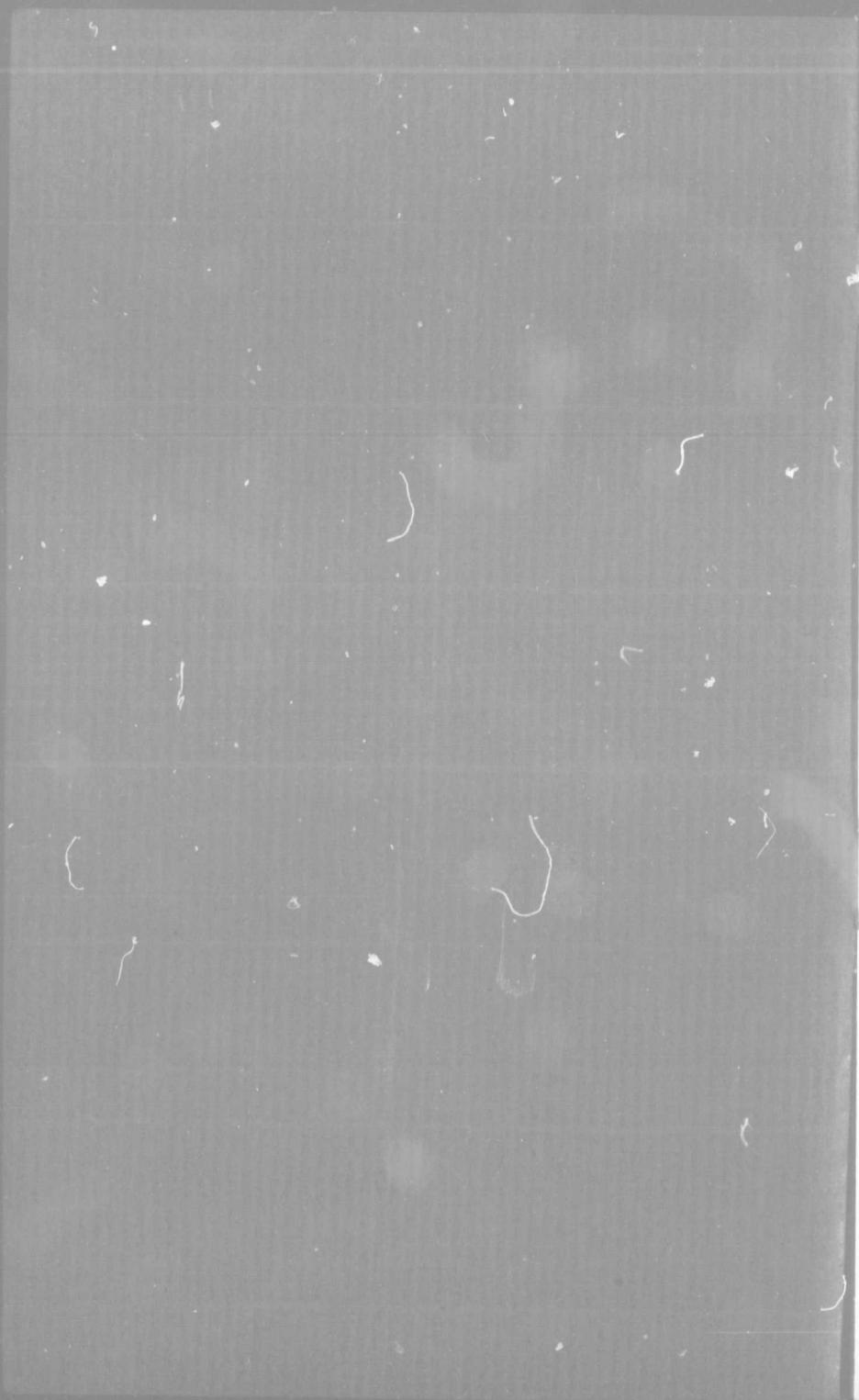


REPORT OF COUNCIL

OF

The Canadian Society of Civil Engineers.



REPORT OF COUNCIL.

ANNUAL MEETING, JANUARY 14TH, 1896.

The Council begs to present the following report on the work of the Society during the past year.

ROLL OF THE SOCIETY.

The elections comprised *one* honorary member, *three* members, *six* associate members, *two* associates and *fifteen* students. *Five* associate members have been transferred to the class of members, and *ten* students to the class of associate members. *One* associate member has been replaced on the roll on application.

Resignations have been received from *three* members, *one* associate member, *one* associate, and *six* students, while *eighteen* members, *twelve* associate members, *seven* associates and *eighteen* students have been removed from the roll for non-payment of dues.

The deaths have been :—

Members:—Charles Sproatt, Patrick Kennedy Hyndman, John Fraser Torrance and Arthur M. Wellington.

