REPORT OF THE DIRECTOR.

To the Board of Commissioners of the State Survey:

Lord Dufferin's proposal that the land about Niagara Falls should be controlled by the governments of Ontario and New York, for the benefit and protection of the public, was at first looked upon rather as an expression of philanthropic sentiment than an earnest proposal of a practical measure. Unsympathetic critics suggested that his kindly nature had been unduly moved by witnessing the tortures of his fellow-beings under persecutions of hackmen, importunities of peddling photographers, and all the pocket-draining exactions of endless gate-keepers and guides, who combine to make the visitor's life miserable and his stay short at Niagara Falls. When, however, Governor Robinson put the matter so forcibly in his last message to the Legislature, appealing to the pride of the people to protect this great and beautiful gift of nature from being degraded into a show and made the means of exasperating extortion, while the shores, once forest-clad, became mill-sites and places of amusement, the appeal found a response in the feelings of our citizens; and the Legislature directed the Board of the State Survey to inquire, consider, and report what measures it may be expedient for the State to adopt, to carry out the suggestions contained in the annual message of the Governor, with respect to Niagara Falls.

In accordance with your directions and accompanied by Mr. Frederick Law Olmsted, Landscape Architect, I first visited Niagara Falls on the twenty-eighth of May.

Although sympathizing in the pride which every citizen of the State feels in our possessions in the great cataract, whose wonders have for two hundred years been better known to Europeans than any other one thing in America; and feeling that the preservation of its beauties...
was a matter of personal concern to every New Yorker; second,
too, that this scene of nature's grandest effort is a precious inheritance
to be handed down to our children unmarred by the destructive hand
of the money-maker or the decorations of art; yet I was not convinced
that to accomplish this, it would be necessary for the State to assume
control of the lands about the Falls. Therefore, with an unprejudiced
mind, I was prepared to examine the facts that lay before us.

Four principal elements combine to make Niagara what it is: the
rapids; the picturesque islands around which they rush; the Falls
themselves, and the deep chasm below. A mile above the Falls, the
river is spread out broad and calm and placid as a lake. At the
upper end of Goat Island, the smooth surface breaks suddenly into
furious rapids, whose wild, white-crested waves, hurrying with cease-
less roar to the inevitable brink, are almost as impressive as the Falls
themselves. In the midst of this scene of turmoil and irresistible
rush of waters stands Goat Island, with fifteen smaller islands and
islets about it. Goat Island is more than half a mile long by a
quarter of a mile broad. The surrounding islets vary from 400 feet
to ten feet in diameter. On all of these, except Bath Island, the hand
of man has spared the primeval forest. Picturesque clusters of ever-
greens, rising out of dashing waters, the rich overhanging foliage of
the high banks of Goat Island and deep seclusion of its woods, give to
this spot a charm not shared by any other about Niagara. The views
of the American and Horseshoe Falls seen from the west end of the
island are far more impressive, sink deeper into the mind than any
others, because only here the visitor finds himself surrounded by the
influences of nature.

Half way between Goat Island and the American side of the river
is Bath Island, whose position in the middle of these rapids must have
made it a fascinating place in early days. In an evil hour it entered
into some man's mind to start a paper mill there—small at first, but
extending year by year, till in place of graceful woods, the ground is
covered with unsightly sheds and buildings, and the rapids above are
disfigured with wing-dams and ice barriers; the whole group forming
a shocking contrast to the natural scenery.

