; that to the eastward is known as the Georgian Bay, and covers an area of six thousand square miles. It is about one hundred and forty miles in length and fifty-five miles in its greatest breadth.

The French River enters this bay, within thirty miles of its northern extremity, opposite the channel between Cape Hurd and the Great Manitoulin. At the south-western extremity the capacious expanse of Nattawassaga Bay is to be found, and at the south-eastern the Severn carries the surplus waters of twelve hundred square miles, of which Lake Simcoe acts as collecting reservoir.

This latter lake is five hundred and sixty-four square miles in area, and thirty-five miles in greatest length, and eighteen in greatest width. It is seven hundred and four feet above the level of the sea, four hundred and seventy feet above Lake Ontario, and one hundred and thirty-two feet above Lake Huron.

It is proposed to excavate a canal from head of Nattawassaga Bay for seventeen miles to the western extension of Lake Simcoe, known as Kempenfelt Bay; thence along that lake for some thirty-two miles of open navigation to Cook's Bay, at its southern extremity; thence by the Holland River and across the summit of the Blue Ridge to the source of the Humber River, down the channel of which it is continued to the mouth in Lake Ontario, a distance from Cook's Bay of forty-eight miles. The total length of excavation or canal being sixty-five miles, and lockage one hundred and thirty-two feet up and four hundred and seventy feet downward, six hundred and two feet to reach the level of Lake Ontario, which is three hundred and thirty-eight feet below Lake Huron.

The dimensions of this canal are proposed to equal that of the Ottawa navigation with locks 250 x 50 x 12, and consequently its capacity for freight will be equal, viz.: 31,680,000 tons per annum (all the elements of the calculation being the same), 15,840,000 tons down and the same quantity up.

At the mouth of the Humber the cargo will have the option of crossing the lake to Oswego, and thence, by Erie canal, to New York, or descending the St. Lawrence canals to Montreal.

The distances by this route are as follows: Chicago to Montreal by the proposed route—Lake, seven hundred and seventy-five miles; canal, one hundred and forty-one; river, one hundred and thirty-four miles—total, one thousand and fifty miles. Time: Lake and river, nine hundred and nine miles, at eight miles per hour, one hundred and thirteen hours; canal, one hundred and forty-one miles, at two miles per hour, seventy hours; lockage on Georgian Bay canal, six hundred and two feet. To this must be added two hundred and five feet lockage downwards in the St. Lawrence, making a total of eight hundred and seven feet, which, at one minute per foot, would be thirteen hours, total time, one hundred and ninety-six hours.

As time is the mainly essential element in the transmission of freight along these routes, the cost by the canal would be probably one cent per bushel more than by the St. Lawrence, or between Chicago and Liverpool, sixty cents, which will be \$22.20 per ton of thirty-seven bushels.

Should the time come when the western freight shall fill all the channels previously enumerated, and an outlet of large capacity be constructed from the southern end of Lake Champlain to the Hudson, at

Albany, this proposed route would become a valuable auxiliary for the distribution of cargo over a portion of the Eastern States. As an outlet to the ocean, its theoretic value is at present negative.

Between Ottawa, the capital of Canada, on the river of the same name, and Kingston, at the foot of Lake Ontario, a navigable channel known as the Rideau canal was constructed by the late Colonel By, of the Royal Engineers.

It is the best example of hydraulic engineering, as applied to the improvement and control of natural water courses on the continent, or probably in the world.

The channel of the Rideau river is rendered navigable by a series of dams, for a distance of *ninety miles*, to the natural summit level between its water shed and that of a small stream known as the Catarqui, where, by cutting through an isthmus less than one mile in length, the navigation is perfected by another series of dams and weirs, and the whole extent of actual canaling, in a length of one hundred and twenty-six miles, is sixteen miles. It has forty-seven locks, and a lockage of four hundred and thirty feet and four inches, of which two hundred and seventy-three feet and ten inches are ascent from the Ottawa, and one hundred and fifty-six feet and six inches descent to Lake Ontario. Its locks are one hundred and thirty-three feet in length, thirty-three feet in width, with five feet and six inches water on the sills. It passes vessels of two hundred tons, one hundred and twelve feet in length, thirty-two feet broad, drawing four feet and six inches water.

Using the data hitherto employed, its capacity for freight would be 6,336,000 tons, or 3,168,000 up and the same down, per annum. Its principal traffic consists in the transportation of flour, grain, partially manufactured lumber and iron ore, of which large quantities of the best black magnetic oxyd is to be found at the summit and at Ottawa. It also furnishes access to a country rich in galena, plumbago and copper.

The upper part of the Rideau and Catarqui rivers is composed of large lakes, with small elevations above the summit level, and it is upon and within easy reach of those lakes the principal ore deposits are found.

As an element in the great canal system, which is eventually to control the traffic of the Western States, the Rideau must only play a subsidiary part, principally for local purposes, and the distribution of such portions of the general downward movement which may be required for local purposes.

It will always play an important part in the distribution of the export lumber trade to the State of New York, and in the development of its own mineral resources.

The next important channel is that afforded by the Richelieu river, which discharges the surplus water of Lake Champlain into the St. Lawrence at Sorel, fifty-six miles below Montreal.

This river is rendered navigable by a canal at Chambly twelve miles in length. It has ten locks, each one hundred and twenty-two feet long and twenty-four feet wide, with six feet water on the sills, admitting schooners or barges one hundred and ten feet long by twenty-two feet broad, and drawing five feet water. To pass through the height of lockage is seventy-four feet.

Applying the data previously used, and allowing this canal to pass vessels of one hundred tons, a total yearly movement of 3,168,000 tons, or 1,584,000 tons up and a like quantity down, would be the measure of its capacity; but it is controlled for useful effect by the Champlain canal, in the State of New York, which leads from Whitehall, at the southern extremity of the lake, to the Erie canal at West Troy, a distance of sixty-six and three-fourths miles. It has an upward lockage of fifty-four and one-fourth feet, and a downward one of one hundred and fifty feet, making a total of two hundred and four and one-fourth feet of lockage.

The locks are twenty in number, ninety feet in length by fifteen feet in width, with four feet water on sills, and it admits vessels of fifty tons. Its yearly value would be equal to 1,584,000 tons, or 792,000 tons upwards and the same downwards.

