

CHAPTER XII

MEETINGS OF THE AMERICAN AND BRITISH ASSOCIATIONS FOR THE ADVANCEMENT OF SCIENCE, 1882-86

ON taking up my residence in Montreal in 1855, I had connected myself with the Natural History Society, the oldest scientific society in Canada, which has since done me the honour to elect me as its president no less than fifteen times, and, when age had obliged me to resign that office, gave me the title of Honorary President. The society already possessed a respectable collection, especially of Canadian zoology, and a small library of scientific books, and included in its membership nearly all the gentlemen in the city who were interested in natural science,—amongst whom were Sir William Logan, Mr. E. Billings, Dr. A. F. Holmes, Dr. Workman, Dr. Smallwood, and others of more than local repute. In 1856, the idea was suggested to the society, of inviting the American Association for the Advancement of Science to meet

MEETINGS OF ASSOCIATIONS

in Montreal, and was warmly taken up by the members, who, though loyal subjects of the Empire, felt that science should not be limited by political boundaries. A committee, of which I was a member, was selected to convey our invitation to the Association for its meeting in Albany, N.Y., it having been first ascertained that the city of Montreal and McGill University, would join with us in the effort. Our invitation was accepted, and we were prepared to welcome the Association on its first meeting on Canadian soil. We made an effort to secure, also, the presence of representatives of science from the rest of the country, and although few of these were able to attend, we were so fortunate as to have Professor Ramsay, afterwards the Director of the Geological Survey of Great Britain, at the meeting was successful, being attended by the members from the United States by a much larger number of those who had previously taken part in the Association. Many valuable papers were read, the most important being those of Professor Hall, State Geologist of New York,—the retiring President expounded his views on the origin of the sedimentary rocks at

in America. To Canada, and especially Montreal, the meeting did much to direct the attention of scientific men in Great Britain and the United States to our resources, and to the scientific work in progress in British North America; it gave our citizens, new ideas as to the value of scientific investigation, and as to the estimates which our own scientific workers were making abroad. This meeting further rendered it easier to provide for the second and larger meeting of the Association in Montreal, in 1882. It was on the occasion of this second meeting that the American Association in Montreal, had the pleasure, as president for the year, of inviting its members to a conversation in connection with the opening of the McPherson Museum. The presence of Dr. Carpenter, and of other Englishmen of scientific fame, at this meeting, was carried on by the Government of Canada, in connection with the organisation of the Geological Society of Canada, and, later, of the Canadian Society under his auspices, and the invitation given to the British Association in Montreal in 1884. At the meeting of the Association it is customary for the president of each year to deliver

his presidential address at the opening of the next meeting. It thus devolved on me, as president in 1882, to deliver an address at the meeting of 1883, which was to be held in Minneapolis. In connection with this, Dr. Sterry Hunt and I were commissioned to invite the members of the American Association, to attend the meeting of the British Association, which we hoped was to be held in Montreal in 1884, and to ask that the American Association should so arrange its meeting for that year, as to give opportunity to our British guests to attend it. I meditated, too, an excursion to the Rocky Mountains before the Minneapolis meeting, so as to be able to state in England, from personal observation, what could be seen in a trip from Montreal to the west, and intended to return to Montreal in time to be in England for the meeting of the British Association in September. As my strength and energy needed recruiting, I had asked the Governors of the University for a year's leave of absence, intending to extend my former travels to the Mediterranean, Egypt, and Palestine. To this request they heartily acceded.

