CHAPTER X

COLLEGE LIFE: AND THE PETER REDPATH MUSEUM

THE life chronicled in these pages may be roughly divided into three periods,—an early one of preparation and active exertion, a middle one more of routine and uniformity, and a later one, of culmination in some respects, and decadence in others. The first was a time of early growth, the second of comparative stability, and the last a ripening of fruit, and a sifting time of the grain from the chaff.

During the ten years following my return from England in 1870, the University outlived, for the most part, its earlier trials and struggles. Its revenues expanded considerably. The original buildings had been completed by the generosity of Mr. William Molson. The number of its students greatly increased, as did also its staff of instructors. Gold medals and scholarships were founded. The beginning of a museum was formed, and the library, although still small, was growing rapidly, by donations and occasional purchases. A suitable building on the college grounds was provided for the medical faculty. A new faculty of Applied Science was active and prosperous, though as yet without any building of its own. The statutes and regulations had become fixed and settled, and the whole machinery of the institution was moving smoothly and regularly. It had in short reached a position in which it could challenge comparison with its sister institutions and rivals, and which to many seemed adequate to all the requirements of the time. Still, there were many wants unsupplied, and constant difficulty was experienced in meeting the demands made upon us, from our limited resources, whilst many promising fields of usefulness had to remain uncultivated. In addresses, at the opening of the session in 1880 and in following years, I directed attention to a number of desiderata still existing, some of which are not yet fully supplied. On the whole, the ten preceding years had been characterised by steady, if slow, advance, achieved by much toil and many sacrifices.

On returning in 1870 and beginning the work of the session, one of the first cares of my wife and myself, was to attempt the organi-

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sation of an association for the higher education of women, on the plan of that of Edinburgh. This proved successful, and continued a most useful work for fourteen years, till the University was enabled by the benefaction of Sir Donald Smith (now Lord Strathcona) to undertake the work.

I should also note that in 1871, and again in 1881, considerable public subscriptions were raised for the University. In securing these, we were greatly indebted to the late Mr. R. A. Ramsay, a member of the Board of Governors, and its honorary treasurer. In 1871, Sir William E. Logan endowed the chair of geology and palæontology, which bears his name, and in 1873, the John Frothingham chair of mental and moral philosophy was endowed by Miss Louisa Frothingham (now Mrs. J. H. R. Molson) in memory of her father. At this time, also, came the educational changes consequent on the federation of the provinces, and the efforts made to gain adequate guarantees for the Protestant minority in Quebec, in which the University, and its preparatory schools and affiliated colleges, were deeply interested. We made efforts to obtain for the University degree in arts, the legal value hitherto denied to it in the Province of Quebec, and to maintain the

interests of our medical and law faculties, under the new conditions. Much time and thought were necessarily occupied by these movements, though we had the aid of many zealous and influential friends.

To this period belongs the writing of several new books, and the revision of others for new editions-some already referred to. Among them the following may be mentioned: the second, and greatly enlarged, edition of "Acadian Geology"; a geological report on Prince Edward Island, by Dr. Harrington and myself; hand-books of Zoology and Geology for my college classes; "Notes on the Pleistocene of Canada"; "The Origin of the World, according to Revelation and Science"; and "Fossil Men and their Modern Representatives," with many papers contributed to scientific societies and journals, especially that one already mentioned, on the land animals of the coal formation, contributed to the Royal Society of London. In 1879 I delivered, by invitation, the annual Phi Beta Kappa oration at Harvard University, before a large and distinguished audience, including His Excellency the Earl of Dufferin, the Governor-General of Canada. The oration was afterwards published in the Princeton

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Review, under the title of "The Rights and Duties of Science."

In 1880, I had been twenty-five years in McGill, and invitations were issued to the graduates of the University, to a celebration on the occasion, at the annual meeting of convocation, in April of that year. Three hundred and fifty guests were present, and letters of apology were received from as many more. Reporters were not admitted, the invitation being a private one, but the following account of the proceedings was circulated amongst the invited guests, after the entertainment ;—

"The guests assembled in the library, and were marshalled to the hall, in order of university rank and of date of graduation, and when all were seated the scene was a memorable one. Grace having been said by the Right Rev. Dr. Bond, the Bishop of Montreal, and sufficient time having been allowed for partaking of the refreshments provided, Dr. Dawson addressed some words of welcome to his guests. The usual toasts were then duly honoured, including that of the Lieutenant-Governor, who responded very cordially, and addresses were delivered by the representatives of the different bodies and interests connected with the University, and by representatives of sister institutions. The speakers were naturally chiefly concerned with the past history and present state of the University, and the part which its Governors, Principal and Fellows, its Benefactors and its Graduates, had taken in elevating it to its present condition, and in advancing the interests of education. As to the future, the evening was signalised by the announcement of the intention of Mr. Peter Redpath, one of the Governors, to erect a costly and capacious museum building on the college grounds, and of that of the Principal to place therein, as a gift to the University, his own large geological collections; and the further announcement that the graduates proposed to commemorate the twenty-fifth year of the Principal's tenure of office, by the creation of a university fund, for the erection of a university building to bear his name.