It has been proposed to construct a canal from Caughanawaga, at the head of the Lachine Rapids, to St. Johns, on Lake Champlain, a distance of thirty-six miles. It was to have two locks, each two hundred and thirty feet long, thirty-six feet wide, and ten feet water on sills. It was designed to admit vessels of eight hundred and fifty tons burthen, which would give, per annum, 26,928,000 tons as its greatest freight capacity; but its value entirely consists in the probability of the enlargement of the Champlain canal, and the possibility of using the lake as a summit level.

If this could be effected, the enlargement would be useful, because it would relieve the St. Lawrence and the Ottawa canals from such portion of the freight as would be compelled to pass in front of Montreal, and would be a very useful auxiliary to the Erie canal.

There can be very little doubt that the only improvement possible in the New York canals is to be found in this direction; and the small elevation of Lake Champlain over the St. Lawrence and Hudson will render the operation of enlarging the Southern canal easy of accomplishment.

Between Montreal and the city of Ottawa the navigation is maintained by eleven locks of various dimensions, but all governed by one of ninety-six feet in length, nineteen feet wide, with four and a half feet water on the sills.

It admits barges of ninety tons burthen, and a large proportion of sawed lumber is shipped annually in craft belonging to the United States, which passes down these canals and the Lachine, and ascends the Richelieu to Lake Champlain.

Using the elements of capacity hitherto employed, these canals have a yearly capacity of 2,851,000 tons, or a downward movement of 1,425,600, and the same upwards.

A large proportion of the heavy local freight passes up there, and they were within the last twenty-five years the highway between tidal-water and the lakes, by way of the Rideau canal.

The facilities afforded by the British North American Provinces for water communication between the Western States and the ocean have been described, and their values freely detailed. The results must be pleasing to those who have faith in the development of the Great West, because they can rest assured that no matter how large the extension may be, natural and artificial channels of corresponding navigation will be ready to afford it easy, cheap and safe transit to the ocean.

Existing lines of communication within the United States have failed to accommodate the grain trade in a corresponding degree with its development, because of the absence of the natural agents necessary; in other words, the water-ways of the country were insufficient and inapplicable for the purpose.

Those improved by artificial means consist of three great lines, the most westerly being the Illinois canal, reaching from Chicago to the Mississippi, which it enters at Grafton, thirty-two miles above St. Louis. It is about three hundred and fifty miles in length, and its cargo is delivered one thousand two hundred and fifty miles from New Orleans, while it would have to perform a voyage of over six thousand miles from Chicago to Liverpool.

This canal is of small dimensions, and, if it were possible to enlarge it, there are obvious reasons against its affording an outlet to the grain trade in the great length to market, and the danger to cargo from the intertropical climates through which it must pass. It will become a valuable auxiliary whenever the cotton of the South comes to be manufactured on the Ottawa.

The next line of value are those canals which communicate with the Ohio. This river, which is one thousand miles in length, enters the Mississippi at Cairo. It drains an area of 200,000 square miles, and has a difference between its highest and lowest waters of sixty-three feet, and on the upper reaches its waters are often reduced to two feet in depth in the channel.

Its downward navigation is carried on principally by *flat boats* built at the wharf, and sold where the cargo is delivered. The upward traffic is by steamboats of peculiar construction, but in any case its traffic is very limited. It has navigable communication with Lake Erie at Toledo, Sandusky, Cleveland and Erie, and may be said to be navigable from Pittsburgh, in Pennsylvania, to its mouth, a distance of nine hundred and sixty-five miles, and this point, known as Cairo, is one thousand and thirty-eight miles above New Orleans, which is one hundred and forty miles from the mouth of the Mississippi, and this latter point is five thousand one hundred and sixty miles from Liverpool.

A cargo shipped at Erie would travel one hundred and twenty-nine miles to Pittsburgh, two thousand and three miles to New Orleans, and five thousand three hundred miles from there to Liverpool, making a total of seven thousand four hundred and thirty-two miles by the Ohio.

There are several lines of canal or navigable waters connected with this river, the principal of which are through the Wabash and Sciota rivers, and the connecting line between Pittsburgh and Erie.

Highly valuable as an agent for local trade and development, it is quite evident that this line can never become the great highway of western staples, nor even an efficient feeder of the commercial centers on Lake Erie.

The next and most successful of all existing routes is the Erie canal, connecting the waters of the lake of that name with the Hudson river

If the man who made two blades of grass grow where one only grew before was a public benefactor, and deserved well of his country, of how much greater honor was he worthy by whose genius, patriotism, and perseverance the western wilderness was converted into a granary for this continent, and, at no distant day, for Europe also.

Honors may be heaped on the successful soldier, statues may be erected to the enlightened and patriotic statesman, dignities may be achieved by the talented lawyer, and wealth may be realized by the successful and persevering merchant; but none of those things can enhance the fame of DeWitt Clinton. The proudest monument which could be erected to him is the creature of his own genius—the Erie canal—and "*Clinton's folly*" stands far above the loftiest pillar a nation's gratitude could construct.

Whether viewed in a political or commercial light, this great work is the noblest inspiration of far-seeing and comprehensive genius the world has ever witnessed; and, although the commerce it has created has outgrown its capacity, or even profitable or possible development, it will exist as a memorial of the greatest benefactor of his race which the present age has produced, and one who deserved well of his country.

It is not necessary to enter into a history of this remarkable channel. Commenced in 1817, it was completed in 1825, and has since been enlarged to many times its original dimensions and its greatest attainable capacity.

The length of the present canal, from Buffalo to Albany, is three hundred and fifty and one-half miles. It has seventy-one locks, one hundred and ten feet in length by eighteen feet in width, with seven feet water on the sills. It allows boats seventeen feet beam, ninety-eight feet in length, and drawing six feet water, to pass through; capacity, two hundred tons.

At Syracuse a branch joins the main line from Oswego. Its length is thirty-eight miles, and it descends one hundred and fifty-five feet to the level of the Erie canal at that point.

The lockage on the main line is six hundred and fifty-four feet. It has two summits—that at Lake Erie, and that at Syracuse. The latter is fifty-three miles in length, and is supplied by a series of small lakes, whose area cannot be extended artificially, and therefore the capacity of the canal is limited.

