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ANNUAL REPORT

OF THE

GOVERNORS, PRINCIPAL AND FELLOWS

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McGILL UNIVERSITY,

MONTREAL,

For the Year 1896.



ANNUAL REPORT

OF THE

GOVERNORS, PRINCIPAL AND FELLOWS

OF

McGill University, Montreal.

FOR THE YEAR 1896.

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

To His Excellency the Right Honourable 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 for the year ending 31st December, 1896.

Though the sad event did not occur till a few days after the close of the year, reference must be made at the outset to the loss which the University has sustained through the death of Sir Joseph Hickson, who for twenty years had rendered loyal service as a member of the Board of Governors. At a recent meeting of the Board the following resolution was adopted:—

"That the Board desires to express its deep sense of the loss sustained by McGill University, and by the members of the Board of Governors individually, in the removal by death of their late esteemed friend and colleague, Sir Joseph Hickson.

"Sir Joseph was always a leading friend of education in Montreal and had served as a member of the Board of Governors since 1876. More especially in later years, since his retirement from the great work of his life—in connection with which he will always be remembered in the history of the Dominion—he displayed a warm interest in the work of the Board, and freely placed his time at its disposal; while his eminent business capacity rendered his services of the utmost value to the University in connection with its recent rapid extension.

"The Board would further convey to Lady Hickson, and to the members of her family, this expression of its sympathy in the great

bereavement which they have sustained."

NEW APPOINTMENTS, RE-APPOINTMENTS AND CHANGES OF APPOINTMENT.

Faculty of Medicine:-

T. Johnson Alloway, M.D., Assistant Professor of Gynæcology, was appointed to be Associate Professor

of Gynæcology.

F. G. Finley, M.B. (London), M.D., Assistant Professor of Medicine and Clinical Medicine, appointed Associate Professor of Clinical Medicine, retaining his Assistant Professorship of Medicine.

Henri A. Lafleur, B.A., M.D., Assistant Professor of Medicine and Clinical Medicine, appointed Associate Professor of Clinical Medicine, retaining his Assistant Pro-

fessorship of Medicine.

George E. Armstrong, M.D., Assistant Professor of Clinical Surgery, appointed Associate Professor of Clinical Surgery.

John M. Elder, B.A., M.D., appointed Lecturer in Medi-

cal and Surgical Anatomy.

R. C. Kirkpatrick, B.A., M.D., appointed Lecturer in Clinical Surgery.

C. F. Martin, M.D., appointed Lecturer in Pathology.

Faculty of Arts:-

Frank Carter, M.A. (Oxon), appointed Professor of Classics.

W. E. Deeks, M.D., re-appointed Lecturer in Zoology. Leigh R. Gregor, B.A., Ph.D. (Heidelberg), re-appointed Lecturer in German Language and Literature.

Nevil Norton Evans, M.A.Sc., re-appointed Lecturer in

Maxime Ingres, B.A., appointed Lecturer in French Language and Literature.

H. M. Tory, M.A., appointed Lecturer in Mathematics and re-appointed Demonstrator in Physics.

Miss Carrie M. Derick, M.A., appointed Lecturer in Botany, and re-appointed Demonstrator in Botanical Laboratory.

S. B. Slack, M.A. (Oxon), appointed Lecturer in the Classical Department.

Rev. J. L. Morin, M.A., re-appointed Sessional Lecturer in French.

R. Tait McKenzie, B.A., M.D., re-appointed Medical Examiner and Instructor in Physical Culture.

Miss Helen O. Barnjum, re-appointed Instructor in Physical Education to students of Donalda Class.

J. P. Stephen, re-appointed Instructor in Elocution.

Frank H. Pitcher, B.A.Sc., re-appointed Demonstrator in Physics.

Howard T. Barnes, M.A.Sc., re-appointed Demonstrator in Physics

Alex. Brodie, B A.Sc., re-appointed Assistant in Chemical Laboratory.

Milton L. Hersey, B.A.Sc., appointed to assist Dr. Harrington in Chemical Laboratory for remainder of Session.

F. Jackson, appointed to assist Dr. Deeks in his Demonstrations in Zoology.

Faculty of Applied Science:-

Stewart Henbest Capper, M. A., appointed McDonald Professor of Architecture.

John Bonsall Porter, Ph.D., F.G.S., appointed McDonald Professor of Mining and Metallurgy.

Henry F. Armstrong, appointed Assistant Professor of Freehand Drawing.

R. S. Lea, Ma.E., Lecturer in Mathematics and Drawing, appointed Assistant Professor of Civil Engineering and Lecturer in Mathematics.

Herbert W. Umney, A.M.I.C.E, appointed Assistant

Professor of Civil Engineering.

R. J. Durley, B.Sc., appointed Assistant Professor of Mechanical Engineering (in succession to J. J. Guest, B.A., who was appointed to the Chair of Engineering in the Worcester Polytechnic Institute, Mass., U.S.A.).

J. J. G. Kerry, Ma.E., re-appointed Lecturer in Survey-

ing and Descriptive Geometry.

W. A. Duff, B.A.Sc., re-appointed Demonstrator in Mechanical Engineering.

Louis Herdt, B.A.Sc., re-appointed Demonstrator in Electrical Engineering.

NEW ENDOWMENTS AND DONATIONS.

Mr. W. C. McDonald has added to his previous munificent gifts the sums of \$1,185 for the purchase of certain apparatus for the Engineering Department; \$150,000 for the maintenance of the Engineering and Physics Buildings; and \$475,000 for the erection of a Building for Chemistry, and Mining and Metallurgy, and for the endowment of the chairs of Architecture and Mining and Metallurgy.

The Hon. Sir Donald A. Smith has again renewed his donation of \$4,000 for Lecturers in the Faculty of Arts.

Mrs. Peter Redpath has given, in continuance of her late husband's annual subscription, \$1,000 for the maintenance of the Peter Redpath Museum, and \$500 for the salary of the Museum assistant, and has also given, as in former years, \$5,000 for the maintenance of the Peter Redpath University Library.

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

Arts.

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

THE PAST AND PRESENT SESSION.

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

Law, B.	C.L	· · · · · · · · · · · · · · · · · · ·	. 9
Medicin	e, M.D)	. 90
Arts, B. A	4.(8 w	omen)	. 36
" M.	A. (1 v	voman)	. 5
Applied	Science	e, B.A.Sc	. 31
66	61	M.A.Sc	. 2
66	66	Ma.E	. 1
Veterina	ry Scie	nce, D.V.S	IO
			184

There were also admitted to the degree of B.A.Sc. "ad eundem gradum," John Taylor Farmer, B.A.Sc., Victoria University, Liverpool, England; George Harwood Frost, M.E., Lehigh University, U.S; and David Pearce Penhallow, B.Sc., Boston University, U.S.

