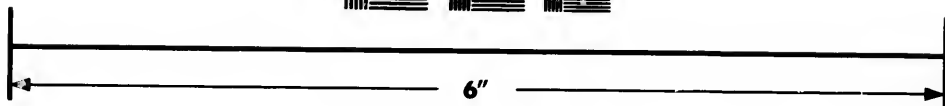
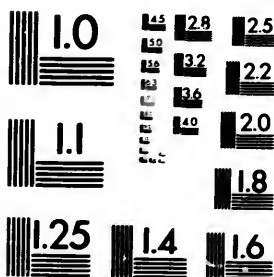


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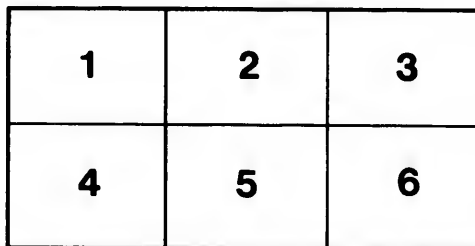
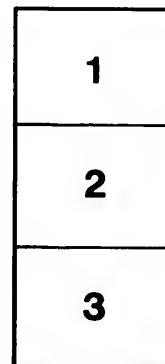
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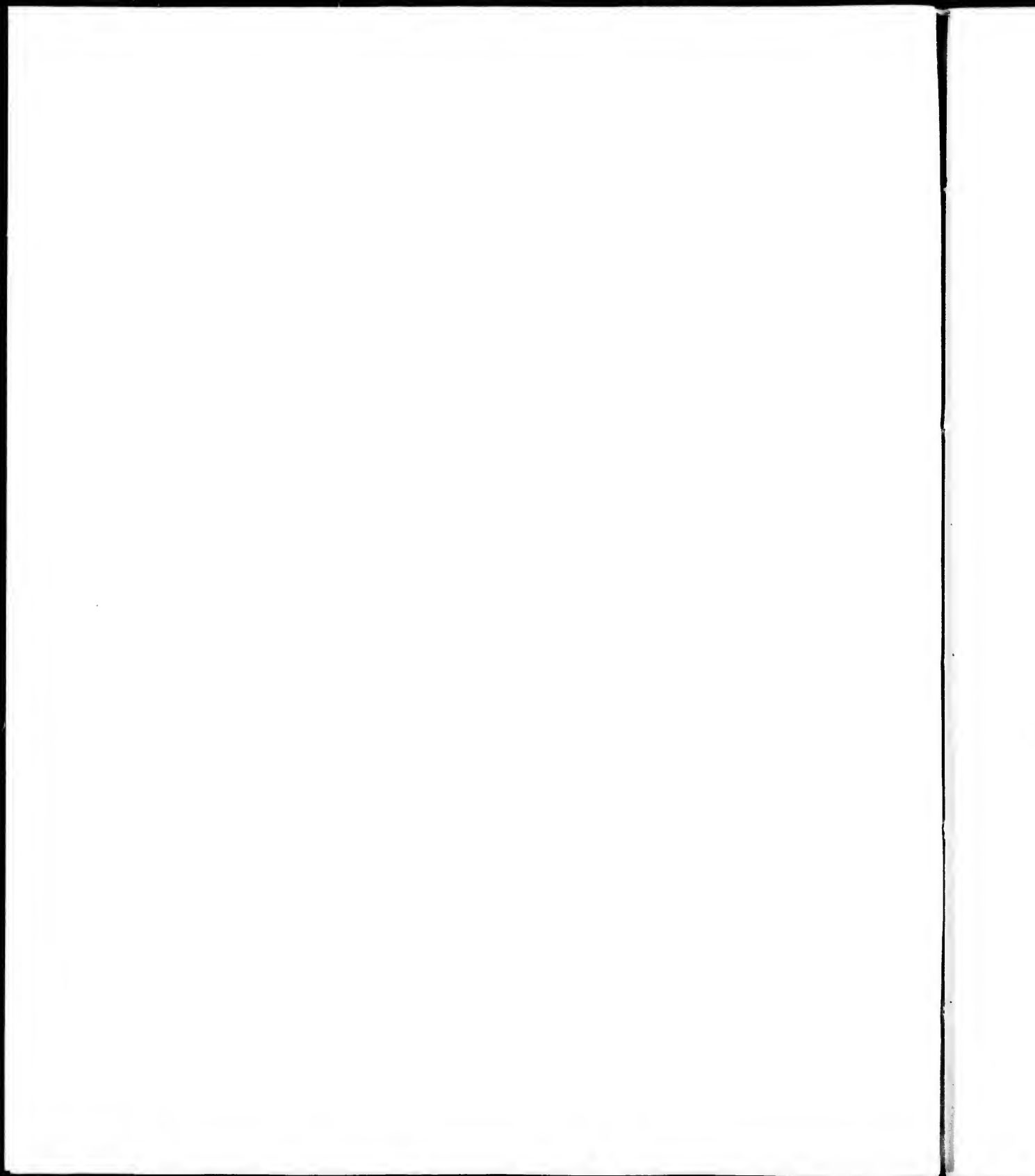
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THE
Welland Canal Company,
INCORPORATED
BY ACTS
OF
THE PROVINCIAL PARLIAMENT,
OF
UPPER CANADA,
IN THE SESSIONS OF 1824 AND 1825.

Directors.

HONORABLE JOHN HENRY DUNN, ESQUIRE, } *President.*
RECEIVER GENERAL OF THE PROVINCE.

HONORABLE WILLIAM ALLAN, ESQUIRE, } *Vice-President.*

HENRY J. BOULTON, ESQUIRE, } *late Vice-President.*
SOLICITOR-GENERAL OF THE PROVINCE.

HONORABLE JAMES IRVINE, ESQUIRE, } *Quebec.*

SIMON M'GILLIVRAY, ESQUIRE, } *Montreal.*

GEORGE KEEFER, ESQUIRE, } *Niagara.*
WILLIAM HAMILTON MERRITT, ESQUIRE,

Treasurers and Bankers.

THE CORPORATION OF THE BANK OF UPPER CANADA.

Agent and Secretary.

WILLIAM HAMILTON MERRITT, ESQUIRE.

MONTREAL:

PRINTED BY JAMES LANE.

1826.

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Director's Report.

TO HIS EXCELLENCY SIR PEREGRINE MAITLAND, K. C. B.

