

THE  
APPLIED  
SCIENCE GRADUATES'  
SOCIETY

— OF —

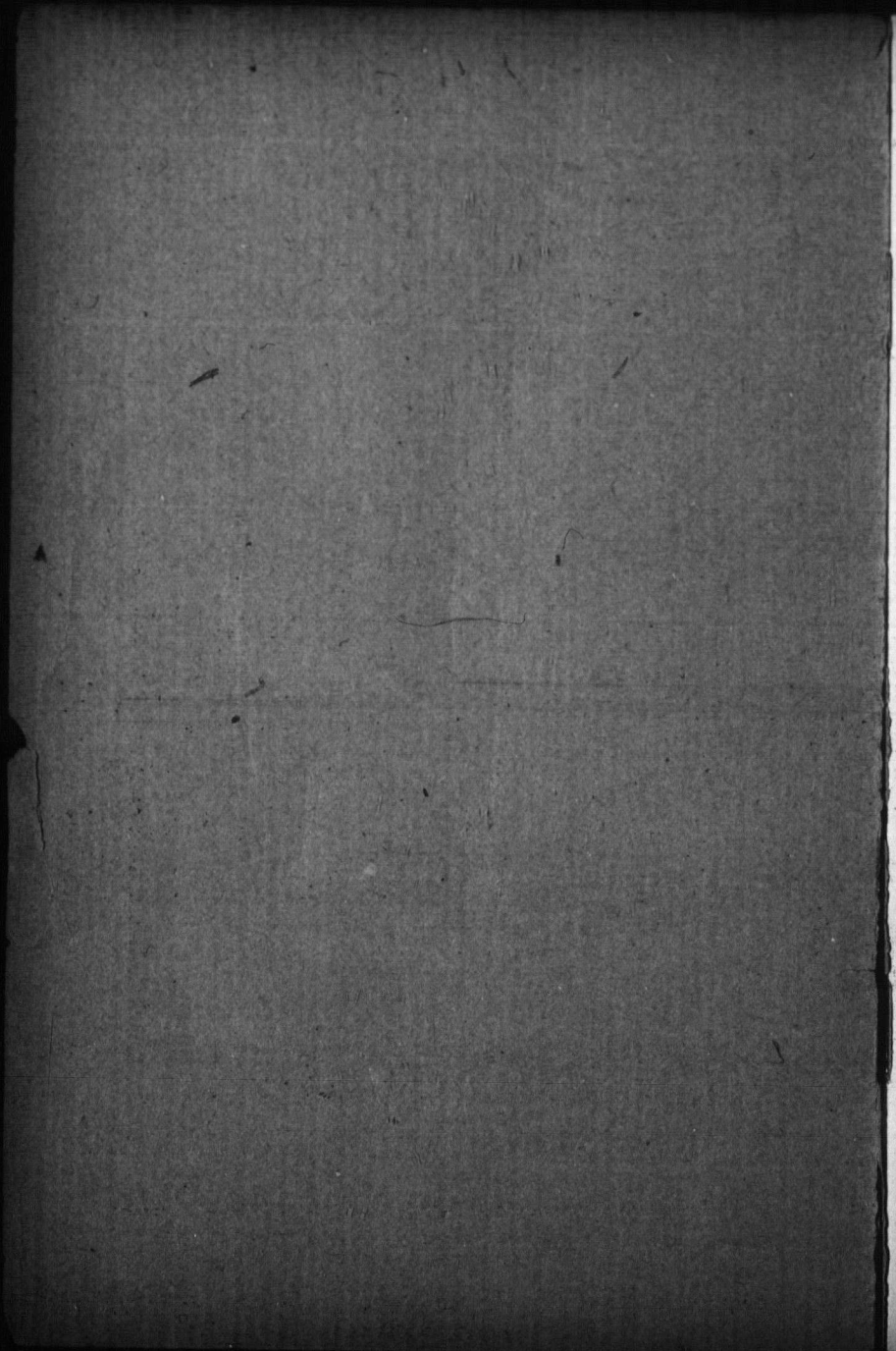
McGill University

THIRD ANNUAL REPORT

MONTREAL

JOHN LOVELL & SON, 23 AND 25 ST. NICHOLAS ST.

