

APPENDIX.

REPORT BY WM. GOSSIP, ESQ., DELEGATE TO THE ROYAL SOCIETY
AT OTTAWA, MAY, 1883.

(Read Nov. 12, 1883.)

AT the Quarterly Ordinary Meeting in April, 1883, of the Nova Scotian Institute of Natural Science, I was chosen a delegate to represent the Institute at the meeting of the Royal Society of Canada, with which we had become affiliated, and which was appointed to be held at Ottawa in the following May. It was a pleasure to me to be the recipient of, and to accept the honor and responsibility; and as a natural sequence it appears that I am expected to furnish some account thereof, so far as my observation extended. I should very much have wished, that what I had to say were of far greater interest; and the only credit I take in the matter is, that it may help to wile away the time in the absence of important papers on subjects of a more scientific nature.

It is certainly a long journey between Halifax, the capital of Nova Scotia, and Ottawa, the Capital of the Dominion, our Institute being the most remote eastwardly of the affiliated Societies. I had never visited the Metropolis, and this was no doubt a chief inducement to undertake it, as it afforded a favorable opportunity of doing the nine hundred and odd miles that intervened. To encourage hesitating travellers, I may state that the journey proved very pleasant at this season, the weather generally delightful, and growing gradually into comfortable summer warmth; and I may also mention, that so far as railway mishaps are concerned, we met with none, and that nothing

occurred to mar the pleasure of the excursion, or is likely to occur on any similar occasion, so far at least as careful management of the Intercolonial is implicated.

Professor Allison, Superintendent of Education, and delegate of the Nova Scotia Historical Society, and Professor MacGregor, of Dalhousie College, a member of the Royal Society, and of our Institute, were fellow travellers with myself from Halifax, and a delegate from New Brunswick, on the same errand, met us at Moncton. There was very little railway detention at any of the stations, and we realized a decided improvement since former visits in this direction, at the stations where provision and attendance are furnished,* the quantity and quality of which minister so largely to the comfort and convenience of locomotion.

There is a marked difference in the length and severity of the winter between the Atlantic coast of Nova Scotia and those parts of New Brunswick and Quebec through which we had now to pass. We left no snow behind us, either at Halifax or Truro, and cultivation was fairly progressive, onward and past Amherst to Moncton. But although this was well toward the end of May, the snow had not entirely disappeared further along the route, and very few signs of progressive vegetation were to be seen. On the hills around, here and there, and often in secluded places on the railway level, were large patches of snow, first seen at Coal Branch, N. B., most frequent from Campbellton on the Restigouche, and onward on the Metapedia, an affluent of the Restigouche, which, spreading into a large lake-like expanse, still retained its winter covering of ice, although evidently on the point of breaking up. The ice was all gone on our return, eight days later.

We get no more than a passing glimpse of the small townships or villages, which follow each other in rapid succession on the railway route by the lower St. Lawrence, on to Chaudiere Junction, near to Point Levi. Rimouski, a summer port of the Allan steamship line, is apparently the largest and most important. What can be seen by the railway traveller does not exhibit signs of any modern improvement except the railway itself. The

* Except at Chaudiere Junction.

approaches to some of the stations are picturesque and of much natural beauty. On the sea side is the Gulf, at this season a sombre, sailless, vast expanse of open water. On the land side the ground presents a bare, uncultivated appearance, with a few sheep and cattle grazing, where a human being at this season is a rare appearance. At the stations the scene changes. There the arrival of a train is still an important event, and excites curiosity and talkativeness. The language is French *patois*. The people around the stations are all seeming idlers and French labourers and artizans. The village dwellings look comfortable, but without any pretensions to architectural neatness or design. A further acquaintance might, however, develop something better worth looking at than tavern and other signs and insignia. Almost every station bears the name of a saint, who, from appearances around, does not seem to care much for the growth or prosperity of the place after which he or she is named. To use an expressive and homely Scotch phrase, these holy patrons appear to "have ta'en a scunner" at the whole region. There is, however, a large bid all along the Lower St. Lawrence, in spite of apparent neglect, for saintly protection and intercession in mundane concerns.