LIEUTENANT GOVERNOR, &c. &c. &c.

TO THE HONORABLE LEGISLATIVE COUNCIL,

AND

TO THE HOUSE OF ASSEMBLY OF THE PROVINCE OF UPPER CANADA;

TO THE PROPRIETORS OF THE WELAND CANAL,

AND

TO THE PUBLIC;

THE DIRECTORS RESPECTFULLY SUBMIT THE FOLLOWING REPORT: VIZ:

An Act passed the Legislature of the Province of Upper Canada, in February 1824, incorporating a Company, with a capital of £40,000, to cut a Canal for boat navigation round the cataract of Niagara, and thus to open a navigation from lake Ontario to lake Erie, by means, in part, of the river *Welland*, which flows into the Niagara river above the falls, and from which the Company took its name, being incorporated under the style and title of the *Welland Canal Company*. About ten thousand pounds, or one-fourth of the whole capital, was immediately subscribed, the Company was regularly organized, and the work commenced; but the Directors, upon a minute inspection of the uncommon natural facilities which presented themselves on the line of the Canal, were induced to postpone their operations, from the conviction that such a vast object as that of connecting the upper with the lower basin of the St. Lawrence, demanded a water communication of far greater dimensions than the one contemplated, and capable of admitting all such vessels as usually navigate the lakes. On referring the plans and estimates to the Stockholders, the conduct of the Directors was highly approved, and it was determined to petition the Legislature for an Act, authorising them to increase their capital stock to £200,000, a sum, trifling as it appears to be, compared with the magnificence of the object to be obtained, yet quite sufficient to complete a Canal capable of allowing vessels of considerable burthen to pass from one lake into the other; thus opening a continued internal navigation, without breaking bulk, of more than a thousand miles.

The Legislature had only to revert to the peculiar position of the country, to be convinced of the immense advantage that must accrue to the Canadas, and to the British Empire, from the completion of this magnificent undertaking, and therefore readily granted the prayer of the petition, by passing an Act on the 13th April, 1825, enabling the Company to increase their stock, for the purposes therein mentioned, to £200,000.

On the day subsequent to the passing of this Act, the Directors assembled, and being anxious to preserve the management of the Company under British influence, they determined to reserve a considerable part of this increased stock, in order to be offered, in the first instance, to subscribers in England. Of the original stock of £10,000, more than one half had been subscribed in New-York, and there was little doubt but that the whole capital required might at once have been obtained in that opulent and enterprising city; whereas, in Canada, the want of capital in the country precluded any prospect of obtaining subscriptions to so large an amount. Feeling the expediency of immediately obtaining means to proceed with the works which had already been commenced, and at the same time being desirous that at least a majority of the Stockholders should be British subjects, the Directors resolved to limit the subscriptions in New-York to £75,000, which sum was immediately taken up by the old Stockholders, to whom the option was first given, so that at a public meeting which had been advertised for opening books and receiving subscriptions, no subscription could be accepted; and such was the general opinion of the benefit promised by the undertaking, that more than the whole capital would, at that meeting, have readily been subscribed, but the President of the Company, who was present in person, refused to receive more than the £75,000. Of the remaining stock £25,000 has been subscribed in the Canadas, and thus £100,000, or one moiety of the whole, remains to be subscribed in London. It was deemed requisite that one of the Directors should proceed to London to afford such explanations and local information as might be requisite, and to make the necessary arrangements for obtaining the required subscriptions. This mission was entrusted to Mr. Solicitor-General BOULTON, late Vice-President of the Company, who resigned that office on his recent departure for England, and with whom Mr. M'GILLIVRAY, another of the Directors, being about to return to England, is now associated. The delay which has taken place in submitting the object of their mission to the public in the British metropolis, has arisen from the necessity of procuring correct maps of the country through which the Canal is to pass, and proper sections, reports and estimates of the work itself, for the information of those who might desire to become subscribers. In the mean time the Canal is rapidly advancing, for the Directors, under the impression that more stock than they require would readily be taken in London, and assured that at all events it would be taken in New-York, if an appeal to foreigners should become requisite, did not think it necessary to delay entering into contracts till the subscription was full.

In offering half the stock of the Welland Canal to the merchants and capitalists of the first commercial city in the world, the Directors act with confidence upon two facts: First, that the other moiety has been already taken up by the merchants and capitalists in New-York and the Canadas, who are well acquainted with the country which this Canal is intended to unite, and who although in the habit of obtaining six per cent for their money, the legal interest in these countries, consider this a far more profitable method of employing their capital. The second fact presents itself on viewing the map of the country, by which it will be seen that the Canal must be the avenue of greater wealth and commerce than any other now on the face of the earth.

But in order to render this mighty undertaking familiar to the British public, the Directors beg to be indulged in giving a short review of the causes which led to its commencement, and to the astonishing results which must follow its completion. In March, 1807, the Senate of the United States of America passed a resolution requiring the Secretary of the Treasury, Mr. Gallatin, to report to them, at their next session, on the subject of Roads and Canals. In obedience to this order, the Secretary delivered, on the 4th April, 1808, a most able state-paper, in which a general view is taken of the greater number of practicable Canals which could be made with advantage in any part of the Union. Some offering benefits which might well be deemed national, others common to several Provinces, and a few only of advantage to individual States; but all tending directly to the augmentation of the power and wealth of the Republic. Among other Canals, one for a sloop navigation round the falls of Niagara, was suggested, in order to unite lake Ontario with lakes Erie, Michigan, Huron and Superior. And to preserve the advantage of being the carriers and exporters of their own produce, another Canal, as a continuation of the line from lake Ontario to the Hudson, is also proposed in the same elaborate document.

It is quite evident that this able communication of Mr. Gallatin's, if it has not suggested, has encouraged the different States to undertake and complete many Canals now in operation; and among others, that stupendous work of three hundred and fifty three miles long, which connects lake Erie with the tide waters of the Hudson river; for it follows the line, or nearly so, which Mr. Gallatin points out, till it reaches the place where it becomes necessary to diverge either to lake Ontario or lake Erie.