1898



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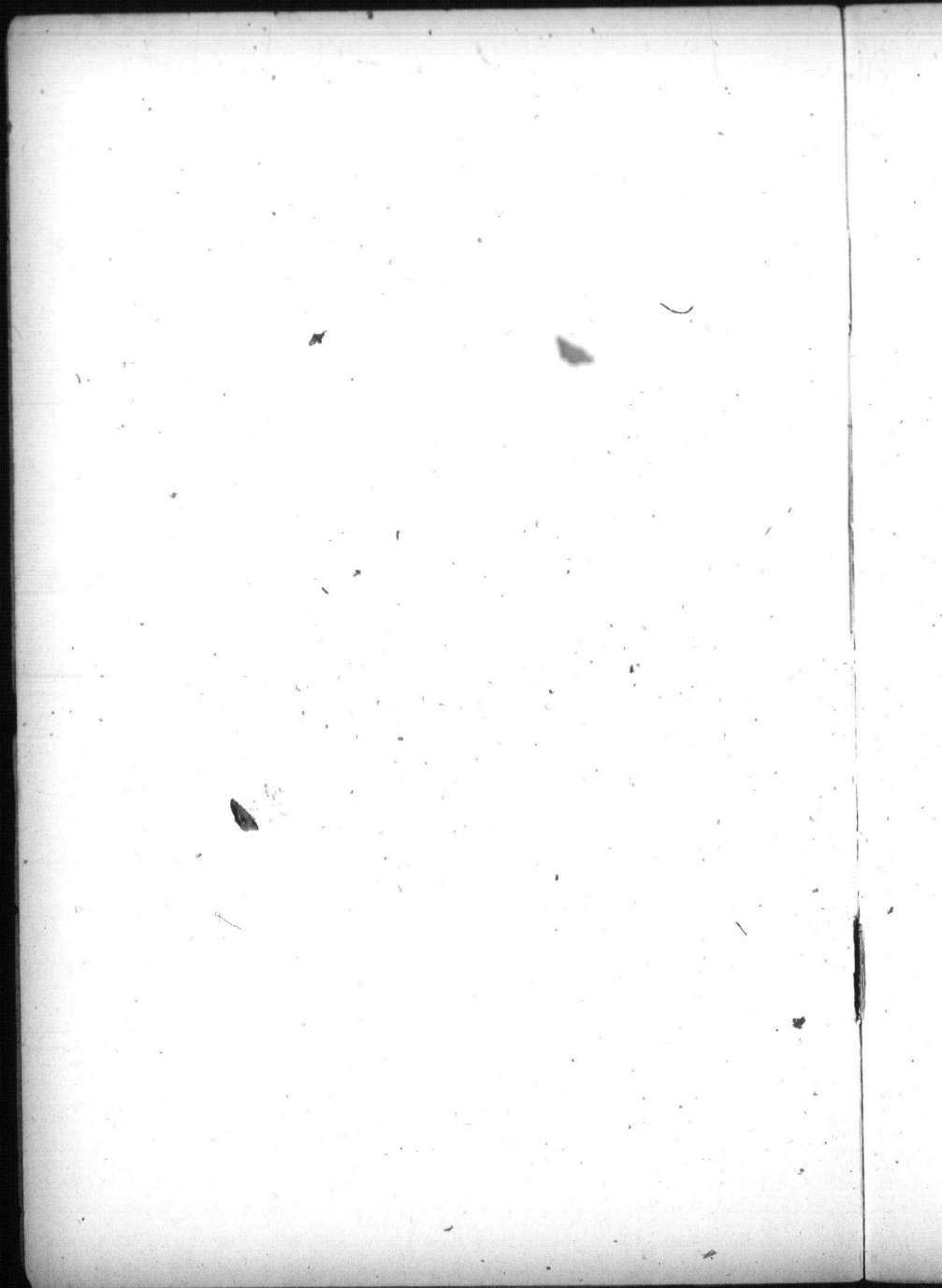
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THE  
**Applied Science Graduates' Society**

—OF—

**McGill University.**

**BY-LAWS.**

1. The name of the Society shall be "The Applied Science Graduates' Society of McGill University."

2. The objects of this Society are :—

(a.) To promote closer relationship amongst the graduates of this Faculty in every desirable way—to keep an accurate account of the whereabouts and occupation of every graduate, and endeavor, wherever possible, to obtain positions, especially for the younger graduates.

(b.) To induce greater interest in the graduates of the Faculty on the part of the Faculty itself, by distributing occasional bulletins containing results of experiments and tests made in the laboratories, and by inviting the attendance of graduates when events of interest are to take place in the college, and by any other available means.

(c.) To establish an Applied Science Library Endowment Fund to which all Applied Science graduates are invited to give voluntary subscriptions, the fund to remain in the possession of the Society, and the interest to be expended, yearly, by the committee of the Society in purchasing books to be presented to the library of the Faculty; the Committee to receive suggestions from the Library Committee of the Faculty and also from the graduates themselves by means of a suggestion book to be kept by the Secretary.

3. The officers of the Society shall be :—Honorary President, President, Vice-President; a Resident Committee of six, composed of a graduate from each department, and the Secretary-Treasurer, one member of the Committee to be preferably the Corresponding Secretary of the most recently graduated year; a Non-resident Committee, living in prominent centres of Applied Science graduates, and a Secretary-Treasurer.

4. All the officers must be graduates of the Faculty, except the Honorary President, and shall be elected each year at the annual meeting.

(a.) A Nomination Committee of (5) five members, elected annually by ballot at the same time as the officers of the ensuing year, shall draw up a list of names of such voting members as in its opinion are qualified to fill the offices of the Society. This list shall be furnished to the Secretary, who shall send it out as a letter Ballot, and at the same time a blank for the Nominating Committee for the following year.

(b.) The member of the Nominating Committee receiving the highest number of votes shall be chairman (in case of a tie vote, the chairman shall be named at the annual meeting), and shall report to the Secretary not later than the 1st of March in each year a proposed list of officers for the ensuing year, as mentioned in previous by-law.

The Nominating Committee will necessarily meet only by letter.

5. There shall be an annual fee which will be fixed, at present, at \$1.00 per year.

6. There shall be a yearly meeting, and any other special meetings if necessary. All meetings shall be called by the Committee, and the yearly meeting shall be held about the time of Convocation, and shall be made as interesting as possible by having addresses from prominent graduates and professors, and, if it is found desirable, be published in a yearly journal. At yearly meetings, reports from non-resident members of Committee will also be read.

7. The financial year shall be from 1st May to 1st May, and anyone joining after January 1st of any year shall be exempt from fees till 1st May, and anyone joining before January 1st shall pay for the whole year. Subscriptions payable in advance, and to be in arrears after 1st September of each year.

8. After (10) ten consecutive years of membership, members shall be entitled to membership for life without further subscriptions, and a member may, at any time, become a life member by a payment necessary to bring the amount already paid in, in annual subscriptions, up to ten dollars.