Leaving Montreal in July, with my friend Mr. J. H. R. Molson, we went westward by

way of Toronto and Collingwood, and thence by steamer to Port Arthur, (as the railway along the north shore of Lake Superior was not then opened). At Port Arthur, I made my first acquaintance with the grand trappean hills of Thunder Bay, and with the black slates of the Animikie group, which have some markings believed to be of organic origin, and, if so, contain the oldest fossils known in this region. Passing by rail over a rugged Laurentian and Huronian country, between Port Arthur and Rat Portage, we came out on extensive peat bogs, or "muskegs," and then on the great alluvial plain of the Red River. The bogs may be regarded as a modern reminder of the vast swamps in which the lignite of the Tertiary beds, farther west, was deposited. The Red River plain, constituting the most fertile part of the great agricultural province of Manitoba, is the dried-up bed of an ancient lake, now filled with the finest mud, which shows under the microscope that,—like the mud of the Nile,—it is largely composed of very minute crystalline grains derived from the waste of the old Laurentian rocks. Beyond the Red River valley, the rolling prairie of the second plateau, with its vast expanse of grassy turf, and its belts of yellow sun-

flowers, asters, and astragalus, its occasional farms and hastily extemporised villages, formed an entirely novel scene to me, and, though monotonous, was far from being uninteresting. The railway was then completed only as far as the Saskatchewan River, and here we stayed for a few days to visit the coal seams and sections on the banks of the river, and the country towards Ross Creek, where we saw the marine Cretaceous beds of the Pierre, with oysters and belemnites, and the coal-bearing beds of the Belly River series. Among other relics from the Cretaceous beds, we were so fortunate as to find a considerable portion of the skeleton of a large dinosaurian reptile, (genus *Diclonius* of Cope); and a little farther west, on the plains, we picked up the entire skeleton of a fine bull bison, which now represents this nearly extinct species in the Peter Redpath Museum.

We made our way as far west as Calgary, which we reached by driving twenty miles, and were much impressed by the systematic and rapid way in which the end of the railway was advancing westward. In Calgary we found a town in a very rudimentary state, its principal hotel being composed of boards and canvas, and floored with sawdust. Near there

I was able to collect some valuable fossil plants for our museum, from the shales and sandstones of the upper Laramie formation.

On our return eastward, we examined the fine series of moraine-like ridges, apparently old sea margins, with ice-borne boulders, which form the Missouri côteau.

When we reached Winnipeg, I parted from my friend, and proceeded at once to Minneapolis, where I arrived in good time for the meeting, and was hospitably entertained in this thriving and busy city of the West. My address on "Unsolved Problems in Geology," was duly read, and the arrangements for the meetings of the British and American Associations on successive weeks, in Montreal and Philadelphia, were provisionally decided on. The meeting was a successful one, and was attended by many leading American men of science, but was not so large as that of the preceding summer in Montreal. When it was over I returned at once to Montreal, and prepared for my voyage, with my wife and younger daughter, to England.

In Montreal a pleasant surprise awaited me. A number of friends had contributed the handsome sum of \$5000, as a testimonial

to be presented to me and my wife, to facilitate our travels in the East. This gift testified, in a most agreeable manner, to the goodwill of my fellow-citizens, and to their appreciation of my work. I regarded it too, as a trust, to enable me to turn my visit to the best account, both in the matter of the proposed meeting of the British Association in Montreal, and as to anything I could do for the advancement of knowledge or the cause of science. If, in the publications and lectures to which it has led, my journey to the East has proved of any lasting benefit, it is but fair that the credit should be fully shared with these kind and liberal friends.

The presentation was made at a meeting held in the board room of the Molson's Bank, the spokesman on behalf of the subscribers being Sir Francis Hincks. In my reply, allusion was made to the early history and progress of McGill University, and to the position of the city of Montreal, at the time, concluding as follows:—

"Everywhere the reputation and influence of Montreal have been extended by its educational action, and it is largely due to this, that, when the British Association decided to meet in Canada, it was tacitly conceded

that Montreal was the only Canadian city prepared adequately to entertain this great scientific body. Another point on which we have a right to congratulate ourselves, in this connection, is the unanimity which has characterised our whole movement. Men of all politics, of all denominations, of all nationalities, have been banded together in this work, and it is something to boast of that no unpleasant controversy, no strife or division, has broken our harmony, and that, while fierce disputes on educational matters have raged elsewhere, we have had here the unity and brotherhood, which are as the dew of heaven in relation to great movements of this kind. I may mention, as an illustration of this harmony, that, since my connection with the University, I have not known any matter decided by a vote of our board of Governors. In every case, subjects on which there was any difference of opinion, have been patiently discussed and examined, until some harmonious decision could be arrived at.

