

COUNCIL OF THE BRITISH ASSOCIATION.

[*Unconfirmed Minutes for the use of the Members of the Council only.*]

At a Meeting of the Council of the British Association, held at the Office of the Association, 22 Albemarle Street, London, February 5, 1886.

Present,—

SIR LYON PLAYFAIR, President, in the Chair.

PROF. T. G. BONNEY.
SIR F. BRAMWELL.
W. CROOKES, ESQ.
PROF. W. BOYD DAWKINS.
DR. DE LA RUE.
CAPT. DOUGLAS GALTON.
F. GALTON, ESQ.

DR. J. H. GLADSTONE.
A. VERNON HARCOURT, ESQ.
ADMIRAL SIR E. OMMANNEY.
PROF. MCLEOD.
J. B. MARTIN, ESQ.
LORD RAYLEIGH.

1. The Minutes of the last Meeting were read and confirmed.
2. The General Treasurer's Report was read and received:—Balance brought forward, £2,399. 4s. 11d.; received for life compositions and annual subscriptions, £173; sale of publications, £2. 16s.; half-yearly dividend on Consols, £123. 5s.; total, £2,698. 5s. 11d. Expenditure:—Sundry expenses of petty cash, advertising, and deductions on Scotch drafts, £25. 9s. 3d.; Mr. Alan Wyon, second half of payment for Montreal die, £42; salaries (one quarter), £130; one quarter's rent, £29. 5s.; on account of grants made at Aberdeen, £232. 7s.; balance at Bank of England (Western Branch), £2,214. 0s. 2d.; in hands of Assistant to General Treasurer, £25. 4s. 6d.; total, £2,698. 5s. 11d.

3. The Council were informed that the following gentlemen had accepted the nominations for the Birmingham meeting made at the last meeting of the Council:—

Vice-President of the Association.—Professor G. G. Stokes.

President of Section A.—Professor G. H. Darwin.

President of Section B.—Mr. W. Crookes.

President of Section C.—Professor T. G. Bonney.

President of Section D.—Mr. W. Carruthers.

President of Section F.—Mr. J. B. Martin.

President of Section G.—Sir J. N. Douglass; and that Professor W. Chandler Roberts-Austen had consented to deliver the lecture to the Operative Classes, but that Sir Charles Warren and Mr. John Evans were unable to accept the Presidencies of Sections *E* and *H* respectively; and that Professor Dewar and Mr. J. N. Langley were unable to deliver the evening discourses. It was resolved to nominate Sir Frederic Goldsmid^x President of Section *E*, and Sir George Campbell^x President of Section *H*, and to request Dr. Rücker and Sir John Lubbock^s to deliver the evening discourses.

x accept office -

s not yet replied.

4. It was resolved that the following gentlemen should be requested to accept office at the Birmingham meeting :—

Section A.

Vice-Presidents.—Dr. Donald MacAlister, Rev. H. W. Watson.

Secretaries.—Mr. R. T. Glazebrook, Professor W. M. Hicks (Recorder), Professor J. H. Poynting, Mr. W. N. Shaw.

Section B.

Vice-Presidents.—Professor T. Carnelly, Dr. George Gore.

Secretaries.—Professor Bedson (Recorder), Mr. H. B. Dixon, Dr. H. Forster Morley, Mr. C. J. Woodward.

Section C.

Vice-Presidents.—Professor Lapworth, Mr. J. A. Phillips.

Secretaries.—Mr. W. J. Harrison, Mr. J. J. H. Teall, Mr. Topley (Recorder).

Section D.

Vice-Presidents.—Professor Allman, Professor Ray Lankester.

Secretaries.—Professor T. W. Bridge, Professor W. Hillhouse, Mr. Howard Saunders (Recorder), Mr. W. L. Sclater, Professor H. Marshall Ward.

Section E.

Vice-Presidents.—Sir Lewis Pelly, Captain Wharton.

Secretaries.—Mr. F. T. S. Houghton, Mr. J. S. Keltie, Mr. J. S. O'Halloran, Mr. E. G. Ravenstein (Recorder).

Section F.

Vice-Presidents.—Mr. G. W. Hastings, Sir Richard Temple.

Secretaries.—Mr. F. F. Barham, Professor Foxwell (Recorder), Mr. J. F. Moss.

Section G.

Vice-Presidents.—Mr. W. Anderson, Mr. W. P. Marshall.

Secretaries.—Mr. Conrad Cooke, Mr. J. Kenward, Mr. Edward Rigg (Recorder).

Section H.

Vice-Presidents.—Professor Boyd Dawkins, Colonel Godwin-Austen.

Secretaries.—Mr. G. W. Bloxam (Recorder), Dr. J. G. Garson, Mr. W. Hurst, Dr. R. Saundby.

5. The question of the Presidency for 1887 (Manchester) was considered.

6. It was resolved to elect the following gentlemen Corresponding Members of the Association :—

Professor Putnam.
Rev. Dr. Renard.

Dr. Max Schuster.
M. Jules Vuylsteke.

7. A letter from the Canadian Government in reply to Lord Rayleigh's letter of December 15, 1884, drawing the attention of the Government to the importance of preserving systematic records of the Ethnology of the Native Tribes of the Dominion, was received.