"The speakers on points more directly relating to McGill, were, the Hon. Judge Day, the Chancellor, Mr. Peter Redpath, the Hon. Judge Dunkin, Dr. E. T. Meredith, Dr. Campbell, Prof. Trenholme, Dr. Johnson, Prof. Bovey, Mr. R. A. Ramsay, Dr. Chamberlain, Hon. Dr. Church, and Hon. Mr. Lynch. The addresses of these gentlemen

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were replete with reminiscences of the olden times, new to many of the younger auditors, as well as with auguries and projects for the future.

"Of the graduates, nearly one hundred came from different parts of Canada and the United States to be present at the entertainment, while hundreds of others, unable to leave their homes, sent letters breathing a spirit of warm affection for their alma mater. Among those present, there were many who had attained to high positions in public and professional life; thus, the Lieutenant-Governor, Dr. Robitaille, is a medical graduate of 1858; the Hon. Mr. Lynch, his Solicitor-General, is a Bachelor of Civil Law and Gold Medallist of 1868; the Hon. Dr. Church, late Treasurer of the Province, and President of the Graduates' Society, is a medical graduate of 1857. A large number of other names might be mentioned, of men who, in public and professional lifeas ministers of religion, members of parliament, professors and lecturers in McGill College, and other institutes of higher learning, eminent physicians and lawyers, or workers in practical science and literature-have already made their mark and taken high positions.

"Besides those more immediately connected

with McGill, there were present the Rev. Dr. Cook, the Rev. Dr. MacVicar, the Rev. Dr. Wilkes, and the Rev. Canon Henderson, as Principals of four of the affiliated colleges. The University of Bishops' College was represented by its Principal, the Rev. Dr. Lobley. Laval University was represented by the Hon. Dr. Chauveau, and the University of Toronto by Dr. Wilson. All of these gentlemen spoke in terms of friendly greeting on behalf of their respective colleges and universities."

The Peter Redpath Museum, of McGill University, marks the culmination of a series of efforts in the direction of establishing, in Montreal, an active and living centre of study and research in natural science. One of my first inquiries as to McGill, on my arrival in Montreal, had reference to any collections that the University might possess. The Secretary, to whom the question was addressed, informed me that there was no museum, but produced from a pigeon-hole in his desk a fragment of a common Trenton limestone coral of the genus Morticulipera, and informed me that this was the only specimen possessed by the University-but of its history he knew nothing. I asked him

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to hand it over to me as the nucleus of a college collection, and it still remains in its proper place in our collection of fossils. Many of my own specimens perished in the fire, which destroyed Burnside Hall, in 1856, so that for the next session, I had to depend largely on the collections of the Geological Survey, and the Natural History Society, for the illustration of my lectures; and in addition to this I could occasionally visit these museums with classes of students.

When a new building was erected, for the joint accommodation of the Faculty of Arts and of the High School, a few cases were placed in one of the rooms, which served also for a library and for my office, and there our museum was begun. I put in them all that was suitable of the remains of my private collection, and gathered diligently in the summer vacations, using the duplicates obtained for exchanges, in the interests of the college museum. After a time, the Governors were able to purchase the valuable collection of minerals made by the late Dr. Holmes, and with these, he presented to the University his herbarium, at that time one of the largest in Canada, which was arranged and catalogued for class use by

Dr. Barnston, who, until his death a few years later, was the lecturer on Botany. When the original college buildings were completed in 1862, by Mr. Molson, and when the classes were removed to them, a suitable room was provided for a museum. At this time also, Mr. William Molson added to his larger gifts a certain sum, as the nucleus of a museum fund, which was supplemented by the fees due to me for lectures attended by the classes of medical students, and by occasional gifts from other friends, especially the late Mr. J. H. R. Molson. Unfortunately, the idea of a permanent endowment, contemplated by Mr. William Molson, was not followed up.

The late Dr. Philip P. Carpenter, who had made his home in Montreal, became one of the largest benefactors to the museum, by presenting to it his invaluable collection of shells, on certain conditions as to its preservation and arrangement, — the scientific portion of which he attended to himself. He thus gave us not only the specimens, but what was of even more value, the determination of the species and varietal forms, in which respect this collection still remains of unique importance to the student of recent

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and fossil mollusca, and has been consulted by many eminent workers from abroad.

