

NUMBER XXI.

WATER COMMUNICATION BETWEEN THE MISSISSIPPI VALLEY AND
THE ATLANTIC OCEAN.

A MEMORIAL to the Honorable Senate and House of Representatives of the Congress of the United States.

*The General Assembly of the State of Iowa would respectfully represent:—*That the question of “uninterrupted water communication, between the Mississippi valley and the Atlantic seaboard, has become one of all-absorbing interest to the people of the whole country, and more especially the food-producing States of the northwest. It has been considered by the people, met in local, county, state, and national conventions; by boards of trade and other commercial associations; by city councils and boards of supervisors of cities and counties; by the legislatures and governors of States, and through the public press; and without exception, by resolution, memorial, message, and public discussion, all have united in recognizing its importance and imperative necessity, and urging the attention and action of Congress and the country in relation thereto. A few brief extracts will demonstrate how thoroughly and universally this subject has taken hold of the popular sympathies of the people.

The National Commercial Convention, which met in Chicago in 1863, one of the largest, most intelligent, and most influential popular assemblies which ever convened in the country, most emphatically affirmed the proposition, that “uninterrupted steam navigation from the Mississippi river by way of ‘the Great Lakes’ to the Atlantic seaboard, had become an imperative necessity.” The following resolutions were adopted by a unanimous vote:

“*Resolved*, That we regard the enlargement of canals between the Mississippi river and the Atlantic, with canals duly connecting the lakes as of great national, military, and commercial importance; we believe such enlargement, with dimensions sufficient to pass gunboats from the Mississippi to lake Michigan, and from the Atlantic to and from the great lakes, will furnish the cheapest and most efficient means of protecting the northern frontier, and at the same time, will promote the rapid development and permanent union of our whole country.

“*Resolved*, That these works are demanded alike by military prudence, political wisdom, and the necessities of commerce. Such works will be, not only national, but continental, and their early accomplishment is required by every principle of sound political economy.”

In the memorial addressed to Congress, the convention say: "The one great idea which your memorialists seek to impress upon Congress is the necessity of a great national highway in the form of a ship and steamboat canal between the Mississippi and the Atlantic. This great national highway is demanded alike by military prudence, the necessities of commerce, and sound political wisdom."

The commercial convention, held in the city of Dubuque, in May, 1864, by Delegates from nearly all the north-western States, in their resolutions to Congress say: "The increasing development of the vast agricultural, mineral, and commercial resources of the north-west, and more especially of the Upper Mississippi valley require and demand the opening, at the earliest possible periods, of a water communication between the Eastern seaboard and the Mississippi river, by the nearest, cheapest, most expeditious, and most practicable route."

A commercial convention of the people of Missouri, Iowa, Illinois, Minnesota, and Wisconsin, held at the same place on the 14th and 15th days of February, 1866, in their report and memorial to Congress say: "Many of the great staples are nearly valueless; and never before, in the history of the country, did the fruit of the laborer produce so little comfort. Corn, in many places, is used for fuel; oats in the stack rot unthrashed; barley and rye cannot be moved; and wheat, except of the first quality, leaves no margin to the shipper. If animal products form an exception, it is only because of the scarcity war has produced, and their price will soon reach the low level of the cereals. In all this there is a great want, a sore need, and if no remedy can be found, production in this region must diminish, and the strongest arm of the nation must wither. But one means of relief can be afforded, which is to provide cheaper transportation to the markets of the world for our heavy products." * * "The good results to flow from the successful accomplishment of this great purpose can hardly be enumerated. They are as multiplied as the industries of the nation, and as huge as its wonderful resources,"

The commercial convention of delegates from all the States of the Mississippi valley, held at Keokuk, on the 7th day of September, 1869, in their proceedings say: "Uninterrupted water transportation from the Mississippi valley to the Atlantic ocean, is an indispensable, and an imperative necessity."

In a memorial to Congress, extensively signed by the people in the upper Mississippi valley, and forwarded to their respective representatives in 1866-7-8, they say: "The experience of the whole country for the last few years has most abundantly proven that new, cheaper, and more direct commercial communications must be speedily opened up between the East and West, or the expansion and consequent continued prosperity of the latter must very soon reach a limit beyond which it cannot pass; railroads are entirely inadequate to

supply that need. We confidently affirm that nothing but a continued water communication between the Eastern seaboard and the Mississippi can, by any possibility, obviate this difficulty." These memorials further say: "This region (the Upper Mississippi valley), will raise and send to market, this year, (1868) about seventy million bushels of wheat, or two million tons. There will also be imported hither at least one million tons of merchandise and other freight, making in all three million tons, besides beef, pork, and other agricultural products which must seek an Eastern market. The annual increase, for many years to come, will be about twenty-five per cent. A water communication, which will reduce the tariff from railroad to water-rates on these products and merchandise, will annually save, to this region alone, at least ten millions of dollars, which must otherwise be paid in freights in the land carriage from the Mississippi to the lakes, when, at the same time, the products of this whole region of country can be transported through such a route to New York City as cheap, and quite as expeditiously, as from any of the ports on Lake Michigan."

In a pamphlet compiled and published in 1868, by order of the president and directors of the James River and Kanawha Canal Company, at the request of prominent citizens of the West, the writer says: "Cheap transportation is the great necessity of the West. Its products exceed the means at command of cheap outlet to the seaboard. They press constantly upon the avenues of transportation, and millions of Western producers are thus placed under the power of carriers."

The city council of the city, and the board of supervisors of the county of Dubuque, in a memorial to Congress on this subject, say: "That upon the speedy completion of the great national thoroughfare from the Mississippi by the way of the Wisconsin and Fox rivers, the Great Lakes, the river St. Lawrence and Lake Champlain, to the tide waters of the Atlantic at New York City, depends in a very great measure the future development and continued prosperity of the entire northwest."

The Twelfth General Assembly of the State of Iowa, in a memorial to Congress in relation to this question, say: "That the great want of our State is cheap transportation for our heavy products to the markets of the world. That the most feasible plan to secure this end is to provide a direct and continuous line of water communication between the Mississippi river and the Atlantic seaboard."

In another memorial to Congress on the same subject, but in relation to another route, the same legislature further says: "The products of the northwest for transportation have increased beyond example. The capacity of the present channels of commerce is insufficient to move them, while the cost of transportation is so great, that in some localities corn is used for fuel, and in most is converted into pork and beef before it can be forwarded."