8. The following resolution, referred to the Council by the General Committee at the Aberdeen meeting, was considered: "That the Council be requested to reconsider the proposal of holding a General International Congress, and to report to the General Committee thereon at the next meeting of the Association," and it was resolved to appoint the following a Committee to consider the subject and report thereupon to the Council, viz., the President and Officers, Sir W. Thomson, Professor Frankland, Professor Bonney, Dr. Gladstone, Professor Boyd Dawkins, Mr. Crookes, and Mr. John Evans.

9. The following resolution, referred to the Council by the General Committee at the Aberdeen meeting, was considered: 'That the Council be requested to consider the desirability of admitting ladies as Officers of the Association, or as Members of the General or Sectional Committees,' and it was resolved to appoint the following a Committee to consider the subject and report thereupon to the Council, viz., the President and Officers, Lord Rayleigh, Mr. Griffith, Professor Bonney, and Dr. Gladstone.

10. The following resolution, referred to the Council by the General Committee at the Aberdeen meeting, was considered: 'That a memorial be presented to H.M. Government, requesting them to enlarge the existing Agricultural Department of the Privy Council, with the view of concentrating all administrative functions relating to Agriculture in one fully equipped Board and Department of Agriculture,' and it was resolved to appoint the following a Committee to consider the subject and report thereupon to the Council, viz., the President and Officers, Mr. J. B. Martin, Mr. A. E. Bateman, Mr. Stephen Bourne, Professor Gilbert, Major Craigie, and Professor Fream.

11. The following resolution, referred to the Council by the General Committee at the Aberdeen meeting, was considered: 'That the Council be requested to consider and take steps, if they think it desirable, to memorialise the Government to undertake the more systematic collection and annual publication of statistics of wages, and a periodical industrial census,' and it was resolved to appoint the following a Committee to consider the subject and report thereupon to the Council, viz., the President and Officers, Professor Foxwell, Sir Richard Temple, Professor Leone Levi, Mr. J. B. Martin, Professor Munro, and Major Craigie.

12. The following resolution, referred to the Council by the General Committee at the Aberdeen meeting, was considered: 'That a memorial be presented to H.M. Government, in favour of the establishment of a National School of Forestry,' and it was resolved to appoint the following a Committee to consider the subject and report thereupon to the Council, viz., the President and Officers, Sir Richard Temple, Sir John Lubbock, Mr. Thiselton-Dyer, Sir Joseph Hooker, Mr. Colmer, and Dr. Blanford.

13. A letter, addressed to the President by certain members of the Association, suggesting the delivery of lectures in elementary schools during the annual meeting, was read and referred to the Officers for consideration and report.

14. The consideration of several applications for a grant of the Report of the Association was deferred.

15. The following applications were granted: From Sir Richard Temple, for permission to reprint his Montreal Address; from the North American Indian Committee, for 50 additional copies of their Report; from Prof. J. J. Thomson, for 50 additional copies of his Report on Electrical Theories; from Mr. Glazebrook, for 100 additional copies of his Report on Optical Theories; from Mr. Whitaker, for 100 additional copies of his List of Works on the Geology, &c., of Staffordshire; from Mr Bourne, for 50 additional copies of his Paper on the Use of Index Numbers in the Investigation of Trade Statistics; from Mr. R. C. A. Prior (life member), for the 1879 and 1880 Reports, which he has omitted to claim.

16. The General Treasurer was authorised to pay to Mr. H. B. Dixon the sum of £3.16s. for expenses incurred in connection with the lecture to the operative classes at Aberdeen.

The Council then adjourned.

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[*Unconfirmed Minutes for the use of the Members of the Council only.*]

At a Meeting of the Council of the British Association, held at the Office of the Association, 22 Albemarle Street, London, March 5, 1886.

Present,—

PROFESSOR A. W. WILLIAMSON, Treasurer, in the Chair.

CAPTAIN ABNEY.

W. T. BLANFORD, ESQ.

PROF. T. G. BONNEY.

W. CROOKES, ESQ.

DR. DE LA RUE.

CAPT. DOUGLAS GALTON.

DR. J. H. GLADSTONE.

A. VERNON HARCOURT, ESQ.

ADMIRAL SIR E. OMMANNEY.

PROF. MCLEOD.

J. B. MARTIN, ESQ.

P. L. SCLATER, ESQ.

SIR R. TEMPLE.

1. The Minutes of the last Meeting were read and confirmed.

2. The Council were informed that the majority of the gentlemen requested to act as sectional officers at Birmingham had agreed to do so; the following, however, had declined:—

Section A.—*Secretary and Recorder*: Prof. Hicks.

Section B.—*Vice-President*: Dr. Gore.

Section C.—*Vice-President*: Mr. J. A. Phillips.

Section D.—*Vice-Presidents*: Prof. Allman and Prof. E. Ray Lankester; *Secretary and Recorder*: Mr. Howard Saunders.

Section F.—*Recorder* (but retaining the Secretaryship): Prof. Foxwell.

It was therefore resolved to nominate the following:—

Section A.—*Secretary and Recorder*: Mr. R. E. Baynes.

Section B.—*Vice-President*: Dr. W. H. Perkin.

