
*Topographical Notices of the COUNTRY lying
between the MOUTH OF THE RIDEAU and
PENETANGUISHINE, on Lake Huron, by
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THE extent of country along the Ottawa River, above its present settlements, and stretching from thence to Lake Huron, forms perhaps the most important portion of Upper Canada, yet to be explored with a view to settlement.—Inhabitants on the Ottawa are particularly interested in ascertaining the nature of this region, as the future progress of improvement of every kind, in this part of Canada, evidently depends mainly upon it. For some years back it has been a subject of regret that the settlements in the neighborhood of this fine river, after thinly extending along the lake of the *Chats*, have nearly come to a stand. The chief cause is evidently the inaccessible nature of the country beyond that lake, from the obstructions in the navigation, and the total want of good roads in the direction of the vacant lands; and another circumstance which has silently operated in causing a remissness with regard to removing these obstacles, is a general opinion (too hastily taken up from people caring little about the extension of population) that the nature of the country on the higher parts of the Ottawa is not such as to warrant any unusual exertion to forward its settlement.

It is certainly true that there is a considerable extent of barren ground along the Ottawa. The mountain ridge which narrowly skirts that river, from the Long Sault upwards, occupies a great portion of its northern shores, and while these barren heights are almost constantly in the view of the traveller, it is also true that there is seldom any where much display of fertility immediately along the water, the good tracts being generally lined with strips of drowned or stony land. Notwithstanding these appearances, however, there continue to be, far above the present settlements, very extensive tracts of excellent soil on both sides of the river, sufficient, without looking far into the interior, to render it a subject of interest, by what means they may be laid open for settlement.

As to the main body of the country between Lake Huron and the Ottawa, its southern extremity from the Simcoe waters to the last surveys on the Ottawa, has been traversed by two exploring parties, and in this direction a barren rocky range of high lands is described to extend nearly across the whole. Respecting the lands north of this, it has hitherto been very difficult to obtain any distinct intelligence, as they have been frequented only by a few illiterate servants of the traders. But it appearing almost certain, from various corroborating reports, that immediately to the north of these explored tracts, the country became less elevated and more fertile, the journey, of which the following observations are the result, was undertaken in order to examine into these important circumstances.

The nature of the country as far as a journey of this kind could ascertain it, though differing materially from what report had described, has far exceeded my most sanguine expectations. From the unfavourable accounts which

travellers have commonly given of the Nipissing route to Lake Huron, we had confined our hopes to finding merely a narrow, low, and fertile tract to the south of that route. —This however, is far different from the reality. About the sources of the Madawaska, near latitude $45^{\circ} 45''$, the interior of the country forms a great table land, gradually declining towards Lake Nipissing, and consisting almost uniformly, as far as I have been able to ascertain, of hard-wood lands, of more or less fertility.

Along the south-westerly route of the Nesswabic and Muskoka, this description of country extends from within thirty miles of the Ottawa to the immediate vicinity of Lake Huron, a distance by the usual route of at least one hundred and forty miles ; along which, excepting a few miles at the height of land, there is almost constantly in view a vigorous growth of hard-wood. Towards Lake Nipissing, I was assured by various persons well acquainted with that neighborhood, that the country continues much of the same nature as far as the lake, round its southern and eastern extremity, and along the upper parts of the little river.

The Nipissing route is undoubtedly the lowest which will be found from the Ottawa to Lake Huron. With regard to the country in this direction, the greatest misconceptions have been prevalent, not only as to the nature of the lands, but as to distances and elevation. Contrary to every opinion which I had previously formed, I have now hardly a doubt, that on a proper examination, this route will be found to combine the greatest facilities for effecting a navigation between these waters. But I shall now proceed to state in detail the information obtained on my journey.

The interruption in the navigation of the Ottawa, immediately above the entrance of the Rideau Canal, extends about five miles, in which, besides the Chaudière falls, there are three short rapids—the Petite Chaudière, the Remmok, and the Des Chenes, all running over a bed of dark blue limestone, and making together, a descent of from sixty to seventy feet. Between these rapids are short spaces of navigable water, which it seems practicable to connect without meeting with any unusual obstacle.

It has, however, been suggested that the best plan to improve this part of the river, would be by connecting the Chaudière lake (which commences above the rapids) with the Rideau Canal, thereby attaining the necessary elevation by means of the first eight locks on that work. In the view of affording a communication between the Rideau line of navigation and the upper parts of the Ottawa, it is evidently the preferable method to form the junction before descending to the foot of the Chaudière rapids; and there is also every reason to believe that this would be much the cheapest mode of improvement. I have attentively examined the ground between the head of the rapids and the reservoir at Dow's swamp, about two miles up the canal, from which the cut would naturally be led off. Throughout the whole distance, of about six miles, the ground declines gradually, or in small sudden descents towards the Ottawa, without any hollows or cross ridges whatever; so that a branch might be formed from the swamp to the Chaudière lake, requiring little more excavation than the necessary depth, and without much winding. The Rideau Canal, at the swamp, is about fifteen feet above the lake, which would allow of the cut being kept entirely apart from the rock near the rapids; and this level may be continued along

a ridge of deep soil to the bank of the lake, where of course a lock would be required. This lock, and an excavation of the above description, can hardly be conceived to require half the expense of a separate cut near the rocky shores of the rapids, with the necessary lockage of sixty or seventy feet. Keeping in view therefore, the locks at the entrance of the Rideau Canal, the improvement of this formidable interruption may be considered as half completed.

The Chaudière lake extends about thirty miles in rather a circuitous course, winding southward towards the upper end, and is from one to two miles in breadth. On the north shore, the land is remarkably fine for the first ten miles; they have been surveyed and partially settled for many years, and the remaining lots are fast filling up.—Beyond this, the north coast is low, and I believe generally poor, excepting some small tracts at the foot of the hills, which here approach within four or five miles of the river. On the south shore the soil is better, though there is a space of an indifferent quality about the centre of the lake, stretching some miles into the country. The whole body of land extending southward from this lake to the Perth and Richmond townships, has been surveyed, and in course of settlement for some years.

Towards the head of the Chaudière lake, the lands are fertile on both sides, and it is abruptly and finely terminated by a precipitous range of rocks, down which the river descends in fifteen distinct falls, averaging about twenty-five feet in height, and extending a mile and a half from the Upper to the Lower Canada shore. The scenery is singular and beautiful, and will not fail to attract tourists when there is a steam boat on the lake, which some

enterprising individuals are proposing to establish next summer. Its support is chiefly looked for in the increasing lumber trade of the river, the settlements alone being insufficient to afford an inducement; but the undertaking itself will have a great tendency to increase the population.

Immediately above the falls is a continued heavy rapid, amidst numerous islands, for nearly two miles, the whole interruption going by the name of the *Chats Rapids*, and making, it is supposed, a descent of fifty or sixty feet.—Apparently these rapids form a very serious obstacle to the future improvement of the river; but I have good hopes that on examination they will be found capable of being very easily surmounted, by taking advantage of a detached channel on the south side.

The Mississippi river enters the *Chats lake* a mile or two above the rapids, and this channel, popularly called the *Mississippi Snigh*, (*chenal*) leads from the backwater near its mouth, to the foot of the rapids; the supply of water being entirely regulated by the level of the lake. Along the basin below the falls, the main shore consists of a steep bank of compact blue clay, about thirty-five feet high, which sweeps round (towards the *Mississippi Snigh*) almost on a complete level, and joins it about half a mile from the basin. On this channel the remaining ascent, probably about fifteen feet, is accomplished in a mile, or so, of little detached rapids, and it then presents a run of smooth water to the mouth of the Mississippi; the whole distance from the *Chaudière* to the *Chats lake* being about three and a half miles. I ascended the river by the common route, through the middle of the rapids, and returned by the *Mississippi Snigh*, which, when the *Ottawa* is at a medium height, affords the easiest and safest route in descending.—

The breadth of the channel varies from fifty to near one hundred feet.

The stone of the *Chats* rapids, and for thirty or forty miles farther up the river, is chiefly a soft, white, coarse-grained limestone. It appears to wear fast where exposed to the action of the water, and generally near the rapids lays in large disjointed angular masses. It would afford, every where, an excellent material for rough work; and no doubt, solid quarries of the species could be found, fit for any purpose whatever.

The Lake of the *Chats*, commencing from the head of rapids, is from one to two miles broad, and about sixteen miles long, nearly in a straight direction north-west by west. Besides the Mississippi, two considerable rivers flow into the *Chats* lake from the south,—the Madawaska, passing through the township of M'Nab, and the Bonnechere, through that of Horton. These townships have a fine bold coast along their whole extent on the Ottawa, on which are some good farms of considerable size; their interior, however, is yet but thinly peopled, and is commonly reported to contain a great proportion of indifferent land. Much, however, of what is now rejected, as I am credibly informed, consists of a serviceable clay soil, principally covered with the fir species, and which will be found acceptable enough when population increases about the river.

It is a common opinion that land without a growth of hard-wood is unworthy of occupation; but this idea, though it may generally hold good farther south, should be entirely lost sight of in exploring these northern parts of Canada.—The white pine frequently forms the main growth on excellent clay soils, with but a small mixture of hardwood, and

sometimes none whatever. The red pine, also well known to be so abundant on the Ottawa, is by no means so infallible a sign of inferior soil as is generally asserted. It certainly grows to a considerable size on almost bare rocks, and on arid sands, it is seen in places the sole tree for miles. But it is on strong clays that the red pine is found in the greatest perfection, and here it is usually accompanied with white pine or other firs, and frequently a mixture of hard-wood.

On the north shore of the *Chats* lake, towards the upper end, the lands have a very good appearance, and they are described to continue of a fair quality to the farther side of the township of Clarendon, situated here, and which is better inhabited than the opposite ones of M'Nab and Horton. No settlement worth mentioning has been formed on the lower part of the lake, on the north side; and, in fact, the land here, and (as before stated) for some miles extending down the Chaudière lake, is too poor to admit of much population in the present state of the country.

The scenery of the *Chats* lake is very pleasant, being diversified with a number of small islands, and from its straight form, nearly the whole extent is seen at one view. At the head, the lumberers have placed a permanent boom, extending across diagonally about three quarters of a mile, and secured midway by two anchors. It is a strong complete piece of work, consisting of long pieces of the largest pine, the ends of which are placed between a double set of other pieces somewhat shorter, and the whole jointed together with huge pins, in such a manner that the boom is flexible vertically, but immoveable sideways. There is not an ounce of iron in the whole structure, and yet it has withstood wind, ice, and flood for two years; nor is there any apprehension of its giving way. The situation is

peculiarly well adapted for it, there being a small island near the north shore, to which the boom is attached, and between this and the main, there is a good channel for boats in the driest season, which is sufficiently out of the current not to admit of the timber escaping. Formerly the raftsmen were under the necessity of putting their timber together several times between this place and the Grand Calumet rapid, about fourteen miles above; but it is now allowed to drift along that space, the only trouble being to push it out from the eddies and shores. Beyond the Grand Calumet, rafts may be floated for eighty miles without breaking up, so that this simple improvement of the boom has proved a most essential benefit to the whole trade.

There are several situations where booms of a durable nature would greatly assist the labours of the raftsmen; and in other places, in the smaller rivers particularly, a few pounds might be most beneficially expended in removing projecting rocks, against which the timber is apt to lodge, and so bar the passage for all that is behind, sometimes until the season is entirely lost, as occurred last year with some hundred thousand feet. But it can hardly be expected that improvements, even of this partial kind, will be accomplished by the lumberers, without the interference and assistance of Government.

It is now only four years since the procuring of lumber from the crown lands along the Ottawa, has been rendered a legal occupation. This branch of the timber trade has increased rapidly, and now forms a principal support of the Canada shipping. The stock of red pine in the upper Ottawa countries is probably inexhaustible; it begins to be a common growth about the head of the *Chats* lake, and

the region favorable to its production, by all account, extends some hundred miles northward. The Grand river, which traverses this region, with its numerous tributaries, promises to afford the means of obtaining the pine for market, from an almost indefinite extent of country; and in which we may expect the growth of the timber to be more than sufficient to keep pace with the annual cutting.

In all likelihood, a great proportion of these northern pine lands will be found unfit for settlement; but, considering the great support and encouragement which the timber trade of the Ottawa must afford, both to the agricultural and mercantile interests of the colony, the existence of this accessible red pine region unquestionably is a most favorable feature in the country, more so, perhaps, than if its place were occupied with the most fertile hardwood lands.