The legislature of Wisconsin, for the year 1868, in a memorial to Congress on this subject, say: "The character of the undertaking is alike apparent to Congress, the legislature, and the people. It is rendered necessary as a military measure, to protect against inroad and attack, a frontier extending from the Atlantic to the Pacific; as a commercial measure, to enlarge the already inadequate outlets for an increasing commerce, thereby lifting from freights, and ultimately from the people, extortionate tariffs; and as a measure otherwise national, to establish, out of avenues of intercourse and trade, bonds of national unity."

The Senate Committee on Commerce and Navigation, of the legislature of the State of New York, for the year 1864, in a report on the Niagara ship canal, say: "On the five seas that are embraced in this system of lakes, there annually floats two thousand vessels of all descriptions, valued at twenty million of dollars, and bearing a commerce double the value of the whole foreign trade of the country.

"This great and rapidly increasing commerce, derived from a group of States, and moving to the markets of the world through three distinct systems of navigation, is as much national in its character as that which is floated on the ocean.

"This contemplated improvement is bounded by no State lines, nor confined to narrow limits, but would affect more or less remotely the interests of ten millions of people, scattered over broad regions of country, and contributing largely to our national power, prosperity, and security.

"In the opinion of your committee these facts and considerations should arouse every honorable effort to prevent the diversion of this commerce into foreign channels.

"The construction of such a route would open a wide and deep channel between the upper lakes and lake Ontario and the St. Lawrence river, and eventually lead to the construction by ship canals from lake Ontario on the St. Lawrence to the Hudson river, thus saving greatly the interchanging of products and merchandise between New York and the West."

At the Canal Convention held at Prairie du Chien in the State of Wisconsin, November 10th, 1868, the President, Governor Merrill of Iowa, on taking the chair said, "The importance of the subject which has called us together cannot be over-estimated. It is a subject affecting, not the interests of an individual, of a corporation, of a city, or of a single State even, but it is one of such magnitude that five or six States have assembled here in the persons of their representatives to consider and discuss it. * * I declare it my belief that our growth and prosperity will be largely affected by the success or defeat of the measure now before us."

In the proceedings of the convention the following resolution was unanimously adopted:

Resolved, That the immediate opening of said channel (through the Wisconsin and Fox rivers) is demanded by the interests of the people of the entire country, that the work is one of national importance, required as a channel of commerce, as a ligament to bind together the States, insuring national unity and as a measure of defence in case of war."

The Dubuque (Iowa) delegation, not being able to reach the convention in time, forwarded a preamble and resolution expressive of the views of the people of that State, which were incorporated into the proceedings of the convention. The following is one of the resolutions :

Resolved, That cheap transportation is an imperative necessity for the entire northwest, and more especially for the upper Mississippi valley, without which its continued development, and subsequent prosperity, must at no distant period reach a limit beyond which it cannot pass."

At the re-assembling of that convention at Portage City, Wisconsin, on the 20th of October, 1869, the following resolution, among others, was unanimously adopted :

Resolved, That a water route by which steamboats of the Mississippi river can run to the harbors, and unload into the vessels of the great lakes, is a public necessity."

These are but brief extracts. Volumes might be filled with proceedings of legislatures, national, state, county, and local conventions, discussions in the public press, and proceedings of the people generally, in relation to this great national and continental enterprise, thus receiving the sanction of the entire American people. The following memorial, now pending before this legislature, is the latest expression of this universal sentiment of the country. It is signed by very many of the most enterprising, public spirited, wealthy, and successful business men of the State, and of the whole northwest, and expressing in very brief terms the imperative necessities and general interests of the people of the entire upper Mississippi valley, and, as we believe, of the whole country :

To the Honorable Legislative Assembly of the State of Iowa :

"The undersigned, citizens of Iowa, would state that the people of the entire country, and more especially of the northwest, have become deeply interested in the question of uninterrupted water communication between the Mississippi valley and the Atlantic seaboard, and more particularly in relation to the route by the way of the Wisconsin and Fox rivers, the great lakes, the river St. Lawrence, and Lake Champlain, to New York City. Although this great trans-continental work must be mainly carried out (if at all) by individual enterprise and capital, the interposition and assistance of the general government will be indispensable to its final success. We would

therefore respectfully request the legislature to memorialize Congress for such legislation and material aid as may be necessary to secure its speedy consummation. Also, to invite the co-operation of the legislatures and people of the country, and more especially of the Western and Northern States in this work. And also to suggest some plan of operation whereby the influence, energy, and capital of the whole country can be successfully concentrated upon this great national and continental enterprise.

DUBUQUE, IOWA, December 24th, 1869.

Lewis A. Thomas, Ambrose Gleed, A. Heeb, Shubel P. Adams, W. H. Rumph, John S. Williams & Co., C. A. Metcalf, P. D. Hosford, M. Kingman, W. Chandler, John King, Stewart, Shields, & Co., John P. Burt, J. W. Coy, W. G. Stewart, E. D. Cook, Simplot Bros., B. B. Richards, John H. Lull, Henry Barr, E. H. Eigmy, L. A. Rhomberg & Co., M. S. Robinson, J. A. Rhomberg, John W. Deery, P. Morgan, John Glabb, Edward Clingenberg, John Milligan, Burton, Hill, & Co., J. W. Parker, John Fitzpatrick, Rouse & Dean, W. W. Parker, E. C. David, A. Hubert, F. A. Parker, H. W. Griswold, Alexander Levi, Will F. Deuce, John D. Jennings, George W. Jones, Atherton, Walker, & Co., Carr, Austin, & Co., Chas. Jones, V. J. Williams, J. B. Lane, G. Fleming, C. J. Cummings, Wm. Newman, Wm. A. Judd, John Mullany, Lawrence McNamee, Amsden & Walker, M. H. Moore, W. H. Peabody, P. Logan, R. J. Gibbs, J. H. Thedinga, Parker, McMasters, & Co., L. D. Randall & Co., W. C. Chamberlain, A. A. Cooper, Thos. Kenney, C. Mason, F. Jeiger & Co., Sears & Abbott, Thos. Swain, J. E. Fairbanks & Co., Sol. Naugh & Co., Geo. D. Wood, H. B. Baker, C. Crocker."

GENERAL DESCRIPTION OF THE ROUTE.

This probably is not necessary. Nature has so clearly and unmistakably marked out the route that any general description thereof will be entirely superfluous. She has not, however, done all the work; something has been left for man (and as we believe, the present moving, active, and energetic spirits of the age), to accomplish, and we hope and trust they will be true and equal to the work imposed upon them. This work is divided into five distinct parts.