This paper mill is, however, only one among the many abomina-
tions which mar the beauty of the American Rapids. Their eastern
bank was once rich in verdure and overhung with stately trees. In
place of the pebbly shore, the graceful ferns and trailing vines of for-
mer days, one now sees a blank stone wall with sewer-like openings
through which tail races discharge; some timber crib work bearing in capitals a foot high the inscription, "Parker's Hair Balsam;" then further up stream, more walls and wing dams. Overlooking this disfigured river brink stands an unsightly rank of buildings in all stages of preservation and decay; small "hotels," mills, carpenter shops, stables, "bazaars," ice-houses, laundries with clothes hanging out to dry, bath houses, large, glaring white hotels, and an indescribable assortment of miscellaneous rookeries, fences, and patent medicine signs, which add an element of ruin and confusion to the impression of solid ugliness given by the better class of buildings. And all this is the background to one of the grandest spectacles in the world, the rapids of a mighty torrent writhing and foaming in the fury of its downward rush. Is it any wonder that visitors do not desire to remain long in the presence of such discords; but, when the first feeling of curiosity is satisfied, hasten away? In looking at the Falls from Goat Island or the Canada side, one cannot help seeing these rows of buildings which line the village shore of the river. Only one spot invites the eye to rest on its green trees. This is Prospect Park at the east end of the American Falls. But even here, the hand of the progressive owner has torn away the shrubs and rich masses of woodbine that clustered along the edge of the precipice, and in their place are seen walls and structures supposed to be for the safety and entertainment of travelers.

The Falls themselves man cannot touch; but he is fast destroying their beautiful frame of foliage, and throwing around them an artificial setting of manufactories and bazaars that rouse in the intelligent visitor deep feelings of regret and even of resentment.

The chasm below the Cataract depends for its impressiveness largely upon the wooded character of the debris slopes and the maintaining of a fringe of verdure along the very brink of the precipice. Here, too, those elements which are essential to the perfection of the landscape are rapidly disappearing. Two mills and a brewery, all built within a short time, near the bank about half a mile below the Falls, warn us of what is coming.

From this sketch of the existing state of the surroundings of Niagara, it will be seen that little remains of their original beauty, except on Goat Island, where the primitive forest still stands as it did in the days of Father Hennepin's first visit to the great cataract in 1679. The island has been carefully preserved from "improvement" by the owners (the Porter family), but it will probably soon pass from
their hands, owing to a partition suit now in progress. I made careful inquiry concerning the nature of the proposals for purchase which have been made, to ascertain what will be the probable fate of the Island when it is sold. By some it has been proposed to cut the woods off the Island, and make a race-course of it; others think it a favorable site for a great summer hotel; others wish to make a rifle range upon it, while another and more practical party suggest cutting a canal down the centre of the island and building a row of factories along its front between the American and Canadian falls. All these, and other schemes that I heard of in connection with the sale of the Island, contemplate the destruction of this one remaining piece of native forest.

I became fully convinced that within a short time, unless the State buys Goat Island, it will be sold to some one who, in order to secure from his investment a good return, will make the Island a place of amusement or of manufacturing. No power but that of the State can save this delightful spot from the fate which has overtaken all other pieces of forest around the Falls.

It remains, then, for us to consider what could be done, by State intervention, to restore to all the river shores something of their original character.

It is now a clearly recognized duty of governments to reserve from sale parts of the public domain that contain natural features of such unusual character as to be objects of interest to the whole world, and whose perfection may be seriously marred by private ownership. Free enjoyment of these noblest works of nature is now felt to be one of man's most precious privileges, not to be abridged by private rights or greed for gain. Acting on this principle the general government in 1865 dispossessed settlers in the Yosemite valley, and reserved it for the benefit of the public. A great tract covering the region of the Yellowstone Geyers has also been designated as a National Park, and now the land occupied by the California Big Trees is dedicated to public use. The State of New York also has taken a similar position respecting the beautiful Islands of Lake George.

A hundred years ago the land along Niagara river belonged to the State. Every one realizes that it never should have been sold; but all the islands and a belt at least a quarter of a mile broad and five miles long should have been kept for public use. The error made by the State in parting with this territory will never be fully repaired. Much of the harm done is irretrievable, but much can even yet be accomplished at a reasonable expense to restore the lost attractions.
Goat Island, preserved hitherto by the kindly care of the Porters, may still be rescued from becoming either a mill site or a circus; the structures may be swept from Bath Island and the Rapids, and the spot restored by planting to its former beauty; on the main shore by the removal of seven good buildings and ten of little value, the river front of Niagara Village may be cleared from Port Day to upper suspension bridge, giving a belt of public land a mile long and widening from 100 feet at the head of the rapids to 800 feet broad at the Falls, where most room is needed for visitors.

