The Report of the Board of Agriculture of Ohio, published in January last, and to which I have already referred, contains returns of the average prices of grain and roots obtained in the several Counties of that State in 1848, furnished by the Secretaries of the several County Agricultural Societies. I have tabulated these returns, and have drawn from them a general average of the prices obtained in the whole State in that year, compared with the New Brunswick prices. They are as follow in New Brunswick currency :

XXV.

	State of Ohio.	*New Brunswick.*
Wheat,	31s. per quarter.	60s. per quarter.
Barley,	14s. 8d. do.	3s. do.
Oats,	8s. do.	16s. do.
Rye,	16s. do.	38s. 8d. do.
Buckwheat,	14s. 4d. do.	30s· do.
Indian Corn,	10s. 8d. do.	37s. 4d. do.
Potatoes,	1s. 10 1-2d. per bush.	1s. 11d. per bush.
Hay,	23s. 9d. per ton.	English, 49s. Marsh, 20s.

I need not remark on the great superiority of the New Brunswick over the Ohio State prices, as shown by the above Table. It ought to be borne in mind however, in order to understand the full value of the differences between the sets of numbers in the two columns, that the comparative productiveness of the two countries, as shown by Table X. inserted in a previous part of this Report, is also in favour of New Brunswick. To make this clearer, I introduce, as I have done in regard to Upper Canada, a combined view of the produce per acre, and the prices obtained in the two Countries, on an average of the whole returns from each :—

XXVI.

	State of Ohio.		*New Brunswick.*	
	Produce per acre in bush.	Price per quarter.	Produce per acre in bush.	Price per quarter.
Wheat,	15 1-4	31s.	17 3-4	60s. 8d.
Barley,	24	14 8	27	34
Oats,	33 3-4	8	33	16
Rye,	16 1-3	16	18	38 8
B. Wheat,	20 1-4	14 1	28	30
Corn,	41 1-4	10 8	36 1-2	37 4
Potatoes,	69 1 4	bu. 1 10	204	1 11 b.
Hay,	t. 1 3-4	23 9	1 1-3 t.	20 to 49s.

All the members, whether they represent produce or prices, are superior in the case of New Brunswick, except the produce of Indian Corn; and it is probably in the general adaption to the growth of this grain, that the State of Ohio differs most widely from New Brunswick in its agricultural character.

If we combine together the produce per acre, and the prices obtained for the produce in the markets of Upper Canada, New Brunswick, and the State of Ohio, we shall obtain the average money-value of an acre of each crop in the three Countries. This money-value—what it would sell for in the home market—ought to measure, if other things be equal, the comparative profit of farming, and the value of farms in the several countries. I have calculated these values, and embodied them in the following Table :

XXVII.

Average money value of an acre of each crop.

	State of Ohio.	Canada West.	N. Bruns.
Wheat,	£2 19 0	£2 4 7	£6 13 0
Barley,	2 4 0	1 19 4 1-2	5 13 7
Oats,	1 13 9	1 11 0	6 3 6
Rye,	1 12 4	1 5 10 1-2	4 7 0
Buckwheat,	1 16 3	3 5 0	2 5 0
Indian Corn,	2 15 0	2 14 4 1-2	8 10 4
Potatoes,	6 9 4 1-2	6 6 0	19 11 0

A glance at these three columns shows how much larger a money return the New Brunswick land yields to the farmer, than that of either Upper Canada or the State of Ohio. Unless there be something very special in the circumstances of the New Brunswick farmers therefore, one cannot refrain from concluding—

1st. *From the amount of produce—*

a. That grain and roots generally can be raised more cheaply in this Province than either in New York State, the State of Ohio, or Upper Canada ; and

b. That it ought to be able to compete with these Countries successfully, and drive them from its home markets.

2nd. *From the prices obtained*—That if the farmers in these countries can make a living, the New Brunswick farmer should be able to do so easier, and should be better off than they are.

Chapter VIII.

Of the climate of New Brunswick in relation to its agricultural capabilities, and to the profits of farming.

The subject of general climate is a very wide one, but the relations of climate to agriculture, in the economical sense, admit of a comparatively limited discussion.

Two things in regard to the climate of New Brunswick, I feel myself compelled by all the evidence I have collected, unreservedly to admit—

1st. That this is an exceedingly healthy climate. Every medical man I have met in the Province, I believe without exception, and almost every other person I have conversed with, assure me of this: and the healthy looks and the numerous families of the natives of all classes confirm these assurances.

2nd. That it does not prevent the soil from producing crops which, other things being equal, are not inferior either in quality or in quantity to those of average soils in England ; while the Tables of produce introduced into a previous chapter shows, that according to our present knowledge, it permits the soil of New Brunswick to yield crops which exceed the present averages of Upper Canada, and of the States of New York and Ohio.