The Secretary's report was for several years considered speculative, and visionary; and when the practicability of this magnificent Canal was first announced by some eminent and intelligent men of the State of New-York, the most distinguished of whom was Governor Clinton, who still lives to enjoy the fruits of his patriotic and persevering exertions, it was treated with contempt and derision. It appeared to be a century before the age; and men incapable of enlarged views; while they were forced to admit that it was splendid on paper, declared it impracticable: that the resources of the whole Union were unequal to the expense, that, if made, it would be useless, and consequently that the capital would be sunk, or ruinously unproductive. Even political animosity was mingled in the contest; for the advocates of the project being friendly to moderation, they were stigmatized as men hunting for popularity by visionary schemes, which must terminate in the ruin and degradation of the State.

When, however, the reiterated explanations of the general utility of Canals, and the vast advantage which must accrue to New-York by directing to its market all the productions of the western States, had made an impression on the public mind, and began to dissipate the prejudices of its opposers, the Legislature was induced to pass an Act in 1811, to provide for the improvement of the internal navigation of the State. The Commissioners, appointed under this law, procured plans and surveys of the proposed Canal, by which it appeared that the expense would be much less than had been anticipated even by the most frugal calculators. This perhaps arose from the fact, that two sources of expense, which in other countries are extremely heavy, here cost nothing, viz: Land for the bed of the Canal, and the water necessary for its supply. The land was readily and joyfully given by the proprietors, and abundance of water was found wherever it was wanted. These estimates and

the facilities which the face of the country exhibited, opened the eyes of the public, and at length good sense triumphed over every opposition.

A water communication to join the Hudson with the western Lakes was now so far from being considered impracticable, or attended with ruinous expense, that it was deemed of easy accomplishment, and of too much utility to be longer delayed. It nevertheless still appeared an undertaking far too great for a Company, or even for a single State, and an application was therefore made to the general government, as well as to those States which were more immediately interested in its accomplishment, for pecuniary assistance. No aid was given: Congress pronounced it a provincial, not a national object, and the other States immediately interested, had either no available funds, or were not sufficiently convinced of the benefit to themselves to justify any sacrifice.

The State of New-York was therefore left entirely to its own resources. But disappointment did not chill the ardour of the friends of the measure; on the contrary, it increased their diligence and zeal. Some delay, however, was produced by a difference of opinion among intelligent men, whether it would be more advantageous to carry the Canal at once from the Hudson to lake Erie, or first to lake Ontario, and then to pass by a short cut round the falls, as had been suggested by Mr. Gallatin.

Those who were for making use of lake Ontario as part of the line, agreed that it was absurd to abandon the navigation of the most noble, the most beautiful, and most commodious means of internal communication ever presented in any part of the world. That to reject such a gift, provided by the bounteous and ever prodigal hand of nature, without any expense, and on a scale, which human science and human labour, or the treasures of a world, are incompetent to rival, and to institute in its stead a narrow, winding, obstructed Canal, would be to insult common sense, and to degrade the character of their rising nation. That a Canal round the falls of Niagara should be for a ship navigation, since it was truly a national object, and ought to be executed on a scale of unrivalled magnitude. That it was a task, which if properly completed, would be of equal duration with the world, and ought therefore to be accomplished at any cost, and at any trouble, not grudging the most liberal supplies, or neglecting to apply them with unremitting attention and perseverance, till the object is attained.

Such a Canal, said they, has been estimated at £250,000, but it is more than probable, that it will cost more than five times that sum, and yet it will be cheap, for of its vast productiveness there can be no doubt. Already the trade with the western States is great, notwithstanding the difficulties which it has to encounter, but the rapidity of its increase from the growth of population, when these difficulties are removed, it is not easy to conjecture. Through this Canal must the whole commerce of the western countries for ever pass, whether destined to the St. Lawrence, or to the Hudson, to New-York, or Montreal.

Once afloat on lake Ontario, a Canal round the rapids of Oswego, will present a fair competition between both markets, and the commodity will reach the one where its price is higher. This alone is the interest of the producer, and indirectly of the consumer, and by such a communication only can justice be done to the inhabitants of the United States, living on the banks of the Canadian lakes.

To this it was answered, that to cut a Canal round the falls of Niagara, in order to admit the productions of the western States into lake Ontario, would be to commit suicide, as it were, on the commerce of New-York. For once afloat in the bosom of Ontario, every thing would proceed to Mont-

real, where the best market will generally be found. But were the markets equal, or even a little better at New-York than at Montreal, the commodities passing through the Canal would proceed to the latter, as they could reach Prescott or Ogdensburgh, only one hundred and twenty miles from the Canadian market, in the same vessels as they could the mouth of the Oswego, where the proposed Canal from Ontario to the Hudson is to commence, a point nearly four hundred miles, or more than three times that distance from New-York. Moreover, produce can be conveyed from Prescott to Montreal, in thirty hours; and from Oswego to New-York it must take at least eight days. These arguments were decisive with the merchants of New-York, who were the principal supporters of the Canal, and who, as might have been expected, were little disposed to hazard the loss of a trade so lucrative and immense, by allowing it even a chance of passing through another channel. It was therefore determined to extend the Canal at once to lake Erie: so that after the productions of the vast countries west of the falls of Niagara should be once unloded from the vessels on the lake into boats on the Canal, there might be no danger of their being diverted from the New-York market by the temptation arising from the greater facility of conveyance to Montreal.

There were doubtless other considerations which had great weight with the Legislature of the State of New-York, in persuading them to adopt the present line of Canal, in preference to the route by lake Ontario. The public mind was indeed too enlightened on the subject of Canals, to relinquish the one proposed between lake Erie and the tide waters of the Hudson; but assistance from other States, and the general government, had been asked and refused, and therefore the expense of the more magnificent work appeared far beyond their abilities. Some were even afraid that a bont Canal through so vast an extent of country would exhaust the revenues of the State; and it was not without much apprehension that the attempt was made, on the very reduced scale of forty feet wide at the top, with four feet of water; to extend from the Hudson, at Albany, to Buffalo and Black Rock, on lake Erie, a distance of three hundred and fifty three miles.

The commencement of this stupendous work, excited the most earnest attention of the inhabitants of Upper-Canada. It was likely to deprive them of the advantage of becoming the carriers of all the produce of the extensive countries belonging to the United States, west of the falls of Niagara, and to divert much of their own produce to New-York; and although they beheld in the Canal a pledge of peaceable intention on the part of the American People, and a relinquishment, by at least the State of New-York, of any hope of ever conquering the Canadas; and were moreover filled with admiration at the magnitude of the work, it was nevertheless attended with feelings of regret that the resources of the Province were too feeble to enable them to improve their own greatly superior natural advantages.