On arriving at Chaudiere Junction, near Quebec, the Intercolonial ends, and the Grand Trunk monopolizes passengers and freight onwards, to the serious detriment of our railway line. We arrive at Montreal early Sunday morning, and express some astonishment that so far the attendance of members and delegates from the Lower Provinces is so scant. The day was remarkably hot, and the morning was spent in leisurely visiting Notre Dame, the Quays, and other remarkable localities. In the afternoon Prof. MacGregor, our New Brunswick friend and myself strolled up the mountain to McGill University, or College—the latter being its more popular and familiar appellation. It occupies a conspicuous site, and is a cluster of detached buildings, about which exteriorly there is nothing remarkable, either in architectural design or beauty. The Principal was away at Ottawa. After satisfying, so far as was possible, our curiosity, we climbed the steep stairs back of the house and grounds which formed the

handsome residence of the late Sir Hugh Allan, who gave to Canada the noble line of steamships that bear his name, passed on above the reservoirs that regulate the water supply of the city, ascending in this way to the summit of the mountain, from which spreads in every direction the most enchanting and extensive view of the country around. At our feet in Sunday quietude and silence lay the City of Montreal, every tower and spire (Notre Dame conspicuous) easily distinguishable. Next the noble river with its wealth of shipping at the quays, the Victoria Bridge, its chief feature,—and then the country beyond and around on all sides, studded with villages and farms—the whole embracing a circumference of fifty miles or more. There were not many on this hot day who had achieved so elevated a position—but the scene well repaid the exertion. The mountain with its palatial residences, religious houses, and sylvan scenery, presents of itself a richly picturesque appearance. At this height and so early in the season, indicative of the rapidity with which spring or summer succeeds the intensity of winter's cold around Montreal, the ground was covered with quite a luxuriant growth of herbaceous plants and wild flowers in full bloom and rare beauty, not having, so far as we are aware, their counterpart in Nova Scotia (of which our New Brunswick botanical friend took particular notice), completing the beauty of the glorious prospect. We could have remained for hours in admiration of the lovely panorama, and its natural and artificial beauties, but a gathering rain obliged a reluctant retreat, and highly delighted as we had been, we descended the mountain, but at a much more rapid pace than we had taken to gain the summit, somewhat tired and withal, and glad to arrive as quickly as possible at the shelter of our hotel.

The train left for Ottawa, 120 miles, on Monday morning, which was reached by 12 noon. The country everywhere had thrown off its winter garb. There were no lingering patches of ice or snow. Wild flowers, skirting the track, met us at intervals, this time of a bright yellow colour, clustering like primroses. Our friend, the sole New Brunswick botanical delegate, spoke of them as not being indigenous either in that Province or Nova

Scotia. Certainly the season here is at least a full fortnight in advance of all the country between Montreal and the Lower Provinces. The villages from St. Polycarp onward, were quite a contrast in beneficence of their saints, to those on the Gulf shore below Quebec, more picturesque and prosperous, especially in the vicinity of streams, the characteristics of each decidedly Canadian, but becoming more and more of a British type, the higher we approached the metropolis—the land low and the soil rich. Lumber was apparently the prevailing mercantile commodity, and numerous piles attested its value. An hour improved appearances in every respect. We came in view of the noble Ottawa, much pleased with the morning's ride, and prepared for a closer acquaintance with the Metropolis.

Ottawa is a city of magnificent distances, a fact easily realized in passing from the railway terminus to the hotel. Many of the streets seemed to be more than a mile in length, crossing at right angles, wide and spacious. It is to be hoped they are all sufficiently high above the river to prevent danger from floods. The Parliament Buildings, erected on a gentle elevation, imposing in the style of their architecture, are conspicuous objects, in every way creditable to the youthful energy and ambition of the Dominion, and crown the city with an air of regal splendor. Ottawa is a Capital of large pretensions, the site and plan being chosen and approved by Her Majesty Queen Victoria, as a central position in a beautiful country, removed from the American frontier, and easily defended in the event of war. Rideau Hall, at the distance of a mile from the Parliament Buildings, the palace of the Governor-General, is quite insignificant in its contrast with the Parliament Buildings, and ought ere long to give place to a structure more in keeping with the Viceroyalty of a Dominion which spans the British American Continent, and east and west is bounded by the Atlantic and Pacific oceans.

