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ANNUAL REPORT

OF THE

GOVERNORS, PRINCIPAL AND FELLOWS

McGILL UNIVERSITY,

MONTREAL,

For the Year 1895.

ANNUAL REPORT

OF THE

GOVERNORS, PRINCIPAL AND FELLOWS

OF

McGill University, Montreal,

FOR THE YEAR 1895.

(Published by permission of His Excellency the Governor-General, Visitor of the University.)

To His Excellency the Right Honorable John Campbell Hamilton Gordon, Earl of Aberdeen, Governor-General of Canada.

MAY IT PLEASE YOUR EXCELLENCY:-

We beg leave respectfully to submit to Your Excellency, as Visitor of the University under its Royal Charter, the following report of its history, and of the progress of its various departments during the educational year ending December 31st, 1895.

In the month of June the Board of Governors took the important step of filling the vacancy in the Principalship caused by the retirement of Sir William Dawson. In September the new Principal entered on the active discharge of his duties, and received a most cordial welcome from every member of the University. In

addition to the office of Principal, Dr. Peterson has undertaken to fill the Chair of Classics.

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It is fitting, in this connection, that the thanks of the University should be expressed to the Vice-Principal, Dr. Johnson, for the unremitting zeal and attention with which he discharged the duties assigned to him by the Governors as Acting Principal during the vacancy.

The year has been one of many changes on the Professorial staff. The following resignations were received by the Board of Governors:—

The Rev. George Cornish, M.A., LL.D., resigned the Professorship of Classics.

P. J. Darey, M.A., B.C.L., LL.D., Officier d'Academie, resigned the Professorship of French Language and Literature.

N. W. Trenholme, Q.C., M.A., D.C.L., resigned his position as Dean of the Faculty of Law and Gale Professor of Roman and Public Law.

Dr. George W. Major resigned the Professorship of Laryngology.

Wm. A. Carlyle, Ma.E., resigned the Professorship of Mining.

At the meeting of Corporation, on April 24th, 1895, resolutions were passed expressing the deep regret felt at the retirement of Rev. Dr. Cornish and of Dr. Darey.

Dr. Cornish, whose death occurred so soon after the severance of his connection with the University, had been identified with its work for many years, his appointment having dated from 1857. A man of scholarship and ability, Dr. Cornish from the first proved a great acquisition to the University, and was distinguished not merely as a diligent and careful instructor, but as a man fitted by his wide reading and literary taste and by his frank, kindly and thoroughly English manner, to give a refined tone to the students who came under his

influence, while his sterling Christian principle inspired all who knew him with the fullest confidence in his truth and honesty of purpose. His influence for good was felt in every part of the work of the University.

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At the meeting of the Corporation held on September 10th, it was

Resolved, "That this Corporation desires to express the great sorrow of the University on the occasion of the death of the Rev. Dr. Cornish, late Professor of Classics. Assiduous in the discharge of the duties of his important chair, with a large sense of duty and unswerving honesty of principle, he gave ungrudgingly of his time and services to the advancement of the University in that period of its history in which its reputation was being slowly but surely founded. As Honorary Librarian for many years, his extensive literary culture, his wide knowledge and love of books were of inestimable value. Secretary of the Board of Examiners, and in many other capacities directly and indirectly connected with the educational and the religious life of the University, he undertook and performed efficiently an amount of work for which his only reward could be his pleasure in aiding the progress of the University. The colleagues with whom he was most closely associated bear ample testimony to those qualities of heart and intellect which won their love and respect.

By the retirement of Dr. Darey from active work, the University, and especially the Faculty of Arts, loses one whose devoted services will be long remembered by his fellow Professors and by the many students who profited by his instructions.

Dr. Trenholme's resignation was received by the Board of Governors with regret at the severance of his long connection with the University and with an expression of their appreciation of the services which he has rendered to the Faculty of Law.

Prof. Carlyle leaves McGill University to assume the position of Provincial Mineralogist and Director of Mines in British Columbia. His short connection with his Alma Mater as a member of the teaching staff sufficed to show his eminent qualification for his office, and his resignation was received by the Governors with much regret.

NEW APPOINTMENTS, RE-APPOINTMENTS AND CHANGES OF APPOINTMENT.

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William Peterson, M.A. (Oxon), LL.D. (St. Andrew's), to be Principal of McGill University and Professor of Classics in the Faculty of Arts.

In the Faculty of Law :-

Percy C. Ryan, B.C.L., was appointed to be Lecturer in Law.

Leonidas Heber Davidson, Q.C., M.A., D.C.L., Professor of Commercial Law, to be Acting-Dean until such time as a permanent Dean be appointed by the Board of Governors,

In the Faculty of Medicine :-

H. S. Birkett M.D., Lecturer in Laryngology, to be Professor in the same subject.

Wyatt G. Johnston, M.D., Lecturer in Bacteriology, to be Lecturer in Bacteriology and Medico-Legal Pathology.

Henry A. Lafleur, B.A., Assistant-Professor in Medicine and Lecturer in Clinical Medicine, to be Assistant-Professor in both subjects.

W. S. Morrow, M.D., Demonstrator in Physiology, to be Lecturer in Physiology.

In the Faculty of Arts :-

The Rev. George Cornish, M.A., LL.D., was appointed Emeritus Professor.

Pierre J. Darey, M.A., B.C.L., LL.D. (Officier d'Academie), was appointed Emeritus Professor.

C. W. Colby, M.A., Ph.D. (Harvard), Lecturer in History, to be Professor of History.

The Lecturers, Instructors, Sessional Lecturers, Assistants and Demonstrators in the following subjects have been re-appointed, viz., German, Chemistry, Classics, Mathematics, French, Botany, Elocution, Gymnastics.

Nevil Norton Evans, Ma.E., to be Lecturer in Chemistry.

The appointment has also been made of Maxime Ingres, B.A. (France), to be Instructor in French Language and Literature.

In the Faculty of Applied Science:-

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Wm. A. Carlyle, Ma.E., Lecturer in Mining and Metallurgy, to be Professor of Mining Engineering.

Cecil B. Smith, Ma.E., Lecturer in Civil Engineering and Descriptive Geometry, to be Assistant-Professor of Civil Engineering.

James J. Guest, B.A., to be Assistant-Professor of Mechanical Engineering.

J. G. Kerry, Ma.E., to be Lecturer in Surveying.

Wm. Archibald Duff, B.A.Sc., to be Demonstrator in Mechanical Engineering.

J. E. Hardman, S.B., M.E., to be Lecturer in Mining and Metallurgy for the remainder of the session.

G. H. Chandler, M.A., to be styled Professor of Applied Mathematics instead of Practical Mathematics.

In the Faculty of Comparative Medicine and Veterinary Science:—

C. F. Martin, B.A., M.D., to be Lecturer in Pathology. N. D. Gunn., M.D., to be Lecturer in Materia Medica.

NEW ENDOWMENTS AND DONATIONS.

The Hon. Sir Donald A. Smith has again renewed his donation of \$4,000 for Sessional Lecturers in the Faculty of Arts, and has given \$100 for the purchase of appliances in Zoology, specially in the interest of Donalda classes.

Miss Elizabeth C. Orkney has given the further sum

of \$6,000 towards the Charles Gibb Botanical Endowment.

Mr. J. H. R. Molson has given \$4,000 to supplement a salary in the Faculty of Arts for a period of eight years.