But in the state and with the prospects of the Colony at that time; recovering slowly and with difficulty from the cruel effects of an unnatural and desolating war, in which the inhabitants had suffered most severely; the produce of the soil remaining on the hands of the cultivator, without a market; and the extension of Commerce restricted by the shackles of a colonial system, the child of a darker age; it seemed hopeless to attempt any competition with their powerful and enterprising neighbours.

So soon, however, as the more liberal policy of the enlightened Statesmen, who now direct his Majesty's Councils, began to be developed, and a prospect was opened to the Colonies of a free-

commerce with all nations, and of receiving greater privileges and advantages in the ports of the Parent State, as well as in those of each other, a new spirit was infused into the Province, and enquiries were made to ascertain what natural facilities offered themselves for the improvement of internal navigation. Accordingly in 1821, an Act was passed by the Legislature, appointing a Board of Commissioners to report upon this interesting subject.

It is due to the memory of the late Mr. Nichol, formerly an active and very intelligent member of the Legislature, to remark, that his zeal in the *cause* of public improvements occasioned this measure to be brought forward at an earlier period than it otherwise would have been; and that so long as he lived, he persevered very faithfully in carrying it into effect.

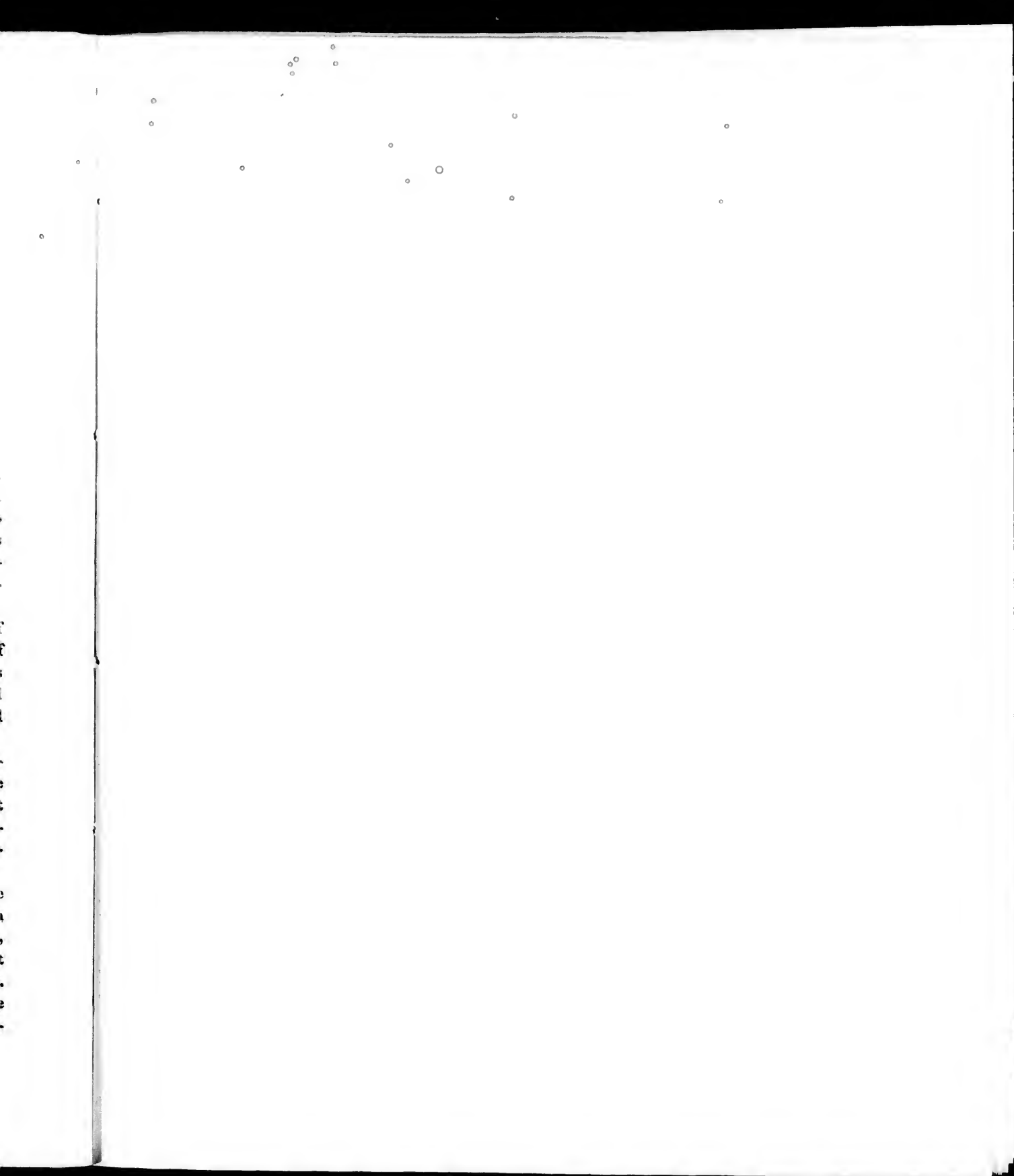
The example of the State of New-York, vigorously engaged in completing an inland navigation, from the Canadian lakes to the ocean, a work which might have well been thought to exceed its power, directed the attention of the Commissioners to the joining of lakes Erie and Ontario by a sloop navigation. This was not only the most obvious, but the most important work which could engage their attention; and accordingly a survey was made by an able engineer, and estimates of the probable expense carefully calculated.