9. No alteration shall be made in the Constitution except at an annual meeting, and all such proposed alterations must be given in the notice calling the annual meeting; and such proposed alterations must be forwarded to the Secretary in writing not later than April 1st.

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### Minutes of the Third Annual Meeting.

The Third Annual Meeting of the Society was held in the Mathematical Lecture Room of the Engineering Building on Friday, April 22nd, at 8 p. m. There were about forty-five present, of whom twenty were Fourth Year students. The President, Mr. T. W. Lesage, occupied the chair.

The Minutes of the last annual meeting were read and approved.

The President appointed Theo. Denis and A. E. Smalls scrutineers of the ballot for the election of officers.

The Secretary read the Annual Report of the Resident Committee. It was moved by J. M. McCarthy, seconded by R. Bickerdike, jun., that the report be adopted. Carried.

The following resolution, of which notice had been given at the previous annual meeting, was moved by R. Bickerdike, jun., and seconded by R. F. Ogilvy:—

"No alteration shall be made in the Constitution except at an annual meeting, and all such proposed alterations must be given in the notice calling the annual meeting, and such proposed alterations must be forwarded to the Secretary in writing not later than April 1st." Carried.

C. H. Gould, the University Librarian, gave a short address about the library and the efforts that he was making to keep the books and publications in the Engineering departments thoroughly up to date, described what he hoped to make the library in the near future, and hoped that the graduates would see their way to giving him active aid.

A discussion took place about the Society Library Fund and its relations and possible interference with the work of Mr. Gould's Library Committee of Graduates. This discussion was taken part in by J. M. McCarthy, T. W. Lesage, C. H. Gould, M. Hersey and Kerry, and brought out some facts about the amount of the fund, the inadvisability of having two committees canvassing for practically the same object and the present method of purchasing books for the library. Finally, it was moved by M. L. Hersey, seconded by R. F. Ogilvy, and carried:—

"That canvassing for the Applied Science Graduates Library Fund be discontinued for the present, and that the Applied Science Graduates now on the general canvassing committee for the library be appointed to represent the Society and to canvass the Applied Science Graduates on behalf of the Library Endowment Fund."

It was moved by M. L. Hersey, seconded by R. F. Ogilvy, and carried:—

"That a vote of thanks be tendered to Mr. C. H. Gould for his interesting address on the library."

J. M. McCarthy gave notice of motion for the disposal of the Applied Science Graduates' Library Fund.

The chairman requested Wm. McPhail, provisional president of the Undergraduates' Technical Society, to give an address upon the constitution and formation of that Society. Mr. McPhail briefly reviewed the constitution and aims of the Society, and was followed by S. F. Kirkpatrick, 1st vice-president for 1898-1899, who reminded the graduates that the new Society must look to them chiefly for technical addresses.

A general discussion took place regarding the future relations

between the Graduates' and Undergraduates' societies, and it was moved by R. F. Ogilvy, seconded by J. M. McCarthy, and carried:—

"That the Committee for 1898-99 be instructed to consider how the two societies may be managed to the greatest mutual advantage, and be authorized to make any steps toward co-operation that may be deemed advisable."

The Secretary then read a letter upon close corporation from W. C. Adams. It was decided that the matter was too important to be taken up by the meeting without previous notice, and it was referred to the incoming committee for consideration.

The President read the Report of the Scrutineers, the officers elected for the coming year being as follows:—

*Honorary President.*—Dr. H. T. Bovey.

*President.*—J. M. McCarthy.

*Vice-President.*—F. D. Adams.

*Secretary-Treasurer.*—J. G. G. Kerry.

*Resident Committee.*—W. F. Angus, A. L. Mudge, R. H. Jamieson, J. W. Bell and R. O. King.

*Non-resident Committee.*—R. B. Rogers, A. A. Cole, W. P. Laurie, W. G. Smart, J. K. Scammel, H. M. McKay, W. J. Bulman, O. S. Whiteside, J. M. McGregor, E. H. Hamilton, P. N. Evans, G. H. Frost and L. L. Street.

*Nominating Committee.*—C. B. Smith, chairman; J. G. G. Kerry, R. S. Lea, E. H. Hamilton and C. H. McLeod.

Mr. Lesage requested the new President to take the chair, and after he had done so, read his own address as retiring president.

It was moved by Theo. Denis, seconded by M. L. Hersey, and carried:—

"That a vote of thanks be tendered to the retiring officers and especially to Prof. C. B. Smith and the President."

The new President gave a short address to the Fourth Year Undergraduates, advising them to join the Society, and pointing out the advisability of so doing. An informal discussion followed concerning the success of the Society in its efforts to aid the graduates in obtaining employment.

It was moved by G. R. McLeod, seconded by T. W. Lesage, and carried:—

"That the ballots be destroyed."

It was moved by Theo. Denis, seconded by T. W. Lesage, and carried:—

"That the meeting now adjourn."

### Report of Resident Committee, 1897-98.

During the past year the membership of the Society has increased from 116 to 140, 19 of the new members being graduates of '97. The total number of graduates from the Faculty is now 280, so that just one half of the graduates are members of the Society.



The membership fees collected during the year amounted to \$106.00, and the donations to the library fund to \$12.00. The total amount to the credit of the library fund, at date, is \$124.15, and to the credit of the general fund \$69.49. In explanation of the discrepancy between the number of members and the amount of fees collected, it may be stated that several of the new members have joined since Jan. 1st, and, according to by-law, their subscriptions are not due until May 1st. There are, however, some members in arrears.