Its freight capacity, taking two hundred and twenty days as a maximum season's work, and *ten* lockages per hour, and capacity of vessel as equal to two hundred tons, would be 10,560,000 tons, or a downward movement of 5,280,000 tons, with a similar upward movement.

For ordinary purposes of comparison the theoretical values given are sufficiently correct, but in practice it is found that a little over 3,500,000 tons of a downward movement will fill the Erie canal to its utmost capacity, and that is due to its greatest artificial length, and the accidents consequent on the amount of mechanical appliances employed in its working and construction.

It follows, therefore, that, amongst the other requisites, a *line of communication by water* must embrace the minimum of artificial channel, or the shortest possible length of canal.

A comparison of the routes described will be necessary, but previously we must consider the *time* and *expense* involved in transit by the Erie canal, as follows: Chicago to Buffalo, one thousand miles; Erie canal proper, three hundred and sixty miles; Hudson river, one hundred and sixty miles. Total, Chicago to New York, fifteen hundred and twenty miles. New York to Liverpool, twenty-nine hundred and eighty miles. Total, forty-five hundred miles from Chicago to Liverpool by this route. Time: Lake and river, eleven hundred and sixty miles, at eight miles per hour, one hundred and forty-five hours; canal, three hundred and sixty miles, at two miles per hour, one hundred and eighty hours; lockage, six hundred and fifty-four feet, at one minute per foot, eleven hours. Total time, three hundred and thirty-five hours, or nearly fourteen days.

It is well known that a cargo generally occupies that time in passing the artificial channel alone, but, as an element of comparison, this data is sufficiently near for all purposes.

The cost of a ton of produce between Chicago and this route is: To Buffalo, eleven cents per bushel; Buffalo to New York, sixteen cents; *lighterage*, weighing, screening, brokerage, stamp duty, and incidentals, one cent; insurance, New York to Chicago, two and one-half cents; commission, one cent; average ocean freight, twenty-four and one-half cents; primage, five per cent. on freight, one cent; Imperial duties at Liverpool, three cents; town and dock dues, weighing, etc., three cents;

commission, three cents. Total, seventy-one cents per bushel, and, at thirty-seven bushels to the ton, the total cost of a ton between Chicago and Liverpool will be twenty-six dollars and twenty-seven cents.

A further comparison would show that the St. Lawrence route places Chicago within four thousand and eighty-one miles of Liverpool; Ottawa and Lake Huron canal, three thousand six hundred and sixty-three miles; Georgian Bay and Toronto canal, three thousand seven hundred and eighty-eight; Erie canal, four thousand five hundred.

The St. Lawrence is shorter than the Erie by four hundred and nineteen miles; the Ottawa and Lake Huron by eight hundred and thirty-seven miles; and the Georgian Bay and Toronto by seven hundred and seventeen miles.

In freight charges, the St. Lawrence will transport at twenty-one dollars and eighty-three cents per ton; the Ottawa and Lake Huron at nineteen dollars and ninety-eight cents; the Georgian Bay and Toronto, twenty-two dollars and twenty cents; the Erie canal, twenty-six dollars and twenty-seven cents.

Therefore, the St. Lawrence is cheaper by four dollars and forty-four cents than the Erie; the Ottawa and Lake Huron, six dollars and twenty-nine cents; and the Georgian Bay and Toronto, four dollars and seven cents.

As time is an important element in a climate which limits internal navigation to two hundred and twenty days each season, its value can be only reckoned to the sea-board in each case. Therefore, between Chicago and New York a cargo occupies fourteen days to traverse the Erie canal.

Between Chicago and Montreal, by the St. Lawrence, *eight days and three hours*; between the same ports, by the Ottawa and Lake Huron, *five days and twenty hours*; by the Georgian Bay and Toronto, *eight days and four hours*. The difference in favor of the St. Lawrence over the Erie would be *five days and twenty-one hours*; for the Ottawa and Lake Huron, *eight days and four hours*; for the Georgian Bay and Toronto, *five days and twenty hours*.

Taking the maximum time on all these channels, a vessel could make the trip from Chicago to New York and back in twenty-eight days, or say *eight trips* per season. From Chicago to Montreal by the

St. Lawrence, in sixteen days and six hours, or *thirteen trips* each season ; Ottawa and Lake Huron, eleven days and sixteen hours, or nearly *nineteen trips* per season ; the Georgian Bay and Toronto, *sixteen days and eight hours*, or *thirteen trips* for the season.

The elements of the foregoing comparison show clearly the reasons of the high price of freight on the Erie canal, and it is for this Convention to devise means whereby the accessible channels to the sea-board will be rendered available for the development of the full proportions of the traffic centering at the lake cities, and thereby give an impetus to the commerce of the country, and supply a stimulus much needed for its agricultural interests.

Whatever may be the impediment, it is certainly strange that a larger proportion of the wheat and coarser cereals of the Western Provinces does not reach Great Britain. As a general rule, they are cheaper here than in Europe, and yet, with her large outlays, it seems she is obliged to search Europe, Asia, and Africa for supplies, which are rotting in Wisconsin and Iowa for want of a purchaser, or, if report speaks truly, *burned*, as being cheaper than firewood at a dollar and a half a cord.

By opening up this country to settlement and commerce, DeWitt Clinton did more for the United States, and humanity, and civilization, than any man of his age, and second only to him will be those individuals who shall, by wise measures, open its agricultural treasures to the starving populations of the Old World.

Great Britain imports yearly £26,000,000 sterling worth of bread-stuffs for her surplus population, and in years of scarcity it ranges as high as £40,000,000. The supply purchased with this enormous sum is gathered from the following countries, and the proportions are such as to show they have little to spare beyond the wants of their own population, except the United States alone, whose miserable proportion is due to the fostering of pet interests to the prejudice of the agriculturist :

	Per cent. of all imported into Great Britain.
Russia	19½
Prussia	31½
Mecklenburg	8½
Hanse Towns	4½
France	6½
Turkey and Principalities	5½
Egypt	2½
United States	7½
Denmark	11½
Other countries	2½

It is true that during the past season a much larger proportion of United States agricultural produce has reached Great Britain, but as the exceptional cause which led to that event has passed away, we may look to the decline in quantity as a certainty, so long as hostile tariffs exclude British manufactured goods from the markets of the Western States.

This question of water communication with *the sea board* has been placed before you in its entirety. It is one of the utmost importance to your interests, as well as those of the British American Provinces, and the advantages to be derived from the various channels described depend in no small measure on the action of this Convention.