- 1st. From the Mississippi river by the way of the Wisconsin and Fox rivers to lake Michigan.
- 2d. From the foot of lake Erie down into lake Ontario.
- 3d. Thence down the St. Lawrence to Montreal.
- 4th. Thence up into lake Champlain.
- 5th. From the head of that lake, (or of lake George) down into the Hudson river, thence to New York city.

The "St. Clair Flats" between lakes Erie and Huron might have been regarded as a sixth obstruction, had not the general government so far improved them as to secure the completion of the whole work at an early period. Indeed, large amounts of work have already been done, and sums of money expended on all, or most of the obstructions for the very purpose contemplated by this memorial, to-wit: "To secure uninterrupted water communication between the valley of the Mississippi and the Atlantic seaboard at New York city.

PARTICULAR DESCRIPTION OF THE SEVERAL OBSTRUCTIONS.

1st. From the Mississippi river by the way of the Wisconsin and Fox rivers to Lake Michigan.

This route has been so thoroughly examined and surveyed, and more especially within the last few years, by the engineers of the general government, that a minute and detailed description will be entirely unnecessary. From the earliest explorations of the Western country it has ever been recognized and used as a "public national highway." It was through this route that the early French missionaries and "voyageurs" discovered and explored the upper Mississippi valley. Along this route from Quebec and Montreal, to the head waters of the Mississippi river, thence north and west to the "Red river of the North," the Saskatchewan and the Rocky Mountains, they established military and trading posts and missionary stations.

In the year 1813, a British army, more than two thousand strong, (including Indians), came through on this route, and captured the military post at Prairie Du Chien, there holding military control and possession of the whole Mississippi valley as far south as St. Louis until after the battle of New Orleans. It is reasonable to presume that had that event proven disastrous to the American arms, the history and destiny of the entire Mississippi valley, from the Alleghenies to the Rocky Mountains, would have been materially different from what they are to-day.

Even in the present development of railroad and other facilities, steamers of three hundred tons burthen frequently pass and repass in flush stages of water, and make profitable trips between lake Michigan and the Mississippi river. One of those steamers has a most remarkable history. It was built at Pittsburgh, came down the Ohio, and up the Mississippi, thence through this route to Green Bay. Was there engaged in the lake trade for several years. In 1862 it came back, was converted into a government gunboat, and became one of the most powerful and efficient vessels in the naval actions on the lower Mississippi, which resulted in driving the rebels out of the valley and opening the river to the Gulf. The late surveys of the general government most abundantly demonstrate, that

for a comparatively small outlay, (less than five million dollars) it can be made available for boats of the heaviest draft used on the Upper Mississippi, passing through the entire distance from river to lake, with as much facility and at as great a rate of speed as to St. Paul or St. Louis. This estimate includes the construction of a canal up the valley of the Wisconsin 90 miles long. Distance through from lake to river, 280 miles long.

2d. *The obstruction from Lake Erie down into Lake Ontario.*—

This is the most serious and important obstruction on the entire route from the Mississippi river to New York City; when removed the most serious obstacle has been taken out of the way. Between the upper lakes and Lake Ontario, several routes are mentioned, all of which have some advantage and many friends. It is safe, however, to affirm that the cheapest as well as the best route under all circumstances will be selected, especially if the work is done by private capital, which is very likely to be the case. By careful and elaborate surveys, made by competent engineers, a ship canal equal in capacity to the St. Mary's canal at the outlet of Lake Superior, can be constructed not far from the Welland canal for six million dollars. That is probably far less than the cost at any other point, with the additional advantage of having all the lockage in a very short space and yet not so crowded as to embarrass the rapid passage of a large number of vessels. The Welland canal has a capacity only for vessels of about 300 tons—about the same as the Erie canal.

3d. *The Rapids of the St. Lawrence.*—The improvements on these rapids have so far progressed under the supervision and patronage of the Canadian government, that loaded vessels, of nine feet draft, can pass over them with safety. All steam vessels from lake Ontario to Montreal take this route. The channel can be deepened to thirteen feet by the expenditure of seven hundred and twenty thousand dollars. The canals around these rapids at present have nine feet of water, with locks forty-five feet wide and two hundred feet long. These need to be enlarged to thirteen feet in depth, and the locks to three hundred feet long and seventy-five feet wide. This can be done at a cost of \$1,028,000. These are official data from actual surveys. The work can be done during the suspension of navigation.

4th. *From the St. Lawrence at Montreal up into Lake Champlain.*

Distance twenty-eight miles, over a nearly level country. The elevation of lake Champlain above the St. Lawrence is 24 feet, hence, requiring only two locks, of 12 feet lift each. With double locks this work will cost \$2,500,000. Its completion will give a free and uninterrupted passage for the largest steamers from the upper lakes to the head of lake Champlain and lake George.

5th. *From the head of lake Champlain or lake George, to deep water on the Hudson.*—On this part of the route the State of New York has already a canal sixty miles long, built expressly for the purpose of securing the trade of the West descending the St. Lawrence; but it is entirely inadequate for that purpose, having a capacity for boats of ninety tons only. The head of lake Champlain or of lake George has an elevation of fifty feet above deep tide water on the Hudson. Summit level between it and the Hudson, one hundred feet; distance therefrom six miles. The whole expense of this part of the work will be about \$6,000,000. Instead of following the line of the Champlain canal it is proposed to use the Hudson river by means of locks and dams. Five dams will be all that will be necessary. This will probably be the cheapest and best route.

RECAPITULATION.

Route by the way of the Wisconsin and Fox rivers	\$ 3,500,000
Between lakes Erie and Ontario	6,000,000
Improving rapids of St. Lawrence to thirteen feet...	720,000
Enlarging the locks and deepening the canals around the rapids of the St. Lawrence.....	1,028,000
St. Lawrence and Champlain Canal.....	2,500,000
Champlain and Hudson river canal.....	6,000,000
Total.....	\$19,748,000

A careful and practical survey of the whole route, as a single and entire enterprise, will probably very much reduce these estimates. It is safe, however, to say that the whole cost of the entire work will not exceed \$20,000,000. These estimates may appear large, but they are indeed small and insignificant when compared with the immense magnitude and importance of the work.

THE EXPEDIENCY AT THE PRESENT TIME OF MAKING AN EFFORT
TO SECURE THE OPENING-UP AND COMPLETION OF THIS GREAT
CONTINENTAL THOROUGHFARE.

This proposition involves the inquiry, whether the requisite amount of capital can be secured? This will depend entirely upon that other proposition, "as to whether the investment will return a dividend and how much?" In other words, "will it pay?"