Mrs. Peter Redpath has given, in continuance of her late husband's annual subscription for the maintenance of the Peter Redpath Museum, \$1,000 yearly during two years, with Curator's salary, \$500, in all \$2,500.

Mrs. Peter Redpath has also given two yearly contributions of \$5,000 for the maintenance of the Peter Redpath University Library, and a further contribution of \$500 toward the expenses of cataloguing in the Library, in all \$10,500.

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Mrs. J. H. R. Molson has continued the payment of \$1,000 for the Lecturer in Chemistry in the Faculty of Arts.

Mr. W. C. McDonald has given a valuable lot of land, containing about 39 acres, for an Observatory site; has defrayed all the expenses incurred in the alteration and renovation of the East Wing of the College Buildings; and has given a further sum of \$10,000 to cover deficiencies in carrying on the work of the Faculty of Applied Science.

Mr. George Hague has continued the Exhibition of \$125, offered regularly for many years in his name, in the Faculty of Arts.

Mr. A. T. Taylor, Architect, contributed his services in connection with the Mural Tablet to the memory of the late Mr. Peter Redpath, now placed in the Museum which was erected by him and bears his name.

A bequest of \$1,000 by the late J. J. Arnton, reduced by the legacy duty to \$900, has been received by the College.

THE PAST AND PRESENT SESSION.

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In the meetings of Convocation, at the close of last session, the following Degrees in Course were conferred:

Law, B.C.L												
Medicine, M.D.				,			 					
Arts, B. A. (8 wo												
" M.A												
Applied Science,												
"												
Veterinary Scien	nce, D	V.	S									

The Honorary Degree of LL.D. was conferred on Prof. Robert Craik, MD., Dean of the Faculty of Medicine, McGill University, and on Prof. William Osler, M.D., Johns Hopkins University, Baltimore, U.S.

Nine gold medals were awarded to successful candidates, besides the Wickstoed Medal for Physical Culture, and the Aberdeen Silver Medal in Applied Science.

In the classes of the Normal School, 120 Diplomas were granted by the Superintendent of Public Instruction, namely, 9 for Academies (issued to graduates in Arts of the University), 50 for Model Schools, and 61 for Elementary Schools. The total number of persons who have received diplomas in the Normal School since its establishment in 1857 is 1,831. The number of diplomas issued has been 2,638, some individuals having taken more than one diploma.

In the June Examinations for the title of Associate in Arts held this year at 38 centres, 192 candidates presented themselves, of whom 142 passed the examination successfully, a larger proportion than in any previous year. Besides these, 147 came up for preliminary subjects only. Many of the candidates for the A.A. degree fulfilled the requirements for matriculation, and, in addition, 143 candidates were examined for matriculation only, coming from 40 centres. The total number of

candidates thus qualified for entrance was 113, viz., 30 for Medicine, 44 for Arts or Medicine, and 39 for Applied Science.

In the past session, 42 partial "exemptions from fees" were given to students, in some cases in competition, in others as Benefactors' Scholarships and as aids to Theological colleges. These have been given principally to students from the country.

At the September Entrance Examinations in Arts, 5 scholarships, 11 exhibitions and 1 bursary were awarded, varying in value from \$125 to \$100 for the two former, and half this amount for the bursaries. They are the gifts of Sir Donald A. Smith, Mr. W. C. McDonald, Mr. Hague, the late Major Mills, and Mrs. Jane Redpath.

In Applied Science, the British Association Exhibition of \$50 and the Scott Exhibition of \$60, and other prizes, were awarded.

A prize of \$50 was offered by the Ottawa Valley Graduates' Society to the candidate taking the highest marks in the Matriculation Examinations in that section of the Dominion, and was awarded to a student in the Donalda Special Course.

The total number of students attending classes in McGill College in the present session is distributed as follows:—

Faculty	of	Law		43
"	46	Medicine		412
. "		Arts, including students from other Faculties attending lec- tures, about	650	
**		Arts, exclusive of students from	000	
		other Faculties Men	248) 144 (392
"		Applied Science		205
"	44	Veterinary Science		38
McGill Nor	ma	l School-		
Teachers	in	training		168
Deduct, r	ере	eated in different lists		1,258 17
				1,241

In the Affiliated Colleges in Arts the following are in attendance:—

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Morrin College, Quebec— Undergraduates Partial	${13 \atop 5}$	18
St. Francis College, Richmond— Undergraduates		7
Wesleyan College, Stanstead— Undergraduates		5

The total given above, for the Faculties alone of McGill College, is 1,090, which exceeds that of last year by 59.

FACULTY OF LAW.

The number of students in the Faculty this year is 43, divided as follows:—In the Third Year, 9 students; in the Second Year, 18; in the First Year, 16.

The outstanding event of the year has been the removal of the Faculty to the class rooms in the East Wing of McGill College, which have been renovated and prepared for the work of the Faculty through the liberality of Mr. W. C. McDonald.

Owing to the retirement of Dr. Trenholme, the Dean of the Faculty, Dr. L. H. Davidson, has been appointed Acting-Dean, and the courses of lectures that he was to have delivered have been assigned to the following Professors:—Dr. Davidson lectures on Criminal Law; Professor McGoun lectures on Constitutional Law, and Professor Lafleur lectures on International Law.

It was decided at a meeting of Faculty held in November that, after the Christmas holidays, students will be required to wear gowns at lectures and while in the College building.

FACULTY OF MEDICINE.

It is a subject of congratulation to the University that, in spite of the fact that the sessions have been lengthened from six to nine months, the number of students in attendance has steadily increased.

The popularity of the six-years' Course of Arts and Medicine is demonstrated by the fact that 16 students in the Faculty of Arts have enregistered also in Medicine and are now proceeding to the double degree of B.A. and M.D.

The Faculty of Medicine is arranging to establish this year, for the first time, a Course of Lectures and Clinics, together with advanced laboratory work for Graduates in Medicine and Practitioners, who desire to keep abreast of the more recent advances in Medicine and Surgery. This Course will begin towards the end of April, and will last for a period of about six weeks.

FACULTY OF ARTS.

The total number of students is 392, of whom 203 are undergraduates, viz., 58 in the First Year, 57 in the Second Year, 50 in the Third Year, and 38 in the Fourth Year. 19 are Graduates.

Of the undergraduates 61 are women, and it is a special feature of this year's report that the number of women undergraduates whose homes are outside Montreal exceeds the number from Montreal.

The illustrated lectures in several of the Courses of Lectures are most attractive and instructive.

Some 16 students are taking the combined six years' Course in Arts and Medicine.

FACULTY OF APPLIED SCIENCE.

The number of students registered in the Faculty is 205, viz., 79 in the First Year, 43 in the Second Year, 45 in the Third Year, and 30 in the Fourth Year. Eight Graduates are taking Post Graduate courses.

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Several new appointments have been made on the staff of the Faculty, as mentioned in an earlier part of this Report, and regret is expressed by the Faculty at the announcement of the resignation of Mr. W. A. Carlyle, Ma.E., Professor of Mining Engineering, who has received an important appointment as Government Superintendent of Mines in British Columbia.

During the year the Applied Science Graduates' Society has been formed, its primary objects being the promotion of closer relation amongst the graduates of the Faculty and the increasing of the interest of the graduates in the University.

A large number of valuable donations to the several departments of the Faculty are enumerated in the appended Report.