Connected with it is the very interesting problem of manufacturing the agricultural produce on its downward passage, because, as a general rule, the losses on grain transported for long distances in bulk greatly enhance its value in the market. Now, cheap food as distinctly means *cheap money* as any one value can represent another; and, in these days of financial enlightenment, cheap money means sufficient capital.

It is not, therefore, the interest of either the seller or buyer that the representative values should be enhanced, without profit to either, by intermediate accidents. Therefore, it is an essential requisite of the trade that manufacture takes place as near the point of production as possible.

From the same reasons which limit the possible extension of the Erie canal, the manufacture of grain on its downward passage could be only partially effected; but on the Canadian routes no such want of motive power prevails.

On the downward passage from Chicago, *via* the Ottawa and Lake Huron navigation, the French river, after deducting largely for navigable purposes, on a fall of sixty feet, would supply a motor equal to 40,707 horse power.

The Matawan, with a fall of one hundred and forty-eight feet, would give 12,745 horse power, while the Ottawa, with an assumed available discharge of 1,000,000 cubic feet per minute (about one-fourth of the actual quantity), and a total available fall between the junction of the Matawan and Montreal, would give 497,159 horse power—making a total of 550,611 horse power.

To render the value of this more apparent, it is known that a French burr mill stone of *five feet* in diameter, making ninety-seven revolutions per minute, and grinding *five bushels per hour*—the speed and quantity proper for an export trade—will, with its corresponding machinery, be about ten horse power; this motor will therefore give 55,061, such machines grinding 36,000 bushels each annually, or a manufacture of 1,980,196,000 bushels—*five times* as much as the greatest enthusiast in western progress can hope that fruitful country will ever produce for exportation.

And this is not more than one-fourth of the real motive power furnished by the river.

It has been stated that Great Britain *imported* from the United States, during the years 1861, '62, '63, breadstuffs to the value of £12,643,918 sterling, and that the transit expenses were £8,826,351 sterling, the original cost realized at Chicago being only £3,817,069. If such is really the case, how stand the facts in relation to your progress?

Why, simply, by multiplying your transit dues beyond all reasonable proportions, you have restricted the power of your best customer to purchase at remunerative rates, and you have wasted so much capital, which might have been in circulation for your own benefit, without a corresponding profit.

If any operation is so badly conducted as to require the labor of two men to perform the work of one, there is a waste of both capital and labor; the work is unremunerative, and progress is impossible. Yet in this transit matter that foolish game has been repeated many times over.

It is about as wise to prescribe by law what tools an artisan shall use to effect a given object as to prescribe the dimensions of an expanding commerce by tariffs and trade restrictions. The law of convenience, supply and demand should alone control, as natural agents, its course; and when the principle is admitted that taxation shall be levied on the surplus of man's industry, and not on the necessities of his existence, commerce will then be treated as subject to known laws, arising naturally from its prosecution, and not from arbitrary enactments, too often the result of prejudice or self-interested convenience.

The wants of the western trade demand the mighty outlets, of which a faint description has been placed before you. Taken in connection with the existing railways through British North America, they

would be equal to a downward movement of *sixty millions of tons*—a quantity that even the Western States could not hope to attain.

The blessings which unrestricted commercial intercourse would bestow upon both nations is incalculable. As friends and neighbors, it would improve the good understanding which should exist between people having so many interests in common; and it would prove a blessing to the vast mass of the over-peopled countries of Europe.

Hostile tariffs will not produce any of those effects which the advocates of protection desire. They will not develop any of the resources of the Western States, nor will they add to the wealth or happiness of the vast mass of the people, or the prosperity of the general commerce of the country.

It will not bring about the consummation so earnestly desired by your extreme politicians of annexation. Perfectly satisfied with being subjects of the greatest empire the world ever saw—first in civilization, in order, in justice—we have no prouder aspirations than our nationality, no higher glory than the name of Briton confers.

Content with our lower political life and greater personal freedom, we leave to the aspirants after new nationalities the higher political life they covet, nor do we regret the accompanying concomitants in our content with our own condition.

We revere our time honored institutions, and we bow to the majesty of our law. We are devotedly loyal to our gracious Queen, whom God preserve, and we are not amongst those given to change.

Our political and commercial interests are bound up in those of the glorious empire to which we belong. We participate in its glories, we feel its reverses, and we are thoroughly prepared to take our share in its dangers. Judge you, therefore, whether we are likely to risk our allegiance for a theoretic advantage of no present or prospective practical value, or whether we shall imperil our future prosperity because it suits your Government to impose a tariff hostile to our interests in appearance.

We wish to live as friends and neighbors, but we know our own advantages, and are convinced our true interests are best served by remaining loyal British subjects.