The admission, especially of this latter fact, shortens our enquiry very much, and restricts our attention almost entirely to the economical influence of the climate on the farmer's operations—the mode in which it interferes with these operations—and the extent to which it lessens the farmer's profits.

1st. *As to the way in which it interferes with the farmer's operations.* This it does cheifly by shortening the period during which all the out-door business of the farm is to be performed.

The ploughing and sowing of Spring, the root husbandry and hay making of Summer, and the reaping and ploughing of autumn, have all to be hurried into the few months which intervene between the final thaws of Spring and the first snows of approaching winter. It cannot be denied that, to whatever extent the time for these field operations is really shortened in New Brunswick, in comparison with other countries, by the duration of winter, to that extent the Provincial farmer is hampered in his work.

If we suppose the year to consist only of a summer and a winter, and that the length of the Summer is very nearly represented by the interval between the earliest sowing and the latest reaping, we obtain from the preceding Table the following data and deductions :

1st. Earliest sowing in the Province, 17th March,
Latest ploughing in the Province, 1st Dec.
Longest summer from these data—8 months and 14 days.
2nd. Latest early sowing, 15th May.
Earliest late ploughing, 1st Nov.
Shortest Summer from these data—5 months and 15 days.

3rd. Mean length of the Summer from these two results —6 months and 22 days.

4th. Average interval between the earliest sowing and latest ploughing—or mean length of Summer—deduced by combining all the returns in the preceding Table—6 months and 22 days.

This number being identical with that deduced from the extremes only, may be considered as a very near approximation to the general or average length of the Summer in New Brunswick.

It of course varies in different Counties to an extent which may in some measure be learned from the returns contained in the Table, but these variations do not affect any general considerations which are intended to embrace the whole Province.

The tillage of the land, and the growth of the crops therefore, in this part of the world, must be all accomplished in an average period of six months and twenty days.

(To be Continued.)

REPORT ON THE NAVIGATION OF THE RIVER ST. JOHN.—*Continued.*

Arestook Bar.—*Survey No. 3.*

The water way of the Saint John is contracted above its confluence with the Arestook by ledges of stratified rock, sloping into its bed from the left bank, confining the channel to narrow limits, and causing a depth of water exceeding 10 feet, but as it disappears again from the bed of the River, and allows the water a free discharge, the greatest depth that occurs during seasons of ordinary dryness, is 2, 9,,; this reduction is also to be attributed to a shoal of stones and gravel deposited where the current of the Arestook loses its transporting power on joining the less rapid water of the Saint John. It therefore seems to us evident, that in order to ensure a sufficiently deep channel over this bar, some artificial means must be resorted to to arrest the flow of the water over too great a surface, and at the same time cause a stronger current at this spot to clear a deeper channel through the gravel shoal stated to have accumulated there. For this object we propose to throw out the Dam shewn in Plan No. 3, from the left bank, bending down the stream, to be constructed of cribwork, and loaded with stone, its average height to be 5 feet, length 170 yards, and probable cost £280.

Tobique Rapids.—*Survey No. 4.*

The natural dam across the Saint John at the confluence of the Tobique River, is composed of a mass of stratified rock, extending obliquely across its bed from the left to the right; elevated ledges of this reef appear above the surface of the water, sometimes on one side of the river, and sometimes on the other ; thus the water escapes too generally over the wide space between the banks, to allow a partial collection of a sufficient body in any one channel. The right channel is through narrow openings in the ledges, with comparatively deep water; but these ledges are passed in quick succession, and the breaks through them not being opposite to each other, the course is too tortuous to be rendered a safe channel for boats in the rapid water; for this reason, the channel most used is the one following the left bank, past the Indian Village, to the embouchure of the Tobique, thence following the current across the Saint John, where it runs swiftly through the principal ledges which show above the surface, pass into the deep water channel to the right of the large isolated rock in the middle of the River. From the head of the shoal to its foot, a distance of 900 yards, the River falls 4, 8 1-2,,. The soundings past the Indian Village vary from 1, 6,, to 3, 0,,, the depth at the mouth of the Tobique is 6 feet passing into 4 feet, 3 feet and 2 feet in succession, and then deepens quickly to 6 feet and upwards. The draught of water is evidently down the right channel, and should be maintained, if it was not for the dangerous passage through the reefs. In order to divert the stream from the right to the left, dams must be so constructed as entirely to change the direction of the current, until after passing the rocks called the "Devil and Indian;" three in all probability, will be required :—

AB 233 yards long, to raise the water on the head of the bar.

CD 140 yards long, to stop the flow through an elevated reef of rocks, in order to dam back the water over the foot of the bar and confine its flow to narrower limits,—and

EF 100 yards long, to act in conjunction with CD and destroy the natural tendency of the stream to revert to its original course after passing an impediment placed across it.

The expense of these services will be about £1,330.

Tobique Rocks.