The Society held three ordinary meetings during the session, at which the following papers were read:—

Nov. 19th—"Sewage Disposal and Purification," by G. H. Frost, Esq., C. E. '60.

Dec. 3—"Hudson's Bay," by Dr. R. Bell, F.R.S., '61.

Feb. 18—"Formation of Frazil Ice," by H. T. Barnes, '93, M.A. Sc.

The attendance at these lectures of both graduates and undergraduates was very gratifying, and the thanks of the Society were heartily tendered to the lecturers for their most interesting discussions.

Every effort has been made to keep track of all the graduates of the Faculty in spite of their numerous changes of residence. This is a somewhat difficult work, but one which your Committee feels should be most carefully attended to, because the continuance of a McGill spirit and the growth of a feeling of unity of interest among the graduates of different years depends upon the graduates being well informed about events happening in the University and about one another's movements and successes. Your Committee, therefore, asks that the members will endeavor to increase the membership of the Society until it includes all the graduates, and will keep the Secretary correctly advised both of their own addresses and of those of any of their class-mates they may be in communication with.

In accordance with the resolution adopted at the last annual meeting, the idea of forming an undergraduate technical society was brought before the students, and by them heartily taken up. The organization of the Society is now complete, and its constitution and list of officers will be laid before the meeting and form an appendix to this report. The word "technical" has not been acceptable to all the authorities in the University, and the Faculty has accordingly been invited by the students to give a name to their Society. Your Committee advise that all papers and lectures secured for the Society during the coming session be placed at the disposal of the management of the Undergraduates' Society, and that the Societies hold joint meetings, the management of the details of which should be placed in Undergraduate hands. In view of the difficulties encountered in obtaining lectures for the Graduates' Society, members are reminded that these lectures were intended primarily for the benefit of inexperienced students, and that the most suitable papers for this purpose are broad and

general descriptions of personal experiences, and that the preparation of such papers does not involve the labour necessary for a paper to be read before any of our national or scientific societies. The students themselves appreciate a statement of personal experiences by the man himself, in his own words, more than any carefully written articles, and your Committee hope that any graduate who may be coming to Montreal and who is willing to deliver such impromptu addresses to the students will advise the Secretary of the fact and of the date of his coming.

Your Committee believe that they are not at present supplying the graduates with all the information they should have about college matters, and they hope that it will be possible in the future in conjunction with the Undergraduates Society to publish each year a Faculty record containing a brief review of the session and its happenings, personals about the professional life of the graduates, papers and lectures given before the societies, and the results of researches carried out in the laboratories. The equipment of the laboratories is now so complete and the opportunities for research work so good that many experimental results of great value are being secured, and there is at present no means of communicating them to the University graduates in whose practice they would frequently be most useful. Your Committee think that reports on these experiments should form the principal feature of the publication, but recognize that they will be usually too narrow in their scope and too technical to be very acceptable for the meetings of the Undergraduates' Society, and look to the graduates to supply the class of addresses most suitable for this latter purpose, and these addresses can be either written out afterwards for publication or not at the option of the speaker.

Your Committee has not taken very active steps to increase the library fund during the past year, chiefly because they were fully advised that efforts on a much larger scale were being organized by the University Librarian, and they did not desire in any way to hamper his efforts.

Your Committee desire to express their keen appreciation of the loss to the Society and to the University occasioned by the resignation of Prof. C. B. Smith. That the Society owes its existence mainly to his efforts is well known to every member of it, and the regret felt by the students at his retirement was best evidenced by the promptitude with which the 3rd and 4th Years got up a testimonial to express their regard for him and their sense of their own loss from such an event. Your Committee can only hope that his future work will be as thoroughly well carried out as all that he undertook for the Applied Science Graduates' Society was, for in that case they feel that they already know how great his future success will be.

## Constitution and By-Laws of the McGill Applied Science Society.

NOTE.—The constitution of the above-named Society is included in our Annual Report because the original suggestion for the formation of such a society came from the Applied Science Graduates' Society, and it is thought desirable that the graduates should know the organization under which the students propose to conduct their meetings. To harmonize with the present aims and activities of the Graduates' Society, this Constitution will require some minor modifications. It is believed that hereafter the membership of the two societies will be sufficient to justify the publication by them jointly of the papers read before them and of some of the engineering research work done in the laboratories. Publications of this character are now issued by nearly all the great universities on this continent, and it is much to be hoped that an arrangement can be made by which the work done in and around their Alma Mater can be placed at the disposal of the graduates of McGill without other expense to them than their subscription to the Graduates' Society.

### ART. I.

This Society shall be called the McGill Applied Science Society.

### ART. II.—OBJECTS.

I. Uniting in one body those who desire to advance scientific research.

II. The preservation of the results of such original research.

III. The cultivation of a spirit of mutual assistance among its members while undergraduates.

IV. To retain a knowledge of the whereabouts of all members after graduation, and thus form a tie connecting them more closely with the University.

V. And, finally, to cultivate a confidence in one's opinions by friendly criticism and discussion of all matters brought up for debate.

### ART. III.—OFFICERS.

I. The officers shall consist of:—An Honorary President, a President and three Vice-Presidents elected from the Fourth Year and representing the four divisions, namely, Mining and Chemistry, Civil and Architecture, Mechanical, Electrical; a Secretary and a Treasurer elected from the Third Year.

II. An Executive Committee shall be elected consisting of the President, Vice-Presidents, Secretary and Treasurer, and also two members from the Second Year and one member from the First Year.