"There are, I confess, some matters connected with our history, which have given cause for apprehension or regret. One of these is the necessity, which has been put upon the University, of alienating so much

of its landed property at an early period of its work. This was not part of the original plan. It was hoped that the Legislature, acting in the public interest, would have aided the Governors to husband the McGill endowment, so that it might attain its maximum value, but these hopes were not realised, and property which would now have enriched the University, had to be parted with in its early struggles. Still the city has received the benefit of this, and has more than repaid us for the loss. It has been a matter of sorrow to me that we have been able to do so little directly, for the education of the working class, and of the citizens generally, more especially in science. We have, however, done much indirectly, through other bodies, and through our school of applied science; and I shall hope in my visit to the mother country, to study some of the new science colleges, established in its cities, with the view of ascertaining whether more cannot be done here, in this direction. Nor am I satisfied with what we have yet done, with reference to the education of women. We have, I think, done more than any other Canadian university, through the Ladies' Educational Association, through our Normal

School, which is practically a college for women, and through the opening of our examinations to women, but we have not done enough. The direction of further advancement, may depend much on the means placed at our disposal, but we are now endeavouring to inform ourselves as to the most successful agencies at work elsewhere, and I hope to do something towards this also, during the coming winter.

“In our circumstances it is inevitable that our progress should be by fits and starts, and somewhat unequal, thus lacking that majestic uniformity, which we see in Nature, and which we would fain imitate. Where all is so incomplete, and where nearly every change for the better depends on some individual benefaction, we must be content to advance step by step, and to find that each step places some part of our work in an attitude of undue development compared with the rest. Our friends must bear with us in this, and should know that we are aware of our weak points, and most anxious to have them strengthened, and that even the oldest universities in the world retain some portion of this one-sidedness, each having some speciality for which it is noted beyond others,

and some points where it is relatively deficient.

“You are familiar, gentlemen, with the fact that the position of Montreal makes it an object of jealousy to some of its sister cities, and subjects it to some disabilities and disadvantages. If the great water highway of the northern half of our continent is to be improved, it is held to be the special business of Montreal to attend to this, though the benefits may affect the whole country westward of it,—even the western and north-western States, as well as western Canada. If anything is to be done, in any part of Canada, from the endowment of a college to the purchase of a bell for a village church, the collector invariably comes with his book to Montreal, while no one thinks, that any charities or institutions in this city, however wide their benefits, have any claim on the liberality of those beyond its limits. If any public improvement or any change in financial measures is contemplated, the first question asked is:—‘Will not this in some way, direct or indirect, minister to the overgrown wealth of Montreal?’ and, if the question can be answered in the affirmative, the scheme is likely to be unpopular. On the contrary, if

duties are to be levied, or taxes imposed, to relieve the general or provincial exchequer, the most profitable harvest is to be reaped from the business community of this city.

"Notwithstanding, Montreal prospers in spite of all, and, no doubt, it is for this very reason that it excites some envy.

"I wish, however, to say to you that the same feeling applies to our educational interests. While Montreal is expected to be a liberal contributor to educational interests elsewhere, it need not reckon on any aid from without, and finds many institutions, desirous of obtaining for themselves some share of its local advantages by various devices, sometimes not quite in accordance with strict justice, or educational comity. Much of the local educational legislation has the tendency, no doubt quite unintentional, to direct students from a great educational centre like this. I do not complain of this. It is the natural penalty of greatness, which always implies perpetual vigilance, but I mention it to you, with the view of asking, that the same watchful care, which you know so well how to exercise in reference to our commercial interests, may be exercised also with regard to those which are educational. But over

all these struggles, God reigns, and with His aid, and unanimity amongst ourselves, we shall be able to sustain and enlarge those great and growing institutions, which originated with the benefaction of James McGill, and which, fostered by your own wisdom and liberality, have conferred such great benefits on the whole of this country, and have contributed so materially to the greatness and dignity of this Queen City of the St. Lawrence Valley.