The passage of the timber down the various rapids and falls does not form the chief obstacle in prosecuting this business. In such a flow of water as the Ottawa, there is always to be found some method of passing it, either in cribs or single pieces, without much damage or extraordinary delay. The grand obstacle consists in the difficulty and expense of providing the provisions, grain, &c. necessary for the winter's operations, at a distance beyond the settlements, and with the interrupted channel of the Ottawa alone as a means of conveyance. The survey and settlement of what eligible lands may be found along the river, is one evident means of assisting the trade in this important particular. Indeed the unusual value of every species of produce in the neighborhood of the lumbering establishments has induced a number of people, at every risk, to occupy and clear lands at various places above the

present surveys, which extend no higher than the *Chats* lake.

In no view are the advantages of a navigation between Lake Huron and the Ottawa more evident than with regard to the lumber trade. By such a communication the winter supplies of the timber cutters would be obtained from the fertile countries south and west of that great lake, at one-third the cost now incurred in procuring them from Montreal, and the certain result would be an ample and steady supply of timber below the lowest of the present varying prices. If, therefore, there was no other object in view, but that of insuring a regular supply of necessaries, at the cheapest rate, for working the great red pine fields of the Ottawa, it is highly interesting to ascertain what natural facilities may exist, for a communication between Lake Huron and the upper waters of that river.

Above the *Chats* lake, the Ottawa completely changes its character, being, for fourteen or fifteen miles, comparatively narrow, swift, crowded with islands, and frequently interrupted with rapids. Immediately on leaving the lake, is the swift water of the *Chenaux*, which can hardly be termed an interruption in the navigation, being merely a smooth strong current, requiring the use of the line or pole, for one or two hundred feet. At this place, and a few others of a similar nature, I think the water wheel might advantageously take the place of the hand line, as has often been before suggested, for the improvement of such obstructions. Where the rapid is moderate, short, and deep, I do not see why this simple machine should not answer every purpose. A water wheel of twenty feet diameter, having twenty superficial feet of float-board to the current, and with its lever power increased about six times, by a

proportionate wheel and pinion, would be sufficient to tow up any vessel likely to be used on the river. To prevent delays from repairs, two wheels could be made use of, which might both be placed on the same race.

Above the *Chenaux*, the navigation is good, though with considerable current, for five or six miles, to the Portage du Fort, at which is the commencement of a chain of rapids, forming the principal obstacle to be overcome in the improvement of the Ottawa. First at this portage is a heavy, though not a continued rapid, for about a mile; a league, or so, more of hard paddling, brings us to the des Sables Portage, only a few hundred feet in length, past a short rapid, easily run down by canoes. Below this, the river forms two channels, enclosing the Grand Calumet island,—the south, and by all accounts, the largest division, is called the Rocher Fendu. It is seldom followed by canoes, on account of its rapids being spread over a much greater space than on the north channel. On the latter about a mile above the Sables, is the mountain fall, about ten feet high and two hundred feet in breadth, a heavy body of water descending in a smooth unbroken sheet, with a short rapid below. The portage is hardly a quarter of a mile, and notwithstanding the name, there is no eminence of any consequence near it. A mile farther, with a moderate current, is the Derangé rapid, a strong rush of water for rather more than a furlong, which, however, canoes run down. Beyond this, about three quarters of a mile, is the Grand Calumet rapid, the least and longest in the range, and in which are several falls. The portage is a full mile in length, uneven and rocky. The extent of all these rapids, by the course of the river, which is very circuitous, appears to be about eight miles. I could form

little idea, in going up the river, as to the amount of the fall on this part of it, but having returned by the route of the Musk-rat lake, in which direction the whole descent of the ridge is comprised, within the space of a mile or two—I think it may be from ninety to one hundred and twenty feet.

It is impossible to ascertain any thing of the nature of the lands hereabouts, merely from passing up the canoe route; the shores are hardly ever discovered with certainty, on account of the great number of islands, which appear nearly all of a very rocky nature, and are covered with a dense growth of pine, cedar, &c. This is also the growth of the main shores, where they can be distinguished; no hardwood being visible from the *Chenaux* upwards, excepting on one or two low islands. I was informed, however, by some people who have taken up their residence at the mountain fall, that on the north side, behind the fir-timbered shore, a good level tract of land extends from the Portage du Fort, to the neighborhood of the Grand Calumet rapid, and for many miles into the country. On the south side of these rapids, the Grand Calumet island presents a very barren appearance, nor, by all accounts, is there a great extent of good soil on any part of it; it has, however, been rich in red pine—many large rafts have been taken from thence, nor is the island yet exhausted.

The south shore of the river, from the *Chenaux* to the Portage du Fort, is composed of a pine-timbered ridge, which, in viewing from the water, I had noted down as a barren height; but having occasion to traverse it in returning, I found it to consist of a good strong clay, the growth being principally large white pine, with some hardwood. The ridge, apparently not exceeding one

hundred and fifty feet in elevation, is the continuation of the one forming the great range of rapids above described. About a mile from the *Chenaux* the ground begins to fall away to the westward; so that from this singular formation of the country, the waters which take their rise a mile or two from this part of the Ottawa, after making a circuit by the Musk-rat and des Allumettes lakes, of nearly one hundred miles, again approach within a few hundred yards of their source.

The Musk-rat lake lays about eight miles south-westerly from the Portage du Fort. A good road has been opened for several years from the portage to the lake, which, with the river of the same name, affords from the end of the road, a smooth uninterrupted navigation, nearly to the upper des Allumettes lake, the last two miles along only being rapid. This has long formed the winter way of the lumberers to the higher parts of the river. The whole distance from the Portage du Fort to the mouth of the Musk-rat river (about three miles from foot of the des Allumettes) does not exceed twenty-eight miles, which is little more than half the length of the route between the same points, by the Grand river.

The comparative ease and expedition with which the des Allumettes lake may be reached by this route, even in summer, by using small light canoes, has given rise to the idea, that it affords a very favourable opportunity for surmounting the rapids on the neighboring parts of the Ottawa, whenever their improvement shall be seriously contemplated. In returning I ascended the Musk-rat river and lake, and leaving the Portage du Fort road to the left, followed up the lake waters eight or ten miles farther, along a chain of smaller basins, from which, by

a long portage we gained the Ottawa, about four miles above the *Chenoux*. The Musk-rat route is certainly not a favorable, and, perhaps, hardly a possible one, for a canal. The Lake is probably a sufficient reservoir to supply a lockage both ways, or might easily be made so by feeders from the Bonnechere; but its surface is thirty or forty feet higher than that of the upper des Allumettes, which would of course occasion an extra lockage of twice that height above the necessary ascent on the Ottawa. Besides this, it does not appear to be practicable to lead the Musk-rat waters towards the Portage du Fort, from the elevation of the intervening ground; and as to the chain of small lakes, extending in that direction, the stream through them is evidently insufficient, and at two great a height to be increased from any source which could be depended on.

The most favourable route for improving this part of the Ottawa, will probably be found on the Lower Canada side, through the hard-wood lands, extending from the Portage du Fort, towards the Grand Calumet rapid. Through this tract also, the indefatigable lumbermen have opened a road, as far up as the Derangé rapid; and this being only four or five miles in length, the direct extent of the whole interruption, including the Grand Calumet, cannot much exceed six miles. Along this shore (as far as I could see from the canoe route), there is no appearance of a ridge of land; indeed, as before mentioned, the main shore can seldom be distinguished from the islands, so that the ground probably has a gradual slope from the river, which shape would afford every facility for leading the water along at the required elevation, whatever it may be.

The chief difficulty on this route would probably be

at the Grand Calumet rapid, which is lined on both sides by high rocky shores. To the south of the portage, however, in the island, there is a hollow extending the whole way to the still water above, along which it appears practicable to effect a lockage. The chief rock about here is still the white coarse limestone, admitting, I think, of being easily quarried; this species of stone is seen no farther up the river. With the exception of some detached masses of the granite kind, it appears to form the channel of the various rapids from the *Chats* thus far--its character, however, varies much along this extent: commonly it is large-grained and brittle; in a few places I observed it forming almost a complete flint, and in others its nature is that of a coarse marble, well adapted for any purpose of building.

In comparing this route, by the Ottawa, with that of the Musk-rat lake, in point of distance, we shall find no very essential difference in favor of the latter, if we extend our view to the head of the great island, des Allumettes, and consider the channel to the north of it, called the *Quelle Butte Snigh (chenal)*, as a part of the Ottawa route. A strong reason in favor of keeping by the Grand river seems this:—Were the Musk-rat lake and river chosen as the line of improvement, the whole of the north channels of the Ottawa, from Portage du Fort to the head of *Quelle Butte Snigh (chenal)*, a distance of fifty miles and upwards, along which there are many fine tracts of land, which would be left entirely in the back ground, and little benefitted, being shut up at every point by rapids, from what would then be the navigable channel. Whereas, were the thoroughfare established along the northern runs of the Ottawa, (these rapids being necessarily improved) the country along the

des Allumettes and Musk-rat lakes, would almost equally partake in the advantage, in addition to the facilities of their natural route by the latter lake.

Were it only sought to pass by the formidable obstruction of the Calumet rapids, by a railway, or good common road, certainly no other line could enter into competition with that by the Musk-rat waters. The road from the Portage du Fort to the lake, though I did not pass along it, is well known to run over a suitable and level soil, and from every account, might be continued on favorable ground to the foot of the upper des Allumettes, bringing us at once to the uninterrupted navigation extending near fifty miles along that lake and the deep river. This road would be about twenty-five miles in length, and mostly through lands fit for cultivation. As far as I could ascertain, nearly the whole of the considerable space between the Musk-rat run of water and the great bend on the Ottawa, is fit for settlement. Along the Rocher Fendu there is said to be a wide extent of hard-wood land. The large point between Coulonge lake and the lower des Allumettes, is known to be almost throughout of the same nature, and on the lower part of the des Allumettes, the soil is also generally good.

From the head of the two mile of rapids near its mouth, the Musk-rat river forms a deep still winding channel, gradually widening from one to two or three hundred feet, and at last spreading into an extensive muddy pond, covered with weeds and wild rice, about which I saw more wild ducks and geese than in all the rest of the journey. Leaving this pond, the river continues in a fine broad channel about one mile and a half farther, when the Musk-rat lake opens to view nearly from one end to the other, extending remarkably direct to the S.S.W. nine or ten

miles, and with a very uniform breadth not exceeding half a mile.

The lands all along the Musk-rat river seem to be of excellent quality, though not chiefly timbered with hardwood. A good clay soil prevails on both sides of this stream, (amidst a variety of other trees) the finest red pine, and constituting from situation, soil, and timber, the most valuable land in this part of the country, before the lumbermen had commenced their operations upon it; but the full grown red pine is now mostly cut away from the vicinity of the water. The finest square timber which has yet descended the Ottawa, and nearly all the red pine spars (for which the choicest trees only will answer) have been cut in this neighborhood, and from actual examination I am convinced that much of the land producing this valuable commodity in such perfection, is suitable for cultivation.

About the great rice pond, and the channel leading from it to the Musk-rat lake, the lands are fertile. Several farms have been commenced in this neighborhood, one of which is not less than fifty acres in extent, and a road has been formed to a large bay on the lower des Allumettes, only two or three miles distant, on which also there is some settlement.

On the Musk-rat lake, the lower part of the eastern shore is formed of low rocky hills, with a growth principally of poor red pine, which, however, from every account, does not continue far from the water. About the head of the lake is some of the finest land I ever saw, a strong free clay, and yet with a moderate growth of timber. This tract, extending several miles along and back from the eastern shore, is in a fair way of being settled. There is already a

considerable clearance at the extremity of the Portage du Fort road, where two families reside ; and one of the men informed me that he expects eight neighbors by the spring.

The western shore of the Musk-rat lake, along its whole extent, consists of a slightly rising ground, covered near the water with a stout forest of white pine. I have not been able to get much information with regard to the country between this side of the lake and the Bonnechere river, about ten miles distant ; but at least a considerable portion of it is composed of hard-wood lands, lying along a stream called the Snake Creek, which winds through this tract, almost on a dead level for many miles, and enters the Musk-rat lake a little above the outlet.

Along the chain of small lakes, extending between the Musk-rat lake and that of the *Chats*, the lands are poor ; on the north shores, little is seen but light sand and red pine ; on the south, the soil is somewhat better, bearing good white and red pine, with a mixture of hard-wood.