Eleven gold medals were awarded to successful candidates, besides the Wicksteed Silver and Bronze Medals, for Physical Culture, the Aberdeen Silver Medal in Applied Science, and a silver medal in Veterinary Science.

In the classes of the Normal School, 137 Diplomas were granted by the Superintendent of Public Instruction, namely, 13 for Academies (issued to gradutes in Arts of the University), 61 for Model Schools, and 63 for Elementary Schools.

In the June Examinations for the title of Associate in Arts held this year at 34 centres, 206 candidates presented themselves, of whom 134 passed the examination successfully. Besides these, 155 came up for preliminary subjects only. Many of the candidates for the A.A. certificate fulfilled the requirements for matriculation, and, in addition, 108 candidates were examined for matriculation only, coming from 25 centres. The total number of candidates thus qualified for entrance was 103, viz., 22 for Medicine, 59 for Arts or Medicine, and 22 for Applied Science.

In the past session, 37 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. Having regard to the financial condition of the University, the Governors thought it right recently to pass a resolution enacting that all such "exemptions from fees" shall henceforward cease. It is hoped that in time to come their place may be taken by an increased number of Scholarships awarded as the result of a general competition among the schools of the Province and Dominion.

At the September Entrance Examinations in Arts, 5 such Scholarships, 8 Exhibitions, and 2 Bursaries 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 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 Faculty of Arts.

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

Faculty	of Law " Medicine " Arts, exclusive of students from		49 380
	other Faculties \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	252) 140 }	392
44	"Applied Science		220
"	" Applied Science" " Veterinary Science		31
Dedu	ct, repeated in different lists	_	1072
	l Normal School—		134

In the Affiliated Colleges in Arts:— Morrin College, Quebec—

87
3
5

FACULTY OF LAW.

The number of students registered in this Faculty is 49, all of whom with one exception are taking the full course.

FACULTY OF MEDICINE.

The total number of students in Medicine registered for this session is 380, of whom 8 are partial students.

The decrease in the number is due chiefly to the absence of dental students.

FACULTY OF ARTS.

In this Faculty 392 students have entered, of whom 219 are undergraduates, viz., 63 in the First Year, 59 in the Second Year, 48 in the Third Year, and 49 in the Fourth Year. 22 are Graduates.

A welcome extension of the work of the Faculty, in the Department of Chemistry, has been rendered possible by the foundation of the McDonald Chemistry Building, referred to below. It is hoped that, as time goes on, the Physics and Chemistry Buildings, so munificently established and equipped, will be increasingly resorted to for purposes of investigation and research, as well as for the work of the ordinary curriculum.

A considerable re-organization of work has taken place

in the Classical Department, where it is confidently expected that improved results will speedily be obtained. General interest in Classics as a subject of study is being stimulated in several ways, and especially by the institution of a Classical Museum, containing a large and valuable collection of wall-hangings and photographic illustrations, in the old Library under Molson Hall. The University has also become a contributor to the British School of Classical Studies at Athens; and it may be mentioned that the subscription offered by the Board of Governors was received with the greatest appreciation by the authorities in London, as the first contribution that had ever been made to their funds by a University outside the United Kingdom.

The extended system of options proposed for the Third and Fourth Years will be favourable to departments which have not yet received the accommodation and equipment that ought to be provided for them in a University. There is already, for example, a marked increase in the attendance of students in the Botanical Laboratory; and as soon as Zoology can be adequately housed in a building common to these two sister-sciences, a notable advance will be possible at McGill along the lines of Biological research and investigation.

Through the liberality of Mr. Hugh McLennan, the University has been enabled to provide for the maintenance of an investigator's table at the Marine Biological Laboratory, Wood's Holl, Mass., which is available to advanced students in Botany, who are engaged in original research.

FACULTY OF APPLIED SCIENCE.

The number of students in the Faculty (undergraduates and partial) at the present time is 220, of whom 9 are taking Graduate courses.

Of these, Mr. J. T. Farmer, B.A.Sc., holder of one of the Royal Commissioners' Exhibition Scholarships, has been allowed by the Commissioners to remain for a second year and carry on his work at this University. At the last meeting of Convocation (April, 1896), the following number of Degrees were conferred in this Faculty:—B.A.Sc., 31; B.A.Sc. (ad eundem), 3; M.A. Sc., 2; Ma.E., 1.

Through the munificence of Mr. W. C. McDonald, a Department of Architecture has been established in the Faculty, and the regular work of this department has now commenced. As already stated, Professor Capper has been appointed to the Chair of Architecture, and Mr. H. F. Armstrong, Assistant Professor of Freehand Drawing.

Mr. McDonald has also rendered it possible for the University to place the Departments of Chemistry and Mining in a thoroughly efficient condition. The erection of a large building is being proceeded with, and it will be equipped in the most approved manner, including not only provision for the several branches of Chemistry, but also for Mineralogy, Mining and Metallurgy. The Mining and Metallurgical laboratories alone will have a floor space of about 10,000 square feet, and will be supplied with the most recent appliances for the milling and metallurgical treatment of ores, etc. Dr. Porter has been appointed Professor of Mining and Metallurgy.

FACULTY OF COMPARATIVE MEDICINE AND VETERINARY SCIENCE.

The students attending this Faculty number 31, of whom 7 are in the First Year, 13 in the Second Year, and 11 in the Third or Final Year.

WANTS OF THE UNIVERSITY.

One of the items specified under the above head in last year's Report has since been supplied on a scale of the greatest completeness by Mr. W. C. McDonald. It is enough to say here that the Chemistry Building now in course of erection will be worthy of the Engineering and the Physics Buildings, for which the University is indebted to the liberality of the same founder.

The revised curriculum of studies which has been drafted for the Faculty of Arts assumes that new subjects, such as Economics and Political Science, will be introduced as soon as the necessary funds can be provided. The strengthening of existing departments is also a prime necessity of the situation, and much could be done to make the course at McGill increasingly sought after by offering additional tutorial instruction—apart from professorial lecturing-during the first two years of the Arts curriculum. The last two years it is proposed to organize on lines which shall provide, where desired, a natural transition to work in the Faculties of Medicine, Law. or Applied Science. It is also being borne in mind that the University will not be completely fulfilling its proper functions till the opportunities of Graduate Work in the several departments have been largely extended and increased.

Among other more or less pressing wants may be briefly mentioned a Biological Building, residential accommodations for students, a University Hall, an Art Museum, a Gymnasium, and an increase in the General Endowment Fund of the University, as well as an addition to the funds at the disposal of the Library and Museum Committees.