"I thank you most sincerely on my own behalf and on that of my wife, and shall retain the memory of your kindness while life remains. It will be truly a pleasure to devote your liberal gift to the purposes you have indicated, and I trust it will, (with God's blessing), aid in the fulfilment of my cherished wish, that I may return, better fitted than heretofore, to advance those interests of good education, which we all have so much at heart."

Before leaving for England, the notes of my western tour, (though containing little more than a summary of the facts in the report of Dr. G. M. Dawson, on the Geology of the Forty-ninth Parallel, published some years before), were thrown into the form of a short paper on the geology and physical geography

of the North-west, for the benefit of such members of the British Association as might propose to visit Canada in 1884. This paper was communicated to the Geological Society of London, and widely circulated among the members of the geological section of the Association.

The preliminary arrangements for the meeting of the British Association in Montreal had at this time already been completed. Committees had been organised, and grants in aid had been secured from the Dominion Government and from the city. On March 19th, 1883, a circular had been addressed by the Council of the Association to all the members, conveying needful information, and requesting a statement of their intention to be present at Montreal, or otherwise. In reply to this circular, the Council was able to report, that nearly 500 members had stated their wish to go to Montreal, including 150 members of the General Committee. A large proportion of the leading scientific members had also signified their wish to attend the meeting. The details had been arranged in such a manner, that the proposal was ready to be brought forward for final action at the approaching meeting in September 1883, which took place

at Southport, and, as might have been expected, was largely attended, and full of interest. My wife and I went early, and did our best on all occasions, to place the projected Montreal meeting in a favourable light, both with the General Committee, and with the individual members. We had to answer all manner of questions, many intelligent and to the purpose, but some of them put by persons who professed to believe, that the climate of Montreal was an alternation of intolerable heat with arctic cold, and that they might expect to suffer from either, and possibly from both of these extremes, during their stay. Before the matter came up for final decision by the General Committee, Sir Charles Tupper, High Commissioner for Canada, came down from London, with his able and energetic secretary, Mr. Colmer, and took part in the discussion. The result was, that the decision to meet in Montreal was carried unanimously, and with enthusiasm. There still remained, after the meeting, some work to be done in London, in settling details to the satisfaction of Professor Bonney, the General Secretary of the Association, who, like a wise general, was determined to provide beforehand for every contingency of this distant campaign.

All this being satisfactorily arranged, my wife, my daughter and I left England in October for Egypt.

My primary object was to rest and recruit, but this end was to be secured, not so much by absolute repose, as by change of scene and of occupation. We were, therefore, to see and to learn as much as possible of those old lands, which have fired the imagination of every reader of history. In previous studies of the relations of nature to the Bible, it had appeared to me that too little was known of the bearing of the geology and topography of Bible lands on such questions. Everything, from the site of Eden, as described in Genesis, to the scenery of St. John's visions in Patmos, appeared to admit of additional illustration from nature. Further information as to the relations of prehistoric man to the early history of the East, was also much to be desired. I had armed myself with many notes and queries on these subjects, had studied collections existing in England and North America, and was desirous, on my way to the East, and in returning from it, to learn as much as possible of the discoveries relating to early man in Europe, and to apply these to eastern and biblical questions.