This, like all similar enterprises, will depend upon the amount of business it will command over all competition. It will be safe to assume that every vessel taking on a cargo of Western produce destined for an Eastern or European market will discharge it only at the most extreme point of the navigable route. Hence if that navigation

extends to tide-water at New York City, *that* will be the port of discharge, if that be the destination of the cargo. Now the amount of Western produce moving eastwardly over the lakes at the present time, very much exceeds six million of tons annually, with more than three million tons of return merchandise. An average charge or toll of fifty cents per ton for the entire distance from the Mississippi to the Atlantic seaboard will yield a revenue to the company of \$4,500,000 on business already existing on the lakes. This will be about one mill per ton per mile for the entire length of the several improvements, or one and one-half cents per bushel on wheat and other freights reduced to wheat measurement; about one-half the present elevator and other charges at the single port of Buffalo.

BUSINESS NOW EXISTING, AND WHICH WILL BE CREATED BETWEEN THE LAKES AND THE MISSISSIPPI BY THE OPENING OF THAT PART OF THE ROUTE.

It is estimated by good judges, men engaged in the coal and lumber business, that should that part of the route between the Mississippi and the lakes be opened, there would at once be created a market annually in the Mississippi valley, for one million tons of anthracite, and five hundred thousand tons of Pittsburgh coal. This trade does not now, and never can exist, unless there be water transportation, because of the high rates that must be charged by the railroads.

Between five hundred and one thousand million feet of pine lumber are annually brought through from lake Michigan to the Mississippi valley. The average cost of its transportation hither (by rail) is from eight to ten dollars per thousand feet. With this water route opened by the way of the Wisconsin and Fox rivers, as contemplated, this lumber can be brought from the mills situated along the shores of lake Michigan and Huron, in barges without reshipment, and distributed at the railroad and other business points on the Mississippi, as far south as St. Louis, for six dollars per thousand feet, or three dollars per ton, or at the rate of about one and one-half mills per ton per mile. This will be a saving of about three dollars and fifty cents per thousand. The effect will be to divert a very large portion of this trade through this route. It will be safe to assume that at least 500,000,000 feet, or 1,000,000 tons, will be thus diverted, especially when it is taken into consideration that it can be thus brought through, not only much cheaper, but also in far less time. This trade will increase at the rate of twenty-five per cent per annum. There is also shipped from the upper Mississippi valley 70,000,000 bushels of wheat per annum, or 2,000,000 tons. From the greater cheapness of water transportation, a moiety at least of this product will be diverted into this channel, and the whole reduced to water rates. Vast amounts of other agricultural products, from

the greatness and facility of transportation, will also be diverted into this channel.

Now if a toll of fifty cents per ton be charged on this freight, (which would be equal to about two mills per ton per mile), through from the lakes to the Mississippi, it would yield an income on this new business alone of \$1,750,000. These two items, therefore, would give an annual revenue to the company of \$5,750,000 on the business already existing on the lakes, or necessarily created by the opening up of the Wisconsin route. If these estimates approximate to the correct standard, then it is evident that the above rates of toll may be reduced very nearly, if not quite, one-half, and still give a dividend of ten per cent per annum, over and above all expenses, on the capital stock invested.

HOW THE NECESSARY AMOUNT OF CAPITAL CAN BE RAISED.

The friends of the Wisconsin and Fox river route hope and confidently expect that the general government will complete the work on that route which it so auspiciously commenced; if it does not, the only thing necessary will be to convince capitalists that it will yield a liberal income over all expenses, to secure all the funds necessary for the work, especially when constituting a portion of the whole enterprise.

NEW YORK MUST OPEN THE ROUTE FROM LAKE CHAMPLAIN DOWN THE HUDSON, OR LOSE THE WESTERN TRADE.

This alternative will be found to be an imperative necessity, from the consideration of two facts:

With the route completed to Montreal, wheat (and of course other merchandise) can be shipped from and to the upper lakes, to Liverpool, from five to ten cents a bushel cheaper than by the way of the Erie Canal and New York City. This would inevitably carry the foreign commercial trade in the same direction. The report of the Senate Committee of the legislature of that State, above referred to, make, (in substance) the following statement: "With this route completed to Montreal, shipments can then be made to Europe from ten to fifteen cents per bushel cheaper than by the way of the Erie canal and New York City." The lower St. Lawrence has been improved so that sea-going vessels of twenty feet draft, (and consequently of more than three thousand tons burthen) can reach Montreal at all seasons of navigation. Light-houses, buoys, and other means of protection have been placed along the river and Gulf of St. Lawrence, so as to render navigation on that route quite as safe as by the other.

2d. This route completed to the head of Lake Champlain, all of New England can be supplied with Western produce from five to ten cents in the bushel cheaper than from New York by the way of the Erie canal, (or by the railroads.) This will also give New England a monopoly of the commercial trade of the West. The laws of "barter and exchange" will bring about this result. This arises in part from the fact that from that point it is, upon an average, thirty miles nearer to nearly all parts of New England than from Albany, ninety miles further south, and over roads of much easier grade. But the main and controlling reason is, that transportation to the head of lake Champlain, can be made from the upper lakes, ten cents per bushel cheaper than can possibly be done by the Erie canal. Indeed, New York itself can be supplied with Western products, 20 per cent cheaper than by the Erie canal or the railroads. This will be most conclusively proven by a single example. From the foot of lake Erie, the propeller (loaded with 60,000 bushels of wheat, can carry its cargo to the head of lake Champlain, in from two to two and a half day's time, for five cents per bushel. Thence to New York by rail, seven cents per bushel. Twelve cents per bushel in all. On the other route there will be elevator and other charges at Buffalo, three cents per bushel. Canal charges to Albany, seventeen cents per bushel. Towage on the Hudson, two cents per bushel. Twenty-two cents per bushel in all. This will give an advantage to the Champlain route of ten cents per bushel. The average capacity of the Erie canal boats does not exceed two hundred tons, hence it will require ten boats (and eighteen days time for each) to carry to New York City the cargo of a single lake propeller, carrying 60,000 bushels of wheat. It would also require ten trains to do the same work, at about the same cost per bushel. It is therefore most clearly demonstrable that if New York City intends or expects to retain command of the Western trade she must complete this route from the head of that lake to the deep waters of the Hudson. It is equally true that to retain possession of the foreign trade of the West, she must also construct the canal from the St. Lawrence up into Lake Champlain. Perhaps the proposed size and capacity of lake propellers are estimated too high. Experience will settle that question. The relative earnings and expenses, however, will be in about the above ratio.

AMOUNT OF CAPITAL WHICH THE COMPANY MUST RAISE.