FACULTY OF COMPARATIVE MEDICINE AND VETERINARY SCIENCE.

The students attending this Faculty number 38, viz., 13 in the third year, 13 in the second year, and 12 in the first year. Owing to the extension of the Course in the Medical College to nine months, while the session in this Faculty is only six months, much inconvenience has been experienced in arranging the lectures on the subjects which hitherto were attended conjointly by the students of both Faculties.

It is much to be desired that more extensive and more modern equipment be provided to keep the Faculty abreast of the times. We cannot over-estimate the importance of providing trained men who, by scientific methods, can accurately diagnose and can apply modern exact preventative and therapeutic measures in combating contagious diseases of animals which are intercommunicable, thus not only promoting in a most important way one of the foremost branches of Canadian commerce (cattle and cattle products), but raising safeguards to public health, by the extermination of such diseases in animals, thus minimizing the danger to man. The work of the students in this Faculty during the present session, 1895-96, has been uniformly satisfactory. Several have been engaged in original research work in the Pathological Laboratory, assisted by and under the direction of the Pathologists of the Medical College.

It is to be hoped that ere another session comes round something will be done towards placing the Faculty in a state of efficiency commensurate to its importance to the country.

WANTS OF THE UNIVERSITY.

Detailed reference was made in last year's report to our most pressing wants. Though various in character, there is none that could not be supplied by an increase in the funds at the disposal of the Board of Governors. Like most universities, McGill suffers from the fact that, even when new endowments are gifted for the purpose of opening up new branches of work, they generally involve additional expenditure which cannot be met out of ordinary resources. The prime need of the University is, therefore, the want of means to raise income to an equality with expenditure.

If it is impossible to expect additions on a large scale to the General Fund of the University, the want might be supplied quite as effectively by the donation of funds to endow existing chairs, which (like that of Botany) have never received any special appropriation, and are consequently a drain on our general resources.

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The strengthening and extension of the Faculty of Arts would seem to be the next necessity of the present situation. It will involve not only the consolidation of the work which is being carried on, with an inadequate staff, in existing departments, but probably also the introduction of new subjects into the curriculum of study.

The science work undertaken by the Faculty of Arts will never be adequately performed until Chemistry and Biology have been accommodated with buildings which will entitle them to rank alongside of Physics and Engineering.

The want of a University Hall may also be referred to as a definite and concrete need.

AFFILIATED COLLEGES.

Since the addition to the endowments of Morrin College, another lecturer has been appointed to the staff, which now has 5 lecturers. The number of students has also been largely increased.

The number of lecturers in St. Francis College, Richmond, is the same as last year, viz., 3.

In the Wesleyan College, Stanstead, there are now 4 lecturers.

The four affiliated Theological Colleges in Montreal* have about the same number of students as last year. Owing to the generosity of one of the Governors of this University in erecting a new building for the Diocesan Theological College, they will all, after this session, be in close proximity to the University buildings, which will greatly facilitate the work.

*In the Presbyterian College there are 79 students; in the Diocesan, 19; in the Wesleyan, 68; and in the Congregational, 16.

THE McGill Normal and Model Schools.

At the close of the session of 1894-95, May 31st, 1895, the Superintendent of Public Instruction, Mr. de la Bruere, conferred 120 diplomas on teachers-intraining, 9 for Academies, given to graduates of the University, 50 for Model Schools, and 61 for Elementary Schools.

The current session opened September 1st, 1895, with the admission of 168 teachers-in-training, 13 men and 155 women. Of these, 6 were enrolled as members of the Academy class, 75 were admitted to the Model School class, and 87 to the Elementary School class. Besides, 13 graduates and undergraduates attend the lectures in Pedagogy, with a view to receiving Academy diplomas of the first grade.

The total enrolment in the Model Schools since the beginning of the scholastic year has been 459, 190 boys and 269 girls. A new and interesting feature of the work of the year is the establishment of a cooking class for girls. It is satisfactory to note that the Boys' Model School took the first prize for its exhibit of school work at the last Convention of the Association of Protestant Teachers of this Province. The Girls' School, having won the prize a year ago, was ineligible to compete, but received honorable mention.

GYMNASIUM.

Dr. R. Tait Mackenzie reports that the work so successfully inaugurated last year by the Committee on Grounds and Athletics, has been carried on this year under improved conditions. In the light of a year's experience, improvements were made in the blank forms used in the physical examination of students, and the questions re-arranged and changed.

This year about 110 men were examined, many of whom were given special advice as to the care of their health or the correction of defects.

For the proper carrying out of this work a dynamometer for testing the strength of the various groups of muscles is urgently needed.

The hearty co-operation and assistance are acknowledged of Mr. S. M. Dickson, B.A., and of Dr. J. J. Ross, B.A.

Dr. Mackenzie also reports with regret that the proper heating of the Gymnasium becomes more and more difficult. At present, the ventilation suffers to such an extent that the foul air and dampness almost counterbalance the benefits to be derived from the gymnastic exercises.

It is largely owing to this fact that the attendance is not so large as last year, being about 100, of which the majority come from the Faculties of Arts and Applied Science.

The number of Donalda Students attending the Gymnasium is 14, and there is also a class of Students from the Normal School.

During the absence of Miss Barnjum on account of illness the Donalda class has been conducted steadily and satisfactorily by Miss Lilian Norton Evans.

APPENDED REPORTS.

Appended are the Reports of the Library Committee, Peter Redpath Museum, McDonald Physics Building, Observatory, the Botanic Garden, Applied Science Faculty, and the financial statements. Some of the salient points in connection with some of these may be indicated here.

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Library.—The Annual Report of the Library Committee acknowledges the gift of a portrait bust of the late Mr. Peter Redpath, and mentions the arrangements made for placing it in the building; records many valuable donations of books, maps and pamphlets; refers to a proposal that the books of the Faculty of Law should be removed to the University Library and to arrangements looking towards the preservation of a large mass of ephemeral publications.

The report further shows that the number of bound volumes added during the year is 2,271, and that the attendance has increased to almost 17,000, bring a gain over last year of almost 33 percent.

The Peter Redpath Museum.—In connection with the Museum it should be stated that the Memorial Tablet to Mr. Redpath, referred to in the last annual report, has during the year been placed in the entrance hall, where it has attracted much attention and been greatly admired.

Mrs. Peter Redpath's interest in the Museum has again been manifested by her kind contribution of \$1,500, in continuation of the annual grant made by the late lamented founder of the building.

During the year important additions have been made to the collections in various departments, and considerable work done in the arrangement and preservation of specimens. A new series of cases has been provided to contain portions of the rapidly increasing herbarium, and additional cases are required for the accommodation of the mineral collection. Valuable additions to the teaching appliance have also been made, including a lantern for the purposes of projection, zoological charts, geological charts, etc.

Botanic Garden.—The Report of the Botanic Garden shows that a very large number of students annually

derive important advantages from the facilities thus offered for the prosecution of practical studies in Phytobiology, including those of the Faculties of Arts, Medicine, Applied Science and Comparative Medicine, as also students of the Normal and Senior Schools. Original research has also been greatly promoted by the support which the Garden has afforded to the Botanical Laboratories.

(Signed), DONALD A. SMITH, LL.D.,

Chancellor.

WILLIAM PETERSON, M.A., LL.D., Principal.

MONTREAL, January 22, 1896.