By planting this strip of land with trees the whole village may be shut out from view—"planted out"—and the unsightly walls, the sewer mouths and wing dams replaced by natural banks like those of Goat Island.

To make an effectual screen of trees between the river and the village it is necessary to plant the top of the terrace which is approximately followed by the line of Canal Street.

After careful study of the ground, Mr. Olmsted and I are of opinion that from the suspension bridge to the head of the Rapids the east side of Canal Street should be the boundary of the State reservation and that any narrower belt along this part of the river will not answer the desired purposes. The number of acres to be purchased would be about 77. Prospect Park and the lots east of it would be included. From the rapids up to Port Day, River Street runs along the water's edge. The street is so broad, (from 60 to 100 feet,) that room is given for both roadway and trees. Control of the street should be assumed by the State, and it should be planted, and protected in connection with the lands opposite the rapids. To realize the total change that the carrying out of this plan would make in the aspects of Niagara, those who are not familiar with the scene may compare the accompanying photographs of the village shore with the picture of the same ground as it will appear when restored, according to our plan.

We recommend also that the State acquire title to the debris-slopes under the cliff from the American falls to the railroad suspension bridge for the purpose of preserving and restoring the woods that border this part of the river. As the land is worthless for building, it can doubtless be obtained for little or nothing.

We also recommend that the right be secured to plant and maintain a narrow belt of trees with a walk at least a mile in length along the edge of the cliff below the suspension bridge. This planted belt need not be over twenty-five or thirty feet broad. Its trees will
the barren nakedness of the cliff edge and partially screen out unpleasing and unsightly structures from the river views, and at the same time afford shade to visitors enjoying the profound impressions of this part of the chasm. The State need not buy the land but only secure a right to plant and preserve. The property belongs to the Hydraulic Power and Canal Company and is to be used for Mills. The walls of these mills will be set back from the cliff, their wheel pits only being sunk at the edge of the precipice. There will be few of these pits, and they can be easily bridged for the proposed walk. The President of the Company owning this property has assured us that he will willingly cede the desired right to the State.

By referring to the accompanying Property Map of Niagara Falls Village, it will be seen that a number of streets are included in the proposed reservation. The State has full power to take possession of those where they have been accepted and belong to the Village. One of these public streets, Water Street, has been fenced up and made to appear as part of Prospect Park, but it is clearly the right of the village or the State to reopen it, as in 1853 and 1868, it was in due form accepted by the village (see Proceedings of Village Trustees, Vol. I, pages 260-265; Vol. III, pages, 177, 178, 180 and 181), and after legal trial was, in 1874, specially decided by Judge Daniels to be a public highway.

I made a very careful investigation into the value of the property covered by our plan and had the principal buildings which would be removed appraised by a most experienced builder, who went from Albany for that purpose. The results are before your Board, but it is evidently impossible for me to estimate what the property will cost the State when the price to be paid for land condemned under the right of eminent domain must be fixed by a commission.

It is, however, to be hoped that the great value to the locality of the proposed reservation will be so evident to all that reasonable prices will be asked; and that a project which should appeal to the pride of every citizen may not be degraded in public estimation by being made a means of private gain.

In a spirit of patriotism what remains of Niagara's beauty should be preserved; what is lost should be restored. Only the power of the State can accomplish this.

And now more than ever, the great Cataract is the property of the whole people. A visit to the Falls is no longer the luxury of the rich. Excursion rates on the railways have made it possible for the
humblest citizen to see Niagara, and more than 100,000 visitors came this season. The heavy local exactions fall most oppressively on the poor, but to the wealthy they are simply annoying. While, therefore, the plan of a State reservation appeals to the taste and aesthetic comfort of the rich, it also promises relief to the pocket of the poorer citizen, wishing to enjoy his rights in our common inheritance.