## ART. IV.—OFFICERS' DUTIES.

I. The President or one of the Vice-Presidents shall preside at all meetings of the Society, enforce due observance of the Constitution and give the casting vote in case of a tie. The President shall also be Chairman of the Executive Committee, and shall call mass and special meetings as the Executive thinks fit or occasion demands.

II. The Secretary shall keep full and correct account of the proceedings of all meetings of the Society; shall prepare and sign notices of all meetings, and shall post the same 48 hours previous to said meeting. The Secretary shall moreover prepare and present at the general annual meeting a report of the year's work.

III. The Treasurer shall receive and keep an accurate account of all moneys of the Society, and shall disburse the same only on a written order from the President, and previous to the general annual meeting shall submit his account to two auditors appointed by the Society, and shall present a report to the Society at the annual meeting. He shall also keep a roll book in which shall be recorded the names of all members, dates of admission, addresses and each payment of fees by each member.

IV. The Secretary shall be assisted in his duties by either of the Second Year representatives as he may elect.

V. The Treasurer shall be assisted in his duties by the First Year representative.

VI. The Executive Committee shall arrange as to who shall preside at meetings, procure or prepare papers to be presented, and shall notify the members of their nature at least one week previous to their presentation before the Society, and shall have the oversight of all business transactions. Four members shall constitute a quorum. Two auditors, to be elected by ballot at an ordinary meeting, shall audit the accounts of the Society annually, and present the same at the general annual meeting.

VII. The Executive Committee shall appoint an editor, who shall, subject to their approval, prepare all matters for publication and see to their printing.

## ART. V.—MEMBERS.

I. Members shall be classed as Honorary, Life and Ordinary Members.

II. Ordinary Members shall consist of graduates, undergraduates and partial students.

III. Life Members shall consist of such Ordinary Members who are graduates of the University as have paid six yearly membership fees and an additional fee of \$3.00.

(a) Present undergraduates who have paid their yearly membership fees from the organization of the Society until their graduation shall become Life Members on payment of two yearly membership fees and an additional fee of \$3 00.

IV. Honorary Members shall consist of those who have been elected as such by the Society.

V. Any one who has paid his yearly membership fee to date shall be a member of the Society, and is entitled to all the privileges of the same.

ART. VI.—FEES.

The annual fee for ordinary members shall be 50 cents.

ART. VII.—MEETINGS.

I. The regular meetings of the Society shall take place on every Monday at 8 o'clock p.m., beginning with the second Monday in October.

II. The General Annual meeting shall be held on the third Monday in March.

ART. VIII.—ELECTIONS.

I. The election of officers shall take place at the General Annual Meeting except that of the First Year representatives, which shall take place at the first regular meeting of the current year.

II. Nominations for officers shall be received on the second Monday of March in conformity with Art. III., Sec. I.

III. The Executive Committee shall prepare ballots, each containing names of all nominees to be voted for at the General Annual Meeting, and, in the case of the Fourth Year nominees, shall state clearly which Division each represents.

IV. Each member shall receive a ballot, and mark with a cross the name of his choice of nominees, one in each division, of the Fourth Year nominees and one for Secretary and one for Treasurer.

V. The man receiving the highest number of votes shall be President; the man receiving the second highest, 1st Vice-President; third highest, 2nd Vice-President, and fourth highest, 3rd Vice-President so long as all four divisions shall be represented.

VI. The editor shall be elected by the Executive Committee.

ART. IX.—AMENDMENTS.

Any part of this Constitution may be amended by a two-thirds vote of members present, provided that notice of said amendments be given at any regular meeting, and that a special meeting be called for the purpose of voting on such amendment. This does not prevent voting on amendments at the General Annual Meeting.

BY-LAWS.

I. The President, assisted by the Secretary, shall conduct the poll, and shall appoint two Scrutineers to count the ballots.

## Retiring President's Address.

April 22, 1898.

My predecessor in office having established the custom of an address by the retiring president, it devolves upon me to keep up the good work, and to try to acquit myself of that duty. I can scarcely claim to reach to the high standard set by these former Presidents, nor shall I attempt it, and I hope you will bear with me this evening in the few remarks I will make touching the welfare of our Society.

The Applied Science Graduates' Society, after three years of existence, has now a membership of 140 graduates out of a total of 280 who have graduated since 1860. There are, however, only about 228 living graduates of Applied Science up to and including 1896. Many of these have drifted into other channels, and no longer follow scientific pursuits, so that we have enrolled nearly all the Applied Science graduates available for our ranks. If we examine the list of our graduates as far as we have the means of doing so from the information in the hands of our Secretary, we find the following disposition of the 228 living graduates up to and including 1896:

	per cent.
Graduates employed as Civil Engineers, including those on Railways, Bridges and municipal work.....	41.0
Graduates employed as mining engineers.....	17.0
“ “ in chemistry or allied pursuits.....	5.0
“ “ in electrical work.....	4.0
“ “ in business or mercantile pursuits other than engineering.....	13.0
Graduates whose positions are indefinite or of whom nothing is known.....	20.0
	100.0

Thus we find that of civil engineers, or taking the college classification of civil, mining and mechanical engineers, nearly 60 per cent. of our known graduates are following that branch. Twenty per cent. are following pursuits other than those pertaining to civil engineering, and the remaining twenty per cent. we know nothing of. This is a rough classification of our graduates, and it might be made more complete if our Non-resident Committee, over all parts of the continent, could gather further information of the graduates they hear of by engaging all to fill in history blanks to be returned to the Secretary.