In our progress through Europe, therefore, we first visited Paris, and paid our respects to the celebrated prehistoric man of the cave of Mentone, who now reposes in the great museum of the Jardin des Plantes. The curator had the kindness to remove the glass covering so that I could examine the bones closely, though under the disadvantage of a temperature lower, I trust, than any this ancient man had been subjected to, when in the flesh. Doubts have been entertained as to his "palæolithic" age, but to me it appeared certain that he belongs to no modern race, but was a veritable antediluvian of the mammoth age; and I find that later discoveries in these caves tend to confirm this conclusion. We also spent some time in the study of the magnificent collection formed by Mortillet, in the old palace of St. Germain, which ranges through the whole history of man's existence in France, from that of the earliest antediluvian tribes, to the Roman period. Leaving Paris, we saw at Lyons collections from the Solutré, and at Florence those from the valley of the Arno. At Rome, we looked into the geological structure of that remarkable site, and examined, in so far as time permitted, the Christian catacombs, which are so intimately

connected with biblical history. I was especially interested in the catacomb of Achilles and Nereus, which is more in its original state than is that of Calixtus, usually shown to travellers. We waited a short time at Naples, in order to obtain news of the cholera in Egypt, and the quarantine in Syria, and of course visited Pompeii, and the specimens collected from it and from Herculaneum, which have thrown so much light on the domestic life of the Romans, and which also so curiously illustrate the possibility of the fossilisation, in modern times, of man and his companion animals. We ascended Mount Vesuvius, and observed the form and behaviour of this interesting modern volcano, built up, as it has been, to a height of 4000 feet by ejections, beginning in the year 79 of the Christian era, and therefore one of the most recent of mountains.

The reports as to cholera being favourable, we took passage from Naples to Alexandria. In Alexandria and Cairo, we found ourselves already in that magical east, which retains to-day so much of the garb and form of old historic times. In the rich and well-arranged museum at Boulac, (since removed to better quarters), and in ascending the Nile as far as Philae, I obtained some acquaintance with the

geology of the Nile valley, and with its superficial deposits and oldest human remains, which, so far as can yet be positively known, are probably all post-diluvian, and so, less ancient than some of those of the caves and river gravels of Europe. Egypt, in short, in so far as man is concerned, though historically very old, is geologically very recent.

Leaving my wife and daughter to visit the mosques, palaces, schools, and bazaars of Cairo, I made an expedition along the Wady Tumilat, part of the old land of Gesen or Goshen, on the supposed route of the Exodus, thence to Suez, and across the desert to Gebel Ataka, where I saw a fine exposure of the Upper Cretaceous rocks, with the Eocene superimposed,—an anticipation of the geology of Syria. In this journey, I gave special attention to the Exodus, as recorded in the Bible. The results of this reconnaissance, and of other observations in Egypt and Palestine, I have given in brief in my little book "Egypt and Syria," and more fully in "Modern Science in Bible Lands;"¹ whilst I have noted some special features of the geology of Egypt in papers contributed to the Geological Magazine of London.

¹ Tract Society, London; and Hodder & Stoughton, London.

On returning to Cairo, I found we had to wait a few days on account of quarantine in Palestine. This time was devoted, partly, to the museum, and to viewing the fine section of the Maokattam Hill, under the guidance of Dr. Schwinforth,—who also kindly accompanied me to other points of geological interest near Cairo,—partly to packing a collection, which I had formed, of fossils and economic stones of Egypt, which is now in the Peter Redpath Museum. When the quarantine was removed, we took the first steamer from Port Said to Jaffa.

From Jaffa and Beyrout, I followed two lines of section across the principal rock formations and physical features of Palestine, so as to learn as much as possible in the short time at my disposal,—one by Jerusalem and the Dead Sea, the other over the Lebanon. We were much indebted in these excursions to the kindness of Dr. Selah Merrill, the American Consul at Jerusalem, and to Dr. Bliss, Dr. Post, and other members of the Missionary College at Beyrout. In the Lebanon country, I was especially interested in the deposits affording traces of prehistoric man, which were found to be of two ages; one of these, like the older cavern deposits, belongs to the age of the mammoth and Tichorhine rhinoceros, equi-