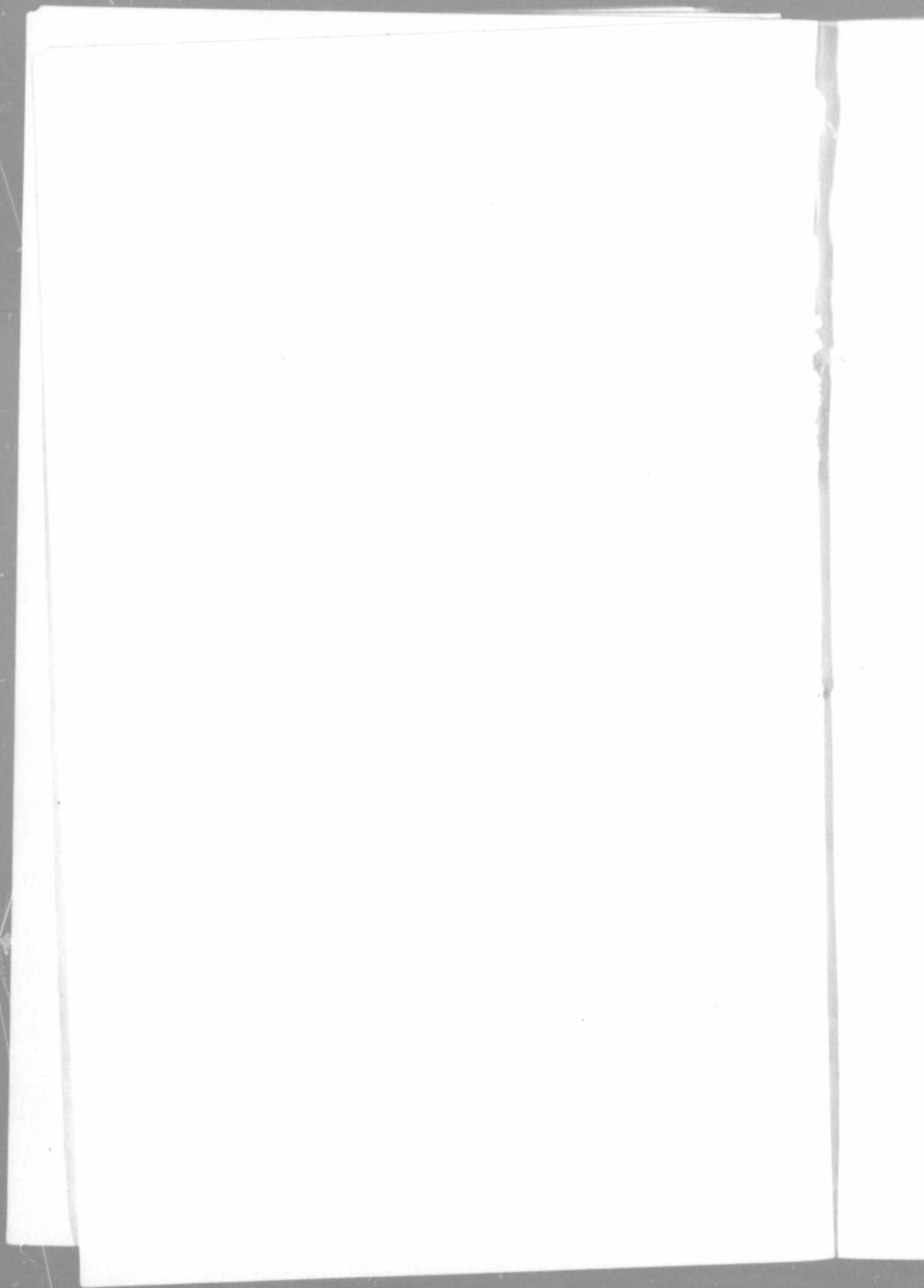
The abrogation of the Reciprocity Treaty will check the development of our canals, and probably of the lumber trade, but the depression must

be partial, and we have the remedy in our hands, which is to abolish import duties on British manufactured goods.

At present our whole revenue is raised in this way, while it operates as a premium in favor of the United States manufacturers; but reverse the process, and what will be the consequence? Why your people will smuggle the cheaper goods at all hazards, and we will reap the profits by increased trade and investment of British *manufacturing* capital.

A comprehensive Reciprocity Treaty will be a blessing to all parties, but unrestricted *free trade* would best subserve the interests of both peoples, while a restrictive policy will be followed by great commercial distress.

GEORGE H. PERRY, C. E.
Ottawa, Canada West



THE LUMBER TRADE OF CANADA.

BY HON. JAS. SKEAD, OF OTTAWA, C. W.

Foremost amongst the natural productions of British North America, the inexhaustible supplies of pine drawn from the Canadian forests furnish an article of commerce which has been, is, and will be, for many years to come, a great staple of trade.

The pine forests which furnish so remarkable a feature in the physical geography of the Provinces, occupy a large extent of country, through five degrees of latitude and eleven of longitude, extending in Canada from the St. Lawrence, in the south, to the Arctic Ocean, in the north. Not that this immense tract is one unbroken forest, but that it is the favored location of the peculiar and useful description of timber, which enters so extensively into domestic use, and contributes so largely to commerce.

Other countries produce greater varieties, but none such *fine* and *large timber*, in merchantable quantities, as Canada. The species peculiarly adapted to commercial purposes being the *white pine*, or, in botanical language, the *pinus strobus*, and the *red pine* or *pinus rubra* both attaining their greatest magnitude of growth and most useful development within the geographical limits described.

Its value as an article of commerce may be ascertained from the fact that the yearly production of material equals *seventy to eighty* millions of cubic feet of partially manufactured timber exported, and the operations consequent thereon involve serious outlays, the effect of which it would be well to consider before proceeding to describe the *modus operandi* of production, and the bearing the whole trade has on the great questions of "commercial intercourse" and "reciprocal free trade" now before this Convention.

The trade employs in the forest alone fifteen thousand men, and the *partial manufacture* ten thousand men. The term *partial manufacture* is used because it only really embraces the operations necessary to prepare the timber for shipment, and is not, strictly speaking, manufactured at all. It is simply analagous to the case of *pig iron*, *pig lead*, or *crude copper*, none of which can be said to be manufactured, because the only operations they undergo is to separate them from the *stony matrix* in which they were confined, and render them available for the uses of the skilled workman, at the lowest possible cost of transportation.

Thus timber, *squared*, *sawed*, *planed*, *tongued* and *grooved*, cannot be said to be manufactured, because it is not actually made into the particular shape in which it could enter domestic service, except in very rough and ordinary cases, but only sufficient of the useless material has been removed as to render it available for the hands of the skilled workman, and prevent useless expenditure for freight.

Having defined what is meant by *partially manufactured lumber*, I may now state that in the operation alone twenty-six thousand tons of agricultural produce are actually consumed every year, and that in the transportation of the portion of this trade, which leaves the port of Quebec for Europe, *seventeen thousand seamen* are employed, and if to that number are added those engaged in the navigation of our internal waters, and the transit of partially manufactured material to the United States, the total would be twenty-five thousand men engaged in transportation, or a total of fifty thousand employed altogether.

As an article of commerce, therefore, this trade is of great importance. Its freight for shipment amounts to over *one million and a half tons*, and its accessories half as much more. The extension of free trade principles will enable those prosecuting it to enlarge its dimensions almost indefinitely, because so great is the quantity on the area covered by pine in Canada that the question of supply can only be regulated by demand, and that will be increasing for many years to come, both in the Eastern and Western States, where cheap lumber for the ordinary purposes of domestic life is an absolute necessity.

The abrogation of the Reciprocity Treaty, therefore, will inflict far greater evil on the people of the United States than on the people of British North America, for the simple reason that it will increase the price of what is one of the necessities and comforts of life to them, while its only effect on the latter will be a decline not in prices but in *quantity*, from the inability of certain classes to purchase. As regards actual

price, it will range higher in the producer's hands than previous to the consummation of that event.