At the present date the membership stands as follows :—

	Non Res.	Res.	Total
Honorary Members.....	6	2	8
Members.....	217	52	269
Associate Members.....	111	29	140
Associates.....	26	18	44
Students	90	55	145
			606

At the same date last year the membership was as follows :—

	Non Res.	Res.	Total
Honorary Members	6	1	7
Members	233	53	286
Associate Members	111	30	141
Associates.....	30	19	50
Students.....	101	63	164
			648

There is therefore a falling off in the total membership of forty-two, the decrease having taken place chiefly in the classes of Members and Students. The decrease is, however, more than accounted for by the large number removed from the roll early in the present year for non-payment of dues. Taking this fact into consideration, the effective membership of the Society remains practically unchanged.

The membership of the Society has now, in the opinion of the Council, reached as large a number as should be expected from the population of the country, and no material increase in its numbers should be looked for in the near future.

At the time of the last Annual General Meeting there were five new applications, and at the present time there are three applications for admission into the Society.

ANNUAL MEETING.

The Ninth Annual General Meeting was called to order at 10.30 a.m. on Tuesday, January 24th, 1895, Mr. P. Alex. Peterson, president, in the Chair, and after the appointment of the scrutineers was adjourned to Wednesday, January 25th, at 10 o'clock a.m. The meeting re-assembled at 2.30 p.m., when the business of the meeting was concluded, and the Address of the retiring President, being a "review of the re-construction work on the Canadian Pacific Railway since 1886," delivered.

On Tuesday evening, a Members' Dinner was held in the Windsor Hotel, and on Wednesday evening an ordinary meeting of the Society was held in the Engineering building, McGill University. At this meeting His Excellency the Governor-General and the Countess of Aberdeen were present. An address of welcome and the diploma of Honorary Membership in the Society was presented to His Excellency. Afterwards Prof. Bovey's paper on the Strength of Canadian Timbers was read, and light refreshments were partaken of.

ORDINARY MEETINGS.

Fifteen ordinary meetings have been held during the year, at which the following papers were read:—On "The Strength of Canadian Douglas Fir, Red Pine, White Pine and Spruce," by Prof. H. T. Bovey, M. Can. Soc. C. E.; on "Cement Testing," Parts I and II, by Cecil B. Smith, M. Can. Soc. C. E.; on "A Micrometer Attachment," by W. T. Thompson, A. M. Can. Soc. C. E.; on "The Application of a Stoney

Patent Sluice to River Improvements," by G. E. Robertson, M.Can. Soc.C.E. ; on "The Barrie Flood of 1890," by Willis Chipman, M. Can.Soc.C.E. ; on "Special Track Work for Electric Street Railways, especially referring to the Montreal and Toronto Systems," by E. A. Stone, A.M.Can.Soc.C.E. ; on "Some Open Questions on the Minor Problems of Railway Building," by J. G. Kerry, A.M.Can.Soc.C.E. ; "A New Method for the Design of Retaining Walls," by W. Bell Dawson, M.Can.Soc.C.E.

ROOMS.

A renewal of the lease of the present rooms has been secured for two years from the 1st of May last at the old rate of \$550 per annum, and a Committee has been appointed to look into the question of securing permanent quarters for the Society in one of the new buildings which are being erected on St. Catherine street.

PROFESSIONAL ETHICS.

The code of Professional Ethics, as presented to the Society at the last general meeting, has been balloted for, and now forms a portion of the By-Laws of the Society.

PROFESSIONAL STATUS.

The Committee on Professional Status has reported to Council, presenting drafts of bills for incorporation in the Dominion and local legislatures. These have been issued, confidentially, to the corporate members of the Society, and the whole matter will come before this meeting for discussion.

COMMITTEE ON AN INTERNATIONAL GAUGE.

The report of the Committee on an International Gauge, the formation of which was announced at the last Annual Meeting, is appended hereto.

In accordance with the resolution passed at the last Annual General Meeting, copies of the minutes of Council meetings have been regularly forwarded to non-resident members of Council not present at the meetings.

Acting upon the report of the Library Committee, the following resolution has been adopted by Council :—

"That the Secretary be instructed to send advance proofs of papers, as soon as read before the Society, to the technical press, with a view to exchange, in every case the press to give due credit to the Society."

AWARD OF THE GZOWSKI MEDAL.

The Committee has recommended that the medal for this year be awarded to Professor Henry T. Bovey, D.C.L., LL.D., F.R.S.C., M.Can.Soc.C.E., for his paper on The Strength of Canadian Douglas Fir, Red Pine, White Pine and Spruce, published in Volume IX, Part I, of the Transactions.

FINANCES.

The income for the year was \$3,591.11, and the expenditure \$3,190.78, leaving a balance of \$400.33, and a total balance to carry forward in the general fund of \$7,217.77, which is on deposit in the Merchants Bank of Canada bearing interest at $3\frac{1}{2}$ per cent. per annum.