The nature of these little lakes is very singular, the whole bed of their waters being composed of a substance which I take to be the finest marl. It appears to have been formed by a vast deposit of shells of various sorts. They are yet but partially decomposed in many places, the mass being half made up of larger and smaller fragments. In other places it is soft, unctuous, and remarkably white, resembling the finest lime plaster ready for use. It evidently forms the main bed of the lakes, being visible at the bottom entirely throughout the small ones, and in the larger to a depth of twenty or thirty feet. The shores, however, are not uniformly composed of the marl, being, in places, lined with a deep mud, of such a consistency, that it is very difficult to get a canoe to or from the solid

bank. In other places, a singular tough moss of a redish colour, forms a quaking precarious wharf, extending many yards into the deep water. Where the shells are least decomposed, a strong unpleasant odour is emitted from the moss; the water, however, has merely a slight earthy flavour, is remarkably clear, and abounds with several kinds of fish: the surface, when viewed either near or at a distance, has a bright green appearance, quite different from that of any other I ever saw.

These ponds commence about a mile and a half from the Musk-rat lake, and as far as I followed them, extend about seven miles south-easterly; there being in this space nine basins, one or two of them upwards of a mile in length, and frequently separated merely by reedy flats or narrow sand banks. A few days labor only is wanting to complete the canoe route along them, as we found, nearly throughout, old timber roads leading from one basin to the other. The portages are all short, excepting the first from the Musk-rat lake, and the last to the Ottawa, which is nearly three miles, both being, however, along level and firm roads.

This chain of small lakes does not end where we left them, but, taking a southerly direction, they continue into the surveyed lands of Horton,—the tract along which they extend is the highest, and probably most fertile, in this part of the country. From hence towards the higher parts of the Bonnechere, the ground declines, so that between that river and the Musk-rat lake, the lands are low and level. This is evident from what is known of the Snake creek, which forms a still winding channel, from the vicinity of the Bonnechere to the lake.

I have been particular in attempting to give an idea of

this section of the country, as it undoubtedly forms one of the most eligible positions for settlement in this part of Canada. The whole tract to which I allude, extending south-westerly from the Ottawa, across the Musk-rat waters to the Bonnechere, and north-westerly from the lake of the *Chats* to that of the upper des Allumettes, may contain from three to four hundred square miles—throughout the whole, limestone is abundant.

As long, however, as the Chaudière and the *Chats* rapids continue unimproved, we can only hope to see a slow and partial settlement of the finest townships above these points. The fine navigation of the Chaudière and *Chats* lakes, is rendered nearly unavailable by these interruptions ; and as to roads, passable ones at least, are hardly known on the Ottawa, from Grenville upwards ; a proof how little is to be expected from them towards the settlement of the more interior parts. Had there been no *Grand River* in the country, we should, probably by this time, have seen a good main road somewhere near the ground which it occupies ; but as it is, whilst there is a possibility of scrambling up the rapids, nobody will trouble their heads about any thing of the kind.

At the Chaudière, as before explained, the work of improvement is half completed, or will be so with the first two miles of the Rideau canal. Both there and at the *Chats*, I am confident that the necessary works will be found remarkably easy of accomplishment, considering the formidable appearance and actual-elevation of the rapids.—In order to obtain the full advantage of these two improvements, a plain timber rail-road would probably be found requisite, from the Portage du Fort to the upper des Allumettes lake, which, in addition to the Musk-rat country,

would lay open for settlement, a considerable extent of fertile lands, touching upon the fifty miles of smooth water immediately beyond that tract. Considering the great space of new country which would not fail to be rapidly peopled, and also the fine districts, near the proposed line of operation, already partially settled, particularly along the Mississippi, there can hardly be a doubt that the conveyance along it, would soon reimburse the outlay, without taking into account the sale of the wild lands, and the revenue from the crown timber, which would be greatly increased by these improvements. I shall, however, return to the description of the Ottawa, being convinced that correct information, with regard to the whole country, cannot fail to lead the public mind to something far beyond these partial improvements.

At the head of the Grand Calumet rapid, the Ottawa, in its northern channel, again assumes a new character.— This branch is now of a uniform breadth, generally under a quarter of a mile, free from islands, with a strong steady current, and apparently of equal depth from shore to shore. This description holds good for about fifteen miles, to the head of the Grand Calumet island. For the first four or five miles, the river is hemmed in by precipitous rocky shores, frequently, on the island, presenting a solid perpendicular face, eighty or one hundred feet in height.— Above this, the appearance of the country becomes more encouraging. A great part of the Lower Canada shore consists of level hard-wood lands, circumscribed, however, by fir-timbered hills and ridges, seldom more than two miles distant from the river. On the island, there also appears to be some great tracts of land along the shore, on which, at one place, is a considerable clearance, occupied

by two or three French families. About the middle of this run, the great northern range of hills comes once more into distant view. Near the upper end is the *Grande Marais*, an open marsh, extending several miles north-west from the river, and which, when overflowed in high spring waters, affords, with a portage of half a mile, a short passage to lake Coulonge.

Thus far, the course from the Grand Calumet is about N.N.W. and very direct; the channel, notwithstanding its narrowness, being frequently within view for miles. From the *Grande Marais*, it winds westerly, for about two miles to the head of the island. Here the water scene suddenly expands. We enter, as from a branch, the main body of the river, the channel of the Rocher Fendu extending in view to the left, three or four miles, and upwards of a mile in breadth; the main river spreading its channel a considerable distance to the right, amidst some rich looking islands. At the upper end of the Grand Calumet island, appears to be a tract of good land; and on the Upper Canada shore, the whole extent in view is fertile, judging from the nature of the timber, which is seen, from the gradual rise of the ground. On this shore, a little above the division of the waters, is the la Bosse settlement, consisting of a narrow entrance, about a mile in length, with eight or ten huts. The poor unprogressing appearance of the place, at once marks it as a nest of old trading people—French, or Bois Brulées.

Passing the islands near this settlement, we suddenly come in view of the Coulonge lake, and the northern hills immediately beyond it, which are now seen gradually to close upon, and follow up the river, presenting a bold swelling face, five or six hundred feet in height. Below

these, on the north bank of the lake, is the Company's establishment, called Fort Coulonge, a double row of neat white-washed buildings, contributing much to enliven the scenery. Lake Coulonge is about seven miles long, and in some places, nearly two broad. Along its Upper Canada shore, the lands continue to have a most favorable appearance, gradually ascending from the water, with a flourishing growth of hard-wood, and a little white pine. On this side, opposite their station, the Company have a farm of sixty or seventy acres, and a little below this are two small clearances lately commenced. I have already mentioned that the space of country between this lake and that of the lower des Allumettes, consists, nearly throughout, of hard-wood lands. This tract is now well known, and uniformly spoken of as being of the best quality. The Upper Canada coast, on this part of the river, is almost entirely hard-wood land, for nearly thirty miles. Commencing some where near the middle of the Rocher Fendu, it continues of this nature, with very little interruption, to the mouth of the Musk-rat river, on the upper lake des Allumettes.

On the Lower Canada side, the river being now closely skirted by the hills, the appearance of fertility becomes more rare. The barren aspect of these heights, towards the Ottawa, has a tendency to convey discouraging ideas of the country beyond them; but from every thing I could learn, there is no reason to infer that this sterility extends to any great distance. It is, indeed, very difficult to obtain distinct information respecting this back country; but as even the vague account I may furnish of this subject, is better than none, I will here sum up the chief particulars which I have gathered concerning it.

From the Grand river, these northern heights have every

appearance of being a distinct range of hills; excepting, however, where evidently detached, they form merely the face or ridge of an elevated tract of country, watered by the Gatineau river and its tributaries, there being generally very little abrupt descent to the north, and frequently none whatever. These high grounds almost every where seem to incline towards the Gatineau, nearly from the extremity of the ridge. From the mouth of that river, a little below the Chaudière falls, to lake Coulonge, there is not a single stream from the northward, which can be supposed to extend beyond the foot of these heights. The small river Coulonge enters the lake of the same name, and about ten miles farther up, there is another considerable stream called the Black river. The valley which these waters occupy, must extend some distance into the highlands, and forms the only exception to their general lay towards the Gatineau.

Near the Chaudière lake, the nature of these elevated tracts is well known. On ascending them, about ten miles below the *Chats* rapids, a table land is met with, and several small lakes not far from the ridge. From these, the waters run to the Gatineau, on approaching which, the lands are good.

Every thing I have heard favors the idea that along the whole of these heights, the lands improve and become habitable, soon after beginning to decline towards the Gatineau. About one hundred miles from its mouth, this river is joined by a considerable tributary from the north-west, called *les Deserts*. For upwards of forty miles, I am assured, the course of this river is through open plains, from one to three miles in breadth, and of the richest soil, beyond which, forests of maple, elm, and basswood,

indicate a continuation of fertility. The Deserts runs in a direction about parallel with the Ottawa, and at no great distance from it, as the Indians pass with their canoes from the one to the other in the course of a day and a half. Their route is by the Coulonge river, which probably affords the best access for exploring these parts of Lower Canada.—The route by the Coulonge must be very difficult for some way; but when once the eminence is fairly gained, the different branches of the Gatineau present the means of penetrating the country easily in various directions.

By ascending the Deserts, canoes may pass with great celerity to the head waters of the Ottawa. On leaving that stream, a large lake with numerous islands, is traversed, called Lac des Ecorces, probably the source of the small river du Moine, flowing into the Ottawa, about sixty miles above lake Coulonge. Northward from Lac des Ecorces a day or two's journey, is the grand reservoir of the Ottawa, called, by the traders, the Grand lake, which, from all accounts, must be nearly half as large as Lake Ontario.—There has been a trading establishment for many years on the south coast of the Grand lake, which is consequently well known to many connected with the trade. It is decidedly spoken of as exceeding forty miles in breadth, the shores being entirely out of view of each other, and the length, extending chiefly east and west, is said to be at least one hundred miles. I was informed by a person who had performed the journey, that light canoes may pass between the Grand lake and the Gatineau, by the route of the Deserts, in four days. If this be the case, that great sheet of water must extend, inconceivably, nearer to the settled parts of the country, than the course of the Ottawa, as far as it is known, would lead one to conjecture.

On leaving lake Coulonge, after passing some low islands, we arrive at the foot of the great island des Allumettes, about two miles distant from the lake, by which the waters of the Ottawa are again divided for many miles.

At the point of division, the whole of the surrounding shores have a fertile appearance, though no very extensive view of them is obtained. For a little way below the Island the river is not much more than a furlong in breadth and the current very strong. Here Mr. Simpson, Governor of the Company, passed us in his return from a northern tour, impelled by the strength of the stream and ten or twelve stout paddles, almost with the velocity of the wind. Immediately after, we fell in with a very different personage, a settler, who had made his selection on the Lower Canada side, apparently but a day or two before, his family and luggage being still scattered among the bushes. The adventurer was standing on the beach very composedly, with his hands in his pockets. His intention, he said, was to clear land and lumber some; and, he might have added, to keep a rum and whiskey shop, when he could obtain a supply. Certainly, no better situation could have been pitched upon for this junction of occupations.

I had no opportunity of seeing the southern division of the waters, from this point to the upper des Allumettes lake, but the following is the general description of it:— Nearly from the foot of the island, this part of the river forms a swift current or gentle rapid, for three or four miles amidst numerous islands. Beyond this is the lower lake des Allumettes, a fine piece of water, upwards of ten miles long and two or three broad. Between it and the upper lake, is a moderate rapid, a mile in length, easily descended by canoes. Along the island, on the lower lake

des Allumettes are some hard-wood lands, but the principal timber is the red pine.

The north channel, called the *Quelle Butte Chenal*, has a pretty direct course, nearly west, about eighteen miles, being reckoned about eight miles shorter than the route by the lakes, and is always followed by the voyageurs. For the first two or three miles, the channel is uniform, seldom more than a hundred yards wide; and it then opens out, forming a succession of small lakes, which afford a variety of pleasant scenery. The hills are constantly in view, sometimes approaching to the edge of the water; their usual dark woods of tamarac and pine, varigated by the light foliage of the dwarf birch, and a few of the hills entirely covered with the latter.

On the north, the hard-wood land continues along the *Chenal* for a few miles, after which, the stony heights closing in upon the shore, there are no farther signs of fertility on that side. Along the island we see little but red pine sands for half the way, when there is a change for the better, and the lands possess a very favorable appearance, nearly to the head of the island.

About half way up the *Quelle Butte Chenal* there is a swift rush of water, for one or two hundred feet, called the *Chapeau rapid*, hardly sufficient, however, to arrest the course a steam-boat. In fact one of our canoes ascended it by the force of her paddles alone. There is no further obstruction, till we reach the *Quelle Butte rapids*, within two miles of the head of the island; so that with the above trifling exception, this channel completes an unbroken navigation, from the head of the *Grand Calumet rapid*, of about forty five miles.