The illustrations exhibit the present aspects of the neighborhood of the Falls, and an ideal view of the American Falls and Rapids as they will appear if the restoration is carried out. Although truthful in the general impression conveyed, such a view cannot, of course, be accurate in detail.

I have appended to the report a facsimile of the first printed description of Niagara Falls by an eye witness and the first picture of them; both taken from the first edition of Father Hennepin's narrative. It is interesting to consider that many of the trees standing now on Goat Island looked down on this first recorded visit of a white man to the Falls, and have remained the only living witnesses of those important scenes in the dramas of European conquest in America which were enacted at this all-important portage in the great water route to the heart of the continent. The savage chiefs and conquering generals, the tribes and armies that moved along this well-known track from Ontario, and launched their vessels on the river above Goat Island, are gone, but the trees that shadowed the flashing stream still remain to make the past real and bring vividly to memory our wonderful progress.

Is it wise to allow the destruction of these living monuments of history? Will not posterity justly scorn a generation which permits them to be cut down to make way for a race-course or a paraground?

While the great trees of Goat Island have stood fast through the centuries since Hennepin's visit in 1679, the Falls themselves have greatly changed, receding as the rocks are worn away by the water. Exactly where the Falls stood two hundred years ago we do not know. Their present position at different periods may to a certain extent be conjectured by what we know of the recession during the thirty-three years from 1842 to 1875. Owing to the foresight of Prof. James Hall, a trigonometrical survey of Niagara was made in 1842, and the resulting map accompanied his report to the State. I have had the
reproduced, and drawn on it in red the position of the brink of Falls in 1875, according to the triangulation of the United States Survey. This map which accompanies my report shows the expected fact that the Horse Shoe Falls have receded in places 160 feet during thirty-three years, and that a large island has disappeared which formerly existed in the midst of the Canadian Rapids. These remarkable physical changes are of deep interest, and their progress should be watched and recorded with great care. The conclusions to be attained by accurate geological study of the region open almost limitless views into far-reaching vistas of the continent's physical history.

Whether, then, we consider Niagara in the light of its glorious scenery, swaying the imagination of the world and drawing to its shrine more visitors than any other of nature's works, or whether we regard its associations with American history and the deep lessons that it can teach of earth's changes through working of great natural forces: in either view it is wonderful, it is unparalleled, it is priceless. But we find its treasures in the grasp of money-getters, and its sacred groves assaulted by the axe of the mill-man or desecrated by the surveyor of public amusements; and are convinced that destruction of the scenery will be swift and certain unless the all-powerful State shall appear as the preserver of Niagara.

Very respectfully submitted,

JAMES T. GARDNER,
Director,
New York State Survey.
The few notes which I propose to append to Mr. Gardner's report will be directed to a single point.

There are those, and I fear that most of the people of Niagara are among them, to whom it appears that the waterfall have so supreme an interest to the public that what happens to the adjoining scenery is of trifling consequence. Were all the trees cut away, quarries opened in the ledges, the banks packed with hotels and factories, and every chance-open space occupied by a circus tent, the falls would still, these think, raw the world to them. Whatever has been done to the injury of the scenery has been done, say they, with the motive of profit, and the profit realized is the public's verdict of acquittal.

It must be considered, therefore, that the public has not had the case fairly before it.

The great body of visitors to Niagara come as strangers. Their movements are necessarily controlled by the arrangements made for them. They take what is offered, and pay what is required with little exercise of choice. The fact that they accept the arrangements is no evidence of their approval.

The real question is, how, in the long run, is the general experience of visitors affected by measures and courses which are determined with no regard to the influence of the scenery?

I have myself been an occasional visitor at Niagara for forty-five years. My attention was first called to the rapidly approaching ruin of its characteristic scenery by Mr. F. E. Church, about ten years ago. Not long afterwards, several gentlemen, frequenters of the Falls, met at my request, to consider this danger, one of them being a member of the commission now reporting on the subject. I have thus had both occasion and opportunity for observing the changed courses into which the public has been gradually led in studying these courses and their results.