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ANNUAL REPORT OF THE LIBRARY COMMITTEE.

TO THE CORPORATION OF MCGILL UNIVERSITY.

Gentlemen,—During the year now closing the work of the Library has progressed to the satisfaction of your Committee.

Some alterations have been made within the building. Of these the most important is the preparation of a niche and canopy for the bust of the late Mr. Peter Redpath, which was recently presented to the University by a few of his friends in the United Kingdom. These friends have also helped to defray the cost of the canopy. The bust now stands in its new position, though the inscriptions which are to be affixed to the wall on either side are not as yet quite finished. When these are completed, the bust and canopy will form a most appropriate feature of the reading room and add greatly to its appearance.

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The Library is indebted to Mrs. Peter Redpath, for her most generous contribution towards its maintenance, for many valuable books (including the second series of the publications of the Paleographical Society), and for two handsome cases. The latter have been placed in the gallery above the reading room, and are intended to contain rare books and other objects of interest.

Mr. John H. R. Molson has contributed a most valuable collection of works on Bibliography, and has also generously furnished the funds for the purchase of a large number (over 600 volumes) of books from the library of the late Dr. Cornish. To Miss Fleet, and to Mr. Botterell, the library is also much indebted.

The thanks of the Corporation have been extended to Mr. Hugh Graham, of this city, for the presentation of two warrants relating to this University, dated 1819 and 1820, respectively, and signed by Lord Dalhousie; also to Mr. Francis McLennan, for rare Canadian maps and books, and to Mr. Richard White, for the presentation of an interesting receipt for two years' subscription to the Montreal Gazette, dated Montreal, 1820, and signed by William Christie.

Messrs. Henry Birks & Sons have presented a fine clock for use in the Librarian's room.

Dr. Bovey has given to the Library a large collection of mechanical drawings and pamphlets.

The above are but a few of many valuable gifts which the Library has received during the year, the full list of which has, by the kindness of the proprietors of the Montreal Gazette, been acknowledged in detail, with the thanks of the Corporation.

The total attendance, from Jan. 23, 1895, to Jan. 14,	
1896, has been	16,541
With the addition of the average attendance for the	
five days necessary to complete the quarter, this	
would give	17,016
readers for the year 1895-96.	
The attendance during the previous year was	12,680
The attendance of the year before was	5,712

The attendance during the present year is, therefore, almost exactly three times greater than it was two years ago. The number of books delivered from the stack has also increased, though not in the same ratio.

Perhaps the most important matter that has come before your Committee during the year, is a request from the Faculty of Law that, if suitable arrangements can be made, accommodation for their books and students be provided in the general Library, and that the cataloguing and other work hitherto carried on by the Faculty of Law be henceforth performed by the staff of the University Library; the additional assistance requisite to this to be secured through funds to be furnished by the Faculty of Law. This proposal, which will form the subject of a special report, commends itself to your Committee, and, if carried out, it can bardly fail to strengthen harmony of thought and action in the University, as a whole; while it will also yield a more satisfactary return for the money expended than could be obtained under the system hitherto in operation.

A reception in honor of Principal and Mrs. Peterson was held in the Library on the 26th of October last; and in order to the preparations incident thereto, the Library was closed from the 26th until the 29th of October inclusive.

The number of volumes presented to the Library dur-	
ing the year has been	1,849
Those added by purchase	422
Total additions for the year	2,271
The number of volumes in the Library at the date of	00.001
last Annual Report was	38,861
Hence, the number* to-day is	41,132

The increase during the quarter now closed was 995 volumes (purchased, 27; given, 968), besides a large number of pamphlets and several rare maps.

Arrangements have been made with the various newspapers of the city which, it is hoped, will soon result in large additions of

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^{*} Apart from some 20,000 volumes contained in the departmental libraries, and in the library of the Faculty of Medicine.

pamphlets and other ephemeral literature, bearing upon matters that are rapidly becoming historic. The arrangement and cataloguing of this large amount of matter will involve much extra work, but your Committee feels confident that the results will fully justify the time and labour expended.

The usual conspectus of Reading, Attendance and Additions is appended.

The whole respectfully submitted, on behalf of your Committee.

(Signed), C. H. GOULD, University Librarian.

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Conspectus of Reading and Attendance from January 20, 1895, to January 14, 1896.

QUARTER ENDING.	READERS.	1	Visito	RS.	TOTAL.	H	BOOKS RE	EAD.
April 23, 1895	7,189		220		7,409		8,237 v	ols.
June 20, "	740		101		841		915	66
Oct. 23, "	2,714		681		3,395		3,624	66
Jan. 14, 1896	5,898	٠.	116		6,014		6,130	"
					-			
	16,541		1,118		17,659		18,906	66

Note.—These figures are exclusive of the work done in departmental libraries; and the number of visitors was many times in excess of those who signed the register.

REPORT OF THE PETER REDPATH MUSEUM FOR THE YEAR 1895.

TO THE CORPORATION OF THE UNIVERSITY,

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Gentlemen,—Your Committee beg to submit the following report on the Peter Redpath Museum and the work carried on there during the past year.

The Museum continues to afford accommodation to large classes of students in the various departments of Natural History, and also attracts a considerable number of outside visitors.* Recently arrangements have been made whereby pupils in the city schools may visit the Museum on certain days, and special tickets of admission have been prepared for this purpose. On the back of each ticket the following notices to teachers are printed:—

- 1. The ordinary time for admission of classes from schools is Friday afternoon. For any other time special application must be made to the Secretary. Tickets must be procured from the Secretary beforehand in all cases.
- 2. Each class must be in charge of a teacher or teachers, who shall remain with the class while it is in the building.
- 3. Teachers desiring any special information respecting specimens, &c., or to obtain copies of the Museum Guide, are requested to apply to the Museum Assistant.
- 4. Teachers intending to visit the Museum with classes are advised to spend a little time in the Museum beforehand, so as to become acquainted with its arrangement. Facilities will be afforded for this by the Museum Assistant.

The Memorial Tablet to Mr. Peter Redpath, the founder of the Museum, has, since the last report, been placed in the entrance hall. It consists of Mexican onyx with suitable inscription on a bronze plate. The admirable design is due to Mr. Andrew T. Taylor. Mrs. Peter Redpath has again given evidence of her interest in the work of the Museum by contributing the sum of \$1,500 in continuation of the annual grant made by her late husband. For her liberality in this matter she is entitled to the hearty thanks of the Corporation.

Through the kindness also of the Board of Governors, a number of necessary repairs to the building have been made, including the painting of the roof, varnishing the front door, window sashes, etc.

In an earlier report of your committee, attention was called to the desirability of having a lantern for the purposes of projection in the lecture theatre. On application to the Board of Governors a grant of

^{*} The number of visitors during the year was 2,460.

money for the purpose was made, and recently one of Queen's "Paragon Projectors" has been purchased and has already proved invaluable in the work of class illustration. The electric wires had already been introduced into the building in connection with the reception given on the 26th of last January, in honour of their Excellencies the Governor-General and the Countess of Aberdeen, so that very little additional expenditure was needed to render the current available for the lantern.

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Through the kindness of Sir Donald A. Smith, a number of valuable charts, lanterns slides, etc., have been obtained for the zoological department under Dr. Deeks. A grant from the fund provided by Mr. J. H. R. Molson has also enabled Dr. Adams to obtain four of Heim's admirable geological models made at Zurich, in Switzerland, and showing the details of a glacier, a volcano, etc.