During the past year we have been favored with several lectures by members of the Society. These lectures are no doubt an excellent means of promoting the closer relationship between the graduates, which is one of the aims of our Society. We should take steps to maintain the issuing of a regular journal of the Society's transactions. It would be the means of stirring up a more lively interest among the members, both resident and non-resident, in the work of

the Society. The results of the more important tests in the laboratories of the University, relating as they do to engineering material, might be communicated to the graduates through this journal. This would serve especially to attach the older graduates to their Alma Mater, as they have not had the advantage of investigation and research which recent improvements in the laboratories have brought about. The summer theses prepared by the undergraduates during vacation, some of which contain real merit, might also be published in the journal, thus helping to strengthen the bonds uniting the younger members of the Society with the older ones.

This relation of the younger graduates to the older ones leads me to speak of the important matter of positions to be secured for the younger graduates when they leave the University.

The position of the young engineer fresh from College has very much improved in recent years. Civil engineering has now taken its rank among the liberal professions, and we, in Canada, have more to hope from the professional status to be accorded that rank, owing to the efforts being made at establishing a close corporation by the Canadian Society of Civil Engineers. The engineers of the old school were those who had taken up this business, or "trade" as they would have called it, from a natural bent of mind and intense love of the physical sciences. They were especially characterized as men of strong, sagacious intellect, close and accurate observers, sound practical judgment, and, what was most fortunate to the rising profession, men of strict honesty of purpose. In our time the engineering schools have developed this sound judgment in the young student, and quickened his intellect whilst broadening his powers of observation. He is, therefore, well fitted to enter the practice of his profession, and should meet with the necessary encouragement and influence of the older engineer. Every engineer, whether he has had himself the technical training at school, or whether he has by his experience and good judgment attained a responsible position in his profession, should make it his duty in employing assistants to give preference to men who have had the training in an engineering school. He would thus broaden the spirit of the profession and discourage the attempt to become engineers by young men without the technical education. This would also be in perfect accord with the objects the Canadian Society has in view in elevating the standard of the engineer by means of a close corporation.

As to the prospects of the young engineer just starting out, they are of the brightest. Our own country is just now awakening to its possibilities, and an era of prosperity in works of all kinds will likely be the result. The natural resources of our great west, so long neglected, are on the eve of being developed by an influx of foreign capital, which is sure to give an impetus to the whole of the industries of our country. The valuable discoveries of gold and other minerals recently made have opened up a vast field for the young mining engineer. Then we have the increasing demand for

the developing of our water powers and their varied applications, brought about by the extension of our electrical knowledge; these will more especially engage the attention of the young civil and electrical engineer. All these are causes which should spur on the young engineer just starting in the practice of his profession.

Let him remember that to be successful he must be skillful in whatever branch he may have chosen. To make two blades of grass grow where but one grew before; to increase manufactured power, while simplifying the mechanism which produces power; to save time, to save labor—these are the province of the engineer, and in the proper appreciation of the natural and physical laws which govern the universe does he differ from the mere untutored workman.

Let me close with one word of advice to the young graduate just entering on the threshold of his career, as well as to the engineer of longer practice. On all I would impress the important duty we owe to ourselves and our profession—the necessity of doing our work well. On this rests fame and all worldly success, and the consciousness that the work that has been given us to do has been done as well as it was in our power to do it should outweigh any external advantages. By so doing, we elevate our profession, we make of it the exponent of that philosophy which produces results, which Macaulay so aptly calls the philosophy of fruit: "for it has increased the fertility of the soil; it has spanned great rivers and estuaries with bridges of form unknown to our fathers; it has lighted up the night with the splendors of the day; it has accelerated motion; it has annihilated distance; it has facilitated all despatch of business; it has enabled man to descend to the depths of the sea, to soar into the air, to penetrate into the recesses of the earth, to traverse the land on cars which whirl along without horses, and the ocean in ships which sail against the wind. It is a philosophy which never rests. A point which yesterday was invisible is its goal to-day and will be its starting point to-morrow."



## LIST OF OFFICERS.

1895-6.	1896-7.	1897-8.	1898-9.
	<i>Honorary President.</i>		
H. T. Bovey.	H. T. Bovey.	H. T. Bovey.	H. T. Bovey.
	<i>President.</i>		
W. J. Sproule.	C. H. McLeod.	T. W. Lesage.	J. M. McCarthy.
	<i>Vice-President.</i>		
M. L. Hersey.	M. L. Hersey.	R. S. Lea.	F. D. Adams.
	<i>Secretary Treasurer.</i>		
C. B. Smith.	C. B. Smith.	C. B. Smith.	J. G. G. Kerry.
	<i>Resident Committee.</i>		
J. M. McCarthy.	D. Ogilvy.	E. S. M. Lovelace.	W. F. Angus.
T. W. Lesage.	H. Herdt.	W. C. Adams.	J. W. Bell.
W. A. Carlyle.	W. A. Duff.	R. F. Ogilvy.	A. L. Mudge.
R. F. Ogilvy.	S. F. Rutherford.	S. F. Rutherford.	R. O. King.
H. T. Barnes.	H. T. Barnes.	R. H. Jamieson.	R. H. Jamieson.
R. McDunnough,			
Wm. Currie.			
	<i>Non-Resident Committee.</i>		
W. Chipman.	W. Chipman.	J. A. Walker.	R. B. Rogers.
W. G. Smart.	R. Bell.	H. K. Wicksteed.	A. A. Cole.
D. B. Dowling.	St. G. Boswell.	J. S. Costigan.	W. P. Laurie.
St. G. Boswell.	J. K. Scammell.	G. S. Dobson.	W. G. Smart.
J. Addie.	P. L. Naismith.	H. Huestis.	J. R. Scammell.
— Morris.	W. J. Bulman.	W. J. Bulman.	H. M. McKay.
P. L. Naismith.	D. A. Stewart.	D. A. Stewart.	W. J. Bulman.
R. Palmer.	W. A. Carlyle.	R. Palmer.	O. S. Whiteside.
D. A. Stewart.	E. P. Mathewson.	C. H. McNutt.	J. M. McGregor.
E. P. Mathewson.	J. P. Ball.	J. P. Ball.	E. H. Hamilton.
W. Graham.	R. A. Gunn.	G. Frost.	P. N. Evans.
A. E. Childs.	A. E. Childs.	R. O. King.	G. H. Frost.
R. A. Gunn.			L. L. Street.