When the arrangements by which visitors were conducted were simple; when there were few carriages, and these little used; when the visit to the Falls was a series of expeditions, and in each expedition were occupied in wandering slowly among the trees, going from place to place, with many intervals of rest, there was not only a greater degree of enjoyment, there was a different kind of enjoyment from any now generally obtained. People, then, were loth to leave place; many lingered on from day to day after they had prepared to revisit ground they had gone over before, turning and return-
ing; and when they went away it was with grateful hearts and grateful words.

The change from this to what is described in the second section of the Commissioners’ report has been gradual and, while something must be attributed to modern ease of travel, a greater influx of visitors and to habits of quicker movement and greater restlessness; much must also be referred to the fact that visitors are so much more constrained to be guided and instructed, to be led and stopped, to be “put through,” and so little left to natural and healthy individual intuitions.

The aim to make money by the showman’s methods; the idea that Niagara is a spectacular and sensational exhibition, of which rope-walking, diving, brass bands, fireworks and various “side-shows” are appropriate accompaniments, is so presented to the visitor that he is forced to yield to it, and see and feel little else than that prescribed to him.

But all the time there are some who, because of better information and opportunities, and as the result of previous training, get the better of this difficulty, and to these the old charm remains. Take, as an illustration, the experience of the writer of the following passage. It is that of a man who has traveled extensively for the express purpose of observing scenery and comparing the value, as determined by the influence on the imagination, of different types of scenery. It is recorded in a little book which treats more especially of the scenery of the Alps and of what are designated “nature’s gardens” among them.* But says the author:

“The noblest of nature’s gardens that I have yet seen is that of the surroundings and neighborhood of the Falls of Niagara. Grand as are the colossal falls, the rapids and the course of the river for a considerable distance above and below possess more interest and beauty.

“As the river courses far below the falls, confined between vast walls of rock—the clear water of a peculiar light-greenish hue, and white here and there with circles of yet unsoothed foam—the effect is startlingly beautiful, quite apart from the falls. The high cliffs are crested with woods; the ruins of the great rock walls forming wide, irregular banks between them and the water, are also beautifully clothed with wood to the river’s edge, often so far below that you sometimes look from the upper brink down on the top of tall pines that seem diminished in size. The wild vines scramble among the trees; many shrubs and flowers scamper on the high rocks; in moist spots, here and there a sharp eye may detect many flowered tufts of the beautiful fringed Gentian, strange to European eyes; and beyond all, and at the upper end of the wood-embowered deep river bed, a portion of the crowning glory of the scene—the falls—a vast cliff of illuminated foam, with a zone towards its upper edge as of green molten glass. Above the falls the scene is quite different. A wide and peaceful river carrying the surplus waters of an inland sea, till it gradually finds itself in the coils of the rapids, and is soon lashed into such a turmoil as we might expect if a dozen unpolluted Shannon or Seine’s were running a race together. A river no more, but a sea unreined. By walking about a mile above the falls on the Canadian shore this effect is finely seen, the breadth of the river helping to carry out the illusion. As the great waste of waters descends from its dark grey and smooth bed and falls whitening into foam, it seems as if tide after tide were gale-heaped one on another on a sea strand. The islands just above the falls enable one to stand in the

where they rush by lashed into passionate haste; some hidden swellings in the rocky bed, or dashing yet hidden obstructions with such force that the crest of the tallest is dashed about as freely as a white charger's mane; splashing into a cavity several yards below the level of the water, and, when unobstructed, surging by in countless mist-crested falls below; and so rapidly that the driftwood twist as swallow on the wing. Undisturbed in their peaceful land, surrounded with wild vine and wild flowers, the islands stand amidst all this fierce commotion of waters—below, the vast rushing falls; above, a complication of torrents that seem fitted to fray iron shores; yet there they stand, safe as if the spirit of had in mercy exempted them from decay. Several islets are so that it is really remarkable how they support vegetation; one, no bigger than a washing-tub, not only holds its own in the very of the torrents just above the falls, but actually bears a small stricken and half cast-down pine. Most fortunate that these beautifully verdant islands and islets occur just above falls, adding immeasurably to the effect of the scene.