The *Quelle Butte rapids* consist of two short interruptions,

about half a mile apart. The first is a moderate rapid, between one and two furlongs in length, which we ascended by dint of poling and towing. Heavy canoes must, however, discharge half their cargoes for a short way. The upper rapid is shorter, but has a small fall at the head. After poling some way, there is a sudden turn to the right, into a little still recess, and from it, the canoes are lifted a few yards over a bare solid rock, into a circular basin about a furlong in diameter, from which no outlet can at first be perceived. The water of this basin is eight or ten feet higher than that of the rapid, and on a level with the lake des Allumettes; a very trifling excavation would lead it over the rock. In every respect this is naturally the most complete mill-seat I ever saw. A deep narrow channel leads out of these curious recesses, when the upper coasts of the des Allumettes immediately open to the view. The head of the island is between one and two miles distant, and the *Chenal* gradually widens, until it unites with the the lake, here, about two miles broad, and containing numerous islands.

The upper lake des Allumettes continues nine or ten miles above the island. Near the head, it makes a complete bend northward, to the foot of that section of the Ottawa called the Deep river, when the course turns abruptly to the north-west. A little below the Quelle Butte rapids, the hills recede from the shore, leaving towards the lake, a wide level space, extending to the Deep river, chiefly hard-wood lands. The coast, however, as is usually the case, gives no indication of fertility, being along the whole of this tract poor and stony.

At the foot of the Deep river, the heights at last completely close upon the Ottawa, forming along its channel,

a continued range, from five to seven hundred feet in height, and shutting out all further appearance of fertility on the north shore, as far as I ascended, fifty miles above this point. The Upper Canada shore also, along this space, has a very discouraging aspect, being generally composed of pine-timbered ridges, fifty to a hundred feet high, evidently of a sterile nature, which, however, on the greater part of the distance, do not continue far into the country, as I shall have occasion to remark immediately.

The scenery of the Ottawa, now becomes very striking ; the tourist, at least, will little regret the want of fertile coasts amidst the succession of romantic views, which every mile of the river presents along these high lands.— From a hill about five or six hundred feet in height, at the foot of the Deep river, is a prospect, which I have no where seen surpassed. The portion of the Ottawa within view is, perhaps, the most remarkable and beautiful in its whole course. To the right is the Deep river, extending upwards of twenty miles along the base of the heights, in the straightest possible course, and yet lined with the most uneven succession of rugged points. To the left, is the whole of the spacious winding of the upper lake des Allumettes, with its numerous islands, and a part also of the lower lake, is visible beyond the great island. Several smaller lakes are seen on both sides of the river, and among the rest, one singularly situated half way up the hill from which the prospect is obtained.

The view south and westward, into the country we were about to penetrate, is also very extensive, and was of course, peculiarly acceptable ; though the elevation was not sufficient to enable us to trace the waters very far amidst the forest. A very good idea, however, is here obtained of

the general form of this part of the country. From the foot of the Deep river, the bed of the Ottawa lays between west and north-west, for at least fifty miles, as may be distinguished from the northern heights. About the end of this space, we can perceive that the ridge extends across the river, with an inferior height, and takes a southerly direction, gradually rising again to an elevation equal to that on the Lower Canada side. A great branch of these barren highlands extends in a gradual slope, quite to the lake des Allumettes, occupying ten or twelve miles of its southern coast, above the Musk-rat river. This extension of the heights forms, with the main ridges on both sides of the river, a great semi-circular valley, stretching about forty miles up the channel, and near twenty miles into the country, at the broadest place. Excepting a rough ridge along the Ottawa, this valley appears to be fertile as far as the nature of the timber can be distinguished from the hill. About the middle and broadest place, it presents a very gradual ascent to the heights, so that there is hardly any decided ridge for some miles; and at this point, as I afterwards ascertained, the interruption of rough country towards the interior hard-wood lands, cannot exceed six or eight miles.

A considerable bay extends into this valley from the lake des Allumettes; and it is penetrated for several miles farther, by a singular channel of still water, forming a succession of narrow straits and small lakes, which are only separated from the Ottawa, by a little fall one or two feet in height, at the head of the bay. Into this channel flow two streams, the largest proceeding from a piece of water, three or four miles long, called the Maskinongé lake, which, as near as I could learn, lays about ten miles

west from the des Allumettes, and is but a few feet above its level. The inlet which these waters afford for several miles, will, no doubt, be found of considerable importance when the settlement of this part of the country is seriously undertaken; as it is apparent that the only eligible route for a main road from the Ottawa to the great hard-wood table land, is through the Maskinongé valley.

I had entertained hopes of being able to make my way towards Lake Huron, up the valley, and so obtain a more distinct knowledge of this interesting line of country; but after attempting it for five or six miles, we found it impossible, there being no canoe route whatever through it to the westward; and indeed the run of water seems quite insufficient to admit of one. From the appearance of this great hollow, one would expect it to be a main conductor from the inland lakes. The waters, however, not only from the interior, but from the vicinity of the higher parts of the Ottawa, are carried round the extremity of the valley, forming, with streams from other points, a large river, which continues its course in a singular manner, closely along the verge of the heights, and enters the des Allumettes, about five miles below the outlet of the Maskinongé.

This river, as far as I have seen, is the largest of the Upper Canada tributaries. With little exception, it traverses the whole country, inclining towards the Ottawa, from the Musk-rat to the Little river, a distance of nearly one hundred miles by the parent stream. The water which it discharges is of course very considerable, nearly equal, I think, in the autumn, to that of the Rideau, in the ordinary flood of the spring. About six miles from the mouth of this river, there is a large branch to the south-west, called the Pittoiwaïs, on which is a considerable lake of the same

name, situated between the sources of the Madawaska and the Bonnechere. The main river continues a westerly course, in an undivided channel, to the verge of the elevated table lands, when it branches out into a number of streams, forming an infinity of small lakes in every direction. I could hear of no distinct name for the lower main channel of these waters; but the branch extending farthest into the interior, is called by the Indians, the Nesswabic, which, therefore, may be considered as the proper designation of the whole river.

Along the Nesswabic is the only canoe route from the *des Allumettes* towards the Huron rivers. This route is one of the utmost difficulties for the first forty or fifty miles, the river being, as far as the level country, almost a constant succession of rapids, which cannot be ascended in less than seven days, by a light canoe in the dry season, and is hardly ever attempted at any other time. The upper parts of the Nesswabic, however, may be reached without the arduous ascent of its main channel. As before noticed, some of its branches make a near approach to the Ottawa, beyond the Deep river, and by these there is more than one route into the heart of the country. Among the rest is one leading from the neighborhood of the *Deux Rivières* rapid, about fifty miles above the *des Allumettes*, of which I was fortunate enough to procure a chart from some Indians at the lake. We could not expect to save much time or labor by following any of these routes, which require much portaging, and are of course circuitous; but they afford the advantage of a much more extensive survey of the Ottawa than I had expected to obtain, and also the preservation of our bark canoes, on which every thing depended, made it in a manner necessary to avoid the

rapids of the lower Nesswabic for the present, which I therefore resolved to do, and resumed the ascent of the Ottawa on the 27th of August.

On the upper des Allumettes are two trading houses, one belonging to the Company, called Fort William, and the other to some private traders. At these stations we had made little doubt of obtaining some distinct accounts of the country towards the Hurons, and also of procuring a guide acquainted with it, in our intended direction, at least until fairly past the division of the waters; but in both these particulars I was disappointed. The lands of the Algonquin Indians frequenting the Ottawa, do not extend quite to the height of land, at least on the Nesswabic; and the traders on the Grand river, have no communication with the Mississaguas, who hunt beyond the Algonquins. All the information obtained, therefore, amounted to this, that along the upper waters of the Nesswabic was a great extent of fertile level country, and that by following up the most westerly branch of this river, canoes could pass to the streams running in an opposite course. We had previously received information of a considerable river rising in that direction, and flowing south-westerly to lake Huron; but whether it was this or some other that might be reached by the above route, I could not ascertain.

As to a guide, after some fruitless enquiry, I was obliged to be satisfied with an Indian canoe-man, in the employ of the traders. He had travelled no part of our intended route, but was an expert tracer of hunting tracks and portages, and could act as interpreter, in obtaining information from the Indians we might fall in with.

From the lake des Allumettes, the Deep river continues to form a fine navigation, for about twenty-five miles. It

is so remarkably straight, that even from the surface of the water, at the foot of the channel, twenty miles of this distance is completely within view, though at various points the breadth does not exceed one quarter of a mile, frequently, however, spreading out to half a mile and upwards. Notwithstanding the inconsiderable width, there is hardly, on account of its depth, a perceptible current in any part of this water, and it is therefore appropriately termed the Deep River. The northern ridge continues to afford the finest views along the whole extent. For some miles on the lower part, it presents a precipitous face to the water, in places quite perpendicular to a height of two hundred feet and upwards. About midway, the heights fall back a little from the river, and form detached hills free from timber of any kind, being covered for miles with a close carpeting of blue-berry bushes. Beyond this, the range again approaches the channel, apparently higher than ever, presenting now a steep face towards it, six or seven hundred feet in elevation.

The Deep river is terminated by the rapids of the Deux Joachims. This is a heavy continued rush of water, for upwards of a mile, forming a circular sweep to the southward. The point thus formed is penetrated by a small bay, from which a ravine continues for some way along the base of the heights towards the upper still water. The portage is commenced from this inlet, and at about half way is interrupted by a considerable pond, so that the carrying altogether does not much exceed half a mile. On the whole, the vicinity of this rapid appears very favorable for improvement.

Above this rapid, the river forms a smooth channel for ten or twelve miles, though with considerable current,

the breadth seldom equalling half a mile. The nature of both shores here is much the same as on the Deep river; the hills continuing closely along the north side, and the fir-timbered ridge on the south. The latter is interrupted a little above the Deux Joachims, by a stream from the low lands, before mentioned to extend in this direction. The appearance of the timber about the ravine of this stream, is rather more favorable, and I think it very probable, that on proceeding inland, good soil will be found on the upper part of this great valley. About the middle of this stream, the river du Moine enters with a rapid channel from the north. It appears about the size of the Rideau and descends to the Ottawa through a deep narrow valley appearing to extend some way into the country. Above the du Moine the north highlands assume the most pleasing appearance, forming long swelling hills of great elevation, covered frequently to the top, with the light green dwarf birch, and interspersed with different kinds of fir, which, at intervals, along the extreme verge of the heights, are seen ranging far above the low birch growth.

At the head of this smooth water, are the Rocher Capitaine rapids, the lower part of them going by the name of the Caribou. They form altogether an interruption of about a mile and a half, in which, however, there is some smooth water, nor is the rapid generally very heavy, being ascended by canoes, excepting one or two furlongs near the middle, where there is a portage on the south side.— At the lower end of this portage is one of the finest scenes of rapid water on the Ottawa. The whole of its waters are, for some distance, condensed into a channel four or five hundred feet in breadth, the foot of which is crossed by a range of rocks, extending from the north shore, and

terminated by one of superior size, about an acre in extent. Against these the river is precipitated with a force which completely curves the surface of its channel several feet from the horizontal, and thus forced abruptly to the right, it descends in great heavy swells, through a pass two or three hundred feet wide, curling up into fierce breakers, when fairly clear of the strait. Below this, is a smooth deep basin, of a circular shape, by which the water, now streaked with foam, wheels swiftly round the *Rocher Capitaine*, and recommences its rapid course along the base of the rocks, which had intercepted its progress.

Above the *Rocher Capitaine*, is a free navigation about ten miles to the *Deux Rivières* rapids, the character of both the river and the shores continuing much the same as before. Towards the upper end of this stream, the channel gradually narrows, until it is scarce a furlong wide; winding along the base of the ridge, which is here precipitous to the height of four or five hundred feet immediately from the water. For a short space here, ice never forms, which is rather unaccountable, as the current is not of remarkable strength. The channel must of course be very deep, and it is strewed with bowlders, some of which, from the depth at which they approach the surface, appear of immense size. Beyond this confined place the river widens, a little below the *Deux Rivières* rapids; and we find that we are no longer skirting the foot of the heights, but fairly proceeding into the heart of them, the channel being now lined with high barren hills on both sides.

At the *Deux Rivières*, the *Ottawa* breaks through the ridge, along the base of which, it afterwards flows for about one hundred and fifty miles. It cannot be said to descend from these heights, as the whole fall here is cer-

tainly not more than forty feet, and above this the channel is smooth for upwards of twenty miles, so that the separation of the Upper and Lower Canada highlands is complete.