Section C.—*Vice-President*: Dr. H. Woodward.

Section D.—*Vice-Presidents*: Professor Schäfer and Mr. P. L. Sclater; *Secretary and Recorder*: Mr. W. Heape.

Section F.—*Secretary and Recorder*: Rev. W. Cunningham.

It was also resolved to nominate Dr. W. W. J. Nicol and Mr. W. W. Watts additional Secretaries of Sections B and C respectively, and Prof. A. Marshall an additional Vice-President of Section F.

3. The Council were informed that Sir John Lubbock was unable to deliver one of the evening discourses at Birmingham; it was resolved to ask Professor Rutherford to undertake the duty.

4. The issue of the usual circular to Corresponding Members relating to the Birmingham meeting was authorised.

5. The question of the Presidency for 1887 having been again considered, it was resolved that Professor Sir H. E. Roscoe, LL.D., F.R.S., be requested to allow himself to be nominated President for the Meeting at Manchester in 1887.

6. The following applications were granted: From Mr. Glazebrook, for 50 extra copies of his Report on Optical Theories; and from Mr. Wilson, for 250 copies (at his own expense) of his abstract, 'The New Man of Mentone.'

The Council then adjourned.

The Minutes of the last Meeting were read and confirmed. The Council were informed that the majority of the gentlemen requested to act as sectional officers at Birmingham had agreed to do so; the following however, had declined: Section A—Secretary and Treasurer: Prof. Hicks; Section B—Vice-President: Dr. Gow; Section C—Vice-President: Mr. J. A. Phillips; Section D—Vice-President: Prof. Allan and Prof. E. Ray; Section E—Secretary and Treasurer: Mr. Howard Saunders; Section F—Treasurer (but retaining the Secretaryship): Prof. Foxwell. It was therefore resolved to nominate the following: Section A—Secretary and Treasurer: Mr. H. E. Roscoe; Section B—Vice-President: Dr. W. H. Perkin; Section C—Vice-President: Dr. H. Woodward; Section D—Vice-President: Prof. Schöberl and Mr. P. L. Schiner; Secretary and Treasurer: Mr. W. Hays; Section E—Secretary and Treasurer: Mr. W. Cunningham. It was also resolved to nominate Dr. W. J. Nicol and Mr. W. W. Watts additional Secretaries of Sections B and C respectively, and Prof. A. Marshall an additional Vice-President of Section F. The Council were informed that Mr. John Lubbock was unable to deliver one of the evening discourses at Birmingham; it was resolved to ask Professor Balfour to undertake the duty.

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SIR F. BRAMWELL.

W. CROOKES, ESQ.

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DR. DE LA RUE.

CAPT. DOUGLAS GALTON.

F. GALTON, ESQ.

DR. J. H. GLADSTONE.

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President of Section C.—Professor T. G. Bonney.

President of Section D.—Mr. W. Carruthers.

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President of Section G.—Sir J. N. Douglass; and that Professor W. Chandler Roberts-Austen had consented to deliver the lecture to the Operative Classes, but that Sir Charles Warren and Mr. John Evans were unable to accept the Presidencies of Sections *E* and *H* respectively; and that Professor Dewar and Mr. J. N. Langley were unable to deliver the evening discourses. It was resolved to nominate Sir Frederic Goldsmid President of Section *E*, and Sir George Campbell President of Section *H*, and to request Dr. Rücker and Sir John Lubbock to deliver the evening discourses.

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Vice-Presidents.—Dr. Donald MacAlister, Rev. H. W. Watson.

Secretaries.—Mr. R. T. Glazebrook, Professor W. M. Hicks (Recorder), Professor J. H. Poynting, Mr. W. N. Shaw.

Section B.

Vice-Presidents.—Professor T. Carnelly, Dr. George Gore.

Secretaries.—Professor Bedson (Recorder), Mr. H. B. Dixon, Dr. H. Forster Morley, Mr. C. J. Woodward.

Section C.

Vice-Presidents.—Professor Lapworth, Mr. J. A. Phillips.

Secretaries.—Mr. W. J. Harrison, Mr. J. J. H. Teall, Mr. Topley (Recorder).

Section D.

Vice-Presidents.—Professor Allman, Professor Ray Lankester.

Secretaries.—Professor T. W. Bridge, Professor W. Hillhouse, Mr. Howard Saunders (Recorder), Mr. W. L. Selater, Professor H. Marshall Ward.

Section E.

Vice-Presidents.—Sir Lewis Pelly, Captain Wharton.

Secretaries.—Mr. F. T. S. Houghton, Mr. J. S. Keltie, Mr. J. S. O'Halloran, Mr. E. G. Ravenstein (Recorder).

Section F.

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Rev. Dr. Renard.

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M. Jules Vuylsteke.

7. A letter from the Canadian Government in reply to Lord Rayleigh's letter of December 15, 1884, drawing the attention of the Government to the importance of preserving systematic records of the Ethnology of the Native Tribes of the Dominion, was received.