I have spoken of the distinctie charms of Niagara scenery. If it possible to have the same conditions detached from the falls (it is not, as I shall show), Niagara would still be a place of sing-fascination; possibly to some, upon whom the falls have a terrify-effect, even more so than it is now.

Bringing nothing of the infinitely varied beauties of water and spray, of water-worn rock, I will, for a purpose, mention a few elements contribute to this distinctive charm.

An eminent English botanist, Sir Joseph Hooker, has said that he upon Goat Island a greater variety of vegetation within a given than anywhere in Europe, or east of the Sierras, in America; the first of American botanists, Dr. Asa Gray, has repeated the ment. I have followed the Apalachian chain almost from end to and traveled on horseback, "in search of the picturesque," over four and miles of the most promising parts of the continent without finding anywhere the same quality of forest beauty which was once abundant about the falls, and which is still to be observed in those parts of Island where the original growth of trees and shrubs has not been turberd, and where, from caving banks, trees are not now exposed to dryness at the root.

For I have found any where else such tender effects of foliage as were to be seen in the drapery hanging down the wall of rock on the American shore below the fall, and rolling up the slope below it, or with still to be seen in a favorable season and under favorable lights, on Canadian steeps and crags between the falls and the ferry.

These distinctive qualities,—the great variety of the indigenous and annuals, the rare beauty of the old woods, and the exceed-beauty of the rock foliage,—I believe to be a direct effect of the and as much a part of its majesty as the mist-cloud and the rainfall are all, as it appears to me, to be explained by the circumstance periods of the year when the northern American forest else-
where is liable to suffer actual constitutional depressions, that of Niagara is insured against like ills, and thus retains youthful luxuriance to an unusual age.

First, the masses of ice, which, every winter are piled to a great height below the falls, and the great rushing body of ice-cold water coming from the northern lakes in the spring, prevent at Niagara the hardship under which trees elsewhere often suffer through sudden checks to premature growth; and, second, when droughts elsewhere occur, as they do, every few years, of such severity that trees in full foliage droop and dwindle, and even sometimes cast their leaves, the atmosphere at Niagara is more or less moistened by the constantly evaporating spray of the falls, and in certain situations frequently bathed by drifting clouds of mist.

Something of the beauty of the hanging foliage below the falls is also probably due to the fact, that the effect of the frozen spray upon it is equivalent to the horticultural process of "shortening in," compelling a denser and closer growth than is, under other circumstances, natural.

Reference is made at page 9, of the Commissioners' report, to a marvelous effect in scenery above the Falls. It is that to which the following account by the Duke of Argyle applies:

"The river Niagara, above the falls, runs in a channel very broad, and very little depressed below the general level of the country. But there is a steep declivity in the bed of the stream for a considerable distance above the precipice, and this constitutes what are called the rapids. The consequence is that when we stand at any point near the edge of the Falls, and look up the course of the stream, the foaming waters, of the rapids constitute the sky line. No indication of land is visible—nothing to express the fact that we are looking at a river. The crests of the breakers, the leaping and the rushing of the waters, are still seen against the clouds, as they are seen in the ocean, when the ship from which we look is in the trough of the sea. It is impossible to resist the effect on the imagination. It is as if the fountains of the great deep were being broken up, and that a new deluge were coming on the world. The impression is rather increased than diminished, by the perspective of the low wooded banks on either shore, running down to a vanishing point and seeming to be lost in the advancing waters. An apparently shoreless sea tumbling toward one is a very grand and a very awful sight. Forgetting, then, what one knows, and giving oneself to what one only sees, I do not know that there is anything in nature more majestic than the view of the rapids above the falls of Niagara."

FREDERICK LAW OLMSTED.