No one can be mistaken who visits Ottawa and its environs, as to its principal industrial staple. The immense piles of sawn timber, here, there and everywhere, strike the beholder with amazement. It was remarked by several, as by the writer, that they never saw anything like it. Yet this was not the busy

season, and of what that may be, both on the river and the shore, we could form only a vague conception. Withal an opinion is broached by some residents, not however general, that Ottawa is unlikely ever to become a flourishing Capital. They probably expected a large and sudden development on its assuming that character, or it may be based upon correct and continued observation. As a stranger, however, we could see no reason for it, and in all respects it is unfounded by any comparison with maritime progress. The immensity of the staple, the bustle of business, the din of steam machinery incessantly at work, the cabs and busses continually running to and fro full of passengers, several first-class hotels, the customers frequenting various handsome retail stores contiguous to the parliament houses, large churches of various denominations, the activity everywhere displayed, all tended to disprove the grumbling element.

Ottawa is delightfully situated, but a large area remains to be built upon. Its geological foundation is sure, being the Trenton limestone formation, which, comparatively in the ascending series, is not much above the lowest non-fossiliferous rocks that first solidified into the crust of the globe. The displacements and contortions of thousands of ages, the disruptions and denudations of overlying strata, as numerous periods have passed over them, have made the country what it is, an invaluable legacy, bequeathed to the energies of the most energetic branch of the human family, to perfect the beneficent designs of an Omnipotent Creator. The natural scenery, in a limited circumference, is all that can be desired either for walks or drives. It is more varied than that of our own Halifax, but can hardly be surpassed, which is saying a good deal for its beauty; the sky, at all events, at this season is of a paler blue than with us.

Hull, a township or district on the opposite side of the river, which we did not visit, is crossed to by a ferry, looked pretty in the distance, and is an attractive outskirt of the Capital. At a short walk in another direction are the Falls of the Rideau and the timber slides, inviting to passive courage. Canals, having numerous locks, pierce the city and communicate with the rivers. The extensive machinery which regulates the water

supply, is well worthy a visit. There are also the Parliament Buildings, with the Senate and Commons Chambers, the really splendid Legislative Library, the Museum and the Patent Office, which represents in great and astonishing variety—rather crowded, however,—the inventive genius of the Dominion. In a building in the vicinity, used as a temple of art, some pictures of high merit were recognized, some of which had graced the late exhibition at Halifax, held under the auspices of the Governor-General. Strangers should see all these and everything. In fact there is nothing to disappoint, but enough to gratify curiosity and taste in all the surroundings of Ottawa, which alone of themselves are amply sufficient to make a visit to the Capital of the Dominion highly agreeable.

Ottawa is not gone over in a day; but the remainder of Monday was spent in the gallery of the Commons Chamber of the Parliament, a large, handsome and commodious hall, where the Liberal-Conservative and Grit elements sat facing each other, Sir John and Sir Charles on one side, and confronting them Mr. Blake and his following. Apparently they were seeking explanations one of the other, preparatory to winding up the business of the session, which occupied both parties far into the night. We left long before the adjournment.

On Tuesday the Royal Society met in the Parliament Building to be organized, Dr. Dawson, the President, in the chair. Mr. Bourinot, the Secretary, read the minutes. The President addressed the meeting. The roll was called, and a large number from various parts of the Dominion, members and delegates, answered to their names. The Society was divided into separate sections, which were referred to their several places of meeting. I was consigned to the Natural Science section, which was also where the general business was transacted. Several interesting papers were read, having reference to the Zoology of the North-West. As I was anxious to find anything that would tend to settle the question, whether any two species were common alike to the eastern and western hemispheres, I ventured to ask of the gentlemen who had contributed the papers in which badgers and earthworms were mentioned, if they were of similar species to