In connection with the need for residential accommodation for students, it is worthy of mention that the efforts made by a Committee of Professors to establish a "Students' Club," where good board and lodging could be obtained at reasonable prices, have been completely successful. As the Committee undertook to act only for a year, it may become necessary to make new arrangements if the Club is to be established on a permanent basis. Meanwhile the success of this year's operations must be regarded as in the highest degree encouraging. The Committee is greatly indebted to its Honorary Secretary, Professor Penhallow, for the care and attention which he has bestowed on the affairs of the Club.

The activity of the various Graduate Societies in various

parts of the Dominion, and also in New York City, calls for grateful recognition. The youngest of these societies—that which has recently been constituted at Vancouver, B.C.—has distinctly formulated the aim of doing what it can to assist in supplying some of the more pressing needs of the University.

Affiliated Colleges.

The staff of professors and lecturers in Morrin College, Quebec, has been further strengthened, now numbering six. The Rev. Donald Macrae, D.D., has been appointed to the Principalship of the College.

In St. Francis College, Richmond, there are three lecturers.

In the Wesleyan College, Stanstead, there are as in last year's Report four lecturers.

A large number of students in the affiliated Theological Colleges in the city are entered as students of the University, 38 taking the full undergraduate course and 60 as partial students. Of the 38 undergraduates the Presbyterian College supplies 17, the Diocesan 7, the Wesleyan 7, and the Congregational 7. Partial students (49) are distributed as follows:—Presbyterian 14, Diocesan 3, Wesleyan 33, and Congregational 10. Six graduates, from the Presbyterian College, are attending one or more courses of lectures.

THE McGILL NORMAL AND MODEL SCHOOLS.

At the close of the fortieth session of the McGill Normal School, May 31st, 1896, diplomas were conferred by the Superintendent of Public Instruction on 137 teachers who had completed their course of training, 63 being Elementary School diplomas, 61 Model School diplomas, and 13 Academy diplomas. At the beginning of the current session, 76 women and 3 men were received as teachers in-training into the Elementary School Class, 65 women and 3 men into the Model School Class, and 7 women into the Academy Class. A little later 7 men and 4 women, graduates of the University, or undergraduates

of the Third or Fourth Years, entered for the short course in pedagogy leading to the Academy diploma of the first class. By illness and by failure at the semi-sessional examinations, the numbers in attendance at all the classes are now, at close of the Christmas holidays, reduced to 124 women and 10 men.

The total enrolment in the Model Schools since September 1st, 1896, has been 194 boys and 275 girls; the number actually in attendance during the month of December was 168 boys and 236 girls, a total of 404

pupils

By a recent resolution, the Protestant Committee of the Council of Public Instruction has provided that, with a few exceptions specially reserved to the action of the Committee itself, diplomas to Protestant teachers shall henceforth be issued only after a course of training of at least four months duration, received in the Normal School. In all probability, the result will be a much increased attendance at that institution during the last four months of the annual session. In consequence, three difficulties of grave import arise: first, the class room accommodation of the building is scarcely adequate to the reception of perhaps one hundred additional pupils; secondly, the teaching staff is numerically too weak to meet the increase of labour involved, while there are no means at the disposal of the Normal School Committee for providing help; and thirdly, suitable lodgings for a large number of women students, who will remain in the city for four months only, are not available at a moderate price. It is not too much to say that the situation constitutes an impending crisis in Protestant popular education in the Province.

GYMNASIUM.

Dr. R. Tait McKenzie reports that 113 men are attending the classes at the Gymnasium, a number which might be largely increased were it not that the hours for lectures in several of the Faculties conflict with those for the Gymnasium. This is particularly the case with the Third and Fourth Years in Medicine and in the Faculties of Law and Comp. Medicine, the students in these classes being wholly excluded from this cause.

The physical examination of students has been systematically carried on, no one being permitted to compete in athletic sports without such examination. 278 men have been examined, 23 of whom were prevented from taking part in violent forms of athletics, while 65 others were given special advice and treatment.

Dr. McKenzie desires to thank the Board of Governors for providing the means for procuring assistance in this most important work, and urges that a permanent assistant be appointed.

The number of Donalda students attending the Gymnasium is eleven, the same difficulty of conflicting hours preventing very many from joining. Even this number was only attained by uniting with the students of the Normal School on one afternoon in each week.

During the continued illness of Miss Barnjum the class has been most efficiently carried on by Miss L. Norton Evans.

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

W. PETERSON, M.A., LL.D.,

Principal.

10th February, 1897.

ANNUAL REPORT OF THE LIBRARY COMMITTEE.

TO THE CORPORATION OF MCGILL UNIVERSITY,

GENTLEMEN,—In the last Annual Report of your Committee, reference was made to the inscriptions required to complete the canopy that had been placed in the Library for the portrait bust of the late Mr. Peter Redpath. Early in the year now closed, two oak panels, upon which these inscriptions had been carved, were placed one on either side of the bust. The inscriptions are as follows:—

"This edifice, one of many noble gifts, was presented to the University by Peter Redpath. Opened on the 31st Oct., 1893."

"Peter Redpath. Born, Montreal, Augt. 1, 1821. Died, Chislehurst, Eug., Feb. 1st, 1894. This bust and canopy were presented to the University by a few of his friends and admirers in the United

Kingdom."

At the meeting held last January, the Corporation asked of the Board of Governors a special grant to defray the cost of publishing, under the caption "University Publications", papers scientific and literary, written by members of the staff of the University. The Governors generously made the requisite appropriation, leaving the details of publication and exchange in the hands of your Committee. Steps were accordingly taken for issuance of University Publications along the lines already indicated by Corporation, and the co-operation of members of the University as a whole was sought and readily obtained. As a result, fifteen papers have been published, by the following departments :-Botany, 2; Pathology, 3; Physiology, 6; Physics, 1; Chemistry and Mineralogy, 1; Philosophy, 2. Sir William Dawson has not merely co-operated as a contributor, but has generously placed at the disposal of your Committee, for distribution, a number of the publications of the Peter Redpath Museum.

Under arrangement with the Faculty of Law as approved by the Board of Governors and by Corporation, the books controlled by that Faculty have been removed to the General Library, upon which henceforth devolves their superintendence and management, while the Faculty provides for the additional assistance required under the new plan. At first it was thought that at least a few books would be required in the building where the Law lectures are held. This has not proved to be the case, however. A Seminary Room in the General Library, supplied with some 1200 selected volumes, seems to answer every need of the students. Indeed, the necessity for even this room hardly seems urgent, in view of the expressed preference for the general Reading Room and its use instead of the Seminary Room by more than one Student.

The Library is under obligations to many friends for important gifts and help received during the year. To Mrs. Peter Redpath especially are the thanks of Corporation due for presenting many valuable books, in addition to her most generous annual donation towards the maintenance of the Library.