8. The following resolution, referred to the Council by the General Committee at the Aberdeen meeting, was considered: "That the Council be requested to reconsider the proposal of holding a General International Congress, and to report to the General Committee thereon at the next meeting of the Association," and it was resolved to appoint the following a Committee to consider the subject and report thereupon to the Council, viz., the President and Officers, Sir W. Thomson, Professor Frankland, Professor Bonney, Dr. Gladstone, Professor Boyd Dawkins, Mr. Crookes, and Mr. John Evans.

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16. The General Treasurer was authorised to pay to Mr. H. B. Dixon the sum of £3. 16s. for expenses incurred in connection with the lecture to the operative classes at Aberdeen.

The Council then adjourned.

ALEX. W. WILLIAMSON.

Confirmed—

March 5, 1886.

BRITISH ASSOCIATION
FOR
THE ADVANCEMENT OF SCIENCE.

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22 Albemarle Street, London, W.

February 26, 1886.

There will be a Meeting of the COUNCIL at this Office on Friday next, March 5, at 3 P.M.

*Principal Agenda—*

- (1.) To confirm the Minutes of the last Meeting.
- (2.) To receive a Report from the General Treasurer.
- (3.) To receive replies from proposed Sectional Officers and Lecturers for the Birmingham Meeting, and to fill certain vacancies.
- (4.) To nominate the President for 1887 (Manchester).
- (5.) To authorise the issue of the usual circular to Corresponding Members.

And other business.

A. T. ATCHISON,  
*Secretary.*



Baker copy  
Feb/86

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BRITISH ASSOCIATION  
FOR  
THE ADVANCEMENT OF SCIENCE.

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22 Albemarle Street, London, W.

January 29, 1886.

There will be a Meeting of the COUNCIL at this Office on  
**FRIDAY**, February 5, at 3 p.m.

*Principal Agenda—*

- (1.) To confirm the Minutes of the last Meeting.
- (2.) To receive a Report from the General Treasurer.
- (3.) To receive replies from a Vice-President of the Association, Presidents of Sections, and Evening Lecturers nominated at the last Meeting, and to nominate Presidents for Sections E and H and two Evening Lecturers.
- (4.) To nominate Vice-Presidents and Secretaries of Sections for the Birmingham Meeting.
- (5.) To consider the question of the Presidency for 1887 (Manchester).
- (6.) To elect Corresponding Members of the Association.
- (7.) To receive a letter from the Canadian Government in reply to Lord Rayleigh's letter of December 15, 1884, drawing



the attention of the Government to the importance of preserving systematic records of the Ethnology of the Native Tribes of the Dominion.

(8.) To consider the following resolutions, referred to the Council by the General Committee—

- (a) That the Council be requested to reconsider the proposal of holding a General International Congress, and to report to the General Committee thereon at the next Meeting of the Association.
- (b) That the Council be requested to consider the desirability of admitting ladies as Officers of the Association, or as Members of the General or Sectional Committees.
- (c) That a memorial be presented to H.M. Government requesting them to enlarge the existing Agricultural Department of the Privy Council, with the view of concentrating all administrative functions relating to Agriculture in one fully equipped Board and Department of Agriculture.
- (d) That the Council be requested to consider and take steps, if they think it desirable, to memorialise the Government to undertake the more systematic collection and annual publication of Statistics of Wages, and a periodical industrial census.
- (e) That a memorial be presented to H.M. Government in favour of the establishment of a National School of Forestry.

And other business.

A. T. ATCHISON,

*Secretary.*



Stoans

The Scientific Relief Fund of the Royal Society.

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BURLINGTON HOUSE, W.,

28th January, 1886.

At the desire of the President and Council I venture to call your special attention to the munificent offer which has been made by SIR WILLIAM ARMSTRONG, C B., F.R.S., and communicated to the Society by the President in his Anniversary Address—It is that SIR WILLIAM will contribute a sum of £6,500 to the Scientific Relief Fund on certain conditions, the principal of which is that an equal sum be subscribed by the Fellows and other friends of science within the present year, thus raising the total amount of the Fund to about £20,000. Subscribers will, however, be at liberty to pay their Subscriptions by instalments extending over two years.

I need not enlarge upon the character and beneficent effects of our Scientific Relief Fund, but may take this opportunity of reminding Fellows that while during the year ending November, 1884, the demands upon the Fund amounted to £450, its income was only £250. During the past year relief to men of science and their families was afforded to the extent of £275 only, the produce of the Fund not permitting more extended grants.



I am confident that a liberal response will be made by  
Fellows of this Society to the generous offer of SIR WILLIAM  
ARMSTRONG, and I trust that within the year a sufficient sum  
will have been raised to entitle us to claim its fulfilment.