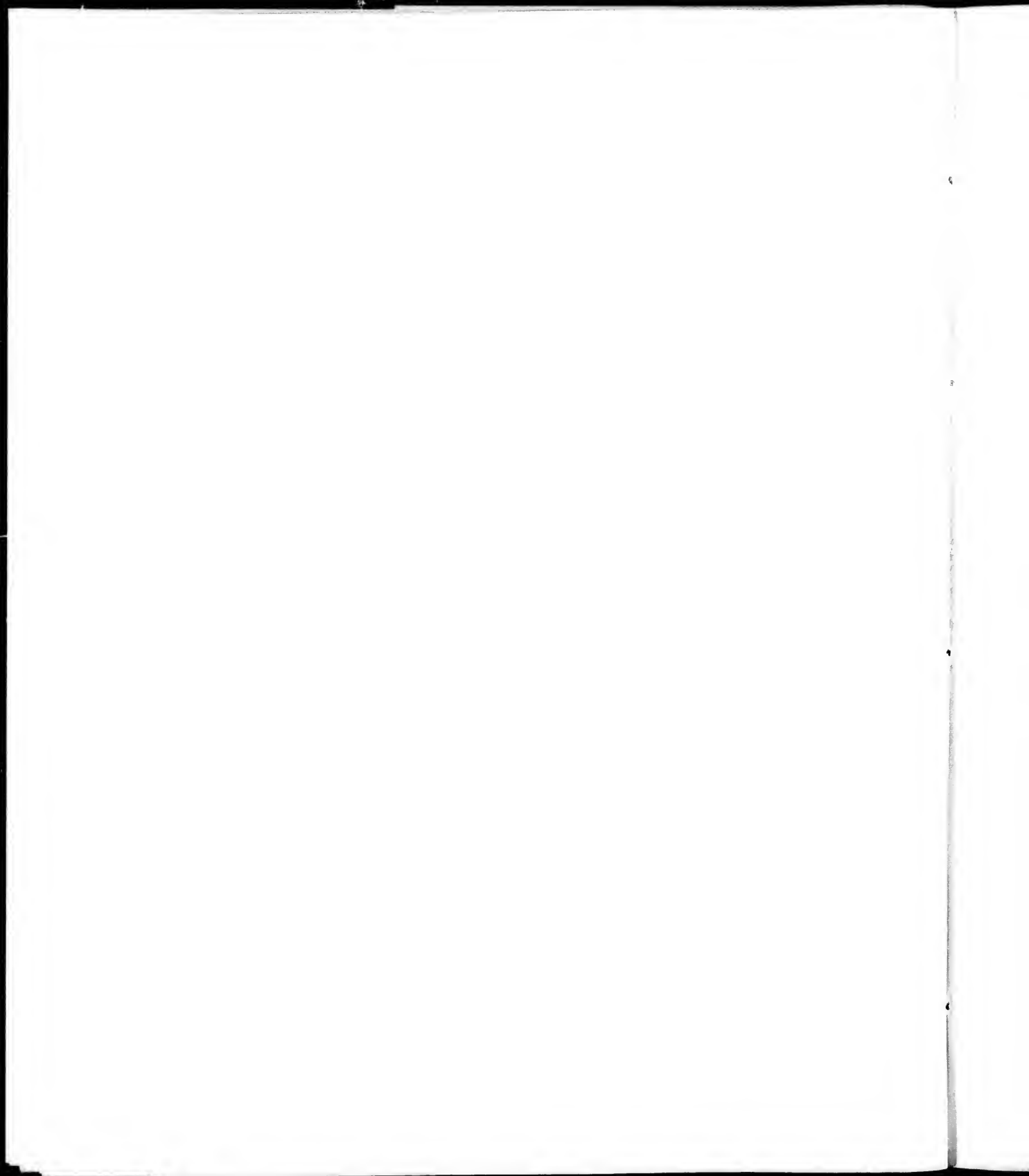
Subsequent experience, and examination, have shewn that the route chosen by the Commissioners, though possessing some peculiar advantages, was too circuitous; by which the expense was very much enhanced. The conception was indeed magnificent: the Canal was to have seven feet water, and to admit all such vessels as usually navigate the lakes; but the execution was far beyond the resources of the Province, and the Legislature was compelled, though not without reluctance, to defer the undertaking till more propitious times, and the growing wealth of the Colony might justify its commencement.

This delay, instead of checking, increased the ardour for internal improvement; even persons of moderate temperament were encouraged by the success which attended the opening of every mile of the New-York Canal. No sooner was one section finished, and the water introduced, than the tolls did more than repay the interest of the capital expended; and in prosecuting the work, it was found that, contrary to usual experience, the estimates of the engineer almost always exceeded the actual expense.

These matters of fact induced some active spirits, who had a more immediate interest in connecting the waters of lake Ontario and lake Erie, to examine whether a more favourable line could not be discovered, than that which had been adopted by Colonel Nichol and the other Commissioners. It had indeed been conjectured that there were more convenient routes for a Canal, and accordingly surveys were made at different points; but owing to the ignorance of the persons employed, or the greatness of the expense attending a minute examination, they all came to nothing.

At length several enterprising gentlemen, living on the banks of a small creek, which runs into lake Ontario, called the *Twelve Mile Creek*, the source of which is very near the deep river *Welland*, which communicates, through the Niagara river, above the falls, with lake Erie, were induced to believe, from carefully observing the valley of the creek, and its gentle declination towards lake Ontario, that it afforded singular facilities for Canal navigation. One of these gentlemen, W. H. Merritt, Esq. possessed of great zeal and energy, and to whose exertions in forwarding the Canal, the Province will ever be indebted, entertaining this idea, examined the course of the creek, and was so much en-





couraged with the facilities it presented, that procuring the assistance of an experienced engineer, a line was surveyed, by which it was discovered that very little cutting would be necessary, and that the locks could be placed in a ravine of such a gradual declivity, that they could be built at sufficient distances from one another.

Pursuing with ardour his object, Mr. Merritt procured plans and sections, as well as estimates of the expense of completing a Canal for boats, which hardly amounted to £40,000. Having proceeded so far, he very naturally supposed that this sum was not too much to be assumed by a private Company, and many persons thinking well of the project, joined him in petitioning the Legislature, that they might be incorporated with a capital of £40,000, for the purpose of opening a Canal for boat navigation between lakes Erie and Ontario. On passing this law, in the spring of 1824, a large portion of the capital was immediately subscribed, and the work was actually begun; but as we have already noticed, it appearing, on a more minute examination of the route, to be uncommonly favourable, and capable at little additional expense, in comparison to the object, of admitting an excellent sloop navigation; the Directors thought it prudent to pause in their proceedings, and to petition the Provincial Legislature to allow them to enlarge their capital to £200,000, in order to make the Canal capable of receiving such vessels as usually navigate the lakes.