The main descent at the Deux Rivières is in a heavy continued rapid, for about one-third of a mile. Above this are two or three short detached rapids, for about a mile and a half, which are ascended, without a portage, excepting the last, called the Discharge of the Trou, where part of the lading is carried. We did not pass up to the still water, our inland route striking off a little below the Trou. I had however, the satisfaction of a distant view of the rough water there; the last until we approach the mouth of the Little river, which forms the eastern part of the Nipissing route to Lake Huron. This point, (about twenty-five miles above the Trou) is commonly called the Matawoen, or forks, from the particular form of the neighboring parts of the Ottawa. Above the Deux Rivières, the heights fall back from the water on both sides, and the whole vicinity of the Ottawa appears to part with much of its rough and sterile aspect; but the view of the lower grounds was too imperfect to enable me to speak decidedly as to their nature.

In case of the navigation ever being completed on this line to the Huron, the improvement of the four rapid spaces between lake Coulonge and the Little river, will probably form the most difficult portion of the undertaking. The obstacles, however, do not appear to be unusually great, notwithstanding the mountainous nature of the country.— On both sides of the different rapids, are generally spaces of low ground, the stone near the surface appearing chiefly to consist of bowlders, so that the necessary excavations would not be very deep, or of the most difficult nature.—

The rock along this part of the route, is of the same description as that of the neighboring heights, which appear to be entirely composed of varieties of granite. Near the river it differs much in its appearance, being sometimes round and solid, often broken and craggy, and in some places lying in regular beds, dipping towards the water.

The distance of the Matawoen from Bytown, (by the route of the Quelle Butte,) I conceive to be about one hundred and eighty miles, which would, of course, make the whole distance from Montreal not more than three hundred. It has hitherto been commonly stated to be four hundred miles, but there has been a most extraordinary system of exaggeration, in estimating every inch of this route. The Deep river, for example, which is called twelve leagues, we only took seven hours and a half to ascend, paddling leisurely; and therefore I am confident it is not more than eight and a half, for the stream is less rapid here than in any part of the river, and, as may be expected, the exaggerations increase with the current.

In this space of one hundred and eighty miles, we have seen that there are seven main interruptions. First, the Chaudière rapids, in all five miles; the *Chats*, two miles; the Calumet rapids, about six and a half miles, and perhaps two more by the channel; the Quelle Butte, about one mile and a quarter; the Deux Joachims, about three quarters of a mile, by the portage; the Rocher Capitaine, about one mile and a half; and the Deux Rivières, two miles.

If there is any use in guess work, I should say that the descent of the four last mentioned is rather less than that of the three first, and does not surpass two hundred feet.—The Quelle Butte has decidedly the smallest fall of the

four ; and the three higher rapids appear to divide the remaining ascent pretty equally. The particular distribution of the declivity along the Ottawa, is not, however, a very material point of interest. From every account of the Nipissing route across the country, I am satisfied that the Ottawa, near the Matawoen, is yet below the surface of lake Huron ; so that, be the respective heights of these rapids more or less, they still form but necessary steps in this grand natural stair, to the level of the western waters.

From the foot of the Deep river, the Ottawa averages nearly an E.S.E. course to the Deux Rivières, above which, as I could see from the range of the heights, it flows much in the same course for many miles, continually narrowing the Huron side of the country, until reaching the Matawoen, where the River takes an abrupt and decided turn, in a more northerly direction ; thus, as it were directing towards the true point of its junction with the waters of that great lake.

Before leaving the des Allumettes, I had not the smallest Idea of the Ottawa forming, above that point, a practicable route for navigation to the westward ; but after passing through the country from the Deux Rivières to Penetanguishine, and returning across the sources of the Madawaska to the des Allumettes, I can say without hesitation, that it is vain to look for any other northward of the Rideau. From the Deux Rivières, the high stony ridge (which is merely the face of the elevated interior lands) continues without interruption far to the south, presenting, every where, a hopeless barrier towards the Huron, at least for the common system of lockage. The passage through this ridge, by the Ottawa, has of course its minor difficulties ; but in the grand essentials of a proper elevation of channel,

and suitable direction, this fine river, without a doubt, is almost every thing we could wish. The adoption of this route would lead to a part of lake Huron, considerably to the north of that, towards which researches have not yet been directed; but this surely is no objection. As a point of general communication, the outlet of the French river appears unequalled on the lake; and the route, from its northern direction, would benefit a much greater portion of the country than any other line of improvement which has been contemplated.

When once the ridge of the heights is fairly passed by the gorge of the Ottawa, there is every reason to believe that no insurmountable obstacles remain. For many miles on the Upper Canada side, the highlands are nearly in the same form as on the other, soon declining back from the ridge seen from the Ottawa and of course to lake Nipissing and the sources of the Little river, both of which receive considerable accession of water from the south.—From the general figure of the country, therefore, we may expect these waters to occupy a comparatively low line through it, and every information I have been able to obtain, has contributed to confirm this idea. I saw no part of the Nipissing route, but after traversing the high country in the direction of Penetanguishine, my inquiries were naturally turned to the northward. The following particulars are the result, and may be depended upon as generally correct, having been corroborated from various quarters.

On the French River, there are only three obstructions, where it is indispensable to make portages. The first is the Recollet, eight to twelve miles from the outlet. It is a fall fifteen or twenty feet high, with hardly any addition of rapid

water. The Parisienne is the second, a short heavy rapid, the portage of which is not a furlong in length. And the Chaudière, consisting of several small falls, immediately at the outlet of lake Nipissing. Besides these, are four rapids, which are generally ascended without carrying the canoes, and always run down. From every thing I can learn of these interruptions, they cannot altogether form a descent of one hundred and fifty feet. East of lake Nipissing, the route leads over a level fertile tract, about eight miles to the Turtle lakes, two considerable pieces of water, which form the chief sources of the Little river.— At each extremity of this distance, are carrying places, between one and two miles in length, called the Portages de Vase; and along the intervening space, a small stream is rendered navigable for canoes by a dam a few feet in height, which throws back the water for five or six miles. This circumstance goes far to prove the flatness of the tract, and the name of the two portages gives an idea of their nature. They are invariably described as leading over a rich deep soil, with little sensible elevation either way. The portage leading to the Turtle lakes, of course forms the height of land, which cannot be supposed to be fifty feet above lake Nipissing, and the whole ascent from lake Huron would thus appear to be under two hundred feet.

I may here remark, that whatever be the exact elevation of this summit, it certainly is not one-third of that sixty or seventy miles southward, on the route of the Nesswabic and Muskoka, which I followed in crossing the country.— On the latter river, there are not less than thirty-five portages, at three of which are falls, of about seventy, fifty, and thirty feet, besides not less than a dozen falls from ten to twenty feet in height. The source of the

Muskoka, is probably between six and seven hundred feet above the level of lake Huron. From the descent of this river being chiefly in falls, I had, with the assistance of a pocket level, a good opportunity of forming an opinion.

From the Turtle lakes to the mouth of the Little river, are about ten portages, all of moderate length. At two of them, are said to be falls of fifteen or twenty feet, and the rest are along the side of small falls and rapids, which, at several places, would not occasion any carrying, if there was a larger stream of water. In addition to these, are three or four more gentle rapids, ascended by polling. The whole together can hardly fail to compose a somewhat greater descent than those on the western side of the route, and therefore the smooth water of the Ottawa, above the Deux Rivières, is, with little doubt, below the surface of lake Huron.

The length of the French river is stated to be seventy miles; the route, through lake Nipissing, thirty to forty miles; and from thence to the Ottawa, about fifty. But here also, the actual distances will probably be found much less than usually stated by common account. On the latest charts, the mouth of the French river appears nearly in latitude 46° and longitude $80^{\circ} 45'$. From various data, the Matawoen cannot be far from latitude $46^{\circ} 30'$, and longitude $78^{\circ} 45'$. With a considerable allowance, then, for winding, though the route is said to be generally a direct one, it cannot altogether much exceed one hundred and twenty miles; making the whole distance on this line from Montreal to the Huron, under four hundred and fifty miles.

The country along the Nipissing route, will, I am persuaded, be found of a very different nature from what has been commonly reported. To the south particularly, the

greatest part of the distance, from every thing I could learn, consists of good lands extending far up the country, in fact to the neighborhood of the line in which I crossed it. It is probable enough that the immediate coasts along the route are generally rough ; but this affords no proof that the country beyond them continues so for half a mile.— Even the shores, however, are not often visible along lake Nipissing and the French river, on account of the numerous islands. The latter, in particular, which has usually a channel of great breadth, is described to be full of rocky islands nearly from one end to the other, which may in some measure account for the character of peculiar sterility which it has received. But even here, I am assured, that good soil is found along the bays, and appearing to extend far inland.

Of the country farther eastward, I have been able to obtain more distinct information. To the south of lake Nipissing is a great level tract, abounding in a rich heavy soil, and extending, with little rise, many miles southward. These lands are traversed by two considerable streams, the largest, called the South river, entering lake Nipissing, not far from the outlet. As far as I could hear, this river has a course, of eighty or one hundred miles, nearly north. The source is near that of a northern branch of the Muskoka, and by this route canoes sometimes cross the country towards Penetanguishine : about four days are required to reach the source of the South river. The first fifteen or twenty miles is described to be without rapids ; and through very fine lands, which, indeed, continue more than half way up its course, and on the upper parts of the river, the lands, though inferior, are said to be still perfectly habitable.

The accounts are not so favorable of the north shores of lake Nipissing, though there are said to be some considerable tracts of good land towards the eastern end. On the upper parts of the Little river, a great proportion of the lands will be found fit for settlement, particularly in the neighborhood of the Turtle lakes. The nature of the route leading between them and lake Nipissing, has already been described, and a little to the north, between the same lakes, is a winter path about fifteen miles in length, also through a fertile level tract. A rich deep soil is said to be generally prevalent in these parts, timbered chiefly with maple, bass-wood, and elm.

Had I obtained no distinct account of these lands, occupying the great valley of the Nipissing, it would seem hardly possible to conceive them to be generally barren (as is commonly stated), when we know that after gradually ascending southward, to a superior elevation, of at least four hundred feet, luxuriant hard-woods are found to extend uninterruptedly across the country.

I now proceed to describe the routes which we followed between Penetanguishine and the Ottawa.

From the Deux Rivières, which I left on the 30th of August, a gradually rising tract of barren sand is crossed, by a most harrassing portage of three or four miles, which, in many places, can hardly be traced through the thickets. It leads to a small lake, the water of which runs to the Deux Rivières rapids. This was the only place in the whole journey, where I observed leeches; they were in great abundance of two kinds, one of a dark red colour, the other greenish, with yellow spots on the back. After making another portage of about half a mile, the same stream of water, is followed three or four miles through a large

beaver meadow. The stream is only about fifteen feet in breadth, excessively winding, and so overgrown with alder bushes, as to require almost constant exertion to force a canoe through them. From this stream, a portage of about a mile, over a nearly barren hill of solid granite, brings us fairly to the top of the ridge, and to the first waters of the Nesswabic, which are not more than ten miles distant from the Ottawa, It occupied us, however, nearly three days to reach this point; such was the difficulty both of finding and following this almost trackless route.

From this to the main channel of the Nesswabic, the course of the water is very direct, about fifteen miles, consisting of a succession of small lakes and ponds, with short swift channels between them, there being ten portages altogether from the Ottawa, all little tracked, and most of them with rough and dangerous footing. The appearance of some of these lakes is pretty enough, but all around denotes barrenness. The route continues from the Ottawa, closely along the ridge of the highlands, to the Nesswabic, which is entered at an oval extension of its channel, near three miles long and one and a half broad, called the Trout Lake. Still no good land is in view; but near the verge of a moderate rise, along the west side of the lake, the hard-woods commence, and continue inland with little interruption. The immediate shores, however, of the river, are barren for some miles farther.

The Trout lake lays about thirty-five miles, nearly west from the head of the lake des Allumettes. By the river, the distance appears to be about fifty miles, in which there cannot be less much less than six hundred feet of fall.—Canoes can easily descend from the Trout lake to the des

Allumettes in two days, and on my return I followed this route. There are about twenty short portages altogether, eleven of which are within eight miles of the Trout lake, passing a number of small falls and some rapids. The remaining descent is almost entirely in rapids, forming an expeditious route downwards, but rather hazardous, from the rugged nature of the channel. About fifteen miles from its mouth, the river forms a smooth broad channel, ten or twelve miles in length; and, about ten miles below the Trout lake, another expansion for four or five miles, called Lake Traverse. With these two exceptions, there is not three miles together of quiet water in the whole of this river.

From Trout lake half way down, the Nesswabic winds its course entirely through masses of rock. Nearer its mouth the banks are less elevated, with some soil of a poor sandy nature. Both above and below the Trout lake, the shores of this river present a considerable elevation towards the Ottawa. About the outlet of this piece of water, for a short way, there is very little rise visible in that direction, nor can there be much, as the Maskinongé valley is only a few miles distant. This seems to be the only pass through the ridge by which a communication can be easily formed towards the interior.