These remarks apply with peculiar force to the Eastern States, as they are almost completely denuded of timber—very few having even one year's supply within their own boundaries.

A very large proportion of the agricultural produce consumed in the manufacture and transport of lumber was drawn from the Western States. The abrogation of the Treaty will destroy that trade altogether, and compel the producers to look to the resources of their own country for supplies.

Hitherto it was more profitable to employ our surplus labor in the woods; but if any portion of it be set free by absurd tariffs, then the agricultural resources of the country will be developed, and there is no doubt if the whole of our surplus labor could be directed to that end, we would create, in a very little space of time, an *export trade* in cereals as large as the lumber trade, and fully as important.

The following statistical table will show the truth of this position :

STATEMENT

Showing the Value of the Exports of Canada, the Products of the Forest, as compared with those of Agriculture, for the last seven years, as appears by the Trade and Navigation Returns made to Parliament during that time, namely :

	1857	1858	1859	1860	1861	1862	1863
Products of the Forest..	11,730,987	9,447,727	9,693,962	11,012,226	9,372,645	9,482,897	13,543,926
Products of Agriculture	8,332,625	7,904,406	7,999,798	14,259,225	18,244,631	15,041,005	13,472,134
Balance in favor of Forest in '57, '58, '59 and 1863..	2,547,322	1,543,321	2,324,164	.....	.....	.....	71,792
Balance in favor of Agriculture in '60, '61 and '62.....	.....	.....	.....	3,246,972	8,871,986	5,558,105	.....

From this statement it will be seen that the value of lumber exported in seven years, from 1857 to 1863, both inclusive, amounted to \$74,223,837, and of agricultural produce the sum of \$85,144,015, leaving a balance in favor of agricultural produce of \$10,890,218. An inspection of the table will show that *four* of the *seven years* show a balance in favor of lumber and against agriculture, amounting to \$6,786,845, but the last *three years* the balance was against *lumber*, to the amount of \$17,677,068.

These figures demonstrate clearly what can be done with agricultural produce, if Canada is compelled to look to it as a staple. In the case before us a stimulus was given to production by exceptional causes which have happily passed away. And from the superior excellence of Canadian grown wheat, and in the event of abrogation of Reciprocity being consummated, our geographical position and the superior excellence of our chief agricultural products will easily secure to us, through local tariff arrangements, control of the English market, and secure a large proportion of the enormous sums she yearly expends for breadstuffs.

A description of the localities from which the lumber trade of British North America is drawn will illustrate the favorable conditions under which its commercial value is realized.

First in order is the Saguenay territory, *one hundred and forty miles* above the Point des Montes, at the head of the Gulf of St. Lawrence. The Saguenay river discharges, from the northward, the drainage of 27,000 square miles. This river is navigable for ships of the largest burthen for a length of seventy-five miles.

The valley of the Saguenay is rich in *white and red pine, spruce, birch and tamarac*. Its surface is diversified by lake, river and stream, but the character of its soil forbids profitable settlement to any considerable extent. It must always continue forest land, and, judiciously managed, can furnish an inexhaustible supply of lumber, as well as a large proportion of minerals.

Between the valley of the Saguenay and the next great lumber region, the St. Maurice, a territory of eight thousand square miles interposes. The city of Quebec stands about midway between the Saguenay and St. Maurice, on the shores of this territory. Its surplus waters are discharged with the St. Lawrence by isolated but sufficiently copious streams. It is moderately well wooded producing *white and red pine, birch, white cedar, spruce and tamarac*.

The St. Maurice river discharges the drainage of an area of *twenty-one thousand square miles* into the St. Lawrence, at a point ninety miles above Quebec. Its valley may literally be called a "*land of many waters.*" A map of its territory resembles a section of a "*plum pudding,*" where the fruit is uncommonly large and plentiful, more than any other object, so thickly is it studded with lakes and lakelets.

It contains large quantities of *white, red and yellow pine, spruce, birch, maple, elm, ash and tamarac.* It interlocks with the valley of the Ottawa and Saguenay.

Between it and the Boute de l'Isle, at the island of Montreal, where the north branch of the Ottawa joins the St. Lawrence, a small valley of nine thousand and six hundred square miles intervenes. It is drained into the St. Lawrence by its own streams, some of which are seventy to eighty miles in length, and good floatable rivers. It possesses a great deal of *white and red pine, spruce, tamarac, and some ash.*

The valley of the Ottawa covers an area of 87,761 square miles. It is traversed throughout its greatest length by the river from which its name is derived, and which may be said to encompass its whole area on the *south-west and north.* Its sources overlap the St. Maurice, and itself is overlapped by the sources of the Saguenay, the head waters of all these rivers being within two days' journey, or forty miles, of each other.

Its tributaries are of great magnitude, many of them being from *three to four hundred miles* in length, while the main stream has a course of seven hundred and eighty miles, and is navigable for canoes to its source.

The valley of this river is the principal site of the lumber trade, and has been so since June 11, 1806, when the first raft left the mouth of its great tributary, the Gatineau. Yet in the fifty-nine years which have since elapsed, little over 20,000 square miles have been denuded of merchantable lumber.

Its principal productions are *white and red pine,* both of the largest and best quality on this continent. It also yields *tamarac, spruce, ash, white oak* of a very superior quality, *elm, birch,* and all varieties of *maple.*

Between the Cataraqui river, or, more properly speaking, the junction of the Rideau canal and the St. Lawrence and the river Trent, a small

area of 2,350 miles furnishes a quantity of *white pine*, and is rich in minerals.

The Trent drains a valley of 6,200 square miles in extent. It furnishes limited quantities of *white and red pine, ash, oak, birch* and *tamarac*. The river is navigable for some eighty or one hundred miles.

This completes the series of lumber lands whose rivers run into the St. Lawrence and Lake Ontario, the total area of which is 161,911 square miles; but to this must be added the territory extending from the Saguenay eastward to Blanc Sablon, on the Gulf of St. Lawrence, known as the Tadousac territory, having a coast line of one hundred and sixty miles, and an area of 65,000 square miles, which has not yet been worked to any extent.