In the herbarium the increase during the past few years has progressed rapidly, and has necessitated the addition of a new series of cases. During the year seven hundred sheets of specimens have been distributed, and about four thousand more are now in course of distribution. These additions, which have been possible only through the medium of the J. H. R. Molson fund for the purchase of new specimens, have proved most important additions to our resources, and include, chiefly, plants from Bolivia, Florida, Texas, Mexico and the Sandwich Islands, as also donations of Australian plants from Baron von Mueller. The work arising out of these additions has been performed in a most satisfactory manner, during the early part of the year, by Miss E. Tatley and more recently by Miss F. R. Angus, who has proved most efficient in the discharge of her duties.

With the extension of the herbarium, this section of the Museum is yearly increasing in importance as a means of scientific resource, and during the past year it has proved of signal service in the prosecution of special studies in Paleobotany, which are continuously in progress, as also in promoting special studies relative to the structure and classification of the North American Coniferae.

Several important additions to the collection of woods have been made during the year, while valuable specimens illustrating the economic application of various plant products, have also been added.

During the year a number of important additions have been made to the mineral collection by purchase and donation, and were more cases available the collection could be greatly expanded and made more useful to students than at present. A desideratum is also a suitable case in which to display the beautiful glass models of crystals obtained some time ago from Germany. The two specimens of fossil reptiles from England are, in their present condition, in danger of being seriously injured and should have suitable cases provided for them.

The complete list of donations will, as usual, be published in the Calendar, but special attention may be called here to the very fine mummy presented to the Museum by Dr. T. G. Roddick, and to the Beluga skeleton presented by Messrs. Smith.

Much valuable work in the way of labelling and cleaning specimens has been done by Edward Ardley, whose zeal and industry are to be commended.

Owing to increase of the collections and changes of arrangement a new "Museum Guide" is now a necessity, and is in course of preparation. It should also be stated that a "Museum Memoir" on the Guanche skulls in the Museum has been published by Sir William Dawson during the year.

The whole respectfully submitted.

(Signed), B. J. HARRINGTON,

Hon. Curator,
On behalf of the Committee.

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REPORT OF COMMITTEE OF MANAGEMENT OF THE McDONALD PHYSICS BUILDING.

The past year's work has been chiefly notable because, for the first time, the teaching of the regular courses was conducted with fair completeness of staff and equipment. Most of the experiments in the ordinary routine of Practical Work had already been set up and used in the previous year. The experience thus gained by the Demonstrators, Messrs. Tory and Pitcher, enabled them to render such valuable assistance in the repetition of courses already once tested that much more time could be devoted to fitting up the Laboratory for special research work.

Considerable progress has been made in this direction, and several original investigations are now being carried on.

Mr. H. T. Barnes, B.A.Sc.McGill, has been engaged during the past year in an investigation of the causes of variation of electrical standard cells, which, it is hoped, will prove of interest to other Physical Laboratories, where such standards are of primary importance.

Mr. H. M. Tory, B.A.McGill, has been investigating the laws of thermo-electricity, with special reference to the thermo-electric properties of iron. This research has also an important bearing on some experiments on cylinder condensation which were carried out during the summer vacation by Professors Nicolson and Callendar at the Thermodynamic Laboratory of the McDonald Engineering Building.

Mr. F. H. Pitcher, B.A.Sc.McGill, is investigating the temperature-variation of magnetic susceptibility by a new method which promises good results.

Mr. R. O. King, B.A.Sc.McGill, 1851 Exhibition Scholar, has partly completed a determination, by a new method, of the thermal conductivity of metals, with the special object of determining whether the conductivity increases or diminishes with rise of temperature. In addition to the above investigations, now in progress, arrangements have been made and special apparatus designed for several other branches of research work.

The setting up and testing of the main electrical and magnetic instruments was fully reported upon last year. It may suffice to mention a few of the new instruments dealt with in 1895.

The large Rowland Grating Spectroscope has been fitted up on a novel plan in the room designed for it: an automatic mercury pump for spectroscopic work on gases has been fitted up in the annex.

The Standard Rieffler Clock has been set up in the constant temperature room in the basement. It has been connected by wires to the

Observatory, and is daily rated by comparison with the stars and the sidereal clock. The observer reports that it proves to be a very good instrument.

A set of Professor Ewing's Seismographs has been set up in the basement for recording earthquakes.

Some new Thermostats and Calorimeters have been added to the equipment of the Heat Laboratory.

The Dynamo Room has been completed, with Gas Engine, Edison Hopkinson Dynamo, Motor Dynamo and Experimental Alternator. Much time has been given to designing and fitting a convenient and safe switchboard for connecting these machines, as well as the circuits of the Engineering Building and the Royal Electric Co., and four large Crompton-Howell Cells, intended to give very heavy steady currents, with the different Laboratories.

Not only has the University reason to be grateful to the continued liberality of Mr. W. C. McDonald for many additions to the apparatus, but for meeting certain needs which had developed during three years' work in the Laboratory; providing, e.g., constant pressure gas supply for working thermostats and photometric experiments; constant pressure water supply, for working pumps and motors, by special main from Sherbrooke street; much extra electric wiring in connection with the Dynamo Room and switchboard; and replacing iron by copper heating coils in yet another floor of the building, to avoid magnetic effects in the Electrical Laboratory. In this connection the University may be congratulated upon the withdrawal by the Montreal Street Railway of the proposed extension of their lines up University street—a calamity to the Physics Building which has apparently been averted by timely representations to the Company on behalf of the University and the Royal Society of Canada.

The Committee have pleasure in recording the increasing use which is being made of the Physics Lecture Theatre. In addition to important addresses delivered by Mr. Coleman Sellars on Engineering Operations at Niagara, and Lord Playfair on the development of University Education at McGill University, the Theatre is now regularly used for Lantern Demonstrations by Prof. Moyse to the classes in English Literature; by the Classical Club for occasional lectures; and by the Applied Science Club for its regular fortnightly meetings; and many other lectures to visiting societies have been given in it, including two of the Ross lectures to the Trafalgar Institute, and a lecture by Prof. Carus-Wilson to the Canadian Society of Engineers.

The whole respectfully submitted.

(Signed), JOHN COX,

Secretary.

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REPORT ON THE OBSERVATORY FOR THE YEAR 1895.

The usual meteorological observations have been made during the year and the results published in the Montreal Gazette and the Canadian Record of Science. The reduction of the bi-hourly series of temperature for the ten years, 1885-1894, has been completed and the average daily curves for each month plotted. It may be interesting to note that the curves exhibit a defect of temperature in the afternoon, due most probably to the position of the Observatory, on the eastern slope of Mount Royal.

The observations on soil temperatures, commenced in November 1894 in co-operation with Professor Callendar, and briefly described in my last report, have been continued throughout the year with very satisfactory results.

Determinations of clock errors were made on 129 nights by the observation of 747 stars. The noon time ball has been regularly dropped at mean noon of the fifth hourly meridian during the period of navigation. The Observatory time signals have also been distributed, as in former years, throughout the city and country. There have been exchanges of clock signals with the Toronto Observatory on twenty days, on which the average difference of the time of the two Observatories was found to be 0.33 of a second and the greatest difference 0.63 of a second.