The thanks of Corporation are also due to Mr. J. H. R. Molson and to Mr. W. C. McDonald. The former has enabled the Library to acquire a valuable collection of books on the French Revolution and a large number of other books of which it was in great need; the latter has presented it with an exceptionally fine collection of architectural works. These have been selected by Prof. Capper. They enrich a department of the Library which has hitherto been but poor, yet is of unusual interest to a large number of students and readers. Mr. McDonald has also kindly provided for the purchase of a number of French works.

The Graduates' Society of McGill University, the McGill College Book Club, Dr. MacPhail, Mr. Alex. Falconer, and Rev. Dr. Hart have also made important gifts. The foregoing names, with those of many others of whom space forbids mention here, have already appeared in the *Gazette* by the kindness of its proprietors, with the thanks of the Corporation. Appended is a complete list of donors for the year.

The number of volumes presented to the Library to Jan. 11, 1897, is	2,283
Those purchased amount to	850
	3,133
Transferred from Law Library, not before entered	10
Previously in Library, but never before entered	18
By exchange, etc	5
Total additions from Jan. 16, 1896, to Jan. 4, 1897 There were in the Library at date of last Annual	3,166
Report	41,132
	44,298
Deduct 5 vols. exchanged and 2 lost	7
The total number of bound volumes \ast at date is the	
fore	44,291

Besides maps, charts, photographs, manuscripts, and many pamphlets.

The increase during the quarter now closed was 609 volumes presented, 465 volumes bought, 5 newly entered, and 5 exchanges;—

* Apart from 20,000 volumes contained in the departmental libraries.

in all, 1084 bound volumes; besides 4 charts, 2 maps, 6 atlases presented, and 6 etchings, 7 photographs and 1 map bought.

Classification of the books on the shelves, and cataloguing have progressed satisfactorily. The author catalogue, with a large number of title entries, has been completed for the following sections which have also been fully classed and arranged:—

Philosophy (Mental and Moral), Religions, Christianity and Judaism, Ecclesiastical History, Biography, History (the History of Canada and early American History are only partially completed), Archæology, Numismatics, Geography and Travels, Social Sciences in general, Economics, Sociology, Constitutional History, Education, Amusements, Fine Arts and General Literature with the exception of the Classics.

In addition to the usual author cards, subject entries have been made for Education and also for all new books which have been received during the last two months.

The attendance from Jan. 16, 1896, to Jan. 11, 1897, has been 18,416.

Jan. 23, 1895, to Jan. 14, 1896, was 16,541.
Jan. 23, 1894, to Jan. 23, 1895, was 12,680.

The number of volumes delivered from the stack has about kept pace with this increase.

Binding and repairing have been attended to as usual.

A voluntary class, averaging about twenty-five in number, devoted an hour a week during the autumn to the study of practical Bibliography. The course included an explanation of the system of Classification and Cataloguing which has been adopted in the University Library, with a short account of the invention of printing.

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

Respectfully submitted, on behalf of your Committee.

(Signed), C. H. GOULD,

University Librarian.

CONSPECTUS OF READING AND ATTENDANCE FROM JANUARY 14, 1896, TO JANUARY 11, 1897.

QUARTER ENDING READERS. VISITORS. TOTAL. BOOKS READ. 7,563 .. 9,650 vols. 87 7,476 April 21, 1896..... 977 .. 1,254 " June 16, " 66 110 4,219 .. 3,254 " 3,595 624 Oct. 26, 6,531 Tan. 11, 1897 6,434 97 874 19,290

Note.—These figures are exclusive of the work done in departmental librariess Visitors have rarely been requested to register: hence, the figures under this heading represent but a fraction of those who have seen the library

DONATIONS TO THE UNIVERSITY LIBRARY.

(JAN, 16, 1896, to JAN, 11, 1897)

(JAN, 10, 1090,	to Jan.	11, 109/1	
Vols	1	V	ols.
	Canad	a Queen's Printer	25
Abbott, Harry 1 Academy of Natural Science,		r, S. H	14
	Car B	uilders' Association, Chi-	
Adams, F. D 2		0	1
American Academy of Arts	Carne	gie Steel Company	2
and Sciences	Chica	go University	1
American Climatological As-		and Public Library	1
sociation I		ado University	1
American Institute Mechanical		abia College	3
Engineers		Clarke Company, To-	
American Institute Mining En-		to	1
gineers		ll University	I
American Society Civil Engin-		irat, Rev. D., and others	90
	Crand	lall, Hon. F. A., Supt. of	
American Society Mechanical		cuments, Washington	17
	Critte	nden, J. P	I
Amherst College	Crock	er, U. H	1
Anonymous Donor 138	Crosb	y Steam Gauge & Valve	
Astronomer Royal, Greenwich		mpany	I
Auckland University College.	Cross	kill, Hon. H	3
Avery, Mr. and Mrs. S. P.,	Cross	kill, W. H., Legislative	
and Trustees of Columbia	Lib	orarian, Charlottetown	5
		er, Prin., N. Y. Inst. for	
Badgley, S. R		af and Dumb	I
Bancroft, George, Knowlton		ousie College and Uni-	
Bethune, Rev. C. J. S., ed.		sity	2
Canadian Entomologist	Dare	y, P. J	4
Binmore, Miss	Darth	nouth College, N.H	3
Bishop's College, Lennoxville.	Daws	son, Sir J. W	25
Blackwood, Miss 2		oit Public Library	4
Blair, Hon. A. G., New Brun-		y, Melvil	1
swick		tt, C. S	2
Botterell, E. H		all, Miss L	I
Bovey, H. T		am College of Science	I
Brazil Inst. Agronomico	Durh	am University	1
Bristol University College	Edinl	burgh University	I
Brit. Assn. for Adv. of Science	Embe	erson, F. C	2
	Ewar	t, J. S., per W. H. Cul-	
British Museum Trustees 3			1
Brown, W. Foster	Fairb	pairn, Miss H	I
Brownlow, E. B., Friends of	Fitzg	ibbon, Miss	I
		, C. J	4
Brownlow, Mrs	Fleet	, Miss	I
Brush, G. R		er and Chalmers, Chicago	1
Bryn Mawr College	Frede	eriks Universitet, Christ-	
Burgess, T. J. W	ian	ia	I
Burrows Brothers Company	Fren	ch, A. D. W	1
California University	Frye	r, A. C	I
Cambridge Philosophical So-	Geole	ogical Society of America	2
ciety	Glass	gow University	I
Canada Geological Survey	Gosn	ell, R. E., Victoria	2
Cultural October Carry			