The Legislature was the more disposed to grant this increase of capital, from the many advantages which the State of New-York was already reaping from such parts of their Canal as were finished, though made on a scale so inferior. The moment that the Act passed, the stock was taken up rapidly by those who were best acquainted with the country; thus affording to strangers the strongest guarantee possible, not merely of the safety, but of the uncommon advantages which must ultimately accrue to the Stockholders. The avidity with which the stock was sought in the city of New-York, has been already mentioned, and the facility with which the whole capital required might there have been obtained; but Upper Canada is a British Colony, the Directors are loyal British subjects, and anxious that their fellow subjects should be their constituents, and in the hope that the Province might derive other important benefits from British capitalists taking an interest in its improvements, and finding that interest advantageous to themselves, they reserved, as already stated, £100,000 of their capital to be offered to subscribers in England; and confident in the vast benefit of the undertaking, and anxious to accelerate its completion, they are in the mean time proceeding with the work, as if the subscription had already been filled.

The proposed Canal, as appears from the report and drawings of the engineer, commences at the mouth of the Twelve Mile Creek, on Lake Ontario, and terminates at the mouth of the Grand River or River Ouse, on lake Erie, a distance of forty-one miles. It may be described generally as consisting of *three* great sections; the *first*, of the length of *sixteen miles*, ascending from lake Ontario, passing through a ravine in the Mountain Ridge, and entering the river Welland, through a deep clay bank which divides it from the Mountain Ridge, and in which, for a distance of three miles, the Canal is to be cut to the depth of about fifty-six feet. This *deep cut* is already under contract, and it is ascertained that the bank consists wholly of clay. It is also a peculiar advantage possessed by this line, that in passing through the Mountain Ridge, and in a considerable part of the descent from thence into lake Ontario, the Canal follows the direction of the natural ravines, where no excavation will be required, and where it will only be requisite to form embankments in which to construct the locks.

whilst the width of the ravines is such as to form ample reservoirs; and the slope is so easy and regular, that one of these reservoirs will in almost every instance be interposed between each two locks throughout the descent, and the sloping banks of these ravines, and the abundant and inexhaustible supply of water, afford an almost unlimited power of hydraulic machinery, which it is intended to connect with the falls at the different locks, and which it is hoped will soon afford a considerable revenue to the Proprietors of the Canal. The difference of level from lake Ontario to the river Welland, is about three hundred and thirteen feet, requiring about thirty five locks; and this is the first section to be completed.

The *second* great section of the Canal, consists of the river Welland itself, which for a distance of nearly thirty miles, resembles a Canal much more than a running stream, having scarcely a perceptible current, and being from twelve to thirty feet deep; so that it will only be requisite to construct a towing path along its bank. The Canal opens into the Welland, about eight miles above its entrance into Niagara river at the village of Chippawa, and by that route, on constructing the towing path from the opening of the Canal to the mouth of the Welland, an inland navigation round the cataract of Niagara, is in fact accomplished, because from the mouth of the Welland vessels *can* sail up the river Niagara into lake Erie: but below Fort Erie, there is a strong current in the river, and besides avoiding this impediment to the navigation, in the case of vessels ascending, there are other important advantages which will be attained by the intended opening of the Canal into lake Erie, through the Grand River. Therefore in addition to the towing path from the Canal to the mouth of the Welland, there is another towing path to be constructed ascending the course of the river, for a distance of eleven miles, which may be described as constituting the second great section of the Canal.

The *third* great section, is a cut of about twelve miles from the Welland to the Grand River, through a flat swampy tract of country, called the Canboro' or Wainfleet Marsh, the surface of which is about eight feet higher than the level of lake Erie. It was at first proposed to cut the Canal on a level with the surface of this tract of country, and to supply it with water by a feeder from the Grand River above the rapids; but the present, and the more improved plan is, to cut an excavation through the Canboro' March, to the depth of sixteen feet, which will render lake Erie at once the summit level, and the feeder of the Welland Canal throughout its whole extent.

At the mouth of the Grand River there is a harbour to be constructed, and it will thus be seen, that the Canal has two outlets for vessels ascending from lake Ontario; *one* through the Niagara river, into the eastern extremity of lake Erie, and opposite to the entrance of the American grand Erie Canal; and *another* through the Grand River, into lake Erie, at a distance of forty miles nearer to the central and western shores of the lake; besides which reduction of distance in lake sailing, the route by the Grand River offers other important advantages to vessels from the upper part of lake Erie. From the Grand River to Fort Erie, the navigation on the north shore of lake Erie is dangerous, and at Fort Erie there is no good harbour, nor is it ascertained if the new American harbours at Buffalo and Black Rock, will resist the severe gales of wind which are frequent in the fall of the year, and the heavy surf which rolls on the beach at that end of the lake, where the coast is much more exposed to its violence, than at the mouth of the Grand River. The prevailing winds in the lake, are from the westward; and by a glance at the map it will at once be seen, that a gale of wind

from that quarter, sets on the beach at Buffalo, with an uninterrupted sweep of above two hundred miles; whereas the mouth of the Grand River is partially protected by headlands on each side of its own bay, and further sheltered from the gales of wind by Long Point, which projects near thirty miles into the lake.

Another circumstance is to be noticed, peculiarly advantageous to the Canal entering at the mouth of the Grand River, and which arises from the form of lake Erie, the prevalence of westerly winds, and the gradual, though scarcely perceptible, flow of the current towards the outlet of the lake, into the Niagara river, where the current being at length contracted as into a funnel, an accumulation of ice from the lake regularly takes place every spring, and effectually blocks up the channel; thus forming a barrier which prevents the opening of the navigation at Buffalo and Fort Erie, for a certain time after the ice has disappeared in the rest of the lake, and after the opening of the Grand River, which as it flows into the lake without obstruction, carries away the ice before it with the first freshet in the spring. This difference of time betwixt the opening of the navigation of the Grand River and the river Niagara, has seldom been less than three weeks, and in some seasons has been five weeks; but estimating it at the shorter period, it gives to the Welland Canal the advantage of being open before the American Canal for three weeks of the most important part of each season.

These general inductions are deemed sufficient for this place; the details and estimates are in the hands of the Directors, who will most cheerfully submit them to the inspection of any person who may be disposed to examine them. They have been drawn up and calculated by an engineer of great intelligence and professional knowledge, on whose accuracy, the Directors, from long experience, have the most perfect reliance. From the whole it is seen at how little expense the Canal may be constructed, and how much the bounty of nature assists in its formation.