the badgers of England and the earthworms of our fields and gardens, and was very kindly informed that the badgers were precisely similar to those of England, with the same habits, only much larger; also that the earthworms were similar to those of our fields and gardens. I remain still in doubt about this latter conclusion. It is certain, I believe, that our anglers never find earthworms in the virgin soil of the woods, but are obliged to take such bait with them. The question may still be one of some zoological importance. A member from New Brunswick laid before the Section a number of well-preserved Indian relics, —axes, chisels, pipes, spear and arrow heads, &c., all stone implements, which had been found in that Province. They were of the Algonkin type of ancient aboriginal relics, and it was presumed were Micmac weapons and utensils. From the absence of pottery in this and other instances noted, it was supposed that the more eastern tribes did not possess the art of making it. Being called upon, I was enabled to contradict this, as in one of the field excursions of the Halifax Institute, with the express object of opening an ancient refuse heap at St. Margaret's Bay and examining its contents, several pieces of broken pottery were found, the remains of dish or bowl, the edges or rims ornamented with small bead-like cubes of iron pyrites, inserted when the clay was soft and compressible. In general the exhibits were very clean, as though carefully washed, and there were present implements of black stone, the like of which I had never before seen, although there are a great variety of Micmac implements in the Halifax museum. They could scarcely be classed entirely as Micmac. Some thought they might be Milicete or Penobscot, or partly of a type more southern still. It was an interesting collection, very appropriate as a memento of the very recent age of stone in America, when man on this portion of the continent had made no progress beyond the rudest appliances to provide for his immediate wants.

It was intimated by direction of the President, that the delegates would meet next day at the Section of Natural Science, to present reports from the various affiliated Societies. Also, that the Governor-General and Princess Louise would hold a reception

of the Society in the Senate Chamber, at 1 p. m., and then the meeting adjourned.

Wednesday the Society again assembled, and reports were read by the delegates. These consisted for the most part of short papers, giving some account of the design and work of the several bodies. Mr. Allison, delegate from the Halifax Historical Society, made some pertinent verbal observations of its objects and progress, and spoke of the importance in connection with it, of preserving a particular record of the stirring events which had taken place in the early period of our provincial history. When called upon I was obliged to state that, owing to some misapprehension, for which I could not then satisfactorily account, I had no report. I had telegraphed to Halifax for the information I sought, in order to be ready for the occasion, but had not obtained it. I had previously prepared a Paper on the work of our Institute, which might be read as a report, which I then submitted for approval and handed to the Secretary. Shortly thereafter the Society adjourned to the Senate Chamber, and in about half an hour the Princess Louise arrived with the Governor-General and suite, who took their places around the throne. A French Canadian member of the Literary Section, with powerful voice and strong emphasis, delivered an original poem in the French language, "the poet's eye in a fine frenzy rolling." A number of presentations were then made, but a scarcely mannerly assemblage pressing before the Society and usurping its place, the Princess soon retired.

The sitting was resumed in the afternoon, when I was informed, through the Secretary of the Section, that the remaining time at their disposal was precious, and that it would be advisable to reduce the length of my paper, which he thought a very good one. This I immediately set about, and accomplished to his satisfaction. In the meantime a rather exciting geological discussion had taken place on a Paper read by Dr. Sterry Hunt. That gentleman contended that in the Thunder Bay section, or district, he had recognized a new geological formation, unconformable and of considerable thickness and extent, between the Huron and Laurentian strata—a statement stoutly opposed by

Dr. Selwyn, a gentleman intimately acquainted with the region, who said that it could not be—that there was not sufficient evidence for it, and that Dr. Hunt must be wrong. Both gentlemen were very positive in the views they entertained, which were supported by others of the meeting, and the discussion may be said to have been a drawn battle, to be decided by more positive evidence in the future. So far as I could ascertain of the views of members around, there appeared to be a rather general disinclination to the admission, under present data, of a new member of the geological series; and an opinion that Dr. Hunt and others may have mistaken for it an upper member of the Laurentian. On this afternoon the Governor-General paid a visit to the Section, and listened to an excellent Paper from Professor McCoun, on the plants of the North-West, with which His Excellency expressed his gratification, and soon after retired.