If the balance of the work be constructed, it will be safe to assume that the Canadian Government will complete the work on the rapids of the St. Lawrence and the canals all around them. The following, therefore, are the items of expense for which provision will surely be made, *upon condition of the completion of the other parts of the work*:

Wisconsin and Fox rivers route.....	\$ 3,500,000.00
Rapids of the St. Lawrence.....	720,000.00
Canals around them.....	1,028,000.00
From head of Champlain to New York.....	6,000,000.00

Whole expenses thus secured.....\$11,248,000.00

leaving a balance of \$8,752,000, on a capital of \$20,000,000 to be raised by the company.

ASSUMED DIVIDEND ON THE WHOLE COST.

Should, however, the company be compelled to raise the whole amount, it is confidently affirmed that the business already existing on the lakes, and which will inevitably be created on the Wisconsin route, will yield a dividend of from eight to ten per cent. per annum over and above all expenses.

OBJECTION IS MADE THAT A PORTION OF THE CONTEMPLATED ROUTE WOULD BE THROUGH A FOREIGN COUNTRY AND THEREFORE WORTHLESS IN TIME OF WAR.

It will be found upon examination that this objection has no weight or foundation whatever. Canada is as deeply interested, in opening this route as we are, because she will derive quite as much, and probably more advantage in the foreign trade of the West as this country, and therefore will, from interest alone, extend every facility in her power to help forward the enterprise. In time of war every other interest along the frontier of the belligerent powers, will be equally jeopardized, and must equally, with it abide the arbitrament of arms. Besides, it would be impossible to construct the route by the way of lake Champlain, the only feasible or even practicable route, without passing through a foreign country. It is most devoutly to be hoped by every patriot and friend of peace, that no such contingency will ever arise.

THIS IS AN AUSPICIOUS TIME TO MAKE THE EFFORT.

There are very many reasons why the present is a most auspicious time to commence the work.

1st. There are vast amounts of capital, both in this country and in Europe, seeking profitable and permanent investment; and, as but a small portion of it can find such in the few remaining railroads to be constructed, a sufficient amount can be readily secured for this enterprise.

2d. Business men and capitalists of New York, are becoming alarmed at the success of the enterprise of shipping Western products to an Eastern and European market by the way of the Mississippi and Gulf of Mexico, and hence will readily and cordially support and assist this enterprise, which will have the direct and immediate effect of securing to that city a monopoly in the trade and commerce of the West, which it has so long enjoyed. But, however Eastern capitalists and business men may feel, or whatever apprehensions they may have upon this subject, they may rest assured that universal—nay, the unanimous sentiment of the people of the entire West is, that they must and will have uninterrupted water transportation to the Atlantic seaboard for their heavy products. If the object cannot be secured in the best and most direct route, they will secure it in some other.

3d. The whole spirit of the age, and public sentiment of the country, are now enlisted in the enterprise of improving the great internal water routes of the nation.

4th. The manufacturing population of the Eastern States, and of Europe, are clamorous for cheap provisions—breadstuffs especially. This result can never be secured in its fullness until this water route to the Atlantic ocean is completed.

5th. The success of the Suez canal, the Pacific Railroad, and similar great enterprises, have given capitalists confidence in works of equal magnitude and importance.

CAPACITY OF THE WHOLE WORK TO BE UNIFORM AND EQUAL TO THAT
OF LAKE HARBORS.

The St. Mary's canal, at the outlet of Lake Superior, has locks 300 feet long, 75 feet wide, and 13 feet deep above the miter sill. They were thus arranged so as to correspond with the depth of water in the principal harbors of the lakes. The whole work should be constructed on the same plan. A larger capacity would be useless.

OBSTRUCTIONS INTERPOSED ON THE FOX RIVER BY MONOPOLISTS.

It is currently reported on what appears to be good authority, that under grants from former legislatures of Wisconsin, Eastern and other capitalists, assume to hold an exclusive right and interest in the improvements on the Fox river, from the "portage," down to lake Michigan, and that they hold those rights and privileges at such high figures as to amount to an absolute prohibition to the progress and completion of the work to the Mississippi river; we would therefore respectfully call the attention of the legislature and people of that State to this subject; and would also suggest that

such a state of affairs, not only imperils the success of the enterprise, but is also unjust, injurious, and oppressive in the highest degree, to the people of the whole country; but more especially to those residing in the upper Mississippi valley. Such an obstruction on a route, and in a river recognized not only by our own government, but also by France and England in early colonial times, to be a public navigable highway between two great continental systems of navigable water, ought not to be allowed to remain if there be any possibility of its removal.

ANY SUBSIDY FROM THE GENERAL GOVERNMENT SHOULD BE SO APPROPRIATED AS TO PROMOTE THE WHOLE ENTERPRISE.

Still its friends may reasonable expect that the general government will make a liberal appropriation for the Wisconsin and Fox river portion. It is not therefore unreasonable to claim that such appropriation shall be so made, as to encourage and stimulate the prosecution and early completion of the whole work. Portions of the route will pass over sections of the country where it may be necessary to secure the right of way, and other privileges from the government. It is most desirable that such legislation should be had at an early day. The good offices of the government may also be needed to secure the speedy construction of other portions of the work. The attention of Congress is invited to these and other matters that may come up in the prosecution of this work.

SIZE, SHAPE, CHARACTER, AND SPEED OF VESSELS BEST ADAPTED TO THE PROPOSED REVOLUTION IN LAKE NAVIGATION, ALSO DEPTH AND CAPACITY OF THE WORKS.

The greatest depth of water practicable should be secured on the whole line. On the Wisconsin portion, only such a depth and capacity will be needed as will allow of its navigation by upper Mississippi steamers. That depth will probably not exceed six feet. On the lakes, the greatest depth practicable will not exceed thirteen feet. This will allow of propellers and other vessels of twelve feet draft, with a capacity, probable of 2,000 tons, or 60,000 bushels of wheat. These vessels, moving at the rate of eight miles an hour, would make the trip from the head of lake Michigan or Superior to New York City in fifteen days, including the discharging and taking on a return cargo, or one round trip a month. Such propellers would probably cost from \$100,000 to \$150,000.

They could carry wheat from the upper lakes to New York City for fifteen cents per bushel, and other freight in like proportion, and make a large profit.

The following estimates will most clearly demonstrate this proposition.

For 15 day's expense of crew, wear and tear, etc.....	\$1,250.00
For 15 day's expense of fuel, oil, etc.....	1,300.00
	2,550.00
Total cost of trip	2,550.00
By 60,000 bushels of wheat, at 15 cents per bushel....	9,000.00
Clear profits above all expenses.....	6,450.00

The return cargo would pay the expenses of the return trip, tolls, insurance, etc. A propellor would make at least six trips in the season. This will give a clear profit for the season of \$37,700. If smaller vessels are found best adapted to the lakes, about the same relative rate of earning and expenses will prevail.