Vol	e 1	Vol	s.
		Manitoba University	I
Gould, C. H	5	Maisonneuve Memorial Com-	
Graduates' Society of McGill	-	mittee, through Hon. Justice	
Chivetotey	7		I
Great Britain Under Secy. of		Pagnuelo	3
State, per W. Rice, London	4	Mason Conege, Ditting item.	2
Guinness, Rev. H. G	2	Maspéro, Gaston	I
Hall, James, State Geologist,		Mayor of Montreal	
Albany	5	McDonald, W. C 33	
Hanson, C. A	I	McGill College Book Club 19	,0
Hartford Theological Seminary	2	McGill University Medical	
Harvard Club, New York	1	Faculty	I
Harvard University	4		30
Hersey, M. L	1	McLennan, Mrs. F	4
Hoepli, U	2	McLennan, William McLeod, C. H	3
Howard Memorial Library	I	McLeod, C. H	I
Hughes, J. H	I	McMaster University	I
Iles, George	16	Melbourne University	2
India, Dept. of Rev. and Agri-		Michigan University	I
culture, through Prof. Pen-		Milwaukee Public Library	1
hallow	1	Missouri Botanical Garden,	
Ingres, Maxime	2	per W. Trelease, Director	I
Iowa Geological Survey	1	Molson, J. H. R 4	59
Iowa State University	2	Mott, Henry	8
Imperial University of Japan.	I	Murray, D	I
Institute of Civil Engineers,		National Academy of Science,	
	6	Washington	5
Institute of Electrical Engin-		National Electric Light Asso-	
	1	ciation	1
Institution of Engineers and		Natural History Society, Mon-	
Chinhuilders in Scotland	1	treal	1
Shipbuilders in Scotland Instituto Geografico y Esta-	•	New Brunswick Regiment,	
	9	Canadian Artillery	1
distico, Madrid	I	New Brunswick University	1
Ives, H. R	I	New Jersey College, Princeton	2
James, E. J	14	New York Institute for the	
Jones, Walton	_	Deaf	I
Johns Hopkins University	5	New York Public Library	4
Kerallain, R. de, Quimper,	т.	New York State, Regents of	
France Calautta Pa	I	University of	2
King, G., Supt. Calcutta Bo-		North Carolina Agric. Exper-	
tanical Gardens	I	iment Station)
King's College, London	3	Northwestern University, Chi-	
Lafleur, P	2	cago	3
Leland Stanford Junior Uni-		Norwich Free Academy	ì
versity, California	I	Nova Scotia, Provincial Secy.	1
London University	1	Nova Scotia, Queen's Printer.	1
Mackay, Estate of late Cap-		Ontario Agricultural College.	1
tain H. B., R.E	2	Ontario Department of Agri-	
Mackay, Hon. R. (received		oulture	
in 1886, but not previously	-	Ontario Department of Educa-	
entered)	I	tion	
Mackay, Miss	6	Ontario Publishing Company,	
MacLehose, Messrs., Publish-		Townto	
ers, Glasgow	I	Ottawa Field Naturalist Club	
Macl'hail, J. A	19	Owens College Manchester	
Manitoba, Legislative Library,		Owens College, Manchester	
per J. P. Robertson, Libr'n.	1	Pelland, J. O	

Vo	ols. 1	South Australian School of	
Patterson, W. J., and Mor-		Mines and Industries	1
ton, H	I	South Wales and Monmouth-	
Penhallow, D. P	2	shire University College	1
Pennsylvania, State Geologist,	4	Special Subscriptions	89
Pennsylvania University	I	St. Andrews University	3
	I	St. Mungo's College	1
Penny, F. G	I	Stock, Elliot, London	I
Perkins Institute		Sydney University	1
Peterson, William	7	Thompson, H. M	I
Peyster, J. W. de	2	Thwaites, R. G	I
Princeton University	2	Toronto Public Library	1
Protestant Council of Public	.	Toronto University	5
Instruction, Quebec	3	Toronto University	2
Quebec Provincial Governm't.	7	Trinity College, Toronto	2
Quebec Supt. of Education	2	Tulane University, La	_
Queen's College, Cork	I	United States Bureau of Edu-	4
Queen's College, Galway	2	cation	I
Queen's College, Kingston	3	Bureau of Ethnology	2
Railroad Commission, Mass	I	Bureau of Statistics	2
Redpath, Mrs. Peter	56	Coast and Geodetic Survey	10
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Terre Haute, Ind	I	of Engineers	7
Royal Astronomical Society.	IO	University College, North	
Royal Botanic Garden, Cal-		Wales	I
cutta	3	University Club, New York	I
Royal Colonial Institute	I	Unknown Source	- 6
Royal Institute of British Ar-		Vermont University	I
chitects	9	Victoria University, Toronto	2
Royal Military College Club,	-	Wade, F. C., per W.H. Culver	1
Kingston	I	Wadsworth, H. W., Secretary	
Royal Society of Canada	2	Dominion Travellers' Assoc.	1
Royal Society of London	7	Wales University College	2
Royal University of Ireland	3	Waller, Rev. C. C	2
Salem Public Library	I	Webster, J. P	I
Secretary's Office	3	Worcester Polytechnic Insti-	
Smith College, Northampton,	3	tute	I
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Smith, Sir Donald A	33	Vorkshire College, Leeds	3
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Society of Arts, London	2		
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Society of Engineers, London		The Chart Mr F Mc	Len.
Royal Geographical Societ	y of	London, I Chart; Mr. F. Mc	coad.

Royal Geographical Society of London, I Chart; Mr. F. McLennan, 2 Maps; Hon. J. S. Hall, 2 Maps; Dr. B. J. Harrington, I Broadside; Hon. E. J. Flynn, Commissioner of Crown Lands, 2 Maps; Mrs. James Peck, 28 Egyptian Photographs; Dr. H. T. Bovey, I Map; Miss Blackwood, I MS Letter, and Constitution (MS) of Montreal Fire Club; Rev. V. C. Hart (through the Secretary of the Montreal Art Association), I Rubbing of Nestorian Tablet, China; Mr. J. H. R. Molson; 4 Charts and I Map; Mr. O. M. Gould, I Map; Mr. W. C. McDonald, 6 Atlases; Mr. C. A. Hanson, of London, has presented the Library with the Daily Times, Dr. K. Cameron, with Fliegende Blatter, Dr. F. D. Adams, with the Engineering and Mining Journal, Dr. A, J. Eaton, with the Harvard Graduates' Magazine, and Mr. John R. Dougall, with the Montreal Daily Witness, for the year 1896. A large number of Pamphlets has also been presented.

REPORT OF PETER REDPATH MUSEUM FOR THE YEAR 1896.

TO THE CORPORATION OF THE UNIVERSITY.