I shall be happy to receive Subscriptions, which shall be  
duly acknowledged, and remain,

Your faithful Servant,

JOHN EVANS,

*Treasurer R. S.*

The following Subscriptions have been already  
paid or promised—

|                     | £   | s. | d. |                     | £  | s. | d. |
|---------------------|-----|----|----|---------------------|----|----|----|
| G. G. Stokes ..     | 20  | 0  | 0  | T. G. Bonney ..     | 5  | 0  | 0  |
| John Evans ..       | 50  | 0  | 0  | A. W. Franks ..     | 20 | 0  | 0  |
| Michael Foster ..   | 10  | 0  | 0  | A Friend (per the   |    |    |    |
| Lord Rayleigh ..    | 20  | 0  | 0  | Treasurer) ..       | 50 | 0  | 0  |
| A. W. Williamson    | 10  | 0  | 0  | Major Burt ..       | 10 | 0  | 0  |
| T. H. Huxley ..     | 10  | 0  | 0  | G. H. Darwin ..     | 5  | 0  | 0  |
| Capt. Noble ..      | 200 | 0  | 0  | Sir J. Caird ..     | 10 | 0  | 0  |
| Sir J. D. Hooker    | 10  | 0  | 0  | Major-Gen. Clerk    | 10 | 0  | 0  |
| Sydney Ringer ..    | 20  | 0  | 0  | F. Ducane Godman    | 50 | 0  | 0  |
| Lt.-Col. Grant ..   | 20  | 0  | 0  | A. A. Common ..     | 5  | 0  | 0  |
| J. M. Duncan ..     | 5   | 0  | 0  | T. Lauder Brunton   | 5  | 0  | 0  |
| J. Tyndall ..       | 10  | 0  | 0  | H. J. Carter ..     | 10 | 0  | 0  |
| F. W. Pavy ..       | 10  | 0  | 0  | W. H. M. Christie   | 5  | 0  | 0  |
| Marquis of Ripon    | 10  | 0  | 0  | J. Carrick Moore    | 25 | 0  | 0  |
| W. T. T. Dyer ..    | 5   | 0  | 0  | C. Tomlinson ..     | 5  | 0  | 0  |
| G. Buchanan ..      | 10  | 0  | 0  | J. Venn .. ..       | 3  | 3  | 0  |
| G. Carey Foster..   | 10  | 0  | 0  | W. Pengelly ..      | 5  | 0  | 0  |
| John Cleland ..     | 20  | 0  | 0  | W. K. Parker ..     | 3  | 3  | 0  |
| G. F. Fitzgerald..  | 3   | 3  | 0  | Sir Richard Owen    | 5  | 0  | 0  |
| Arthur Schuster..   | 5   | 0  | 0  | G. Matthey ..       | 25 | 0  | 0  |
| W. J. Russell ..    | 10  | 0  | 0  | H. N. Moseley ..    | 5  | 0  | 0  |
| J. Norman Lockyer   | 5   | 0  | 0  | G. F. Wilson ..     | 10 | 0  | 0  |
| Bartholomew Price   | 5   | 0  | 0  | W. D. Niven ..      | 5  | 0  | 0  |
| Warren de la Rue    | 50  | 0  | 0  | R. H. Inglis        |    |    |    |
| Francis Galton ..   | 20  | 0  | 0  | Palgrave ..         | 20 | 0  | 0  |
| Lt.-Gen. Strachey   | 10  | 0  | 0  | Staff-Com. Creak    | 5  | 0  | 0  |
| James Dewar ..      | 5   | 0  | 0  | Vice-Admiral Spratt | 5  | 0  | 0  |
| Lord Justice Fry    | 10  | 0  | 0  | B. B. Stoney ..     | 3  | 0  | 0  |
| T. Clifford Allbutt | 10  | 0  | 0  | Sir W. W. Gull ..   | 20 | 0  | 0  |



READ THE CONDITIONS OF THIS RECEIPT.

# UNITED STATES EXPRESS COMPANY.

(18)

CHICAGO, Ill.,

188

Received from

said to contain

Valued at

Dollars,

Marked

NOT NEGOTIABLE.

Which we undertake to forward to the nearest point of destination reached by this Company, subject expressly to the following conditions, namely: This Company is not to be held liable for any loss or damage, except as forwarders only, nor for any loss or damage by fire, by the dangers of navigation, by the act of God, or of the enemies of the Government, the restraints of Government, mobs, riots, insurrections, pirates, or from or by reason of any of the hazards or dangers incident to a state of war. Nor shall this Company be liable for any default or negligence of any person, corporation or association to whom the above described property shall or may be delivered by this Company, for the performance of any act or duty in respect thereto, at any place or point off the established routes or lines run by this Company, and any such person, corporation or association, is not to be regarded, deemed or taken to be the agent of this Company for any such purpose, but on the contrary, such person, corporation or association, shall be deemed and taken to be the agent of the person, corporation or association from whom this Company received the property above described. It being understood that this Company relies upon the various Railroad and Steamboat lines of the country for its means of forwarding property delivered to it to be forwarded, it is agreed that it shall not be liable for any damage to said property caused by the detention of any train of cars, or of any steamboat upon which said property shall be placed for transportation; nor by the neglect or refusal of any Railroad Company or Steamboat to receive and forward the said property.