It furnishes a large quantity of timber, available for ship building, and a quantity of the best description of *birch, maple, ash, oak* and *elm*. This would make the whole *pine* producing area 226,911 miles, leading to the St. Lawrence. It is penetrated in every direction by large navigable rivers, with nothing to restrict the commercial value of material produced but the demand.

Between the western affluents of the Ottawa and the shores of Lake Huron, limited on the south by the Severn and a series of streams connected therewith, and on the north by the French river, an area of 12,800 square miles supplies a choice quality of *white and red pine*, some *oak, elm, maple* and *birch*. It is well watered—several large streams discharging into the Georgian Bay—and is easily accessible. Its forests furnish splendid *spars*.

West of French river, to Pigeon river, on Lake Superior, an area of 48,000 square miles, with a coast line of four hundred and twenty miles, furnishes a quantity of *white pine*, of small but good quality. It produces a large quantity of other timber, as *birch, maple, oak, elm, spruce, tamarac, ash* and *white cedar*.

The whole area available for producing *pine* north of the St. Lawrence would be 287,711 square miles.

Of the 24,000 square miles, wholly or in part producing the *finer hard woods*, as *oak, elm, black walnut*, all the varieties of *maple, chestnut, hickory, sycamore, basswood* and *ash*, it is not necessary to enter into details. A large trade has been driven in this material for years,

especially in *pipe staves*, and this will doubtless increase as demand multiplies. But if a market could be obtained for the ornamental woods, the western peninsula of Canada would have a regular mine of wealth in her yet uncleared forests.

- Having described the country from which the lumber trade is drawn, it may be necessary to detail the means whereby it is brought from the forest and placed in the hands of the shipper.

The principal part of the forest lands of British North America belongs to the Crown; in other words, they are public property, and are administered for the benefit of the people. The lumber manufacturer obtains the area on which he works, which is called a "*timber berth or limit*," by bidding the highest price for it at auction. It is generally supposed to be *theoretically* ten miles square, containing one hundred square miles, or sixty-four thousand acres; but owing to the topographical features of the country, the "*limits*" are of all sizes and shapes, from twenty-four square miles upwards.

The "*limit*" holder becomes a yearly tenant to the Crown at a fixed ground rent, and pays a duty of *one half penny* per cubic foot of *squared timber* got out, and of five pence per piece on each standard log of twelve feet in length and twenty-one inches in diameter, which is equal to twenty-eight cubic feet for sawed lumber.

All the operations connected with this trade are costly. Streams have to be improved—converted into *floatable* channels—roads, bridges and *chautiers* to be constructed, and very often extensive farms cleared from the forest for the pasturage of cattle necessary to transport the *manufactured timber* or the *saw-log* to the nearest water course.

Winter is the period during which the greatest part of these operations are completed. The *squared timber* must be selected with great care, nearly perfectly straight, and entirely free from *knots*, *shakes*, or other *blemishes*. It must be hewed perfectly square, and must carry the same thickness throughout, a very slight taper indeed being allowable. About *one twenty-fifth* of the standing *pine* is available for squared timber.

It must be totally free from blemishes of any kind, over thirty feet in length, and should square at least fifteen inches. Fully forty per cent. of the remainder is available for saw-logs, the balance of thirty-five per cent. being undergrowth, or useless, or damaged.

The loss in the manufacture of *squared* timber is enormous, especially when it is of large growth and will square over eighteen inches, it may be taken at twenty per cent., and that of the best cleared stuff. Very often splendid pieces of timber are left on the ground because they will not square evenly throughout. Bringing the market nearer the point of production will remedy this to a great extent.

When the whole quantity has been hauled out, which is generally accomplished by the middle of the month of March, and when the ice breaks up, it is floated down to the main river, and formed into cribs—each twenty-four feet in width, by *string-pieces, traverses* and *wilhes*—care being taken to avoid injuring the timber by any attachment. Seventy, eighty, or one hundred of these cribs form a raft, which usually contains 100,000 cubic feet. Each crib consists of twenty-six to thirty-six pieces, and contains from eight hundred to one thousand cubic feet.

The raft descends the various falls on the river by inclined planes called slides, erected expressly for this purpose. A single crib is passed at a time, so that when all are over the raft must be *banded* up again, or re-made. This occurs as often as slides are to be passed. Towing by steam is resorted to in the navigable reaches of the rivers.

It is thus squared timber reaches Quebec, while the saw-logs either descend the falls singly without a slide, or are passed down after the descent of the cribs on the large open reaches, are moulinetted or enclosed by booms, and towed *en masse* to the head of the next falls. Those operations are repeated till the point of manufacture is reached.

The works connected with those streams are very extensive, artistic, and complete in their character, and wholly unique; and, it may be added, the best investments in public works the country affords.

Full details of the statistics of this trade would cover a large amount of time, but the average quantity arriving at Quebec, and manufactured for other markets, during a period of five years, will show the value of the Canadian lumber trade.

	Cubic feet.
Oak, average yearly quantity.....	1,585,856
Elm, " "	1,435,706
Ash, " "	149,930
Birch, " "	92,714
Tamarac, " "	987,062
White Pine, " "	17,665,675
Red Pine, " "	2,566,360
Sawed planks, 250,000,000 feet, B. M.	24,496,303
" " home consumption, 250,000,000 feet, B. M.	20,533,333
" " American market, 250,000,000 feet, B. M.	20,533,333
Total.....	86,956,352

Or over one million and three-quarters tons.

The manufacture of this material into *sawed* lumber employs over two thousand mills of all sizes, many of them costing \$30,000 to \$40,000, and some as high as \$300,000.

The census returns for 1861 show that in that year alone 982,060,145 feet, board measure, were manufactured in Canada of a value of \$8,243,735, exclusive of squared timber. The capital invested amounted to \$8,621,149—the cost of raw material being \$3,516,695.

The tonnage this trade employs at Quebec comprises about twelve hundred vessels of an aggregate freight capacity of 673,507 tons. The lakes and canals employ over 500,000 tons, so that the trade, in one way or other, furnishes a traffic of over *two million tons*.

As before stated, the supply can only be circumscribed by the demand, and new markets would open a trade unrivalled in magnitude. If all trade restrictions were withdrawn, and a portion of the traffic in breadstuffs passed down the Ottawa, a profitable return freight was a certainty on which the forwarder could reckon, which he can do on no other route.