It had from the first been kept in view, as essential to an academical museum, that we should carefully classify our collections, and expose them in such a manner as to be really useful to students,-that we should in zoology, mineralogy, and botany, represent in the first instance the typical forms, and give to others, as far as possible, a representation in proportion to their importance in the system of nature. In geology, it was the aim to represent every period by its characteristic rocks and fossils, and to arrange the latter in such a manner that the student could either occupy himself with the fauna and flora of a given period, or could trace any group of animals or plants through the whole course of its existence in time, taking special note of its first known appearance and final decline and extinction. Throughout the whole, preference was given to Canadian examples, where available; and in some departments special Canadian collections were provided. The material accumulated on these principles was, before 1880, too much for our available space, and it was becoming imperative to relegate

the portions least necessary to be on view, to drawers and packing-cases, whilst I had to keep my working collections in my own residence.

I had about this time received a tempting offer of employment in the United States, which would have improved my income, and given me greater scope for original work. The inducements were strong, both in my own interests and in those of my family, but I disliked the idea of leaving my own country and allegiance, and of abandoning a work which seemed so necessary in Canada, and especially in the Province of Quebec. I mentioned the matter to my friend Mr. Peter Redpath, in whose judgment I had much confidence, referring more particularly to an impression, growing in my mind at the time, that my connection with McGill for so long a period, might have so far exhausted my power and influence for good, as to make removal to a new field desirable. Mr. Redpath dissuaded me from entertaining the idea of removal, and stated that he believed new and larger benefactions were in store for McGill, and that he himself contemplated, at no distant date, the erection of a museum, and possibly of a library, in regard to which

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he reckoned on my aid. His attention was particularly directed to the museum in the meantime, because of the overcrowded state of our present rooms, and of the intended removal, by Government, of the Geological Survey Museum, which had heretofore been of so much service to Montreal and to McGill. Thus originated the Peter Redpath Museum, the greatest gift ever made by a Canadian to the cause of natural science, and up to this time, the noblest building dedicated to that end in the Dominion. I have already stated that Mr. Redpath announced his gift at the banquet of 1880, and the plans of the building having been matured, its erection was immediately commenced, whilst I, with the aid of some of my natural science graduates, and the best special assistance that could be secured, spent the whole summer vacation in the preparation of the specimens for removal to their new home.

In the spring of 1881, when the basement of the building had already made good progress, the corner-stone was laid by the Governor-General, the Marquis of Lorne, and we succeeded in having the specimens transferred to the building, and laid out in the cases, in time for the meeting of the American

Association for the Advancement of Science, in the autumn of 1882. The museum was formally opened at an entertainment given by me, as president of the Association for the year. After the formal conveyance to the University by the founder, addresses were delivered by the Hon. Justice Day, Chancellor of the University; by Dr. W. B. Carpenter of London; and by Dr. James Hall of Albany, all of whom expressed their high appreciation of the scientific and educational value of the museum and its contents. In the session opening immediately after the meeting of the Association, the museum and its class-rooms were fully in use for the teaching of geology, mineralogy, zoology, and botany.

When our collections were finally transferred to the new museum, I was surprised and gratified to find to how great an extent they realised my idea of an equable representation of all departments of natural history, with typical examples of the objects in each, necessary to the student. It is true there were some gaps, and we left these unfilled till the appropriate material could be procured. There would have been more imperfection, but for donations called forth by

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the occasion. The most notable of these was one of \$4000 from the heirs of Sir William Logan, to form a collection in his memory. Sir William, when head of the Geological Survey of Canada, was obliged by the parsimony of the Government, to procure many expensive books and instruments at his own cost, but made it a condition, that, should the collections be removed from Montreal or dispersed, these outlays should be reimbursed. His heirs claimed this sum of money, when the museum was removed to the new seat of Government at Ottawa, and as one of Sir William's executors, I, of course, did what I could to sustain their just claim. When the matter was arranged finally, though only a portion of the amount claimed was actually paid, the heirs showed their appreciation of his preference for Montreal, by the handsome donation above mentioned to the museum of the University. To secure the end in view, as fully as possible, Mr. James Richardson, one of Sir William's valued assistants in field work, who had in the meantime retired from the Survey, was employed to revisit some of the more important localities from which collections had been made, so that many Canadian examples, previously accessible only

in the Survey museum, might be duplicated in that of the University. Richardson's work also led to new discoveries in the fossils of the Quebec group, and to the recognition of the equivalency of beds on the lower St. Lawrence with the Tremadoc formation of England. Curious additional facts were further obtained, as to the fossils and impressions in the Potsdam sandstone. Some of these facts were communicated to the Natural History Society of Montreal, others were published in the reports of the museum. These reports, annually appended to the report of the University to its Visitor, also show the growing usefulness of the museum, and its improvement during more recent years.

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