A number of large masses of rock stand in the stream about 4 miles below the Tobique River, known as the "Tobique Rocks," one of these, situate in the channel, and nearly opposite to Lally's Creek, should be removed ; probable cost £5.

Bishop's & Immaun's Rocks.

"Bishop's Rocks," and "Immaun's Rocks," further down the River, interrupt its free navigation, but a wide and sufficiently deep channel is found between them.

Kilburn's Rapid.

About 1 mile above the "Muniac River," a natural dam of solid ledges of rock, extends directly across the bed of the River, over which the water runs; two passages through it afford straight channels for boats with 4, 6,, water.

Muniac Bar.

There is a shoal off the mouth of the Muniac River, the water 4 feet deep, also a reef of rocks across the St. John, but this latter should be no obstruction if the Pilot knows the River.

Fitzherbert's Rapids.—*Survey No. 5.*

The impediment to the navigation between the Great and Little Aquisaquit River, is caused by the combined influence of an increased declivity in the bed of the River, by the course of the stream being crossed obliquely by discontinuous ledges of stratified rock, and by the interspersing of large erratic blocks of stone. Through the broken water in this locality, known as "Fitzherbert,s Rapids," there are three boat channels, which diverge from each other to avoid particular rocks; but in every case, the boats must pass close to the reef of rocks marked K. where the depth varies from 2, 9,, to 3, 3,, with a hard rocky bottom ; then avoiding several sharp reefs, some sunken, others barely visible, the only passage is through the deep strong water between the reef No. 8 and the rock No. 9; this latter rock, which is most in the way, (from the set of the current,) is an arractic block, 2 feet below the surface, and can easily be removed by blasting ; the other ledges, standing in deep strong water, and whose strata are nearly vertical, cannot readily be blasted, so that any attempt to form a strait channel, or lower the bed of the River to the right or left of K, could not be undertaken with any prospect of success ; the most simple remedy that offers, is to contract the space through which the water discharges in order to raise its level in the channels among the rocks ; we therefore propose to stop the flow through the reef No. 2, by the construction against it of a dam from the left bank, projecting 150 yards into the stream ; its average height will be 5 feet ; a good channel may then confidently be expected by following the track marked on Plan A B C D ; and probable cost together with removal of the rock, £250.

(To Be Continued.)

The Hippopotamus.—The safe arrival of a living Hippopotamus in the menagerie of the Zoological Society is already well known through the daily press. The whole of the arrangements for his transport to Cario have been most successful, and reflect the highest credit on the energy and ability of all who were concerned in them.—It will be readily understood that no ordinary difficulties had to be surmounted in his maintenance at Cario, in the first instance, during five months ; and afterwards, in getting him down to Alexandria, shipping him on board the *Ripon*, supplying him with the vast amount of fresh water necessary for his bath, transferring him from the steamer to the railway, and thence to the Gardens. It appears, however, that throughout the whole of his eventful journey from the Island of Obaysch, where he was captured in July or August last, some 1800 miles above Cario, everything has conspired to give a favourable issue to the Viceroy's liberal desire to assist the Society in the most interesting and important enterprise which they have ever undertaken. Several attempts have been made within the last twenty years to obtain living specimens of this great amphibious quadruped, but with uniform ill success; so that an offer of an American agent at Alexandria to give £5000 for an animal of this species delivered to him at that city, has entirely failed to induce any speculator to encounter the risk and labour of an expidition to the White Nile, with this object. Nothing perhaps more clearly denonstrates the value of the Pasha's gift, and of Mr. Murray's energetic advocacy of the interests of science than the fact that even Egypt, in the land of its nativity, the Hippopotamus is now so far removed from the observation of men, that the animal possessed by the society created intense wonder and interest at Cario, and could only be withdrawn from the curious gaze of ten thousand spectators who witnessed the debarkation from the canal boat at Alexandria by the intervention of a strong body of the Pasha's troops, who accompanied it as a guard to the place where the Ripon was moored.

The Hippopotamus was first seen in the Gardens by ourselves and the members of the Society on Sunday morning last, having arrived at a late hour on the previous evening. His beautiful and healthy condition his docility and attatchment to his Arab attendant, and the evident enjoyment with which he plunged and gambolled in the water, gave satisfactory evidence of the care which had been bestowed on him, and the foresight with which the Societie's arrangements had been laid for his reception. Although yet under a twelvemonth old, his massive proportions indicate the enormous power which will be developed in his maturer growth ; and the grotesque expression of his physiognomy far exceeds all that can be imagined from the stuffed specimens in museums, and figures which have hitherto been published from the reminiscences of travellers.

To see the hippopotamus rightly, is to see him in the water ; there his activity is only surpassed by the otter or the seal ; and fortunate is the spectator who obtains his first impression of the animal as he emerges suddenly above the surface, after diving or lying tranquilly at the bottom of the tank, which occupies a large portion of the house in which he is exhibited. The beautiful adaption