GENTLEMEN.—The Committee begs to report that the Classes in Geology, Mineralogy, Zoology and Botany, and demonstrations in these subjects have been continued as usual, with increasing attendance, and that owing to the greater number of students the Committee has found it necessary to provide some additional apparatus, and to give additional facilities in the lecture theatre and the smaller class-room.

The number of Visitors registered has been 2,600.

The Board of Governors, by request of the Committee, has had the window frames and doors of the entrance and a portion of the entrance hall cleaned and re-varnished, and has placed a flooring in the space under the main roof to protect the ceiling of the upper hall. Electric lighting has also been introduced into the rooms on the lower floor of the Museum.

A grant from the Board of Governors has enabled us to secure the services of Mr. Bailly, jointly with the Museum of the Medical Faculty, as taxidermist and anatomical preparator. He has already gone over a portion of the mammalian skeletons, cleaning and mounting them, and has also mounted a number of additional skeletons and skins presented to or purchased by the Museum. A list of specimens prepared by Mr. Bailly accompanies this Report.

In the course of the year, Mr. E. Ardley, Museum Assistant, has occupied himself with the cleaning, re-arranging and relabelling of specimens, especially in Palæontology; in these respects the collections may be said to be in much better condition than at any previous period. New locks have also been placed on 72 cases and drawers, and the protection of the upright cases from dust by India rubber strips has been extended as far as permitted by the means at disposal. It is, however, much to be desired that all the upright cases should be protected in this way. Mr. Ardley has also given some time to the better mounting of specimens of fossils and to preparation of slices and polished specimens.

A number of valuable specimens has been added to the collections in Geology, Zoology, Mineralogy and Botany by purchase with the aid of the J. H. R. Molson fund, and by donations. The latter have been recorded in the quarterly lists of donations.

Mrs. Redpath, of the Manor House, Chislehurst, has continued the annual sum of \$1500 for maintenance granted by her late husband, the founder of the Museum; and Mr. J. H. R. Molson has added to his former benefactions for the purchase of specimens the sum of \$500.

The Committee has felt for some time that the increase of the Museum and its improvement, to keep pace with the educational and scientific demands made upon it, should not be dependent on donations and private gifts as at present, but should be recognized as a permanent department of University expenditure. With the object of securing this, a memorandum was prepared last autumn and submitted to the Board of Governors, who it is hoped may be able to supply this urgent need, or, if unable to do so, to secure an endowment available for the purpose. One such endowment already exists, the William Molson Museum fund of \$2000, but a much larger sum is required. In connection with this it is specially desirable that the museum should be in the best possible order on account of the probable visit of members of the British Association to Montreal on invitation of the University.

The additions to the Herbarium during the past year amount to about nine hundred species, comprising, chiefly, plants from the Sandwich Islands and an important collection of South American plants from the Orinoco region.

The collection of woods has been enlarged by the addition of a number of type specimens obtained by Professor Penhallow in connection with special studies concerning certain of our native species.

To the Zoological collections were added a mounted head of Walrus and tusk of the Narwhal from Greenland; also several specimens to fill blanks in the collection of Canadian mammals and birds.

A small amount was expended in securing some desiderata for the collection of Canadian minerals.

The whole respectfully submitted.

(Signed),

B. J. HARRINGTON,

Hon. Curator,

On behalf of the Committee.

SPECIMENS PREPARED BY MR. BAILLY.

Skelerons re-mounted:—Canada Lynx, Pine Marten, Fisher, Fox, small Otter, common Otter, Mink, Mole, Turtle. New specimens mounted:—Acquired by purchase, Woodchuck, Barred Owl, Opossum, Fish Hawk, Wild Goose, Guinea Hen, Raccoon, Black Squirrel. Presented by J. F. D. Bailly, Gray Parrot, Ermine, common Rabbit, common Mouse; by E. Warren, Gopher; by Dr. Shepherd, Menobranchus lateralis; by Dr. Harrington, Star-nosed Mole, Angler Fish.

DONATIONS TO THE PETER REDPATH MUSEUM.

APRIL, 1896, TO JANUARY, 1897

Allan, Messrs. H. & A., three hogsheads of sea-water for aquarium. Ami, Dr., F.G. S., Ottawa, three specimens of Stephanella sancta, from the Utica Shale, Ottawa.

Bailly, Mr. J. F. D., mounted skeleton of Ermine. Bartlett, Mr. G.: W. (student in Medicine), specimens from Greenland, including large and fine mass of Rose Quartz, crystals of Tourmaline, Fossil Plants; also Shells in hardened sand and Leda glacialis in nodule, from the Pleistocene formation.

Beaton, Mr. John, Almonte, Ont., specimens of Emperor Moth (Samia cecropia).

Beecher, Professor C. H., Yale University, New Haven, specimen of Triarthrus Becki with antennæ and limbs.

Bishop, Mr. W. Gordon, nest of Baltimore Oriole.

Bourne, Rev. N. A. F., Dunham, P.Q., specimen of Natural Graft. Consumers' Cordage Company, collection of Fibres and samples of

Cross, Hon. G. H., Beaver, Wyoming, U.S., portion of Femur of Dinosaur and fragments of Belemnite from the Cretaceous of Wyoming.

Dawson, Sir J. W., F.R.S., Rocks and Fossils from Anglesea, Wales, and Slabs with Footprints from the Coal Measures, South Joggins,

Douglas, Dr. James, New York, specimens of Azurite from the Copper Queen Mine, Arizona.

Evans, Mr. Nevil Norton, M.A.Sc., specimen of Scolithus from the Potsdam Sandstone, Lachute, P.Q.

Fenwick, Mrs. George, Brechin, Scotland, Chinese Bow and Arrow. Geological Survey, Ottawa (per A. E. Barlow, M.A.), large specimen of

Sodalite from Dungannon, Ont. Grant, Lieut. Col., Hamilton, Ont., collection of Niagara and Clinton

Fossils from Hamilton, Ont. Hale, Mr. Horatio, Clinton, Ont., Wampum from Kingsmill Island.

Harrington, Dr. B. J., specimen of Angler Fish (Lophius piscatorius) and three specimens of Star-nosed Mole (Condylura Cristata) from Little Metis, P.Q.

Macnider, Dr. S., Little Metis, P.Q., specimen of Sponge (Chalina) from Gulf of St. Lawrence, Little Metis.

Mathewson, Mr. E. P., B.A.Sc., Pueblo, Col., specimens of Native Gold and Gold Telluride from Cripple Creek, Colorado.

Meldrum, Mr. J., Johor, India, specimen of Soapstone from Johor, India. Nichol, Dr. W. G., Rattle of Rattlesnake (Crotalus horriaus); specimen of Conglomerate from Little Metis, P.Q.