Ten miles below Trout lake, the north shore rises into steep hills of solid, and often bare rock, upwards of three hundred feet high, which closely follow the river for about twenty miles. From one of these hills, about half way to the des Allumettes, I obtained an extensive view to the south. Every where appears a succession of small round hills; rock, or sand at the best, densely covered with fir, chiefly red pine and tamarack, thinly interspersed with

birch and oak bushes, which, in autumn, assume tints of the brightest yellow and red. The highest and most distant land in view was to the south-west, some where between the Pittowais lake and the Madawaska river.

The view towards the Maskinongé valley was confined by the neighboring heights, but the high northern shores of the Ottawa (about the head of the Deep river) were visible for a short way, ranging nearly parallel with the Nesswabic, and to my surprise not more than fifteen miles distant. I was not previously aware of the great proximity of the two rivers, which, in fact, are never more than twenty miles asunder, until the Nesswabic spreads itself over the table lands, and this sight at last fully convinced me of the futility of searching for canal routs up these furious mountain streams, while the spacious channel of the Ottawa, calmly dividing the highlands far below any of them, continues its course nearly direct from the desired point.

From the Pittowais upwards, the Nesswabic is joined by no stream of any consequence, for probably forty miles, until within three or four miles of the Trout lake. Here a small tributary flows in from the south, on which, about twelve miles distant, is a considerable lake called la Vieille, and by these the route strikes off which crosses the sources of the Madawaska. The Vieille branch forms hereabouts, nearly the division between the hard-wood and fir countries. No good lands, indeed, are seen on the stream, but they commence at no great distance from it.

From the Trout lake, the Nesswabic continues in a westerly direction amidst broken stony shores, and interrupted by several heavy rapids, the ascent being hardly less than eighty or ninety feet, in the space of four or five

miles, which brings us to the Cedar lake. This piece of water may be considered the grand reservoir of the river, the main channel terminating here, and several inferior streams branching off in various directions, collecting the waters of numbers of smaller basins. As far as I could ascertain, the south-western branch, which we followed, is the largest, but it does not appear to discharge one-third of the water which flows from the outlet of the Cedar lake.

Our route did not enable me to see more than twelve miles of the length of this lake, but it has the appearance of extending much farther than this, in a winding course, generally about westerly, and from one to two miles in breadth. On the lower part of the lake, the lands, which now form a gradual ascent from the water, are still covered with pine, cedar, &c. but on proceeding upward, this is succeeded by considerable tracts of hard-wood, which are separated by other spaces covered with fir, and this seems to be the general character of the western end.

At the Cedar lake, I remained nearly three days, partly delayed by bad weather, but chiefly waiting the arrival of a son of the Algonquin chief, named Constant Pennaissez, who had established his hunting winter quarters here.—From him I received an excellent chart, which delineated the route as far as his hunting bounds extended, nearly to the source of the Nesswabic; but he could give no distinct information as to the the situation of the portages crossing the height of land. From Constant I learned that there was a much better route from the Ottawa thus far, than that which I had followed. It is by a stream entering the Cedar lake, from the north, and communicating with another, called after the Indian who hunts upon it, *Map di*

Fong's creek, flowing into the Little river. This, though the longest, is much the smoothest route, and is always followed by the Indians passing between the Ottawa and the Cedar lake, with loaded canoes. It would have been much the most interesting route for me, had I known of it in time.

One of my men having become quite lame from a hurt in his foot, was obliged to remain at the Cedar lake. This determined me to proceed with the four remaining hands in one canoe, taking only about twenty days provisions, and otherwise as light as possible. I was in hopes of being able to return in that time, but the man was instructed not to move farther than the Trout lake with our provisions and canoe for at least thirty days, and if we had not then made our appearance, he was allowed to make the best of his way. In the mean time his quarters were comfortable enough, being on a most excellent fishing station, and in the neighborhood of the friendly Pennaisez.

There is still a continuation of rapids for four or five miles on the small river, which we now began to ascend. To surmount these, a good wide portage road has been formed north of the channel, through a stony hard-wood tract, in which three small lakes are crossed, and this at length brings us to the elevated country. Hard-wood now appears to be the general growth wherever a view is obtained a few hundred yards inland beyond the firs and cedars, which here, as in other parts of Canada, commonly skirt the waters.

There is, however, little extent of rising ground to be seen from this stream of water, the hollow which it occupies forming but a trivial interruption to the general level face of the country. In a few miles it ceases to have a regular

river channel, being merely the connection of a range of lakes, extending nearly south through the table land. Of these, there are four principal, and several smaller ones, some of them only separated by narrow still channels, and others by short swift streams of inconsiderable descent.—The largest of these lakes do not appear to extend six miles in any direction, though the route did not always enable me to judge exactly of their size. They vary much in shape, several being deeply indented with bays, and others finely checquered with islands. The shores are invariably bold, though hardly ever precipitous, but rising one or two hundred feet into gentle hills, and long swelling ridges, covered with the finest hard-wood, generally with a small mixture of white pine.

The scenery is of the most pleasant and inviting nature, totally differing from the wild romantic views along the Ottawa, and indeed from any thing I had before seen in the country. It is rare, in the uncultivated parts of Canada, to see beauty and fertility combined. Generally the richest lands have a dreary, and, often too truly, an unhealthy aspect. Here, amidst the most enlivening scenery, there is every appearance of fertility; and both from the nature of the soil and waters, an assurance of the country being of the most healthy nature.

White pine abounds across the whole country in the greatest perfection. Red pine is not seen on this route after leaving the Cedar lake; nor did I observe a single white oak, from the neighborhood of the Ottawa, until approaching lake Huron. Maple is the principal tree about here, perhaps composing half the forest. Birch and beech are in about equal proportions, and bass-wood and elm rather more rare.

The whole of the lakes, not only here but in every part of our routes, are deep and clear, (shoal, or rushy shores being seldom seen) and they seem generally to be stocked with fish of various sorts and excellent quality. In this particular, the waters of the Nesswabic surpass those of any other river I have seen in the country. In its larger lakes, eels and catfish are taken, of a size and plumpness seldom seen in the Ottawa; but the most noted fish is called the white trout, which is caught in abundance, both winter and summer, frequently forty pounds in weight. It is of a light silvery hue, and cream-coloured in the flesh, but in shape and flavor resembles the common speckled trout, which is also plentiful in the same water. Neither of these kinds are found in the Grand river.

The range of lakes above described continues for about twenty-five miles, beyond which the stream winds through an open marsh of considerable size, and the first thing of the kind we had met with. Here it divides into two branches, and our chart directed us up the most northerly. About two miles from the swamp, this channel begins to make a considerable ascent, being interrupted by several small rapids and a fall twelve or fifteen feet high, within the space of a few miles. The route here is extremely tedious, from the scarcity of water, and number of fallen trees. To the south of the stream, the shores are broken and frequently swampy: but we were now close upon the division of the waters, and some interruption to the fertility was to be expected. On the north side the lands still continue good. Five or six miles from the swamp, after ascending a steep rise, upwards of one hundred feet, I found a plain of excellent loam, and apparently very extensive.

At length the stream opens into a deep round basin, about

a furlong across, and from this, a long straight passage, with bold hard-wood shores of the finest foliage, gradually tapers to the breadth of thirty or forty feet, through which, at the distance of about a mile are seen the shores of a more extensive sheet of water—altogether it is a curious and beautiful scene. The northern shores of this lake have even a richer appearance than any thing I had yet met with. After rising somewhat abruptly to a height of sixty or eighty feet, they continue in a level sweep round the lake, covered with the most luxuriant maple woods, and without any pine. Though the bed of the water has here risen considerably, yet the adjoining land is not higher than that along the range of lakes farther down the river; and there is every appearance of the ground to the northward continuing on a fertile level, to the streams flowing towards lake Nipissing, which are only a few miles distant.

The lake which we had now reached, is within the Mississagua hunting bounds, and along the south shore, I was directed to look for the portages leading to the Huron waters. From the Cedar lake, thus far, it had proved a three days' journey, travelling leisurely, though, by the help of Constant's chart, without much delay in tracing out the route. After a little searching we found a portage-path which led to a small lake, and from thence ascending a brook still belonging to the eastern waters, we soon arrived at another carrying place, which, from its westerly direction, and being distinctly tracked and marked, I did not doubt to be the proper route. Having proceeded along it nearly a mile, we were met by an Indian, only the second we had seen since leaving the Ottawa. It could not have occurred in better time, for I now found that we had missed the main route, and begun to follow an interior hunting track.

After retracing our way for a little, the Indian conducted us to an extensive piece of water, which he called Otter lake. Its waters run into the Nesswabic by the most southerly of the two branches, meeting at the swamp before spoken of, and which is only five or six miles distant from Otter lake. Of course this southerly branch should have been our route; but I had no reason to regret our wandering, as it was the means of throwing us in the way of this Indian, without whose information we must have incurred much more serious delay.

He was one of the Iroquois tribe, who reside with the Algonquins, at the Lake of the Two Mountains. They are generally robust enterprising fellows; and, having no hunting territory of their own, frequently ascend the Ottawa, and passing over the grounds of their Algonquin friends, make free with the beavers and otters, on those of the Mississaguas. These Iroquois, from their roving habits, are the best guides through this part of the country. The hunter we had fallen in with, and his father, had been rambling round this neighborhood for a twelve month, and described it as *bonne terre partout partout*, and every where abounding with small lakes. A few hours journey northward from the lake, on the northern branch of the Nesswabic, (and the shores of which are above described as peculiarly fertile) he says the streams run off in a northwesterly direction, and no doubt it must be to the south river, so that it seems almost certain that there is no material alteration in the nature of the country, before reaching the waters running into lake Nipissing. Indeed, from every thing that came under my observation, there appears to be no distinct continuation of heights dividing these level tracts, either towards the north or the west.

A few weeks previous to our meeting with the Iroquois, he had made an excursion to Penetanguishine, and I now learned that a few miles more would bring us to the head of a considerable river, running in that direction. With the lowest part of this river, however, he was not acquainted, having left it some distance above the mouth, by a route crossing to the Severn. I procured from him a chart of his whole journey, as near as he could recollect it, and also a sketch of the various streams of waters forming the heads of the rivers, running both ways from this vicinity.

Round Otter lake the lands have very little rise and are timbered with hard-wood and a considerable mixture of white pine. Where we chanced to encamp, the soil was very good and free from stones. From this lake there is no further ascent on the waters, in the direction we now proceeded. A still channel, in places scarcely twice the breadth of the canoe, winds for a mile or two through a tamarac swamp, and ends in a basin of a remarkably circular shape, near a quarter of a mile in diameter. I think it probable that, at some points, this swamp continues uninterrupted to the first western stream, not a mile distant; but, on the route, the marsh is crossed by a sandy bank, twenty to thirty feet high, and about fifty paces over, and close to the round pond, from which is a miserable sinking portage, of half a mile to the first Huron water, a deep pool two or three acres in extent. The surface of this was raised to its utmost brim, by a beaver dam near the outlet, which accounted for the wet and yielding nature of the portage. The beavers have, in fact, nearly effected the junction of the Huron and Ottawa waters.

After crossing this pond, there is a further portage of about three quarters of a mile, over an uneven rocky tract,

to a lake appearing to be of considerable extent to the right of our rout, and from which flows the river which was to bear us to lake Huron. It is here a fine clear stream, with a gravelly channel, twenty or thirty feet wide, and already with sufficient water, even in the dry season in which I passed, for the easy navigation of a three-fathomed canoe, excepting at a few rippling shoals. This river, by the traders, is called the Muskoka, after the Mississagua chief, who hunts in some part of its neighborhood. The Indians have some other name for it, which I could not learn.

The nature of the rock thus far across the country, is much the same as on the ridges along the Ottawa, and on the Muskoka it continues so quite to lake Huron; the shores and numerous islands of which, near the mouths of this river, as far as I can judge, being of the same granite composition as the Ottawa heights. The different parts of the routes, however, present considerable variety in the rock. On the lower main channel of the Nesswabic, it generally lies in round compact masses of a redish hue, without any regular vein. On approaching the Cedar lake it is dark coloured, and strewed along the shore in angular fractures. From that lake to the height, the surface stone near the Nesswabic chiefly consists of dark coloured bowlders. On the Peonga (or Madawaska route), more solid rock is met with, still of the same kind, but various in its appearance.

On the western descent of the country, there is yet more variety in the granite. It assumes different shades, is sometimes craggy and angular, but more frequently, as on the Huron shore, lying in round solid masses. Nearly from the source of the Muskoka, it is seen at intervals in

smooth beds, or layers, from six inches to four feet thick, and generally dipping to the south-west. I observed no limestone on any part of these routes, from the Ottawa until reaching Penetanguishine bay, where it appears in abundance.