APPEAL FOR UNITY OF ACTION OF THE WHOLE PEOPLE TO SECURE THE CONSTRUCTION AND EARLY COMPLETION OF THIS GREAT NATIONAL AND CONTINENTAL THOROUGHFARE.

The one great object of the whole country is to cheapen transportation between the East and the West. This can never be secured through the existing routes. There are many rival roads between the two sections, but their interests are identical, hence they will, and practically *do*, combine to promote that common interest, to-wit: high rates of toll for transportation of products between the two sections. The only rival to these powerful and wealthy corporations at present, is the Erie canal, which is also an immense monopoly, whose sole (at least main) object is to wring the very highest charges possible from the business of the country which is compelled to pass over the route; hence it will, and does, contrive, with the railroads, to keep up those exorbitant charges. The only possible remedy for these oppressive and ruinous exactions, is to open up an avenue superior in capacity to them all. This can only be done through this route. Competition on that thoroughfare, and with the railroads and canal will very soon reduce prices to living rates for all—producers and consumers as well as carriers. It will be impossible to create monopoly here. If all the steamers on the lakes combine with the railroads and canal to “put up prices,” men of equal energy, business talent, and means will embark in rival companies. Hence every part of the country is equally interested in this great measure. The East in having cheap provisions, the West in greater facilities and cheaper rates of transportation. All then can, and ought to unite to hasten forward the consummation of this work.

HOW CAN THE INFLUENCE, ENERGY, AND CAPITAL OF THE WHOLE COUNTRY BE COMBINED AND CONCENTRATED UPON THIS MEASURE?

This is a question of somewhat difficult solution. Perhaps, however, the experience of other public enterprises of vast magnitude

and importance, may be made available in this case. In the construction of the Pacific railroad, "construction companies" were organized under the laws of Iowa and other States by means of which the work was pushed forward with an energy and success which could not have been attained without them. The Suez canal was also built under a like charter, from the French government. The Darien ship canal, and the Tehautipec railroad and canal, are to be prosecuted in the same manner,—the former under a charter from the State of Massachusetts, and the latter under a like charter from the State of Vermont. The Panama railroad was built by a like company, under a charter from the State of New York. Other like enterprises have been, and are being successfully prosecuted, under similar organizations. Following these examples, such a company could be organized under the laws of this, or some other State, to do this work. Probably an organization under the laws of this, or some other State having a general incorporation law, would be far preferable, because, if there be any deficiency in the original charter, it could at any time be amended without the delay and inconvenience resulting from the protracted and uncertain action of a legislative assembly.

SHOULD BE UNDERTAKEN AS A SINGLE AND ENTIRE ENTERPRISE.

There are many strong and controlling reasons for this.

1st. It will insure the construction of the whole work in the shortest possible space of time, each part progressing at the same time.

2nd. Capitalists will more readily invest their money in the enterprise as a whole, than if divided up into separate parts, from the fact that as a whole the tolls on business already existing on the lakes, will be sure to return an ample dividend over and above all expenses, which might not be the case on some or perhaps any one portion thereof.

3d. The completion of any one part, (for example, the Wisconsin portion), will not materially benefit the country by the reduction of charges for transportation. Indeed it would enable Eastern carriers (from the foot of lake Erie) to increase the exorbitant rates already levied, because of the increased amount of Western products going through that route, and seeking an Eastern or European market.

4th. By a uniform system of operation, the expenses of each part, as well as the whole, will be very much less than if divided into several independent parts. This is most conclusively proven

by the experience of railroads all over the country, many rival and hostile roads consolidating into one for the purpose of reducing expenses, and securing a more efficient and economical operation.

5th. It would then, and only then, become an independent, efficient, and successful rival and competitor with the Erie canal and railroads, in the carrying trade between the East and West. All of these interests now practically combining "to keep up," (as well as "put up to higher rates,") transportation and charges.

6th. It would bring under one uniform and efficient system of operation, an enterprise from necessity, one consolidated and homogeneous system, which must otherwise be conducted under several independent, and somewhat rival systems, each of which would be quite as expensive in salaries and other charges as the consolidated one, and far less efficient and successful.

7th. It would not secure the objects sought to be attained, to-wit: profitable investment of capital, and cheap and rapid transportation, unless the whole work from the Mississippi river to New York City, be completed and operated under one uniform and permanent system.

IT IS CLAIMED "THAT RAILROADS WILL VERY SOON SUPERCEDE WATER TRANSPORTATION, EVEN ON THE LAKES."

That is the position assumed by Mr. Richards, president of the Chicago Board of Trade, in his speech before the National Board of Trade, at Richmond, in December last, and indorsed generally by the Chicago papers. He says, "There is no method of inland transportation worthy of a moment's consideration, but that of railroads. * * * Our own great lakes in the north will be the last to succumb, but the iron horse has actually overtaken them in the amount of business done."

Possibly that may be so, in travel, and light and valuable merchandise it is undoubtedly true; but in order that there may be a fair test on the question, the two systems must be placed on an equal footing in regard to completeness. Each of the great railroads between the Atlantic seaboard and the Mississippi, are as perfect and efficient as capital, science, and art can possibly make them. Let the proposed water route be constructed and finished with a like degree of perfection, so that upper Mississippi steamers can go through to the lake, with the same rate of speed as to St. Paul or St. Louis, to wit: eight miles the hour, thence by lake propeller of twelve feet draft and 2000 tons burthen, (or such other capacity as experience shall find to be best adapted to the trade), also traveling at the rate of eight miles the hour. The test would then be fair and conclusive.

The distance by rail from the Mississippi (for instance Dubuque) to the Atlantic ocean, would be 1600 miles; by the water route, 1800 miles. The very lowest rate for which Western produce has ever been carried during lake transportation is 95 cents per hundred lbs., the average never less than one dollar per 100 lbs.