It is further agreed that this Company is not to be held liable or responsible for any loss of or damage to said property or any part thereof, from any cause what-

ever, unless in every case the said loss or damage be proved to have occurred from the fraud or gross negligence of said Company or their servants, nor in any case shall this Company be held liable or responsible, nor shall any demand be made upon them beyond the sum of **Fifty Dollars**, at which sum said property is hereby valued, unless the just and true value thereof is stated herein; nor upon any property or thing unless **properly packed and secured** for transportation; nor upon any **fragile fabrics** unless so marked upon the package containing the same; nor upon any fabrics consisting of or contained in **glass**. In no case shall this Company be liable for any loss or damage unless the claim therefor shall be presented to it in writing, at this office within **sixty days** after this date, in a statement to which this receipt shall be annexed. If any sum of money besides the charges for transportation is to be collected from consignee on delivery of the above described property, and the same is not paid within thirty days from the date hereof, the shipper agrees that this Company may at its option return said property to him at the expiration of that time, subject to the conditions of this receipt, and that he will pay the charges for transportation both ways, and that the liability of this Company for such property while in its possession for the purpose of making such collection, shall be that of Warehousemen only. And it is further agreed that this Company shall not be liable for loss of, or damage to **BAGGAGE**, addressed to Railroad, Steamboat or Steamship lines, after the same has been left at the usual place of delivery to such lines. **The party accepting this receipt hereby agrees to the conditions herein contained.**

For the Company,



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# ❖ MONTREAL ❖ AUXILIARY ❖ BIBLE ❖ SOCIETY. ❖

STATEMENT OF BIBLE COLPORTAGE BY STUDENTS DURING THE SUMMER OF 1885 IN THE  
LOWER ST. LAWRENCE DISTRICTS.

| COLPORTEUR.           | DISTRICT.          | SOLD.                             |                  |                                   |          | LOANED.                           |                  |                                   |         | FAMILIES VISITED. | TIME.           |
|-----------------------|--------------------|-----------------------------------|------------------|-----------------------------------|----------|-----------------------------------|------------------|-----------------------------------|---------|-------------------|-----------------|
|                       |                    | FRENCH.                           |                  | ENGLISH.                          | VALUE.   | FRENCH.                           |                  | ENGLISH.                          | VALUE.  |                   |                 |
|                       |                    | <i>Bibles and New Testaments.</i> | <i>Portions.</i> | <i>Bibles and New Testaments.</i> |          | <i>Bibles and New Testaments.</i> | <i>Portions.</i> | <i>Bibles and New Testaments.</i> |         |                   |                 |
| MR. WATIER . . . . .  | Bonaventure.       | 53                                | 47               | 69                                | \$23.65  | 7                                 | 55               | 1                                 | \$7.33  | 2,729             | 3 mos. 15 days. |
| " ROY . . . . .       | Kamouraska.        | 63                                | 70               | ....                              | 11.97    | 11                                | 90               | ....                              | 8.85    | 1,720             | 2 " 25 "        |
| " LANGEVIN . . . . .  | Chicoutimi..       | 28                                | ....             | 15                                | 14.42    | 1                                 | 142              | ....                              | 0.80    | 1,966             | 3 "             |
| " LEFEBVRE . . . . .  | Dorchester ..      | 18                                | 1                | 120                               | 17.00    | 2                                 | 29               | 5                                 | 2.10    | 1,107             | 2 " 25 "        |
| " RAINVILLE . . . . . | Megantic . . . . . | 23                                | 14               | 522                               | 107.44   | 5                                 | 60               | 28                                | 7.11    | 620               | 2 " 29 "        |
| " SICARD . . . . .    | Bellechasse...     | 19                                | 26               | 35                                | 8.99     | 23                                | 107              | 1                                 | 9.58    | 1,106             | 2 " 6 "         |
| " GUIMOND . . . . .   | Beauce . . . . .   | 8                                 | 7                | 28                                | 6.37     | 9                                 | 57               | 3                                 | 3.88    | 572               | 2 "             |
| " RONDEAU . . . . .   | Saguenay . . . . . | 39                                | 12               | 2                                 | 13.37    | 4                                 | 24               | 1                                 | 2.53    | 1,634             | 3 "             |
| " PLOURDE . . . . .   | L'Islet . . . . .  | 38                                | 76               | 2                                 | 10.44    | 8                                 | 87               | 3                                 | 4.13    | 1,326             | 2 " 25 "        |
|                       |                    | 289                               | 253              | 793                               | \$213.65 | 70                                | 651              | 41                                | \$46.31 | 12,780            | 25 mos. 5 days. |

|                                                                                   |                                                                                                                                          |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| <u>253</u><br>542 French copies sold.<br>793 English " "<br><hr/> 1,335 Total " " | <u>651</u><br>721 French copies loaned.<br>41 English " "<br><hr/> 762 Total " "<br><hr/> 1,335<br><hr/> 2,097 " copies sold and loaned. |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|

Cost of Agency, including wages and expenses . . . . . \$1,175.13

GEORGE CORNISH, LL.D.,  
Corresponding Secretary.



Ball's Bay  
Oct 1885



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Toronto, 1885.

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*Sept. 1885*

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ROSE PUBLISHING CO.  
100 N. 3rd St. St. Louis, Mo.

ROSE PUBLISHING CO.



# MERCHANTS BANK OF CANADA.

## THE ANNUAL MEETING OF STOCKHOLDERS.

Held Wednesday, 17th June, 1885.

(From THE GAZETTE, Montreal, 18th June, 1885.)