The Astronomical Instruments have been used by the students of the Astronomical Classes of the University.

> (Signed), C. H. McLEOD, Superintendent.

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REPORT ON THE BOTANIC GARDEN FOR 1895.

TO THE CORPORATION OF McGILL UNIVERSITY,

Gentlemen,—I have the honor to report that during the past year the Botanic Garden has continued to justify its utility as a means of practical education of high value. During the year ending December 31st, 1895, a total of 469 students have received direct advantage from the educational facilities thus offered, the highest number at any one time being 190.

It is the policy of the Garden to extend its advantages as far as possible, under special provisions, to the various educational institutions of the city, and it is gratifying to note in this connection that under the encouragement thus offered, there is an increasing tendency for our schools to take advantage of the privileges thus made available.

Within the University the facilities now offered in the way of an abundance of material have led to marked improvements in the Course in Anatomy, and in the Course in General Morphology being brought to a high state of efficiency. To the same cause may be attributed a greater measure of interest on the part of the students as well as an increasing demand for the advanced courses of instruction.

Attention should be drawn to the fact that through the possession of resources such as a Botanic Garden and Herbarium can alone afford, it has been possible during the past year to decide many important questions of both a scientific and economic character, and in this wider sphere of usefulness the garden is yearly growing in strength.

While the popular aspects of such a garden are necessarily of a secondary nature, it is gratifying to observe that in its relations to the public at large it is rapidly gaining, as the character and scope of its work become better known.

Our relations to kindred institutions have continued to be productive of mutual benefit, communication being maintained with all the leading gardens of the world, to which publications of a scientific character and also seeds have been regularly distributed.

The recently developed activity displayed in the United States in the liberal endowment of Botanic Gardens either as independent public institutions, based upon the broadest policy of public and scientific utility, or as adjuncts of educational institutions where their work is chiefly confined to educational and scientific purposes, is worthy of special mention in this connection as affording convincing proof of the important relation in which such institutions stand to the highest public interests.

Our obligations are due to the Superintendent of Government Printing

for India, for the publications of that office; to the Royal Gardens, Kew, for a set of Hooker's Icones Plantarum; to the Imperial Gardens. St. Petersburg; the Botanic Gardens of the University of Amsterdam, of Stockholm, Dublin, Lille, Tiflis, Valencia, Berlin, Belgrade, Madrid, Malta, Lyon, Chamrousse. Cracow, Portici, Gröningen, Copenhagen, Utrecht, the Royal Gardens of Edinburgh, the Missouri Botanical Gardens, and the Botanic Gardens of Smith College, Northampton, Mass.; to the Institutio Agronomico, Brazil; the Boletim da Sociedade, Broteriana; the Kolonial Museum, Haarlem; the Agri-Horticultural Society of Madras, and the Botanical Department of Jamaica for their publications.

Seeds have been received from the Royal Gardens, Kew; Baron F. Von Müeller, Australia; Mr. A. Cockayne, New Zealand; the Arnold Arboretum of Harvard University and the Agri-Horticultural Society of Madras. A large number of trees and shrubs have also been received from the Central Experimental Farms at Ottawa, through the horticulturist, Mr. John Craig.

Respectfully submitted,

(Signed),

D. P. PENHALLOW,

Director.

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REPORT OF FACULTY OF APPLIED SCIENCE.

The number of students registered in the Faculty is 205, namely, 79 in the First Year, 43 in the Second Year, 45 in the Third Year, and 30 in the Fourth Year. Eight Graduates are taking Post Graduate Courses, and of these special reference may be made to Messrs. Farmer, Mellanby and King, who all hold scholarships of the value of £150 sterling per annum, on the foundation of Her Majesty's Commission of

Mr. Farmer, a graduate of Victoria University, comes to McGill from University College, Liverpool, and is engaged upon a research in the Hydraulic Laboratory.

Mr. Mellanby, from the Durham College of Science, Newcastle, has entered upon an investigation of the action of Quadruple and Triple Engines.

Mr. King, one of our own graduates, has been allowed by the Commissioners to continue an important investigation on the magnetic qualities of iron in the laboratories of the Physics Building.

In consequence of the large increase in the number of students and of the amount of lecture and tutorial work required, important additions to the staff have been found necessary.

It is with great regret that the Faculty has to announce the resignation of Mr. W. A. Carlyle, Ma.E., Professor of Mining Engineering, who has received an important appointment as Government Superintendent of Mines in British Columbia. The excellence of the work done by Mr. Carlyle for the University may be at least partially measured by the high estimation in which our mining graduates have been held. In appointing a successor, the University has been very fortunate in securing the services of Mr. J. E. Hardman, S.B., M.E., a graduate of the School of Technology, Boston, and a distinguished mining engineer, who has had large practical experience during the last ten years. The high standard of the mining work will undoubtedly be maintained under Mr. Hardman, but it should be clearly understood that it is impossible to do much more in the development of the mining work until suitable Metallurgical Laboratories have been erected and equipped.

As already stated in a previous report, the difficulties in the Chemistry Course are exceedingly great, and the efficiency of the work is being seriously diminished. The accommodation is altogether insufficient, and the crowding in the lecture room rapidly renders the atmosphere somewhat objectionable. The laboratories also are no longer

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large enough to provide places for the increasing number of students, and the chemistry work now being done is on this account less than was required and actually done ten years ago.

During the year the Applied Science Graduates' Society has been formed, its primary objects being the promotion of a closer relation amongst the graduates of the Faculty and the increasing of the interest of the graduates in the University. The Society is showing much energy, has already issued various publications, and is now instituting a series of fortnightly lectures to be given by the older graduates of the Faculty and by others.

Donations. - Amongst the most important donations to the Faculty may be mentioned: valuable collections of Australian Timbers from the Governments of Queensland and New South Wales; specimens of timber from the Canadian Government; timber for testing purposes from Messrs. McLachlin Bros. of Amprior, and the Canadian Pacific Railway Company; an instrument for measuring the magnetic qualities of iron and steel from Mr. W. C. McDonald; a Ewing's Hysteresis testing apparatus from Mr. W. C. McDonald; drawing tables from the Laughlin-Hough Drawing Table Company; gauge and valve from Crosby Steam Gauge and Valve Company (Boston); brake shoe and disc from Edison General Electrical Company (Schenectady); specifications and drawings showing construction of the Sault Ste. Marie Canal Locks from Mr. J. B. Spence; a number of valuable books from Dr. Egleston; photographs from the Canadian Pacific Railway Company; specimens of pine and of wood bored by teredos from Mr. G. W. Furlong; iron rail showing effect of long immersion in water from Mr. W. B. Dawson; model of motor truck from Peckham Motor Truck & Wheel Company (Kingston, N.Y.); model of sand box from the McPherson Sand Box Company (Troy, N.Y.); specimen of rail joint from the American Rail Joint Company (Cleveland, Ohio).

Mathematical Laboratory.—During the past year the laboratory has been used chiefly for educational work in connection with the lectures of the First Year. In addition, time has been found for a course of experimental work in the Third Year on such subjects as moments of inertia, torsion, pendulums, mechanical integration, etc., in which the need of experimental illustration has been especially felt in the past. Additional apparatus now under construction will, it is hoped, considerably increase the usefulness of the laboratory, more particularly in the advanced part of the Course.