## List of Members of the Applied Science Graduates' Society of McGill University

Name.	Address.	Graduates.	Date of Admission to Society.
Adams, Professor F D, McGill College, Montreal		1878	1896
Adams, W C, Sandon, B C		1894	1896
Angus, W F, 240 Drummond St, Montreal		1895	1896
Asquith, W R, Slocan Star Mine, Sandon, B C		1895	1896
Ball, J P, Illinois Central Ry, Lemont, Ill, U S A		1887	1895
Baker, H C, Parkins Mills, Ottawa Co, P Q		1895	"
Barnes, H T, 14 Lorne Ave, Montreal		1893	"
Bayfield, H A, Intercolonial Ry, Moncton, N B		1896	1896
Becket, F M, care of Dr. Geo Becket, West 66th St, N Y		1895	1895
Bell, Robert, M D, Asst Director Geol Survey, Ottawa		1861	"
Bickerdike, Robt, Jr, Box 94, Montreal		1891	"
Boswell, St Geo J, Harbor Engineer, Quebec		1874	"
Brodie, Alex, McGill College, Montreal		1894	1897
Bulman, W J, Charlottetown, P E I		1891	1896
Burns, John A, Munderloh & Co, Montreal		1893	1895
Balfour, R H, 248 Mountain St, Montreal		1897	1897
Bovey, Prof. H T, Dean of Faculty of Applied Science			Honorary
Bovey, E P, Torquay, Devon, England		1897	1897
Bell, J W, Westmount, P Q		"	"
Campbell, Alex, 478 Maria St, Ottawa		"	"
Carlyle, W A, Rossland, B C		1887	1895
Carter, W F, 123 Park Ave, Montreal		1895	"
Childs, A E, 89 State St, Boston, Mass.		1888	"
Chipman, Wills, 103 Bay St, Toronto, Ont.		1876	"
Cole, A A, Rossland, B C		1874	"
Collins, J J, Ottawa		1882	1896
Connal, W F, B C Electric Ry Co, Vancouver		1897	1897
Costigan, J S, Black Lake, P Q		1894	1896
Currie, Wm, 89 Union Ave, Montreal		1895	"
Connor, M F, 192 Theodore St, Ottawa		1894	"
Chamberlain, W T, 39 Fenwick St, Halifax, N S		1897	1897
Darling, Edward (Darling Bros), Queen St, Montreal		1894	1895
Dawson, G H, Vancouver, B C		1886	1896
Dobson, G H, Kingston, Kent Co, N B		1895	"
Dougall, Wilfred, "Witness" Office, Montreal		1895	1895
Douling, D B, Geological Survey, Ottawa		1893	1896
Denis, Theo, Geological Survey, Ottawa		1896	"
Duff, W A, 478 4th St, New York		1894	"
Dufrene, A R, Dept Rys & Canals, Coteau		1896	"
Dougall, R, 244 Madison Ave, Flushing, R I		1897	1897
Drinkwater, Graham, 184 Mansfield St, Montreal		"	"
Edwards, G M, Henderson & Potts, Halifax, N S		1889	1895
Evans, N N, McGill College, Montreal		1886	"
Evans, P N, Purdue College, Lafayette, Ind.		1890	"
Farmer, J T, Patent Office, Ottawa		1896	1896