valent to that of Palæocosmic, Palæolithic, or antediluvian man; the other to the post-diluvian time, when the Lebanon had its present geographical relations, and was inhabited by recent fauna.¹ In both periods flint knives were used, and the people seemed to have been hunters. It was very striking, thus to find the evidence of two human ages, anterior to the arrival of the Phœnicians on the coast. In one of our excursions, we visited the Maronite village of Zahleh, perched on a shoulder of the Lebanon, where we were received by Mr. Dale, a noble example of a Christian missionary. The rocks of the Lebanon are Cretaceous limestones for the most part, but there is an outcrop of Eocene age at Zahleh, and the great plain of Cœle-Syria must have been under water at a much later date.

From Beyrout, we turned our faces westward, and had the opportunity by the way, of seeing something of several historic places of interest, and of obtaining glimpses of their geological surroundings. We visited Smyrna, Athens, Corfu, Trieste, and Venice, and remained a short time at Lucerne, Basle, Bonn, and Cologne. We made a somewhat longer stay at Brussels, studying the wonderful collec-

¹ For detail, see "Modern Science in Bible Lands."

tions relating to prehistoric man, accumulated by Dupont in its museum. From Brussels we returned to London, whither many weighty boxes of specimens had preceded us, on their way to Montreal.

In London, I could remain only for a short time, as it was necessary to be in Montreal for the meeting of the British Association, at the end of August. I had besides, to visit Edinburgh, in order to be present at the Tercentenary of the University, a great and interesting occasion, during which I was the guest of my friend Professor Calderwood, and in the course of which I delivered an address, as a representative of McGill, and received the degree of LL.D. from my Scottish *alma mater*.

I had, properly speaking, no official connection with the meeting of the British Association in Montreal. Strong and active committees had been pushing forward the preparations, and little remained for me to do, except some details connected with the use of College buildings, an entertainment which we proposed giving to the Association, and certain honorary degrees to be conferred on some of its leading members. I found, however, in these and other matters, many things to attend to, and when the meeting began, I was in constant

request, to smooth over small difficulties, to provide for details that had been omitted, as well as to speak with a great number of persons who looked to me for guidance in the affair. During the meeting, we had Dr. Asa Grey and Dr. Daniel Wilson as guests, and practically kept open house. I thus had very little time even to attend the geological section, nor was I able to take part in the excursions, or to go to the Philadelphia meeting, since the rearrangement of our buildings and many other matters had to be seen to, for the opening of the session in September. To me personally, except in regard to the public evening meetings, the week was almost a blank. The meeting, however, was evidently a successful one, the number of members and associates being 1773, or nearly equal to an average English meeting, and much above many of the smaller ones. Nearly 600 members and associates from England were among the number, and there were many also from the United States. The arrangements made for luncheon on the college grounds seemed excellent, and we were favoured with fine weather, which made it very pleasant for members so inclined, to spend their time there, or in the neighbouring mountain park. The meetings of the sec-

tions were held close to one another, and had ample accommodation. Three hundred and twenty-seven papers and reports were read. Of these sixty-five were by Canadian authors, and forty-three by members from the United States. The funds provided for the occasion by the Dominion Government, and by the citizens of Montreal, proved adequate, and the Association itself lost nothing financially by the venture. The great excursion to the west, over the Canadian Pacific Railway, was a success, and, but for the death of one of the members of the Association, Mr. Brown of Worcester, there would not have been a cloud to throw a shadow on the occasion.

In the many accounts that afterwards appeared in England, of the meeting in Montreal, nothing was expressed but satisfaction with the arrangements, and there can be no doubt that it greatly tended to give credit to Canada, and to make it, its institutions and resources, better known.