THOMAS MONRO, *President.*

C. H. McLEOD, *Secretary.*

REPORT OF THE LIBRARY COMMITTEE.

During the year additional shelving has been put up in the rooms, but the extra accommodation thereby obtained can only be considered as a temporary expedient. Our bound volumes of exchange publications increase so rapidly that additional wall space, which is not available in the present rooms, will in the near future be absolutely required.

Exchanges have been effected with the following journals and societies:—

American Society of Irrigation Engineers.

University of Minnesota.

Railway Age, Chicago.

Bureau of Mines, Toronto.

U. S. Department of Agriculture.

Engineers' Gazette, Newcastle-on-Tyne, Eng.

Donations to the Library of volumes and pamphlets have been received from E. L. Corthell, M.Can.Soc.C.E., Reginald Bolton, Henry Carry, M.Can.Soc.C.E., J. K. McDonald, A.M.Can.Soc.C.E., O. Higman, A.M.Can.Soc.C.E., the Aqueduct Commissioners of the City of New York, Professor J. B. Johnson, J. B. Spence, M.Can.Soc.C.E., D. O. Lewis, A.M.Can.Soc.C.E., and Thomas Middleton, Esq., C.E.

One volume purchased, and one journal subscribed for.

A subject index of the Transactions of the Society up to the end of the year is being compiled. This it is hoped will prove of material assistance to members when consulting the volumes of the Transactions.

The following periodical publications are on file in the Library shelves and rooms :—

- American Society of Civil Engineers, *New York*.
- American Society of Mechanical Engineers, *New York*.
- American Institute of Electrical Engineers, *New York*.
- American Institute of Mining Engineers, *Philadelphia*.
- American Society of Irrigation Engineers, *Denver*.
- American Engineer and R.R. Journal, *New York*.
- Austrian Engineers and Architects Society (German), *Vienna*.
- Association of Industrial Engineers, *Barcelona*.
- Association of Engineering Societies, *New York*.
- Association of Engineers of Virginia, *Roanoke, Va.*
- Association of Industrial Engineers (Spanish), *Barcelona*.
- Boston Public Library, *Boston*.
- Bureau of Mines, *Toronto*.
- Canadian Institute, *Toronto*.
- Cornell University, *Ithaca, N.Y.*
- Cleveland Institute of Engineers, *Middlesborough*.
- Cassier Magazine, *New York*.
- Engineers Club of Philadelphia, *Philadelphia*.
- Engineering Association of New South Wales, *Sydney*.
- Engineering Association of the South, *Nashville, Tenn.*
- Engineers Association of Western Pennsylvania, *Allegheny, Pa.*
- Engineering News, *New York*.
- Engineering and Mining Journal, *New York*.
- Engineering, *London*.
- Engineer, *London*.
- Engineering Magazine, *New York*.
- Electrical World, *New York*.
- Electrical Engineering, *Chicago*.
- Electrical Literature, *Chicago*.
- Engineer's Gazette, *Newcastle-on-Tyne*.
- Franklin Institute, *Philadelphia*.
- Geological Survey of Canada, *Ottawa*.
- Hanover Architects and Engineers Society (German), *Hanover*.
- Hungarian Society of Civil Engineers, *Buda-Pesth*.
- Institution of Civil Engineers, *London*.
- Institution of Mechanical Engineers, *London*.
- Institution of Electrical Engineers, *London*.
- Iron and Steel Institute, *London*.

- Ironmonger, *London.*
 Indian Engineering, *Calcutta.*
 Institution of Civil Engineers of Ireland, *Dublin.*
 Institution of Engineers and Shipbuilders in Scotland, *Glasgow.*
 Junior Engineering Society, *London.*
 Journal of the U. S. Artillery, *Fort Monroe, Va.*
 Liverpool Engineering Society, *Liverpool.*
 Midland Institute of Civil, Mechanical and Mining Engineers
Barnsley.
 Marseilles Scientific and Industrial Society (French), *Marseilles.*
 Manchester Association of Engineers, *Manchester.*
 Mining Journal, *London.*
 Mining Institute of Scotland, *Hamilton.*
 Mining Society of Nova Scotia, *Halifax.*
 Minnesota University, *Minneapolis.*
 North of France Industrial Society (French), *Lille.*
 Nova Scotian Institute of Science, *Halifax.*
 North East Coast Institution of Engineers and Shipbuilders, *New-*
castle.
 National Car and Locomotive Builder, *New York.*
 New York State Library.
 Patent Office Library, *London.*
 Philosophical Society of Glasgow, *Glasgow.*
 Physical Review, *New York.*
 Royal Society of Canada, *Ottawa.*
 Report of Chief of Engineers U.S. Army, *Washington.*
 Royal Engineers Institute, *Chatham.*
 Royal Artillery Institution, *Woolwich.*
 Royal Institute of British Architects, *London.*
 Royal United Service Institution, *London.*
 Royal Dublin Society, *Dublin.*
 Royal Society of Edinburgh, *Edinburgh.*
 Royal Scottish Society of Arts, *Edinburgh.*
 Royal Institute of Engineers, *The Hague.*
 Royal Irish Academy, *Dublin.*
 Railroad Gazette, *New York.*
 School of Mines, Quarterly, *New York.*
 Society of Engineers, *London.*
 Society of Arts, *London.*
 South Wales Institute of Engineers, *Merthyr Tydvil.*