About the first lake on the Muskoka, the shores are rocky and fir-timbered, and they continue so for a mile or two farther down the stream. In half a mile it touches upon another piece of water, extending to the left, and a mile further, after passing a fall two or three feet high, is a very picturesque lake, extending also to the left, apparently several miles. Here the country resumes its fertile appearance, and retains it, with some inconsiderable exceptions, to the mouth of the river. Immediately beyond this lake, is a short rapid and portage, a little below which, the river is joined by a considerable stream from the north, and soon after enters a fine open piece of water, about two miles in extent. Within three miles below this, are two more small lakes, and from this point, which is about twelve miles from the first basin, the water ceases to widen out in this way, now forming a regular river channel, in which are only three more lakes on the whole course.

A little above the lowest of these basins, the Madawaska route, by which we recrossed the country, strikes off from the channel of the Muskoka, and to prevent recurrence may be here described.

On leaving the latter stream, this route follows a chain of small lakes, extending nearly eastward. The height dividing the waters of the two rivers, is between the second and third of these ponds, only about four miles from the Muskoka; and to this point the ascent appears very con-

siderable, probably exceeding one hundred and fifty feet. The stream from these lakes is soon joined by another from the south, and forms a western branch of the Madawaska, which is followed for some way. On this part of the route, the country is very pleasant, consisting of a succession of hard-wood hills of moderate declivity, and the portages are generally over an excellent soil, though often encumbered with loose stones. As we descend the waters of the Madawaska, these favorable appearances begin to give way. Swamps and rocky ridges become frequent near the river, and the pine gradually thickens on the hills. In short, the whole country seems decidedly to change for the worse.

About twenty miles from the Muskoka, the route leaves this branch, and bearing more northerly, proceeds seven or eight miles across a poor stony tract, by several small lakes and rough ill tracked portages. The last of these, not less than three miles long, over rather better soil, conducts to the Abeunga, or, as commonly pronounced, Peonga lakes, which are among the finest in the interior, and form the principal reservoirs of the Madawaska river. The first lake of this name extends northerly, in a winding direction, one or two miles broad, but of the length I could form no idea, as the route only passes up it, about four miles to the outlet, near which there is a trading house belonging to the Company, occupied in the hunting season. After gliding down a swift clear stream, for two or three hundred feet, the second Peonga lake opens to the view, four or five miles in extent, to the north-east, and with a considerable breadth, though its appearance is much diminished by a hard-wood island, containing some hundred acres.

To the north of these lakes, are long, sloping, rising

grounds, between one and two hundred feet high, and of the most fertile appearance. To the south, the country is much in the same form, but covered with firs and birch.—Indeed this route, by the Peonga lakes, with the exception of the first fifteen miles from the Muskoka, appears to be nearly the division line between the hard-wood and fir regions.

There is still another lake of the same name, separated from the others in a similar way, by a short swift stream; but we did not enter it, our route leading off from the middle basin. North-westerly, through two small lakes, still discharging into the Madawaska, and from thence, by a portage of four miles, over a miserable soil, we reached the waters of the Nesswabic at lac Clair, a pretty piece of water, but with sterile looking shores, and appearing to extend about four miles north and south. This is only separated from lac la Vieille by a stream and portage not a furlong in length. The route passes closely up the eastern side of the Vieille lake, about three miles to the outlet. The lake appears to extend much farther to the north; but from the numerous islands, I could obtain no distinct view of its size, in any direction. To the north and west the lands appear good, and here also are some trading huts, only occupied in the winter. As before mentioned, the Vieille stream joins the Nesswabic about twelve miles below this lake. In this space it forms no basins of any consequence, and has many rapids. In one place there is a portage of more than two miles, cutting off a great rapid bend in the stream.

On the whole, the Peonga route is a most harrassing one. It leads over much higher ground than the more northerly route, by the source of the Nesswabic, and is in

every respect less eligible. The whole distance from where we leave the Muskoka, to the mouth of the Vieille stream, appears about fifty miles, and in this space there is no less than three dividing heights of land, and altogether thirty portages, three of them between two and four miles long, and several exceeding one mile. Nineteen lakes, great and small, are crossed.

I now return to the Muskoka :—As already noticed, this river ceases to widen out into lakes, about twelve miles from the first one on the route, and from this point it continues to flow in a regular channel for about twenty miles. On the first seven or eight miles of this space, there are several small rapids, and for the ensuing ten or twelve, is a smooth stream, winding in a most extraordinary manner, through a level sandy valley, timbered chiefly with balsam, tamarac, and poplar, beyond which, however, the hard-wood rising grounds are seen, seldom a mile distant on either side. The river here is of a very uniform breadth, from sixty to eighty feet ; the depth is six feet and upwards quite across the channel, and the current about one mile per hour.

This winding channel is terminated by a great and sudden descent in the river. First is a little rapid water, and then succeeds a fall, nearly perpendicular, of about thirty feet. Below this are some rapids, for half a mile, which suddenly and in a great slanting fall, descending perhaps fifty feet. Neither of the portages at these falls exceed a furlong in length. On the lower one is a curious variety of the rock. When broken, it is of a light carmine colour, and resembling free-stone in the grain. Not much of it is seen above ground, but it appears to be in regular beds, three or four feet thick, and though rather hard

near the surface, it would probably be found, on more thorough examination, a fit and beautiful material for building.

These falls may be considered as the western verge of the interior table lands. In a direct line this point is probably about twenty miles from the division of the waters. The route of the Muskoka, thus far, continues nearly in the same direction as that on the upper parts of the Nesswabic, and the whole direct breadth of the level country on this route appears to be about fifty miles. The perpendicular rise within this space, from either side to the height of land, I should not suppose to exceed seventy feet.

The streams running in every direction from these uplands, have a much more steady supply of water, and are far purer than the lower tributaries of the Ottawa. The channels are generally very moderate in breadth, appearing to be little troubled with floods, which, from the marks along the shores, seldom seem to rise above two feet (perpendicularly) in the streams, and fifteen or eighteen inches in the lakes. These favorable distinctions are readily accounted for in the form and nature of this interior country, consisting of a vast level, generally with a light free soil devoid of marsh, and interspersed with hundreds of small deep reservoirs, retaining and refining the water again and again, before it passes to the main rivers.

The singular facilities which this plain country possesses for water communication, within itself, must be evident. Were there any possibility of leading a population into it, the channels and basins of still water, intersecting it in every direction, might quickly be completed into a ramification of water ways, which for general utility, and natural beauty could scarcely find a parallel. Sufficiently

deep and expansive for the largest steam-boat, and yet too small, or too well sheltered by the bold shores, to be dangerous for the smallest skiff. But without some main line of navigation from the inhabited parts of Canada, this pleasant and commodious region must, for obvious reasons, remain a desert.

In less than half a mile below the great fall, a narrow lake is entered, which appears to extend a number of miles north and south, along the base of the ridge, but we saw neither extremity, merely passing with the flow of the water about a mile across the middle of the lake. From hence the river continues a rapid descent for about eight miles, through fine hard-wood forests to the next lake. In this space the fall, which must be considerable, is principally in rapids, it being the only part of the river where there is any considerable descent of this kind.

The piece of water to which this leads, with its surrounding shores, is the finest in appearance which we met with. It extends about ten miles nearly south, and towards the lower part is a wide inlet to the east, much farther than I could distinguish. Several islands of various sizes, rise boldly from the water, and in the entrance of the great eastern bay, just mentioned, there is one appearing to contain three or four hundred acres of good land. On the west, the shores rise quickly to a considerable height, timbered with hard-wood and white pine. On the east, they form a long gradual slope of the richest appearance, and without a fir for miles.

A large southern branch of these waters flows into the eastern arm of this lake. Its course is through several considerable lakes, and by it canoes may pass to the Trent or lake Simcoc. I did not see this branch, but was informed

of it by a trader well acquainted with this vicinity. He further asserted that saltpetre is found on a certain part of the stream, not far from its mouth. The fine central basin which receives these rivers appears to have been long a principal station of the traders. There are here vestiges of two old establishments, besides a commodious house in good repair, but deserted when we passed.

The Muskoka flows from the southern extremity of the lake, apparently doubled in size. It is now from one to two hundred feet wide, containing about as much water as the Rideau, and continually interrupted by small falls, with here and there a short rapid, among which obstructions there is seldom four miles of still water together. The channel between the falls is alternately composed of sand and a firm compact gravel. The portages, which are now well tracked, are generally over even ground, the shores of the river being seldom rough or precipitous, even near the falls and rapids. Considering the great descent of the country, the canoe route is as good as could be looked for, consisting, with little exception, of smooth runs and short portages, and this continues to be its character to the end. In returning we made our way up the river about as expeditiously as we had descended.

This succession of small falls continues for about twenty miles from the Trading lake, when the river again makes a great and sudden descent. There are first two falls, from fifteen to twenty feet in height, and then a sloping fall of sixty or seventy, all within a quarter of a mile, and in a straight range down the ridge, forming together a wild interesting scene. A little below this, the river is joined by a large branch from the north, and it now winds gently with a broad deep and still channel to its last and largest

lake, about six miles distant from the great fall.

There are altogether fourteen portages on this river, and the difference in level of the two lakes, is, I think, about two hundred and fifty feet. The channel here is not remarkably winding except at two points, for a few miles. The course continues much the same as on the upper parts of the river, averaging about S. S. W. until half way between the lakes, when it makes a decided turn nearly westward for the remaining part of the route. The lands retain their promising appearance along this part of the river, being almost every where covered with timber of nearly the same description as that in the centre of the country. In returning I examined the vicinity of most of the portages, and almost invariably found a light soil of fair quality, though frequently uneven and strong, as might be expected near the falls.

The large stream which flows in from the north at the lower part of this run, is the same by which, and the south river, (as before hinted) there is a canoe route to lake Nipissing. On a lake about two days journey up this branch, is a trading station to which the common route is, not by the Muskoka, but along a considerable river flowing out of, or through a large lake not far to the westward of the station, and entering lake Huron, (as I am told,) about thirty miles from the French river. It is called the Neyetewa, and the country along its upper parts, and on the northern branch of the Muskoka, is said to be much of the same nature as that which we passed through.

The last Muskoka lake is a great body of water extending chiefly north-westerly, and containing hundreds of islands, some of them very large, but appearing mostly barren. From the entrance of the river, the route runs westerly

through the islands, about ten miles to the outlet of the lake, which we found without much delay, having fortunately met with an Indian, (only the third we had seen,) the night before, who directed us how to steer, and but for this, we should, in all probability, have spent days in searching for it. It was impossible to form any idea of the extent of this piece of water to the northward, on account of the multitude of islands. To the south west, it extends about ten miles from the outlet. In this direction it is less crowded with islands, and has a fine appearance. Where the main shores could be distinguished, they generally seemed to be of a habitable nature, continuing round the water in an even moderate elevation, with, however, a greater proportion of white pine than I had before usually observed. At the lower end of the lake, the appearance is not favorable, the growth, as far as seen, being of the fir kind.

From the southern extremity of the lake to the Severn river, the distance is only eight or nine miles, and over this space is the common route by which the fur traders reach the waters of the Muskoka. From the lake is a portage of about three miles, leading to a rivulet which passes through two small lakes, and enters the Severn, half a mile above the fifth portage from Penetanguishine bay. On my return I ascended the Severn and regained the Muskoka by this route. The long portage, close to the large lake, is mostly over a good, though uneven soil, but from that to the Severn, the country gradually assumes a barren aspect. Along this river from the fifth portage to its mouth, a distance of fifteen or sixteen miles, the shores are uniformly barren, consisting, in fact, generally of solid rock, even on the smooth water. The limestone of

Penetanguishine bay does not extend up the Severn, the stone of this river appearing exactly of the same nature as along the Muskoka. Both streams evidently flow from the same ridge of country, though the sources of the Severn, are without doubt in a much lower part of it. The elevation, however, of lake Simcoe above the Huron, must be considerable, there being seven portages altogether to this lake, and five of these which I passed, certainly form an ascent not far from one hundred and twenty or thirty feet.

At the outlet of the large Muskoka lake, is a fine fall sixteen or twenty feet high, with a heavy body of water. The river now appears to contain considerably more water than the Severn, and probably three times as much as the Rideau. A mile or two below this fall, the channel is divided. The principal branch runs north-westerly, and enters the Huron at Moose point, said to be about thirty miles from Penetanguishine. The lower branch appearing to lead off about one third of the water, continues in a westerly course thirteen or fourteen miles to a small sequestered bay on the lake, about ten miles north of the same place.