The annual meeting of the stockholders of the Merchants Bank of Canada was held in the Board Room of the institution at twelve o'clock yesterday, when there was a large attendance of stockholders, among those present being Messrs. Andrew Allan (president), Robert Anderson, Jonathan Hodgson, Hector Mackenzie, Adolphe Masson, William Darling, John Cassils, John Duncan, John Crawford, T. D. Hood, H. Montagu Allan, Hugh Allan, A. C. Clark, G. S. Brush, Mr. Rae, J. L. Marler, L. Huot, J. Learmont, F. Caverhill, J. Bennett, J. Curran, Alex. Ewan, G. W. Hamilton, J. Try-Davies, W. B. Cumming, A. McDougall, J. P. Cleghorn, D. Lorne McDougall, Wm. Millar, J. C. Watson, J. Y. Gilmour, Geo. Hague (general manager), and others.

The proceedings were opened by Ald. T. D. Hood, who moved that the president, Mr. Andrew Allan, take the chair.

The PRESIDENT then asked Mr. J. H. Plummer, Assistant General Manager, to act as secretary of the meeting.

The SECRETARY, being called upon, read the advertisement calling the meeting.

### THE ANNUAL REPORT

of the Directors, which had been in the hands of the stockholders for some time was taken as read. The report is as follows:—

The board have pleasure in again meeting the stockholders for the purpose of placing before them the results of the year's business—

The net profits of the year, after payment of interest and charges and deducting appropriations for bad and doubtful debts, have amounted to..... \$ 523,799 04  
Balance from last year..... 9,501 36

\$ 533,300 40  
This has been disposed of as follows:—  
Dividends No. 32 and 33, 7 per cent..... \$ 400,733 69  
Added to the "Rest"..... 125,000 00  
Carried forward to profit and loss account of next year..... 7,566 71  
\$ 533,300 40

MEM.—It will be observed that the form of the statement has been changed from that presented last year, the sum written off for bad and doubtful debts being deducted from the gross profits, as well as charges, and in-

terest on deposits. In addition to this a large amount of debts that have now become irrecoverable have been written off the Contingent fund, reducing the same to \$150,000.

The profits of the year, though on the whole well maintained, have not been as large as those for the year 1884.

The appropriations for bad and doubtful debts have called for the setting apart of much larger sums than are necessary in an average year, a result which stockholders cannot be surprised at considering the large number of failures during the year. It is satisfactory to note that during the last few months signs of improvement have been perceptible, and failures have considerably diminished.

The harvest which was reaped in 1884 was on the whole an abundant one. But the grain harvest was very productive in other countries, and prices fell to a point almost unprec. The consequence of this was deferred payments, many renewals, and poorer returns than usual to the cultivators of the soil.

The heavy export trade in the products of farms, which is of so much advantage to the country generally, has not resulted in profit to those who have carried it on. The volume of business, however, has been very considerable, and the Bank has had a due share of it, which has been done without loss. The profit from this branch of business, owing to excessive competition, has been reduced below a reasonable minimum.

The business of the Bank with the wholesale importing houses of the Dominion has been generally satisfactory. The customers of the Bank have exercised commendable prudence and avoided unprofitable expansion.

The large lumber interests of the Ottawa valley are on the whole in a satisfactory condition; and the business of the Bank in that quarter your Board believes to be in a sound state.

The commencement of the Bank year witnessed a deep depression in some of the most important manufacturing industries of the country. This at one time threatened to result in a disastrous collapse. By the prudence, forbearance, and firmness of the Banks interested, and their readiness to assist deserving customers, this period of depression has been tided over with no worse results than the closing of the larger factories for a short period. Stocks were thus worked off, and a way opened for a resumption of production. The business, generally speaking,

cannot be said to be profitable at present; but production has been resumed on a moderate scale. It is hoped that business may shortly be done on a basis that will be profitable to the owners and stockholders of these establishments.

The business of the Bank in Manitoba has called for constant vigilance, and the exercise of much prudence and judgment on the part of the officers of the Bank. Of the heavy losses suffered in the Northwest by Banking institutions in consequence of the collapse of speculation, the Bank has had but a very moderate share, considering the extent of its operations. The loss, however, has been considerable in itself, and forms a large proportion of the total suffered during the year. Progress towards a sound condition of affairs is undoubtedly being made, but the rate is slower than was expected. The completion of the Canadian Pacific railway is an event of the greatest importance to the future development of the whole Northwest. The speedy suppression of the late outbreak may tend to bring the territory under the attention of European settlers, and so in the end, promote its prosperity.

The cessation of demand for money at call in New York has seriously affected the profits obtainable there; and it has been found necessary to withdraw funds from that point, and seek employment elsewhere. The possible disturbance of a gold basis in the United States has called for the exercise of much discretion with regard to operations connected therewith. The Directors consider it necessary to keep this matter constantly before them. Measures have already been taken to protect the Bank in the event of gold advancing to a premium.

It gives them pleasure to state that notwithstanding the foregoing drawbacks, the business of the Bank has been well maintained, as will be seen by the accompanying Balance Sheet. A considerable number of new and satisfactory accounts have been opened during the year. The Directors of the Bank have steadily kept in view the improvement and extension of the Bank's business. Their aim has been to build up a sound and profitable connection amongst the stable business men of the community.