On my return from England in 1884, and before the meeting of the British Association, I had found that a new thing had occurred in our college life, but one that I had anticipated for some time, in consequence of the work of

the Ladies' Educational Association, of the Girls' High School, and of some discussions in our corporation; and one for which I had been collecting information in England. Eight young ladies, who had been educated at the Girls' High School, waited on me, to express their desire to be admitted as students in the University. The serious consideration of this matter had to be deferred till after the meeting of the British Association, but it was while this was in progress, that my friend Sir Donald A. Smith, Chancellor of the University, called me out of the geological section to intimate his wish to bestow the handsome sum of \$50,000 on the University, in aid of separate classes for women. During this session and the following one, I was much occupied in arranging and systematising the "Donalda" special course for women, under the terms of this bequest.

It was in the winter of 1884-85 also, that I began those studies and reports on the fossil plants collected by the Geological Survey, in the North-West Territories, that have appeared in successive volumes of the transactions of the Royal Society of Canada. I had, several years before, examined a collection from the Laramie, or "Lignite Tertiary," made by my

son,—then geologist of the Boundary Line Commission,—but I had not continued this pursuit, nor made any consecutive studies of these fossils, which, however, I now found very interesting, especially in connection with the sequence of the several floras in geological time.

I had hoped, too, during this and the following year, to find time to write out my notes on eastern travel, both because I believed that the conclusions arrived at were in themselves of value, and since I felt desirous of showing some tangible results of my explorations, to the friends whose liberality had made them so pleasant and profitable. It was therefore with somewhat mixed feelings that I learned that the British Association had, at its Aberdeen meeting, elected me as President for the ensuing year,—an honour which necessitated another visit to England, and the preparation of a presidential address.

This visit to the old land in 1886, although of brief duration, proved one of the most agreeable and memorable episodes in my life. My wife and daughter preceded me to London, and enjoyed some of the hospitalities, which, on the occasion of the Indian and Colonial Exhibition, were so freely extended to visitors

from outlying parts of the Empire, alike by public bodies and by private individuals. So soon as my college duties permitted of my getting away, I joined them, and was enabled to employ the time before the meeting of the Association both profitably and pleasantly, partly in London, and partly at one or other of the country houses to which we were invited. At Birmingham we were guests of the Mayor, the late Sir Henry Martineau. My address, on the History of the North Atlantic, was delivered in the town hall, before a large audience, and was well received.

The presidency of the British Association for the Advancement of Science, on this occasion, I regard as the greatest honour of my life, and following, as it did, my presidency of the similar American Association, has seemed to confer a sort of international status in the scientific world, which, in so far as it goes, is unique.

A somewhat amusing incident which occurred during the Birmingham meeting may perhaps stand repetition here. In my address, I had referred to the future of the Atlantic Ocean and its shores, and had remarked, that possibly some new crumpling up of the earth's crust, near the shores of the present ocean

might be due, and that, as the greater accumulations of sediment were forming on the American side, it was probable that the Atlantic coast of America would be the first scene of disturbance. Lest, however, such a forecast might give rise to misconceptions, I remarked that it was something to be looked for only in the distant future, "not an event of to-day or to-morrow." It so happened, that the time of the delivery of my address was that of the Charleston earthquake of 1886, the news of which appeared in the next morning's papers, together with the report of the address itself, and when I came into the reception room that day, I was at once accused by Dr. Barker of Philadelphia, of having had a private intimation of the event, while other members alluded to the circumstance that Lyell had been said to carry an earthquake in his pocket.

CHAPTER XIII

THE HIGHER EDUCATION OF WOMEN

DURING the early years of my connection with McGill, when we were occupied with the enlargement of the Faculty of Arts, and the establishment of the Normal School, the movement for the higher education of women was still in its infancy, both in Great Britain and in the United States. We were, it is true, founding in the Normal School, what was practically a professional college for women, but beyond this there were no means of proceeding, nor did there seem to be any demand, since there were few opportunities enabling young women to fit themselves for entering college. Still, I was not without thought in reference to this new departure, as may be gathered from the following little episode in connection with my earlier work in Montreal. The late Miss Hannah Willard Lyman, a noble woman, subsequently appointed Lady Principal of Vassar College, was then the head of a school for young ladies in Mon-