Testing Laboratories.—The Third and Fourth Year students have been engaged in a variety of tests on the strength of Fire Hose, Timber, Iron and Steel Bars, Cubes, etc., under various conditions. A preliminary report as to the elasticity and strength of Canadian Douglas Fir, White Pine, Red Pine and Spruce, was presented to the

Canadian Society of Civil Engineers and has now been published and distributed. The special research on the strength of timber is still being continued and a large amount of new apparatus in connection with the work has been designed and installed. Special reference may be made to large and small drying chambers, which now render it possible to obtain most valuable information as to the strength of timber when all moisture and sap have been removed.

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nadian to the Important improvements have been made in the Wicksteed testing machine by the addition of a counter and other appliances, while the general equipment of the laboratory has been increased by a measuring and dividing engine—torsion pointers—an Unwin extensometer—new deflecting apparatus for the purpose of determining the effect of moisture and time upon timber under stress—and a very valuable impact machine for testing the strength of materials under repeated stress. The erection of this last machine is now nearly completed, and the whole is expected to be ready for experimental work in the near future. A large portion of the new apparatus and the whole of the drying chambers have been designed in the laboratory and made by the mechanics of that department.

Hydraulic Laboratory.—In this laboratory the Fourth Year students are engaged in investigating the phenomenon of the flow of water through orifices and over weirs, and also the efficiency of various hydraulic motors. A very large amount of work has been expended on this laboratory during the past year and equipment has been increased by the addition of an improved recording chronograph, a valuable registering gauge and other apparatus. The experimental pump has now been installed, and the indicating apparatus will be added shortly.

Cement Laboratory.—An extensive series of tests on the effect of frost on Natural and Portland Cement Mortars has been concluded and the results published in the Can. Soc. C. E. Transactions. Also the tests on the strength of mortars in brick piers have been extended and the additional results published in the same Transactions.

The method of subjecting sand briquettes to pressure has been continued and the results are uniform and satisfactory. A special machine has been invented and is now in use for the purpose of producing the required pressure. The usual courses of instruction have been carried on. At the present time a valuable and extensive series of experiments, on the strength of large concrete blocks, is being conducted by three Four Year students under the guidance of the instructor. A large amount of commercial testing has also been done.

Electrical Engineering Department.—In this department two new courses of lectures for the Fourth year on Electro-Dynamics, one

Advanced, and one Elementary, have been arranged, dealing specially with the problems of Electric Traction. The practical work done in the Electrical Engineering Laboratory is suited to illustrate these lectures, the experiments there carried on bearing directly on the theory discussed in the lecture room.

Special note may be made in this connection of a series of experiments on Armature Reaction, made on apparatus kindly lent for the purpose by the Canadian General Electric Company. These experiments have been most valuable in illustrating the subject, and have also incidentally been the means of bringing out several new points hitherto unnoticed, which, it is believed, will have an important bearing on the improvement of Dynamo Design.

In the Third Year a new course of Demonstrations has been arranged, leading up to the course of Dynamo Design in the Fourth Year. This course has recently been enriched by the accession to the laboratory of Ewing's Hystereris Tester.

Several new pieces of apparatus have been made during the year in the Electrical Workshop, amongst which may be noted a small Tesla Motor for lecture purposes.

The General Electric Company of Canada has kindly donated a complete Magnetic Brake outfit, with which a series of tests are to be made on this new principle of braking.

Several of the leading Electric Companies in the United States have kindly assisted our work by giving us valuable working data, photos, and blue prints of machines, etc.

The accumulators are proving of great service in the electric lighting of the building. They are now used daily to almost their full capacity, a fact that justifies the purchase of cells of such size, for smaller cells would certainly not be sufficient for our present needs.

Thermodynamic Laboratory.—A series of compound triple and quadruple expansion engine tests, about 48 in number, have been carried out on the experimental engine, to determine the relative plant efficiencies of various cylinder ratios, of triple versus quadruple expansion.

A large number of boiler, feed pump and anemometer tests have also been made.

A testing apparatus for indicator spring and pressure gauges has been fitted up. The corrections are determined by reference to a Callendar platinum thermometer, thus comparing results with Regnault.

A conductivity experiment with a large cast iron bar has been permanently set up. The conductivity will be determined by a calometric method.

The experimental engine has been completely fitted with surface condensers to the jacket drains, 14 in number, so that the relative amounts of jacket steam used by every part of every cylinder can be separately measured.

Professor Callendar and Professor Nicolson made an elaborate research conjointly on the nature and amount of cylinder condensation in steam engines, using thermo-electro junctions and platinum thermometers.

Geodetic Laboratory and Astronomical Observatory.—Here the courses of instruction outlined in the report of last year have been carried out. The most noteworthy improvement in the equipment of the laboratory is the completion of the 50-ft. unit of length for the comparison and graduation of standard bands and tapes. This instrument is, to the best of our knowledge, the only high class standard of so great a length in America.

The special field work of the year was a contour plan of a portion of Westmount, a hydrographic survey in the neighborhood of St. Helen's Island, and the measurement of the discharge of the river St. Lawrence at a point about 40 miles below Montreal. The latter is a work of considerable importance, inasmuch as it has secured a record, which would not otherwise have been obtained, of an extreme low water discharge of the St. Lawrence, and was undertaken especially in view of the abnormal condition of the river in October last. It was possible to carry out the work only through the kindness of the Hon. G. A. Drummond, who placed his private steam yacht at the service of the faculty for the purpose.

Mechanical Laboratory.—In this laboratory, of which Mr. J. J. Guest has taken charge, a "Reuleaux friction pendulum," a belt dynamometer after Hefner-Alteneck, and a screw friction testing machine have been the chief additions. Although the capacity is but small, the Fourth Year mechanical students have performed a large number of experiments on friction, efficiency and stiffness of belts; on the efficiency of pulley blocks; and on lubrication.