Paterson and Foster, Messrs., chromo-lithograph of Human Nervous

System. Porter, Dr. J. Bonsall, fossils from the Cincinnati Group; specimens of Silicified Wood and Corniferous Coral. Also, vol. VII of the Ohio Geological Report and Maps.

Provincial Museum, Victoria, B.C., photographs of group of Great Blue Herons and of groups of Raccoons.

Shepherd, Prof. F. J., M.D., specimen of Menobranchus lateralis.
United States National Museum, Washington, three specimens of

Teganium substharicum, from Utica, N.Y.

REPORT OF COMMITTEE OF MANAGEMENT OF THE MCDONALD PHYSICS BUILDING.

TO THE CORPORATION OF MCGILL UNIVERSITY.

Gentlemen,—In reporting the progress made during the year 1896, the Committee of Management of the McDonald Physics Building desire to call attention first to the completion of the Endowment. Mr. W. C. McDonald, in the month of May, increased the sum of \$40,000, already set aside for this purpose, by a further gift of \$110,000, making \$150,000 in all. According to careful estimates, it is believed that the income from this endowment will provide for the maintenance of the Building, including heating, lighting and insurance; the salaries of the necessary Demonstrators; the wages of a janitor and a first-class instrument maker; and the annual cost of materials consumed, together with additions to the apparatus from time to time. This last munificent gift assures the perpetual continuance of the work in the Physics Department with unimpaired efficiency, and without laying any charge on the general fund of the University.

The Committee feels satisfaction in noting the increase in the number of students (now above 200) receiving regular instruction in the Laboratory, as well as the frequency with which the Lecture Theatre is made use of for the purposes of other Departments.

As might naturally be expected in a new Laboratory, the time of the Professors and Demonstrators has necessarily been largely devoted to the setting up and adjustment of new instruments. It is hoped, however, that such work may be completed in the course of the ensuing summer vacation. In the meanwhile a considerable amount of research has been accomplished, leading to interesting results which have appeared in the Proceedings of the Royal Society of Canada and other Scientific Bodies. A brief notice of the principal points investigated may fitly conclude this Report.

Within a few days of the arrival of the news of Dr. Roentgen's discovery, Professor Cox, on Feb. 7th, succeeded in making one of the first applications of this process to surgery, by the photographic location of a bullet in the leg of a patient. An account of the experiments and of the extraction of the bullet is given in the *Montreal Medical Journal*, March, 1896.

Since that date he has been engaged in conjunction with Professor Callendar, in investigating the conditions of production or the Roentgen rays, and the best method of obtaining clear and quick photographs. A paper containing some of the most important results, especially those bearing on the nature of X rays, was read at the last meeting of the Royal Society of Canada.

The observations of the Soil Thermometers set up in Oct., 1894, have been continued throughout the year. The reduction of the observations has been recently completed under the supervision of Professors McLeod and Callendar, who will contribute an account of the work to the Royal Society in continuation of the report presented by Professor Callendar last year.

During the summer vacation of 1895, Professor Callendar was engaged with Professor Nicolson in a research on Cylinder Condensation. The electrical thermometers required for this work were made and calibrated in the Physics Building. It is hoped that the results of this work, which are in many respects new, may be presented shortly to the Society of Civil Engineers in London.

Mr. H. M. Tory, M.A., has been engaged in the intervals of his other work, in an investigation of the thermo-electric properties of iron and copper, with a view to the accurate verification of the formulæ of Avenarius and Tait. He is now proceeding to extend his results to higher temperatures, and in particular to make a comparison between the two systems of electrical pyrometry.

Mr. F. H. Pitcher, B.A.Sc., Demonstrator in Physics, has been engaged in studying the magnetic properties of iron at high temperatures, by a new method designed by Professor Callendar. He has already obtained results of considerable interest, which he hopes

to extend to other magnetic metals.

Mr. H. T. Barnes, B.A.Sc., has been engaged with Professor Callendar in investigating the nature and extent of the temperature variations of the E. M. F. of the Clark Standard Cell. This work, which was primarily undertaken with a view to completing the electrical standards equipment of the Physics Building, has brought to light several new points of interest. The results are now approaching completion, and will, it is hoped, be communicated shortly to the Royal Society of London.

Mr. R.O. King, B.A.Sc., 1851 Exhibition Scholar, has been engaged on a new electrical method of measuring the thermal conductivity of metals. He is endeavoring to settle the much disputed question as to whether the conductivity is constant or varies with the temperature. In connection with the same method, he is also attempting to verify the very difficult experiments of Lord Kelvin on the existence of the "Thomson" effect, and to measure its

amount.

Mr. R. W. Gill, B.A.Sc., is at present engaged in a research on Hysteresis, which he is conducting with special apparatus designed on a new principle.

The whole respectfully submitted,

(Signed), JOHN COX,

Secretary.

REPORT ON THE BOTANIC GARDEN FOR 1896.

TO THE CORPORATION OF THE UNIVERSITY.

The past year has witnessed an increase of 5.4 per cent in the number of students deriving benefit from the advantages offered by the Botanic Garden. This has resulted in part from the natural growth of the classes in Arts, but in large part also from the great increase in the number of those who have elected Botany as an optional subject in the Third and Fourth Years. The immediate increase in numbers, which has followed upon the adoption of more liberal options in Natural Science subjects, and better provision for the prosecution of work in the higher branches of Botany, affords an excellent illustration of the demand for biological work, and the fact that students will be drawn to such studies in direct proportion to the facilities afforded for making them live subjects. In my last report, I drew attention to the important relations existing between the Garden as a source of supplies, and the Laboratory as a means of converting the material thus obtained into intellectual food. The experience of the past year has served to confirm the view that a properly equipped garden is an absolute essential to the conduct of efficient courses in Botany, especially where the function of investigation is joined to that of instruction, and any curtailment of the efficiency of the former must lead to a diminution in the strength of the latter as an important educational

During the past year the facilities afforded by the Garden have made it possible to extend the work of special investigation, and the following subjects have been dealt with:

- 1. A revision of the species of Picea occurring in North-eastern America. D. P. Penhallow.
- 2. Myeloxylon topekensis, N. S. A new species of Myeloxylon from the Carboniferous of Kansas. D. P. Penhallow.
- 3. Contributions to the Pleistocene Flora of Canada. D. P. Penhallow.
- 4. The Generic characters of the North American Coniferae, based upon the structure of the stem. D. P. Penhallow.
- 5. The Idioblasts of the Aroidae in relation to distribution and mechanical stress. In progress. Miss K. T. Lyman.
- 6. The Stomata of Seed-plants, in relation to distribution and special adaptation. In progress. Mr. W. H. Watters.