We followed the lower stream. There are on it ten short portages chiefly passing moderate falls, which, with some rapid water, form a descent from the Muskoka lake, of probably about one hundred and fifty feet. The breadth of this channel is very irregular, particularly towards its outlet, where it spreads out into ponds full of rocky islands. The lands along it continue good, and even appear to increase in fertility as we approach the lake. The soil at the portages is richer than I had generally observed close to the river, and often free from stones to the brink of the falls and rapids. Within three or four miles of lake

Huron, a sudden change takes place, and nothing is now seen but low, solid, and frequently bare masses of rock. We reached the immense expanse of water the seventeenth of September, the eighteenth day from the Ottawa, and a long swell from the boundless north-west drove our *now* little canoe speedily into the bay of Penetanguishine.

No contrast can be more complete than that of the fine sloping hard-wood lands surrounding this spacious inlet, and the bleak granite coasts and islands immediately to the northward. Proceeding down the bay, we soon perceived that the settlement of its shores was in the act of commencement. At various points were small new inroads into the forest, with buildings apparently but of a few days standing. On approaching one of these, a voice in the broad Yorkshire dialect, directed us round a point into the smaller cove on which is the naval station.

One cannot view this noble bay and its vicinity, forming a position at once beautiful, fertile, and central, between the older settlements of Upper Canada, and the great western navigation of the lakes, without feeling a surprise that it should have remained in a state of nature to so late a day. As a port, however, Penetanguishine seems to have one serious disadvantage. From its retired situation at the bottom of the Georgian bay, and the prevalence of strong north-west winds at particular seasons, it is often a matter of the greatest difficulty for vessels to gain from hence the body of the lake. The master of a schooner which happened to be at the station, informed me that in the previous autumn he had spent twenty-five days in attempting to beat round Cabot's head, and, if I remember right, was obliged after all to winter his vessel in the bay.

In returning, I fell in with the man who had remained

at the Cedar lake on the twenty-fifth day after leaving him. He had procured a chart of the lower part of the Nesswabic, and was prepared to start punctually on the thirtieth day. It was well for him that we had not been delayed beyond that time, as his safe descent, alone and inexperienced in such a channel, would have been almost impossible.

It occupied us altogether twelve days to repass from Penetanguishine to the lake des Allumettes. Our travelling was not expeditious, the men being obliged to pass twice over the portages, and it being often very difficult to get our three fathomed canoe through the uncleared tracks.—Had I kept my old route instead of ascending the Severn, and afterwards turning south by the Madawaska waters, we should probably have regained the Ottawa in ten days. By the sources of the Nesswabic, a good route for canoes (considering the elevation of the country) might be easily opened the whole way from lake Huron to the Cedar lake. Little rapid water is encountered on this route, and none of the portages, in all about forty-five, exceed three quarters of a mile. If these were widened where necessary and some fallen trees and drift wood removed from the upper parts of the rivers, a well manned canoe might pass between the two points in four or five days. From the Cedar lake to the Ottawa, the various routes are difficult or circuitous, as before explained, and the only apparent way to obtain expeditious access here, is by a road up the Maskinongé valley.

From every appearance of the country along the upper parts of the Nesswabic, and the whole of the Muskoka river, I have no doubt that a fair proportion of it is fit for settlement and cultivation. On this line, the lands throughout appear to be composed of the lighter soils, and

are well elevated above the waters. My opportunities of examining them were chiefly confined to the neighborhood of the falls and rapids, where, of course, we may expect to find the inferior portion of the soil; but even in these places I frequently found excellent loamy lands, and seldom any that are totally unfit for cultivation. If, however, this line of country cannot be considered as the richest in Canada; its considerable elevation, free soil, and pure waters, ensure it as being unsurpassed, and perhaps unequalled, by any other section of the country, in the important requisite of healthiness.

With regard to the nature of the whole body of the country, extending from the sources of the Madawaska to lake Nipissing, and from lake Huron to the Ottawa, I cannot, from merely passing through it in one or two lines, pretend to speak with certainty. The central part, however, of this wide region is, without doubt, generally good, there being, as already stated, every reason to suppose that the soil increases in fertility as we descend from the elevated tracts on the head waters of the Nesswabic and Muskoka, towards lake Nipissing. As to that part nearer lake Huron, and south of the French river, I have obtained but little distinct account, which is favorable, however, as far as it goes. On the whole, every thing I have seen or heard, enables me at least to state that in this, hitherto, unnoticed part of Canada, a fine habitable country will be found, to the extent of millions of acres; and I have now only to express my hope, that it will, ere long, be rendered accessible to population.

Notes respecting certain TEXTILE SUBSTANCES
in use among the North American INDIANS,
by W. GREEN, *Esqr.*

THE Indians of North America were found, by the Europeans, in possession of the means of manufacturing cordage, and of making a variety of articles of fine thread, both by ingenious plaiting, and by weaving in its simpler modes. It does not appear that, for these purposes, they used the flaxen and hempen fibres which we employ; nor does it appear that the *phormion tenax*, (if, indeed, this continent or its islands produced that plant, so abundant in New Zealand, and elsewhere in Polynesia,) nor that the nettle, [*urtica*] each of them so much superior in strength and elasticity to hemp, were known to the Indians as textile fibre. Sinew and hide were among the substances extensively used by them, and preferred for many purposes for which their superior strength and the minute divisibility of the former peculiarly fitted them. The flax and hemp introduced from Europe, have by no means, even now, and among those Indians whose domestication has given them the readiest access to European productions, superseded the use of the substances employed by their ancestors: and, if this retention be not merely a consequence of partiality for that which is derived from the remote past—

but be founded on a knowledge, either of the sufficient or the superior fitness of the articles to the end of their application, or on the facility with which, from their abundance, they may every where be procured, it may be useful to record what are the substances, and what the process by which they are prepared, in the hope of enlarging our own list of materials useful in manufactures and arts.

The inner bark of the more slender branches of the elm, of hornbeam [*carpinus*], of American walnut [*juglans cinerea*], of linden [*tilia*], of *bois de plomb* [?], being stripped from the wood, and the outer bark scraped off, is macerated in ley of wood-ashes, and boiled in it, then rinsed in pure water; and, for many purposes, such as the making of various ligatures, no other preparation than merely twisting it to increase its flexibility, (as is done with withs in the same intention,) is used. But for plaiting and weaving, the bark having been treated as above, is beaten with a mallet, until its separated fibres become of the required tenuity. Among the articles made of these filaments, are the bands which, passing round the head and shoulders, sustain the weights the Indians have to carry in their excursions. The strain these bands bear on such occasions is very great. They are ingeniously plaited, often highly ornamented with embroidery, are two or three inches in breadth, are divided at the ends into narrow strips, for the more convenient attachment of the suspended baggage, and they are as soft and pliant as any thing made of flax can be.

For coarser purposes the bark of white cedar [*thuya occidentalis*], is used. It does not undergo the preparation stated above, but is merely supplied by twisting. All the above materials may be procured several feet in length.

For stitching the sheets of birch bark, of which their canoes are made, slender roots of the spruce tree are used. The root is merely slit longitudinally into strips, as thick as packthread, moistened, twisted and applied. The sewing is then payed over with resin extracted from pine-knots by boiling them in water.

The *phormion tenax*, although so exceedingly strong, contains some principle soluble in weak alkaline ley and even in soap and water, the removal of which principle reduces its strength below that of most other fibres, very much limiting its utility. The fibre procured by the Indians, in not being weakened by these menstrua, has some advantage over that otherwise invaluable filament.

It cannot be doubted that every textile fibre of vegetable origin would be a fit material for *paper*—and it is probable that the toughness of that article, which ought to be extreme, might be made as nearly equal to that of the original material as is consistent with its nature, by reducing it to pulp by *sufficiently pounding it, instead of hashing it*, (as is usually done,) into particles having little more coherence than is afterwards supplied by sizing the sheet.

*Autograph Letter of COTTON MATHER, on
WITCHCRAFT, presented to the Literary
and Historical Society, by the Honorable
Chief Justice SEWELL.*

17th 6^m, 1692.

S^r,

You would know whether I still retain my opinion about y^e horrible Witchcrafts among us, and I acknowledge that I do.

I do still Think That when there is no further Evidence against a person but only This, That a Spectre in their Shape does afflict a neighbour, that Evidence is not enough to convict y^e — of Witchcraft.

That the Divels have a natural power w^{ch} makes them capable of exhibiting what shape they please I suppose no body doubts, and I have no absolute promise of God that they shall not exhibit *mine*.

It is the opinion generally of all protestant writers that y^e Divel may thus abuse y^e innocent, yea, tis y^e confession of some popish ones. And o^r Honorable Judges are so eminent for their Justice, Wisdom, & Goodness that whatever their own particular sense may bee, yett they will not proceed capitally against any, upon a principle contested

with great odds on y^e other side in y^e Learned and Godly world.

Nevertheless, a very great use is to be made of y^e spectral impressions upon y^e sufferers. They Justly Introduce, and Determine, an Enquiry into y^e circumstances of y^e person accused; and they strengthen other presumptions.

When so much use is made of those Things, I believe y^e use for w^{ch} y^e Great God intends y^m is made. And accordingly you see that y^e Excellent Judges have had such an Encouraging presence of God with them, as that scarce any, if at all any, have been Tried before them, against whom God has not strangely sent in other, & more Humane & most convincing Testimonies.

If any persons have been condemned, about whom any of y^e Judges, are not easy in their minds, that y^e Evidence against them, has been satisfactory, it would certainly be for y^e glory of the whole Transaction to give that person a Reprieve.

It would make all matters easier if at least Bail were taken for people Accused only by y^e invisible tormentors of y^e poor sufferers and not Blemished by any further Grounds of suspicion against them.

The odd Effects produced upon the sufferers by y^e look or touch of the accused are things wherein y^e Divels may as much Impose upon some Harmless people as by the Representacôn of their shapes.

My notion of these matters is this. A Suspected and unlawfull com^union with a Familiar Spirit, is the Thing enquired after. The communion on the *Divels* part may be proved, while, for ought I can say, The *man* may be Innocent; the Divel may impudently Impose his com^union upon some that care not for his company. But if the

com^union on y^e man's part bee proved, then the Business is done.

I am suspicious Lest y^e Diavel may at some time or other, serve us a trick by his constancy for a long while in one way of Dealing. Wee may find the Diavel using one constant course in Nineteen several Actions, and yett hee bee too hard for us at last, if wee thence make a Rule to form an Infallible Judgement of a Twentieth. It is o^r singular Happiness That wee are blessed with Judges who are Aware of this Danger.

For my own part if the Holy God should permitt such a Terrible calamity to befall myself as that a Spectre in my Shape should so molest my neighbourhood, as that they can have no quiet, altho' there should be no other Evidence against me, I should very patiently submit unto a Judgment of *Transportation*, and all reasonable men would count o^r Judges to Act, as they are like y^e Fathers of y^e public, in such a Judgment. What if such a Thing should be ordered for those whose Guilt is more Dubious, and uncertain, whose presence y^s perpetuates y^e miseries of o^r sufferers? They would cleanse y^e Land of Witchcrafts, and yett also prevent y^e shedding of Innocent Blood, whereof some are so apprehensive of Hazard. If o^r Judges want any Good Bottom, to act thus upon, You know, that besides y^e usual power of Govern^{rs}, to Relax many Judgments of Death, o^r General Court can soon provide a law.

S^r,

You see y^e Incoherency of my Thoughts but I hope, you will also some Reasonableness in those Thoughts.

In the year 1645, a Vast Number of persons in y^e county of *Suffolk* were apprehended, as Guilty of Witchcraft; whereof, some confessed. The parliament granted a special

com[^]ission of *Oyer & Terminer* for y^e Trial of those Witches; in w^{ch} com[^]ission, there were a famous Divine or two, M^r *Fariclough* particularly inserted. That Excellent man did preach two sermons to y^e Court, before his first sitting on y^e Bench: Wherein having first proved the Existence of Witches, hee afterwards showed y^e Evil of Endeavouring y^e Conviction of any upon Defective Evidence. The Sermon had the Effect that none were Condemned, who could bee saved w^{thout} an Express Breach of y^e Law; & then tho' t'was possible some Guilty did Escape, yett the troubles of those places, were, I think Extinguished.

O^r case is Extraordinary. And so, you and others will pardon y^e Extraordinary Liberty I take to address You on this occasion. But after all, I Entreat you, that whatever you do, you Strengthen y^e Hands of o^r Honourable Judges in y^e Great work before y^m. They are persons, for whom no man living has a greater veneration, than

S^r,

Your Servant

C. MATHER.

For

the Honourable

John Foster Esq.