Westward-bound merchandise, during the same period, never less than \$1.30 per 100 lbs. The average both ways never less than \$1.10 per 100 lbs., or \$17.60 per ton. On the water route there is 400 miles of canals, 300 miles of river, and 1100 miles of lake—1800 miles in all. Rate of charge five mills per ton per mile; this is in fact one third higher than the actual charges, \$9.00 per ton; in favor of the water route, \$8.60. On the railroads this will be fifty-four cents per bushel on wheat, and other freight in the same proportion. By the water route it will be twenty-seven cents per bushel, or twenty-seven cents in favor of the latter. The rate of speed on both routes being eight miles per hour, both will arrive at their destinations about the same time. Now if this claim of Mr. Richards and the Chicago press be correct, the railroads east from that place, up to the present time, must have become formidable competitors, and rivals with the lakes, in the carrying trade of Western products. Lake and railroad statistics however tell a different story. By the annual reports, for the last five years, of the Chicago board of trade, of which Mr. Richards is president, it appears that the four of five eastern railroads entering into that city, do not all together carry (during the seven months of lake navigation), above five per cent of the wheat and other heavy agricultural products of the West. During the entire year the amount does not much, if any, exceed twenty per cent. By the same reports it appears that, of the vast amount of beef and pork, packed at Chicago and other lake ports, not more than ten per cent is forwarded east by rail; it remains in the packing houses until the opening of navigation, then shipped by the lakes to Buffalo, thence by canal or rail to its Eastern or European market.

A FREIGHT RAILROAD TO BE CONSTRUCTED.

It is conceded by Mr. Richards and the Chicago press, that the present railroad system cannot successfully compete with lake navigation in the transportation of heavy and bulky freights. But then, a freight railroad (with greater capacity), with two or more tracks, is to be constructed, which is to supercede both lake transportation, as well as the present system of roads. That may appear very plausible in theory, but the practical and successful prosecution of such an enterprise will be a very different thing. It enters the field not only as a competitor, but as an exterminator of both systems. From the Atlantic seaboard to the Mississippi valley, it will be 1,600 miles in length; cost per mile, \$150,000, making an aggregate capital exceeding \$250,000,000. Even on such a road, it will

require at least eight trains, worth \$100,000 each, to equal the capacity of a single lake propeller, costing from \$150,000 to \$200,000. The daily expense of each train, including "wear and tear," casualties, etc., will be very nearly equal to that of the propeller. If this be an approximately correct estimate of the costs and expenses of the two systems, it has not a very hopeful aspect for the speedy annihilation of lake shipments. At least such a view of the case has not much in it to discourage the friends of the contemplated "water-route."

COST OF REPAIRS.

The experience of railroads, both in this country and in Europe, is that the repairs on rolling stock, road-bed, and everything connected with it, have to be renewed once in every ten years. There are four great lines of railroad between the Atlantic seaboard and the Mississippi, all competing for the trade of the lakes. Each of these lines of railroad cost at least \$100,000,000, hence, there must be levied upon the travel and commerce between the east and the west, over and above what will be necessary to pay the expenses of operating them, and the interest on the capital stock,—ten per cent., or \$40,000,000 per annum, to keep in repair those roads. On the water-route, the entire cost of opening the same to the required capacity will not exceed \$25,000,000. The value of the shipping, on the lakes and on the Mississippi, engaged in carrying trade, is about \$20,000,000. By the opening of this water-route, it will be doubled, or \$40,000,000—\$65,000,000 in all. The improvements themselves, being excavated deep below the natural surface of the country, will require but a very small per cent. for repairs, but assuming ten per cent. for repairs, both of it, and the vessels engaged in the through trade, will amount to \$6,500,000; difference in favor of the water-route, \$33,500,000. In other words, it will be necessary to tax the trade, commerce and travel between the two sections to the amount of \$33,500,000 higher on the railroads, than on the water-route. A moiety only of this burthen will fall upon commerce; i. e. only \$16,500,000. But the produce trade of the West cannot stand under this burthen, and will not any longer than can be avoided.

COAL TRADE OF THE ENGLISH RAILWAYS.

In the case cited by Mr. Richards, from England, in support of his theory "of the railroads driving ocean propellers out of the trade in carrying coal from Newcastle to London," be applicable to this country, then surely railroads can drive lake vessels out of the trade in carrying coal from Cleveland to Chicago. The lake freight is seventy-five cents per ton. Can the roads carry it for that price? If so, why don't they do it? Everything is in their favor; the distance not half so great, and almost on a dead level all the way. The

fact is, however, the roads could hardly pay for their fuel, and yet lake vessels make a good living at the business, else they would not carry coal or anything else at those rates. It is of daily and almost hourly occurrence that immense trains of empty cars pass right by deposits of coal piled mountain high on the Cleveland wharves, awaiting shipment to the upper lakes. Why don't, also, the trains bringing coal from the interior of Pennsylvania and Ohio to that lake port, keep right on to Chicago instead of unloading there? The reason is obvious, they cannot carry it at lake prices.

The case cited to sustain the theory that railroads will supersede water transportation, does not in fact exist. The railways do not carry any coal from Newcastle to London, at least not to any very great extent. They do carry coal from the coal-fields of Staffordshire to London. This place is situated about midway between the two places, about one hundred miles distant, London being the nearest shipping port. This coal comes in competition with the Newcastle coal, but not to such an extent as to drive the latter out of the market, or even materially lessen the demand.

THE TRADE OF THE WEST ALREADY BEING DIVERTED INTO FOREIGN CHANNELS.

The following extract taken from the *Chicago Tribune* of the 28th of December, 1869, most clearly demonstrates this proposition :

“*The Erie Canal.*—The exhibits of the business of Buffalo during the year 1869, conveys an important lesson. It will be remembered that the Erie canal has, until within a few years, been the highway of the productions of the northwest. The State of New York built that canal, promising that it should be made a free route as soon as the State should be reimbursed for its cost. The tolls collected upon the produce of the West have paid for the canal, and for all its repairs and enlargements, twice over, and have kept in commission whole regiments of office-holders. The State of New York, however, found itself in possession of a constant source of revenue, and, holding the only canal through to tide-water, resolved to use it like any other monopoly. Consequently the rates of toll were increased, until at last they were so leveled up that it became an even thing for shippers to use railways or canal. All appeals have been in vain; the State legislature and the State convention have both insisted on extorting the last measure of toll. The result is that, during 1869, the volume of grain sent east from Buffalo, by canal, has seriously diminished, and now, instead of being the sole route for breadstuffs, the canal is the least used of the several routes.

“The persistence in high tolls has not only destroyed the business of the canal, but has seriously injured Buffalo. It is true that much of the grain diverted from the canal has taken rail at Buffalo, but nevertheless that city has suffered generally with the decline in the

use of the canal. It is somewhat remarkable that the receipts and shipments of Montreal have increased to about the same extent that those of Buffalo have declined. Thus the total receipts of grain, including flour reduced to wheat, in Buffalo, for four years, have been as follows: 1866, 57,806,708 bushels; in 1867, 50,274,874; 1868, 49,983,204; 1869, 45,472,133. The receipts of wheat and flour at Montreal, in the same time, are thus stated: Flour—1866, 740,750; 1867, 693,154; 1868, 789,041; 1869, 1,021,419. Wheat—1866, 951,597; 1867, 2,831,637; 1868, 2,426,882; 1869, 7,817,470.