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Featherstone, J H, Grand Forks, B C.....	1893	1895
Frost, G H, Tribune Bldg, New York.....	1860	"
Ferguson, T, Box 93, Peterboro, Ont.....	1897	1897
Finnie, O S, 473 Wilbrod St, Ottawa.....	"	"
Gill, J A L, McGill College, Montreal.....	1896	1896
Greenburg, L, Room 7, Erie Co. Bank Bldg, Buffalo, N Y.....	1893	"
Greig, A R, Canada Atlantic Ry Shops, Ottawa.....	1895	1895
Guillem, J C, Three Forks, British Columbia.....	"	"
Gunn, R A, 8 Bayle Street, Montreal.....	1894	"
Green, R, Rossland, B C.....	1896	1898
Hamilton, E H, Box 727 Pueblo, Col, U S A.....	1894	1895
Hamilton, W, Great National Smelting Co, Monterey, Mex.....	1888	"
Hare, G G, Rossland, B C.....	1896	1896
Hart, O C, Maiden, Montana.....	1895	1895
Herd, L, McGill College, Montreal.....	1893	"
Herd, H, 441 St Denis st, Montreal.....	"	1896
Hersey, M L, 16 St Sacrament St, Montreal.....	1889	1895
Hill, A E, New Westminster, B C.....	1875	"
Hislop, J L, Skagway, Alaska.....	1884	1897
Holden, A R, Ames, Holden & Co, Montreal.....	1895	1896
Howard, W H, Pueblo, Col, U S A.....	1883	1895
Huestis, H, Halifax, N S.....	1896	1896
Hunter, J W, Globe Iron Works, Cleveland, O.....	"	"
Haycock, R L, 46 Sparks St, Ottawa.....	1897	1897
Jamieson, R H, 962 Sherbrooke St, Montreal.....	1890	1896
Jaquays, H M, 963 Dorchester St, Montreal.....	1896	"
Jones, T H, Brantford, Ont.....	1877	1895
Kenny, F F, 581 Richard St, Vancouver, B C.....	1896	1896
Killaly H M, C P Ry, Crow's Nest Pass.....	"	"
King, R O, McGill College.....	1895	"
Kerry, J G G, McGill College.....	1886	1898
Lambert, Frank, "The Vicarage," Greenwich, England.....	"	1896
Lamonth, J H, 16 Lisgar St, Ottawa.....	"	1895
Laurie, W P, 596 John st, Quebec.....	1893	"
Leofred, A, 513 N Y Life Bldg, Montreal.....	1888	"
Lesage, T W, City Surveyor's office, Montreal.....	1885	"
Lea, R S, McGill College, Montreal.....	1890	"
Lovelace, E S, H R Ives & Co, Montreal.....	1888	"
McCarthy, J M, Standard Building, Montreal.....	1887	"
McCallum, A L, Dom Coal Co, Glace Bay, N S.....	1896	1897
McGregor, J M, Rossland, B C.....	1892	"
McKay, H M, Pictou, N S.....	1894	1895
McLeod, C H, McGill College, Montreal.....	1873	"
McNutt, C H, Box 137, Leadville, Col.....	1888	"
McDougall, W M, Ormstown, P Q.....	1896	1896
Macy, E M, Berlin, N H, U S A.....	1885	"
Mathewson, E P, Box 791, Pueblo, Col.....	"	1895
Mattice, E S, Dom Bridge Co, Montreal.....	1890	"
Middleton, P H, Harvey, Ill, U S A.....	1891	"
Mudge, A L, Royal Electric, Montreal.....	1894	"
McLeod, G R, McGill Observatory, Montreal.....	1897	1897
Naismith, P L, Little Glace Bay, C B.....	1889	1898
Newcombe, A B, South Africa.....	1897	1897
Ogilvy, D, Montreal St Railway Bldg, Montreal.....	1894	1895
Ogilvy, R F, 1144 Dorchester St, Montreal.....	1888	"
Ogilvie, Morley, Cumming's Bridge, Ottawa.....	1897	1897
O'Dwyer, J S, Granby, Q.....	1880	1898
Palmer, R E, Box 292, Vancouver, B C.....	1886	1896

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Pitcher, F H, McGill College, Montreal.....	1894	1896
Packard, T L.....	1897	1898
Reinhardt, Carl, 133 Crescent St, Montreal.....	1896	"
Robertson, G E, Trent Canal, Kirkfield, Ont.....	1874	1895
Robins, S P, 29 Bleury St, Montreal.....	1895	"
Rogers, R B, Trent Canal, Peterboro, Ont.....	1877	"
Ross, George, Welland, Ont.....	1875	1896
Routhier, J J, Public Works Dept, Ottawa.....	1885	1895
Rutherford, F, Pueblo, Col.....	1896	1896
Rutherford, E S, 61 Rosemount Ave, Westmount, P Q.....	"	"
Rutherford, S F, " " " " " " " ".....	"	"
Scammell, J K, 27 Creighton St, North Cambridge, Mass.....	1895	"
Stewart R H, Rossland, B C.....	1896	1897
Scott, W M, P O Box 352, Charlottetown, P E I.....	"	1895
Shuttleworth, A E, Ag. College, Guelph, Ont.....	1890	1897
Small, A E, 31 Milton St, Montreal.....	1896	"
Small, Wm, " " " " " " " ".....	1890	1896
Smart, W G, Jenckes Machine Co, Sherbrooke, P Q.....	1892	"
Smith, C B, C P R, Barrie, Ont.....	1884	1895
Stewart, D A.....	1873	"
Stovel, R W, P & L E Depot, Pittsburg, Pa.....	1897	1897
Street, L L, 34 Church St, Marlboro, Mass.....	1893	"
Stuart, H B, 10 Hutchison st, Montreal.....	1892	1895
Sproule, W J, Harbor Com. Office, Montreal.....	1877	"
Symmes H C, McGill College.....	1897	1897
Thompson, H V, New Jersey I & S Co, Trenton, N J.....	1885	1896
Thompson, W T, Qu'Appelle, N T W.....	1877	1895
Thomson, C, Patent Office, Ottawa.....	1897	1898
Turnbull, J, Fort Steel, B C.....	1897	1898
VanBarnveld, C E, Tucson, Arizona, U S A.....	1895	1897
Waddell, J A L, Kansas City, Mo, U S A.....	1882	1895
Walkem, G A, T & C R R, Lake Park, Washington.....	1896	1896
Williams, M L, 17 St John st, Montreal.....	1891	1895
Wright, C H, Point aux Trembles, P Q.....	1896	1896
Wardrop, Nowal, 14 Noble St, Detroit, Mich.....	1877	1895
Wicksteed, H K, Box 156 Coburg, Ont.....	1873	1896
Whiteside, O S, Anthracite, N W T.....	1894	1895
Webb, W M, Aspen, Col, U S A.....	1896	1897
White, F H, 298 Stanley St, Montreal.....	1897	"

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