Our relations to kindred institutions continue on the same basis as heretofore, and exchanges have been made with the same institutions and publications as during the last year.

(Signed), D. P. PENHALLOW, Director.

OBSERVATORY REPORT.

TO THE CORPORATION OF MCGILL UNIVERSITY,

GENTLEMEN,—I beg to submit the following report for the year 1896.

The usual meteorological work in connection with the Meteorological Service of Canada has been carried forward without interruption throughout the year. This has consisted in: (1) A series of observations of the usual elements at four hours intervals. (2) The telegraphic observation series at 8 a. m. and 8 p. m. each day, upon which the weather probabilities depend. (3) A bi-hourly series of temperature observations from self-recording thermometers.

The time service and system of clock exchanges with the Toronto Observatory have also been conducted as detailed in former reports. Observations of 628 stars were made on 122 nights during 46 weeks. For six weeks—Sept. 11th to Oct. 24th—clock errors were determined from the observations of the Coast and Geodetic Survey Assistants, Messrs. Sinclair and Faris, who were during that period engaged in longitude work here, and occupied our transit pier with their instrument. Comparisons of the mean-time clocks, here and in the Toronto Observatory, were made on 18 days.

During the months of May and June, observations for determining the longitude of Ottawa were made in co-operation with Mr. W. F. King, of the Department of the Interior. During September and October, the difference of longitude between Albany, N.Y., and Montreal was determined under the direction of Mr. C. H. Sinclair of the Coast and Geodetic Survey. This work completed the chain of longitude determinations between Washington, Cambridge and Montreal, and gave another connection between the American trans-Atlantic longitude determinations and our own determination in 1892.

By the kindness of Mr. Sinclair I am able to give the results of his field reduction, which makes the difference of longitude between Montreal and Cambridge 9^m $47^s.581 \pm .011$. The difference obtained in 1883 by Professor Rogers and myself was 9^m $47^s.550 \pm .019$. Combining these two results we obtain 9^m $47^s.572$ as the difference of longitude between Montreal and Cambridge.

The longitude of Montreal, as determined by cable in 1892, was 4th 54th 18th.670. Hence the resulting longitude of Cambridge (Harvard College Observatory) is 4th 44th.31th.108. The formerly accepted longitude, depending upon the U.S. cable determinations of 1866, '70 and '72, was 4th 44th 30th.993.

The longitude of Montreal (the middle point between the two piers of the transit instruments) above given is the final result of the cable determination in 1892, and depends upon the observations of Professor H. H. Turner and myself. An account of this longitude work will, it is expected, appear in the "Transactions" of the Royal Society of Canada, for 1897. I was fortunately able to meet the Astronomer Royal here last July, on his way to Japan, and to confer with him as to the final values in connection with the transatlantic longitude work.

I may perhaps be permitted to record here, that the Astronomer Royal, as well as the other members, Professor Turner and Captain Hills, of the British Eclipse expedition, visited, in passing through Montreal, the site recently purchased by Mr. McDonald for an Observatory, in which they all evinced very great interest and united in declaring the position to be most admirably suited to the

purpose in view.

The soil temperature observations made in co-operation with Professor Callendar have been continued. Two eye observations per day, at the several depths, have been taken throughout the year. The results up to May 1st last were presented as a Paper at the last meeting of the Royal Society of Canada, and will be published shortly.

The astronomical instruments of the Observatory have been employed, as in former years, in giving instruction to certain classes in Arts and Applied Science.

(Signed),

C. H. McLEOD,

Superintendent.

McGill College, Montreal. Jan. 1st, 1897.

ROYAL INSTITUTION FOR THE

Balance Sheet for the

	Balance	Sheet	for	the
SUNDRY ORIGINAL DONATIONS IN LANDS, ETC. (balance of Estate a	account). \$526	.862 50		
McTavish Street Property, the gift of J. H. R. Molson, Esq \$				
W. C. McDonald, Esq., donation towards building of Workshops Subscriptions towards Equipment of Thos. Workman Workshops John H. R. Molson, donation for Extension to Medical College	57,000 00 20,000 00 13,150 04			
Macdonald Engineering Building and Equipment, the gift of W. C. McDonald, Esq	62,153 86 78,954 67			
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ADVANCEMENT OF LEARNING.

year ending June 30th, 1896.

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Macdonald Physics Building	143,820 39		
University Library Building	135,000 00		
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			\$269,129 3
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CAPITAL RECEIVED and DISBURSED by the ROYAL

for the year ending

RECEIPTS.	
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Endowments, etc. :-	
Dr. T. Sterry Hunt Scholarship 8 252 49	
W. C. McDonald Endowment for Maintenance of Engineering and Physics Buildings	
INVESTMENTS REPAID DURING THE YEAR 172,416 27	
MOUNTS CAPITALIZED	323,512 8
	\$374,700 7

Verified, MACINTOSH & HYDE, Auditors.

INSTITUTION for the ADVANCEMENT of LEARNING,

30th June, 1896.

YAL

nding

9,129 39

YAL

nding

1,187 96

3,512 80 4,700 76

EXPENDITURE.

Balance at debit of Profit and Loss Account on 1st July, 1895	104,557 10	\$65,414 80
Maintenance, Law Charges, Clearing Snow, etc., etc.	20,380 67	
"Amount paid to Faculty of Medicine being Interest on their endowments. "Apparatus and Supplies for Class Work in Botany, Chemistry, Mechan-	9,847 66	
ical Department, etc	4,759 56	
" Botanic Garden Maintenance	1,656 86	
" Gymnasium	1,205 44	
" Library—for Books, etc	1,324 00	
"Scholarships, Exhibitions, Medals and Prizes	4,944 79	
" School Examinations, Diplomas, etc	1,266 25	
"Insurance	3,696 76	
" Deposit Moneys	1,002 50	
"Annuities	3,753 34	
" Amounts Capitalized	34 04	
_		158,428 97
CASH ON HAND OF UNEXPENDED INCOME OF SPECIAL ENDOWMENTS, SCHO-		
LARSHIPS, APPROPRIATIONS, ETC., on the 30th June, 1896		45,285 62
		\$269,129 39

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

INSTITUTION for the ADVANCEMENT of LEARNING,

30th June, 1896.

DISBURSEMENTS.

		\$374,700	76
CASH ON HAND FOR INVESTMENT on 30th June, 1896		90,487	49
Amount carried to Profit and Loss Account, being amount of Capita make up Deficit in Income (see Statement of Income and Expenditure)	al used to	6,356	69
INVESTED DURING THE YEAR		\$277.856	58
Natural Science Apparatus	\$ 713 59 232 90		
EQUIPMENT, ETC.: - Fixtures and Furniture			

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





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