Society of Civil Engineers (French), *Paris.*
School of Practical Science, *Toronto.*
Technical Society of the Pacific Coast, *San Francisco.*
Technology Quarterly, *Boston.*
U.S. Naval Institute, *Annapolis.*
U. S. Geological Survey, *Washington, D. C.*
Western Railway Club, *Chicago.*
Western Society of Engineers, *Chicago.*
Wisconsin University, *Madison, Wis.*

The Reading Room is not as fully equipped with technical journals as it ought to be. We should have on file additional current standard periodicals relating to Engineering in its several branches, so that Members could enjoy privileges in that respect second to no similar society.

To obtain such by subscription would entail considerable cost; the Committee therefore considers it advisable to endeavor to effect exchanges for our advance proofs under special conditions with certain periodicals, and have so reported to Council.

GRANVILLE C. CUNNINGHAM, *Chairman.*
W. McNAB, *Librarian.*

CANADIAN SOCIETY OF CIVIL ENGINEERS.

ABSTRACT OF RECEIPTS AND EXPENDITURES FOR THE YEAR ENDING DECEMBER 31st, 1895.

Balance from 31st Dec, 1894 \$6,817 44

GENERAL RECEIPTS.

Subscriptions :-
 Arrears. \$705 25
 Current. 1,862 75
 Advance. 661 00
 Extra on Cheques. 1 80
 Transactions sold. \$2,330 80
 Interest to Dec. 31st, 1895. 40 03
 Interest to Dec. 31st, 1896. 220 28

BUILDING FUND.

Balance from Dec. 31st, 1894. \$3,094 32
 Interest to Dec. 31st, 1895. 125 10

GENERAL EXPENDITURES.

Transactions published and printed. \$638 78
 Advance proofs, etc. 80 50
 Printing and stationery. 181 11
 List of members, charters and by-laws. 120 50
 Postage. 183 12
 Messengers. 2 50
 Cabs. 2 50
 Secretary's salary. 300 00
 Asst. do do. 480 00
 Janitor's wages. 120 00
 Office furniture (includes a new safe). 3 00
 Rent of rooms for one year. 169 30
 Telephone service. 550 00
 Bank commission on cheques. 15 00
 Gas. 10 50
 Water rate. 2 64
 Electric lighting. 26 00
 Bookbinding for library. 39 75
 Books and Magazines. 48 65
 Express charges. 49 00
 Expenses re Close Corporation. 3 53
 Telegrams. 168 02
 Address to Governor General. 8 27

\$3,190 78

BALANCES.

General Fund Treasurer. \$7,217 77
 Building Fund Treasurer. 3,729 42

\$10,947 19

\$14,137 97

K. W. BLACKWELL,
Treasurer.

Examined with books and vouchers, and found correct.
 I. T. BOVEY,
 HERBERT WALLIS, } *Auditors.*

APPENDIX.

REPORT OF COMMITTEE ON AN INTERNATIONAL GAUGE.

To the Council of the Canadian Society of Civil Engineers :

Your Committee appointed last year on the establishment of a standard gauge for thickness, applicable specially to rounds and flats in metals, unanimously approves the resolution of the Joint Committee of the American Society of Mechanical Engineers and the American Railway Master Mechanics' Association, in "earnestly deprecating the use of any of the numerous wire and sheet metal or other trade gauges now in vogue, and in strongly urging the use of thousandths of an inch for all kinds and classes of small measurements."

Your Committee also agrees with the recommendation to use in practice gauges suitable to the requirements of the various industries interested, notched in dimensions of and marked in terms of thousandths of an inch.

The following resolution is proposed :

Resolved.—That the Canadian Society of Civil Engineers recommends to its members and to all persons interested in uniform practice, the abandonment of the use of arbitrary gauges in favor of gauges expressed in thousandths of an inch.

J. DAVIS BARNETT,
G. H. DUGGAN,
HERBERT WALLIS, *Chairman.*

MONTREAL, October, 1895.

K. W. BLACKWELL,
Treasurer.

\$14,137 97

Examined with books and vouchers, and found correct.

I. T. BOVEY,
HERBERT WALLIS, } *Auditors.*

\$14,137 97

\$10,647 10