(Signed), HENRY T. BOVEY,

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Balance Sheet for the

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SUNDRY SUBSEQUENT DONATIONS:-		
McTavish Street Property, the gift of J. H. R. Molson, Esq		
Wm. Molson Hall and Corridors, the gift of Wm. Molson, Esq. 27,500 00	!	
Peter Redpath Museum, the gift of Peter Redpath, Esq. 100,000 00		
McTavish Street Property, the gift of J. H. R. Molson, Esq. 842,500 00 Wm. Molson Hall and Corridors, the gift of Wm. Molson, Esq. 27,500 00 Peter Redpath Museum, the gift of Peter Redpath, Esq. 100,000 00 Thos, Workman Mechanical Workshops and Equipment, bequeathed by the late Thes Workman		
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Subscriptions towards Equipment of Thos. Workman Workshops 13,150 04		
John H. R. Molson, donation for Extension to Medical College 62,153 86		
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by the late Thos, Workman W. C. McDonald, Esq., donation towards building of Workshops 20,000 00. Subscriptions towards Equipment of Thos, Workman Workshops 13,150 04. John H. R. Molson, donation for Extension to Medical College 62,153 80. Macdonald Engineering, Building and Equipment, the gift of W. C. McDonald, Esq. 378,218 88. McDonald Physics Building and Equipment, the gift of W. C. 283,228 70.		
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W. C. McDonald Endowment Fund for Faculty of Law	150,000 00	
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Sir W. E. Logan do	1,000 00	
Prince of Wales do	1,000 00	
Shakespeare do	1,000 00	
Sutherland do	. 1,000 00	
Major Hiram Milis Scholarship and Medal	. 1,500 00	
Henry Chapman Go. Elizabeth Torrance do Sir W. E. Logan do Prince of Wales do Shakespeare do Sutherland do Major Hiram Mills Scholar ship and Medal Jane Redpath Exhibition W. C. Webonald Scholar ships	. 1,667 00	
Walter Scott Exhibition	1,100 00	
Dr. T. Sterry Hunt Scholarship	2,574 86	
Wm. Wood Redpath Memorial	1,000 00	
Charles Alexander Scholarship	2,000 00	
British Association Apparatus.	1,500 00	
Museum Endowment Fund	2,000 00	
Hon F. W. Towanga Mantal and Manal Philosophy Dook Fund	4,400 00	
Hugh S. McLennan Library Endowment	1,000 00	
Barbara Scott Scholarship Walter Scott Exhibition Dr. T. Sterry Hunt Scholarship Dwm. Wood Redpath Memorial. Charles Alexander Scholarship British Association Apparatus. Museum Endowment Fund. Wm. Molson Library Fund. Hon. F. W. Torrance Mental and Moral Philosophy Book Fund Hugh S. McLennan Library Endowment. Faculty of Applied Science Library Endowment.	. 250 00 791 05	
ractify of Applied Science Library Endowment	. 491 05	1,396,684 3
HINDRY ACCOUNTS BEING INCOME DENOMED TO SPECIAL DURDOGS	FO 001 40	
SUNDRY ACCOUNTS, BEING INCOME DEVOTED TO SPECIAL PURPOSES NOT YET EXPENDED Less Sundry Sums expended in advance	53,821 6 8 14,188 55	
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39,633 13

\$3,031,352 38

ADVANCEMENT OF LEARNING.

year ending June 30th, 1895.

GROUNDS AND BUILDINGS:		
College Grounds		
College Buildings (Arts Law Offices)		
Medical do do - Extension.	54,049 31	
Porter's Lodge	69,576 64	
Observatory Buildings		
Gymnasium Wm. Molson Hall and Corridors	4,693 89	
Wm. Molson Hall and Corridors	8,718 59	
Peter Redpath Museum Building Thomas Workman Mechanical Workshops! Macdonald Engineering Building	27,500 00	
Thomas Workman Mechanical Workshops	62 208 07	
Macdonald Engineering Building Macdonald Physics Building	157 057 69	
Macdonald Physics Building University Library Building	1 12 820 39	
University Library Building	135,000,00	
- Indiana I not bit i ,—		
Equipment Chemical Laboratory Museum, Collections, etc.	\$4.000 OF	
Museum, Collections, etc. Philosophical Apparatus	\$4,826 97	
Philosophical Apparatus Engineering do	51,077 85 9,866 94	
Engineering do Library Fixtures and Furniture in old Publish	9,800 94	
	327 63	
Law do do	510 50	
General do do do	9.310 54	
	2,165 45	
Books in Library	47 887 44	
Equipment Macdonald Engineering Building.	221,221,26	
Equipment Macdonald Physics Building.	89,408 31	
MOUNTS UNDAID IN DESCRIPTION OF		1,394,781 1
AMOUNTS UNPAID IN RESPECT OF ENDOWMENTS		8,600 0
TO THE MORIGAGES, ETC.		1,471,735 3
MOUNT PAYABLE IN RESPECT OF ARREADS OF INTERPRET	•• • • • • • • • • • • • • • • • • • • •	
MOUNT PAYABLE IN RESPECT OF ARREARS OF INTEREST. ALANCE AT DEBIT OF PROFIT AND LOSS ACCOUNT. Less above Aware.		6,759 5
DESCRIPTION LOSS ACCOUNT	ØC5 414 SO	
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Less above Arrears of Interest.	6,759 53	

CASH ON HAND IN BANK ..

90,821 09

\$3,031,352 38

INCOME and EXPENDITURE of the ROYAL

for the year ending

INCOME.		•
From Fees collected "Income received from Investments, Deposits in Bank, etc" Government and other Grants Donations and Subscriptions Insurance Companies for Loss caused by Fire in the Workman Workshops Sundry Receipts	92,251 25 4,950 00 31,289 61 2,157 00 687 16	
Balance at debit of Profit and Loss Account on 30th June, 1895.		\$162,004 60 65,414 80

Deficiency for the year \$5,589 00

\$227,419 40

\$143,823 71

Verified, MACINTOSH & HYDE, Auditors.

CAPITAL RECEIVED and DISBURSED by the ROYAL

for the year ending

RECEIPTS.			
Cash on hand for Medical Building Extension, on 30th June, 1894 Endowments etc.:-		\$32,507 48 3.892 43	\$28,615 05
Dr. T. Sterry Hunt Scholarship Chas, Gibb Botanical Endowment John Frothingham, Chair of Mental and Moral Philosophy Gale Chair Endowment, balance in full Graduates' Endowment Fund, Faculty of Applied Science Applied Science Library Endowment	\$2,566 66 6,000 00 20,000 00 4,054 54 10 00 20 00		
INVESTMENTS REPAID DURING THE YEAR		32,651 20 82,299 13	
AMOUNTS CAPIFALIZED		258 33	115,208 66

Verified. MACINTOSH & HYDE, Auditors. INSTI 30th J

Balance a CASH ON H

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EXPENDITURE.

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\$162,004 60 65,414 80

\$227,419 40

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\$28,615 05

115,208 66

\$143,823 71

INSTITUTION for the ADVANCEMENT of LEARNING.

30th June, 1895.

							\$59,825 80
AP	ON HAND OF PROPRIATIONS	UNEXPENDED IS, ETCdo.	do.	do,	ENTS, SCHOLARSHIPS, 1 the 30th June, 1895 30th June, 1894	\$39,633 13 14,727 11	24,906 G
							~*,000 U
" Ge	enance of Gr	diture-Gas.	Fuel, Water, is to Building	Insurance, Prins, Fittings, Muse	ting, Stationery, Main- eum Maintenance, Law	94,454 74	

3,553 87 500 00 1,607 21 1,251 34 1,493 89 3,663 42 1,223 31 173 86 1,249 99 2,920 00 258 33

142,687 58 \$227,419 40

J. W. BRAKENRIDGE, B.C.L., Acting Bursar.

INSTITUTION for the ADVANCEMENT of LEARNING,

30th June, 1895.

DISBURSEMENTS.

		\$143,823 71
Cash on Hand for Investment on 30th June, 1895		51,187 96
Amount carried to Profit and Loss Account being amount of Capital used to mak Deficit in Income (see Statement of Income and Expenditure)	e up	5,589 0
Invested during the Year	53,410 28	\$87,046 75
CHARGES ON PROPERTIES	154 27	
Natural Science do 500 94	514 94	
Philosophical Apparatus		
EQUIPMENT, ETC. :	\$52,961 20	
Medical Building Extension. \$32,735 56 Addition to Observatory and Observer's House 255 70 Transit House 25 00	\$32,967 26	
Buildings :-		

J. W. BRAKENRIDGE, B.C.L., Acting Bursar.







The List of Graduates is published every three years, giving in each case Post Office address as far as known.

To make this publication as complete as possible, it is requested that notice of change of address, ordination, degrees received, appointments to professorships or to civil office, the names of deceased graduates, with the year of death, and any other relevant information, be sent to the Registrar of the University.