This important commercial element will be very little affected in mercantile value by the abrogation of the Reciprocity Treaty, or any hostile legislation whatever. As a trade it was in existence before the Treaty was thought of as a possibility, and that to a very considerable extent too, although a heavy duty was levied on it by the United States Government.

Twenty years ago, in 1845, New York imported more than one-third the whole quantity now sent to the United States; and for thirteen years afterwards, from 1851 to 1862, the following table will show the relative value of this material to be not so greatly affected by Reciprocity as by the wants of the different markets, which cannot be supplied elsewhere:

EXPORTS OF LUMBER FROM CANADA.

	To all Countries.	To Great Britain.	To the United States.
1851	\$5,085,628	\$3,373,080	\$1,147,369
1852	5,548,122	3,918,088	1,590,816
1853	8,666,160	6,162,568	2,383,184
1854	9,275,780	7,246,968	1,975,080
1855	7,127,104	4,870,663	2,094,286
1856	8,894,948	5,935,592	2,597,548
1857	10,427,656	7,212,132	3,121,556
1858	8,354,755	5,166,698	3,207,964
1859	8,556,691	5,204,248	3,301,819
1860	10,061,147	6,130,776	4,546,611
1861	8,693,688	6,405,789	2,065,870
1862	10,051,147	4,896,533	3,253,559
1863	12,264,178	7,713,316	4,165,290

EXPORTS OF PLANKS AND BOARDS TO THE UNITED STATES.

	Value.	Price per M.
1851	\$ 774,116	\$ 7 00
1852	1,144,092	7 75
1853	1,866,712	9 00
1854	1,579,821	9 75
1855	2,313,359	10 50
1856	2,458,687	10 75
1857	2,557,206	11 50
1858	2,890,319	7 75
1859	2,676,447	8 00
1860	3,027,780	9 75
1861	1,507,546	9 50
1862	2,279,567	9 75
1863	2,963,426	10 00

The liberality of the Imperial Government was manifested by allowing the Provincial Executive to suspend the operation of the *Navigation Laws* in 1847, so that vessels belonging to the United States actually shipped lumber at Ottawa, and actually traversed two hundred and fifty miles of our canals and internal waters, on the same footing as British vessels, *seven* years before the Reciprocity Treaty was negotiated.

And since that event no circumstance has arisen which can be charged to either the Provincial or Imperial Governments as manifesting an intention, on their parts, to construe the terms of the Treaty in an unfair or illiberal spirit.

On the contrary, while well aware that one of its most important stipulations are yet unfulfilled (that contained in the third paragraph of the fourth article, relative to the navigation of State canals), and that no attempt has been made to meet the conditions of the case by the United States Government; and that a very restricted and illiberal construction has been put on the *first*, *fourteenth* and *seventeenth* articles, to be admitted in the Free Schedule, yet the United States craft have been allowed to navigate our canals, free of tolls, for more than one season, and on the same footing as British vessels. During the year 1864 the number of American vessels navigating these canals were 1,433, of an aggregate freight capacity of 278,463 tons, while not one British craft was found on their waters.

We have admitted American manufactured flour, whether from home grown or Canadian wheat—we have admitted pig iron, pig lead and crude copper, free of duty; and it certainly must be a considerable amount of casuistry to make *tongued*, *grooved* and *planed* more of a manufactured article than the same material fresh from the saw.

The course followed by the United States Government is directly the reverse of this. They will not admit Canadian manufactured flour without an affidavit that it is not the produce of wheat grown on their own territory. They keep Consuls at our principal ports, from whom we must obtain permits before we can take a cargo of free goods to any of their ports, and pay for the privilege too. They levy duties on pig lead, pig iron, and crude copper, and planed, tongued and grooved lumber, as well as other articles of agricultural produce. They deny our ships register on equitable terms, and they engross our fisheries, which are valued to the Eastern States alone at \$3,000,000 per annum, and for which we receive no equivalent whatever, so that, as far as we are concerned, Reciprocity is a misnomer, and its abrogation would not be that fearful evil to British North America which some people in the United States imagine.

The idea appears to be entertained by a portion of the people of the United States that the abrogation of this Treaty would compel *annexation*. No greater political fallacy was ever broached. As a people, our interests, directly and indirectly, are bound up with those of the great empire of which we form a component part. Even our trade relations are more important with her than with the United States, because she manufactures more cheaply, and the abrogation of the Reciprocity Treaty will be far more likely to give these interests a preponderating influence than otherwise.

We thoroughly understand the effect of our abolition of import duties on British manufactured goods, and how it would be felt on the United States revenue. And you can picture to yourselves the effect a discriminating duty, in our own favor, will have on the western farmer and merchant.

The issues are in your own hands. We have paid pretty dearly for the privilege of trading with you, but we knew our material progress and development required some sacrifice, and we were content to pay you \$7,934,243 per annum to secure that. But your politicians, by presuming that, like Esau, we would sell our birthright for a mess of pottage, will find themselves woefully mistaken; and after having inflicted on their own people a lasting injury, will perhaps begin to understand what is meant by the term "*allegiance*"

We are here to receive your overtures; to adjust with you our trade relations as reasonable and sensible business men. We responded freely to your call. We made no movement for the abrogation of this Treaty, nor did the prospect of that consummation affect us very much. We made no effort to stay the proceedings your Government wisely or unwisely had inaugurated; but when, like sensible business men, you proposed to talk this matter over in Convention we acceded to your request, and are here to receive your propositions.

Sincerely desirous of preserving amicable trade relations with our neighbors, we are fully aware of the advantages we enjoy, physically, geographically, and commercially, and are not disposed to throw them away for theoretical or speculative benefits, of more than doubtful character.

I have endeavored to place fairly before you the advantages the British North American Provinces possess in assisting the development of your own and their resources, and which, by a judiciously planned system of commercial intercourse, can be fully realized.

In concluding this address, I would remark that, as this is the first great Commercial Convention on record, it is to be hoped its proceedings will mark an era in the history of mankind, characterized by *peace, good will*, and the removal of national and sectional prejudice or jealousy, as well as the establishment of an enlightened commercial policy, more in accordance with the progress of civilization than that hitherto followed.

We frankly and freely extend to you the right hand of fellowship, content to live with you as friends and neighbors, though still devoted adherents of the British empire, and loyal subjects of our gracious Queen.