It was happy for Upper-Canada that the Canal undertaken in the State of New-York, and now almost completed, is on a scale so very small, and is nevertheless attended with immense profit, for this example encouraged the colonists to attempt what perhaps they never would have dared even to imagine, a Canal of similar dimensions. This attempt led to a minute examination of the route, the facilities of which appeared so great, that their views gradually expanded, and they began to consider a Canal on a far greater scale as possible, and not greatly beyond their resources; the more they examined the country through which it must pass, the more easy of accomplishment did it appear; and from considering it possible, they began to think it advisable, and even despise the more humble attempt which they had formerly conceived. It was therefore equally fortunate that a Canal of similar dimensions with that of our neighbours was first proposed, and that it has been enlarged from a conviction, arising from the existence of local advantages, which will render it infinitely more profitable, convenient and important. Such are the causes that led to the project now going forward, of uniting the great lakes of Canada, by a sloop navigation.

In touching upon these mightily results, which must attend, or soon follow, the completion of the Welland Canal, the truth will assume the appearance of the most extravagant exaggeration to those who do not make themselves acquainted with the singular geography of North America. We therefore desire all those who are astonished at our remarks, and feel inclined to pronounce them erroneous, to take this preliminary step, by placing a map before them, and estimating the wonderful water capabilities which present themselves, and the immense countries which can approach the sea only by

the St. Lawrence. Moreover, to judge correctly, those conversant with the largest and most productive of European Canals, must divest themselves of all prejudices in their favour, and only take into account the facilities of communication which they offer, when compared to those which will be opened by the Welland Canal.

Darby, one of the most faithful of geographers, who never published a map till he had traversed on foot the country which it represents, estimates the valley of the St. Lawrence above the falls of Niagara, exclusive of the lakes, at 186,700 square miles; to which we may add the valley of the Ohio, containing 226,000 square miles, when the Canal now cutting between that river and lake Erie shall be finished. Thus, the commercial intercourse between the sea and upwards of four hundred thousand square miles of fertile land, must pass through the Welland Canal, or the smaller one belonging to the State of New-York. When this fact is considered, the first idea that strikes us is, the impossibility that the produce of countries so vastly extensive can pass through these two Canals, and the necessity that soon must arise for opening other communications to meet the increase of commerce; but as no other can be made with any prospect of success, except by the straits of Niagara, the Welland Canal need fear no competition.

The reader will have a more distinct conception of the magnitude of the intercourse that must soon be carried on through these two Canals, by supposing Great-Britain, Spain, France, and Germany, to be so situated, that all their intercourse with other nations must come through one narrow valley, admitting only two or three convenient Roads or Canals. Such a supposition gives a vivid image of what must be the case at the straits which divide lake Erie from lake Ontario, and will enable us to form some estimate of the ships and boats that must pass through these Canals, bearing the riches of the western world to the Atlantic Ocean. Nor are these countries in a state of nature, and without inhabitants; they are indeed thinly peopled, in proportion to their extent, but nearly three millions are scattered over them; and from the known rapidity of the increase of population in new countries, the period is at hand when the quantities of produce will be so great as to compel an enlargement of the present dimensions of the Canal, great and magnificent as they are.

It has been found from experience, that when agricultural produce had to be carted one hundred and thirty miles, it ceased to be worth raising, as the expense of bringing it (a barrel of flour for example,) so far, added to that of raising it, exceeds or equals what can be obtained for it in the market, hence at this distance a check is put upon agriculture and the improvement of any country. It has also been found, that water communication, such as that which the Welland Canal opens, is to land carriage as one to twenty five; consequently, commodities can be conveyed by Canal and lake navigation three thousand two hundred and fifty miles, as cheaply as one hundred and thirty by cartage. But as one hundred and thirty miles of land carriage ceases to be profitable, let us take the limit of one hundred miles, at which a positive advantage accrues, and then a ton will be carried by water two thousand five hundred miles at the same rate as you can waggon it one hundred miles. In applying these facts, deduced by experience, to North America, we see the certainty of improving countries, which but for this, must have for ever remained in a state of nature, totally inaccessible to civilized man, and discover grounds for believing, that all the productions of the upper valley of the Mississippi, the settlement of which is now commencing, will be conveyed to the ocean by the Welland Canal; thus opening a farther extent of country of 225,000 square miles. Indeed the communication between

the Canadian seas and the river Mississippi, is now practicable at high water; in the spring loaded boats of a considerable size pass from lake Michigan into the Illinois river, which falls into the Mississippi, and from lake Michigan, by the Miami river, into the Wabash, a tributary stream of the Mississippi; but it would engage us too much in detail to point out the extraordinary facilities which a bountiful Creator has afforded for opening water communications, between the different parts of this vast continent. It is presumed that enough has been stated, to show the great quantities of produce which, of necessity, must pass through the Welland Canal; and it is easy to infer the consequent profits which must accrue to the Proprietors.

As the Welland Canal, and that which passes through the State of New-York from lake Erie to the tide waters of the Hudson, are in some degree rivals, it may not be out of place, to state the superior advantages of the former; but in doing this, the Directors disclaim all wish or intention of disparaging the mighty work of their neighbours; for to its astonishing success they are indebted for the commencement of their own. They confine themselves to matters of fact, and to the fair exposition of such matters as are necessary to enable those whose assistance they are soliciting, to form a correct judgment on the subject.

1.—The Welland Canal passing on the diameter of an ellipsis, forty one miles long, unites both lakes at little more than half the length of the present communication by Buffaloe and the falls of Niagara.

2.—Ships passing the Grand River where the Welland Canal begins, have to sail down lake Erie about forty miles, to the mouth of the New-York Canal, and here they are nearly as far from lake Ontario, as if they were at the entrance of the Welland Canal.

3.—The Welland Canal, as has been already noticed, has two outlets: Vessels may pass from lake Ontario by the Grand River into the broadest part of lake Erie; or they may proceed down the Welland into Niagara river, and thence to Buffaloe and lake Erie.

4.—Vessels have access three or four weeks sooner every year to the mouth of the Welland Canal, on lake Erie, than to that of the New-York Canal at Black Rock; add to this, that vessels are often detained many days in the Narrows between Black Rock and Point Abino, a distance of nine miles; but vessels passing through the Welland Canal, get at once into the broad lake, and therefore make good their passage.

5.—The New-York Canal commences about five hundred miles from the sea, of which three hundred and fifty three, is a boat navigation, at the end of which, you are farther from the market of New-York, than you are from Montreal at the extremity of the ship navigation opened by the Welland Canal.

6.—The Welland Canal will bring all the commodities of the western countries, without breaking bulk, within one hundred and twenty miles of Montreal, and the distance may be passed in less than two days, by large boats, on account of the rapidity of the stream; and it will, probably in a few years, be rendered capable of steam navigation.