The President then gave notice that such papers as had not received attention might be read as reports on the following morning, which certainly included mine, and the Section adjourned.

Thursday was the Queen's Birthday. The weather, which for the three previous days had been an incessant rain, and very disagreeable, suddenly changed to clear and lovely sunshine, befitting the occasion. Bands of music paraded the streets at an early hour in the morning, and the day was celebrated as a public holiday. The Society, however, met as usual, eager to finish its business. Several reports from distant Societies had come to hand since the last adjournment, and it was decided that they should be read although out of time. This was hardly fair to my report, which was in no way objectionable, and should have had precedence. There could be no reasonable excuse, I thought, for the omission, although the report was that of a delegate. I therefore asked for its reading on the ground of the notice of the President at the adjournment last evening. But time was pressing. The prorogation of Parliament, the presentation to the Princess, and the Governor-General's Lunch at Rideau Hall, to which all were invited, were considerations far too important to be affected by minor details. Mr. Sandford Fleming and Prof.

MacGregor, both members of our Halifax Institute, recommended me not to press the reading. I acquiesced, and the meeting adjourned. I brought away my Paper, which, as I thought it fit to be read before the Royal Society, may not be an inappropriate Paper for the affiliated Nova Scotian Institute. I leave it with you. The Society met again in the afternoon when the celebrations had terminated. They elected Mr. Chaveau, a talented French Canadian gentleman, President for the ensuing year, and Dr. Sterry Hunt, an eminent geologist, Vice-President, and then the session of the Royal Society concluded its labours with the usual formalities.

It only remains to notice the gracious reception accorded to the members and delegates of the Royal Society by His Excellency the Governor-General and Her Royal Highness the Princess Louise, at Rideau Hall. The Society had been specially invited to a Lunch and Garden Party, on the anniversary of the birthday of Her Majesty Queen Victoria, mother of the Princess, and we need hardly say that the gracious invitation was generally accepted. The Presentation took place in the Hall set apart for the occasion. There were present Sir Charles Tupper and several members of the Government and of Parliament, and other distinguished persons. That funny fellow Mark Twain was there as a guest of His Excellency. Each member and delegate was introduced by Dr. Dawson, President of the Royal Society, and shook hands with the Governor-General and Her Royal Highness, both of whom looked in the best of health and in excellent good humor. The party were then ushered into the dining hall, which was soon filled with guests. His Excellency presided. An hour was spent in agreeable converse, and ample discussion of the viands and wines lavishly prepared for the occasion. Only two toasts were proposed. His Excellency gave The health of the Queen of England, which was quietly but enthusiastically responded to; then that of the President of the United States, which would have been responded to by Mark Twain, but was otherwise arranged. After the lunch the party visited His Excellency's Museum of curiosities, where were exhibited Zulu rifles, on one of which at least "the blood still stuck to the *stock*,"

spears, assegais, &c. A number of unique and valuable Indian curiosities were displayed, consisting of sumptuous Indian gala robes and dresses, spears, bows and arrows, collected in the North West during His Excellency's visit to that part of the Dominion. After deliberate inspection of these, His Excellency led the way to the Garden Party, of which the Princess did all the honors with the gracious affability she well knows how to assume. A cricket match in an adjoining field also drew the attention of the party, at the conclusion of which the festivities ended.

It would be premature to hazard a decided opinion on the permanence or otherwise of the Royal Society. Time must decide that question, which is an important one. The British Association pays a visit to Canada next year, and a good deal will depend on the action then taken. If the people of the Dominion can be induced, even comparatively, to take a similar interest in scientific pursuits to that which is manifested in England, there can be no doubt of the result. The Dominion Government, we dare say, will do its part upon the occasion. We fear, however, that neither numbers, nor wealth, nor inclination, nor time, can be sufficiently engaged to secure the immediate success of the Royal Society, although we earnestly hope it may be otherwise. There are some defects also in its organization, in that its numbers are unwisely limited. So far, however, the attempt is highly laudable, and ought to inspire the earnest zeal in its behalf of every lover of his country seeking its advancement among the nations.