“The legislature of New York, with the indubitable facts of the diversion of trade produced by the high tolls of 1869, can no longer plead want of information on this subject. They must act now, and act thoroughly. They must reduce the tolls to the exact amount that will cover the cost of repairs and management,—in other words, make the canal practically free. Any longer persistence in the present policy will result in the general abandonment of the canal, even for the local traffic along its line.”

Not a bushel of wheat, or a pound of other freight, from the upper lakes going to Montreal takes that route (by the way of lake Champlain and the “Northern canal”) to New York; hence, everything going to that point is lost to the New York trade. Western wheat and flour arriving at Montreal has increased from 1,692,347 bushels in 1867, to 12,424,565 bushels in 1869. Let, therefore, that route be completed to Montreal, and we will be most abundantly sustained in the assumption, that the entire export of Western wheat and other agricultural products will be through that route. The writer of the above article says, the State of New York must act now, and act thoroughly. “They must reduce the tolls (on the Erie canal) to the exact amount that will cover cost of repairs and management,—in other words, make the canal practically free.” We submit, however, that that will not remove the difficulty, or perceptibly reduce it, because it will only take off about two and one-half cents per bushel on wheat, (on other freights in the same proportion,) whilst the average cost of transportation from Buffalo to New York City, via the Erie canal (or the railroads) is about twenty-two cents per bushel. With this route open to Montreal, and wheat can be carried from Chicago to Liverpool for twenty cents per bushel. It is even now carried for about thirty-five cents.

We are then most abundantly sustained in the proposition that New York City must furnish the means to construct that part of the route from the St. Lawrence, at Montreal, by the way of Lake Champlain and the Hudson river, or lose the trade of the West.

No one can understand this subject more thoroughly than the statesmen and people of the State of New York; but so long as the West submits to the enormous exactions that heretofore have been, and are still imposed upon her industry and commerce, just

so long will they be continued. The West has the remedy in her own hands. Let her apply it by putting forth one united and simultaneous effort to open up this "water route" "from the river to the ocean," and she has applied a corrective as permanent and lasting as the ages.

THE VIEWS OF HIS EXCELLENCY THE GOVERNOR, AS EXPRESSED IN HIS ANNUAL MESSAGE, IN RELATION TO THE WISCONSIN AND FOX RIVER ROUTE MOST TIMELY AND APPROPRIATE.

And not only so applied to that route, but also in relation to the entire work to the Atlantic seaboard. In the language of His Excellency, "the improvement of water channels will reduce the charges on every ton of heavy freight, whether moved by water or rail!" With this route completed to the Atlantic seaboard as contemplated, and there would be an annual saving, to Iowa alone, of at least \$5,000,000 in the transportation of her cereals and other agricultural products to an Eastern and European market.

WISCONSIN AND FOX RIVER IMPROVEMENTS.

"I have given this subject, during the past five years, much thought and some personal examination. It is receiving consideration in many parts of the country, and especially in the Northwestern States. Cheap transportation is the one question which is vital to these States, and to none more so than to Iowa. It is of little consequence whether her products be moved by rail or water, but of the greatest consequence that they be moved at rates whereby the market price will give back the cost of production and a living profit to the farmer. If railways can carry heavy freights as cheaply as waterways, it is certain that they will not unless compelled thereto by water competition. The improvement of water channels will reduce the charges on every ton of heavy freight, whether moved by water or by rail. Our State has raised, during the past year, nearly fifteen million of bushels of wheat for export. With the freight charges on this quantity reduced—in the cost of transshipment and movement—only ten cents a bushel, the total saving will amount to \$1,500,000. But Iowa exports large quantities of other grains and other products, and imports great amounts of lumber, merchandise, etc., so that this large sum would not be one-half the yearly saving to Iowa alone. The States of Wisconsin, Illinois, and Minnesota, and those lying further west, will be benefitted, but, perhaps, in a less degree. With wheat selling in the State of Iowa at an average price of fifty cents per bushel, and on Lake Michigan at seventy cents per bushel, our representatives in Congress should not long hesitate in assuming for their constituents their part of the necessary debt in order to open an ample water-way between the Mississippi and the Lakes. The full results no one can foresee. It would unite the commerce of the lakes, with its two thousand vessels, to the commerce of the Mississippi and its tributaries, with their more than two thousand vessels;

and the commerce so united, measured by tons or by values, would be greater than the existing foreign commerce of the country. The highest estimated cost of this improvement, made by Gen. G. K. Warren, government engineer, is about four millions of dollars.

"I deem this question so vitally important to the agricultural interests of our State, that I may (if time will permit) submit at more length my views upon the subject."

OBJECTS AND PURPOSES OF THE MOVEMENT.

The one all-absorbing and prevailing idea which the people of the West, and more especially the northwest, without distinction of party, desire to impress upon the attention of Congress and the country, is the indispensable and imperative necessity of a great national highway in the form of a ship and steamboat canal, (of a capacity equal to the river and lakes), between the Mississippi and the Atlantic seaboard, by the way of the Wisconsin and Fox rivers, the great lakes, the river St. Lawrence, and Lake Champlain, to New York City. This great national highway is demanded alike by military prudence, the necessities of the agricultural and commercial interests of the country, and sound political wisdom. And although the main portions of this must be accomplished (if at all) by private enterprise and capital, still there is much that Congress can and ought to do; therefore,

Resolved, by the General Assembly of the State of Iowa, That Congress be requested to make an appropriation for the speedy completion of the water route from the Mississippi to Lake Michigan, and by way of the Wisconsin and Fox rivers, in such a manner, and upon such terms and conditions, as to encourage, stimulate, and promote the whole work set forth in this memorial, Congress retaining the control of rates of toll, and the regulation of the management of said canal. Also, that such other legislation be had, and measures taken, as may be necessary to secure the speedy and successful prosecution of this great national and continental enterprise.

Resolved, That our Senators and Representatives in Congress be requested to use their best efforts to secure the legislation herein desired.

Resolved, That the Governor be requested to transmit this memorial and resolutions to the Governor of each of the Western and Northern States, with a request that they may be laid before their respective legislatures, and other constituent bodies, now or soon to convene.

Resolved, That a copy of this memorial and resolutions, duly authenticated, be transmitted to the President of the United States, the President of the Senate, and Speaker of the House, and each member of Congress from this State.

Approved, April 12, 1870.