7.—The Welland Canal opens an interrupted navigation from Prescott and Ogdensburgh, on the river St. Lawrence, for all craft used in navigating the Canadian seas, to the western shores of lakes Huron, Michigan, and by removing a trifling obstruction, to the head of lake Superior, a distance of more than twelve hundred miles, or upwards of three thousand miles of coast.

The late Mr. Fulton, justly celebrated for applying steam, with effect, to the purposes of navigation, calculated that one million of tons would pass the Canal, from Buffalo to the tide waters of the Hudson, in a very few years after its completion, (and ten times that quantity in a short period,) which at one hundredth part of a dollar per mile, taking the length of the Canal at three hundred and fifty miles, to avoid broken numbers, will yield a revenue to the State of three and a half millions of dollars per annum. This he reckoned as trifling to the revenue arising from the Canal when the vast regions west of the cataract of Niagara, became full of inhabitants. Supposing an equal quantity, or one million of tons, to pass through the Welland Canal, at the same time, it will give four hundred and ten thousand dollars per annum, or more than fifty per cent, on the original expense. Suppose only one half this quantity to pass, or that the one million of tons is equally divided between the two Canals, we have still two hundred and five thousand dollars per annum, or rather more than twenty five per cent on the capital expended.

If it be said that the State of New-York may remit, or greatly lessen, the toll; we answer that the cost of keeping so long a line of Canal in good repair, is very great, and will never admit of the total relinquishment of duty; but if it were entirely done away, it can easily be demonstrated, that commodities entering the Welland Canal, can be conveyed at less expense to Montreal and Quebec, than the same can be carried to New-York, were the whole toll remitted.

Hence it may be reasonably expected, that this magnificent work will, as a lucrative speculation for the Company, that is, when accomplished, be far superior in its advantages to any similar undertaking yet attempted in any part of the world; and it is therefore confidently offered and recommended to the attention of the public, both in Great Britain and in the Canadas, as a project combining the prospect of great profits to the Stockholders, with that of most important benefits to the public. It will tend to draw forth the latent resources of this rising Colony; bring to our ports a portion of the riches of the more fertile half of the United States; and while it must produce immense profit to the Company, it is an object honorable to those by whom it is to be accomplished, and a noble example of enterprise to our more wealthy and more populous sister colonies.

But, in addition to pecuniary advantages to the Company, commercial advantages to the Province, and honorable distinction to those, under whose auspices, and by whose means, this important undertaking is to be accomplished, it is a public measure, connected with even higher considerations. Improvements suggest and assist each other, and tend to the nourishment and developement of that vivifying principle, which exalts one nation above another, and which connects the distant branches of one parent stem to each other, by the ties of a common origin, of mutual attachment, and of reciprocal advantage; that principle which has enabled Great Britain to maintain the character of being at the same time the first nation in war, the first in manufactures, the first in public improvements; that principle which enabled the small and scattered population of this young Province, successfully to resist the repeated inroads of their powerful invaders in war, and which it is hoped may in peace enable them to follow the great example of the Mother Country in the career of improvement; and like her to derive wealth and power from the honorable exertion of individual enterprise.

In the progress of improvements, and amongst those *public works* which bestow wealth and power on nations, and which confer permanent distinction on individuals, there are none of equal importance or celebrity with the construction of Canals. The conquests of Louis the XIV are forgotten,

or remembered only to be held up to execration, but the Canal of Languedoc remains a blessing to France, and to *his* name, a monument of imperishable renown. The Duke of Bridgewater's rank and wealth would not have preserved his name from oblivion; but he will always be remembered, as the man who embarked his fortune in constructing the first Canal in Great Britain, regardless alike of popular prejudices, of friendly remonstrances, and of prophetic threats of ruin: And in our own times, and in our immediate neighbourhood, it is probable that the name of Dewitt Clinton will always remain associated with the Grand Erie Canal of the State of New-York, when the names and the measures of other cotemporary Chief Magistrates of States and of Nations, will be consigned to the same forgetfulness which has already swallowed up so many of their predecessors.

The Directors of the Welland Canal Company profess not to be insensible to the honour conferred upon them, in being chosen to begin so noble a work as a Canal, for ship navigation, round the cataract of Niagara, and as their services are gratuitous, the honor of conducting the undertaking is their only reward. It is one of those rare measures, which though of immense magnitude, is of comparatively easy, and absolutely certain accomplishment. The natural advantages of the ground, combined with the inexhaustible supply of water are such, as no other Canal ever had, and such as can be found for no other Canal; and when finished, on the intended scale, it will be one of the grandest works ever effected by any country, or by any nation. No work in Europe, or in Asia, antient or modern, will bear a comparison with it in usefulness, to an equal extent of territory; and it will yield only to the Canal which may hereafter unite the Pacific with the Atlantic Ocean, through the Isthmus of Darien.

But each undertaking has its own peculiar advantages; and the Welland Canal will possess some advantages even over the projected Canal of Darien. The Pacific Ocean is already accessible by navigating round the Cape of Good Hope or Cape Horn; but the interior seas of North America, which contain more than half of the fresh water in this Planet, and the fertile and extensive shores of which, are destined to be peopled by an active, an intelligent, and an enterprising, race—boasting their descent from England, and preserving and perpetuating her language and her institutions: these interior seas can be approached in ships only through the Welland Canal.

Such is the importance, and such will be the splendid and immense results of the work now offered to the notice of those enterprising and enlightened capitalists, who may be disposed to contribute to its completion; at the same time that they secure for themselves a participation in its advantages, and a share of the liberal profits which it may reasonably and speedily be expected to produce.

N. B.—In consequence of the delay which has arisen in making the proposed application for obtaining in England a certain part of the increased capital of the Welland Canal Company, in consideration of a Petition presented by the Directors, at the opening of the present Session of the Provincial Parliament, and in order to prevent any delay in the progress of the works now under contract, a bill has been introduced for granting to the Company, a loan of £25,000, or an hundred thousand dollars. This bill has already been passed by the House of Assembly, and it is not doubted that the measure will obtain the sanction of the other branches of the Provincial Legislature.

31st DECEMBER, 1825.

W.C.

The Secretary of the Board
of Directors of the National
Canal Company -
Philadelphia 28th Street
Care of the Office -
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The Journal of the
1st Division of the
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