The outlook seems to be better than it was a year ago, though your Directors would speak cautiously on this point, being aware that the consequences of a period of depression are apt to extend beyond the time when recovery has commenced. A return of prosperous years cannot, in their judgment, be immediately expected. The Bank, however, is in a posi-



tion to take advantage of a change for the better when it transpires; and the Stockholders may reasonably look forward in due time to a gradual and steady improvement.

The Bank has acquired premises for its business in Owen Sound, the cost of which has been added to Bank Premises account.

The various offices of the Bank have been duly inspected.

The Directors call attention to the accompanying Balance Sheet.

The Officers of the Bank have fulfilled their duties to the satisfaction of the Board.

The whole respectfully submitted.

ANDREW ALLAN,  
President.

Montreal, June 9th, 1885.

GENERAL STATEMENT.

30th May, 1885.

LIABILITIES.

|                                                                                       |                        |
|---------------------------------------------------------------------------------------|------------------------|
| Notes in circulation .....                                                            | \$ 2,896,074 00        |
| Deposits bearing interest (including interest accrued to date) .....                  | \$ 5,653,672 30        |
| Deposits not bearing interest .....                                                   | 2,469,296 07           |
|                                                                                       | <u>8,122,968 37</u>    |
| Balances due to Canadian banks keeping deposit accounts with the Merchants Bank ..... | 451,527 12             |
| Balances due to Canadian banks in daily exchanges .....                               | 36,128 93              |
| Balances due to banks in Great Britain .....                                          | 521,719 56             |
| Dividends unclaimed .....                                                             | 5,616 24               |
| Dividend No. 33, payable 1st June .....                                               | 200,374 14             |
| Total liabilities to the public .....                                                 | 12,234,408 36          |
| Capital paid up .....                                                                 | 5,724,976 64           |
| Reserve .....                                                                         | 1,375,000 00           |
| Contingent fund .....                                                                 | 150,000 00             |
| Balance carried forward to profit and loss account of next year .....                 | 7,566 71               |
|                                                                                       | <u>\$19,491,951 71</u> |

ASSETS.

|                                                                                    |               |
|------------------------------------------------------------------------------------|---------------|
| Gold and silver coin .....                                                         | 427,589 34    |
| Dominion notes on hand .....                                                       | 644,022 00    |
| Notes and cheques of other Canadian banks on hand .....                            | 680,947 29    |
| Balance due by other Canadian banks in daily exchanges .....                       | 80,352 08     |
| Balance due by agencies of the bank in the U. S., and by U.S. Nation'l banks ..... | 321,844 60    |
| Dom. Government bonds .....                                                        | 856,250 00    |
| Call and short loans on bonds and stocks .....                                     | 1,220,466 00  |
| Total available assets .....                                                       | 3,631,471 31  |
| Time loans on bonds & stocks .....                                                 | 671,246 78    |
| Other loans, discounts and advances on current account .....                       | 14,200,814 75 |

|                                                                                                          |                        |
|----------------------------------------------------------------------------------------------------------|------------------------|
| Other loans and discounts overdue and not specially secured (loss provided for in Contingent Fund) ..... | 126,973 36             |
| Other loans and discounts overdue secured .....                                                          | 124,528 19             |
|                                                                                                          | <u>15,123,563 08</u>   |
| Mortgages, bonds and other securities, the property of bank .....                                        | 161,025 24             |
| Real estate, productive .....                                                                            | 40,343 88              |
| Real estate, unproductive .....                                                                          | 94,774 65              |
|                                                                                                          | <u>135,118 53</u>      |
| Bank premises, fittings and furniture .....                                                              | 430,000 00             |
| Other assets not included in the foregoing heads .....                                                   | 10,773 55              |
|                                                                                                          | <u>\$19,491,951 71</u> |

G. HAGUE,  
General Manager.

The PRESIDENT then moved :-

That the report of the Directors, as submitted, be and the same is hereby adopted and ordered to be printed for distribution amongst the stockholders.

Mr. ROBERT ANDERSON seconded the motion.

The PRESIDENT said—Gentlemen, as the General Manager will address you at some length, it will not be necessary for me to say anything, and before asking any questions of the General Manager or of the Board, I would ask Mr. Hague to make his remarks now.

THE GENERAL MANAGER'S ADDRESS.

The General Manager, Mr. HAGUE, then said :-

Before making any general remarks, I will correct a misapprehension which has arisen with regard to the Contingent Fund of the Bank. It is assumed by some that the amount written off from this Fund has been lost during the present year. This is not the case. In order that it may be understood, I will explain the origin and use of the Fund.

In our periodical review of the assets of the Bank, it is incumbent upon us to consider the position of Insolvent Estates and other Doubtful Debts. The estimating of the outcome of these matters, whether they be many or few, is a difficult task. It is impossible to arrive at absolute certainty. But after hearing all that can be said by our managers, we come to a conclusion that a certain sum represents the doubtful element in each case. When debts have become finally bad, we have an absolute certainty, and write them off our books. But for doubtful debts, we make an estimate, and put aside a certain sum from the profits of a given year for the purpose. Now this sum so appropriated may be dealt with in two ways. We may cut down the amount of the debt itself by this sum; or we may allow the debt to stand at its original amount and place the sum named to a special account called "Contingent Account." We call it this because, while it is known that there are doubtful elements attaching to certain debts, the exact amount of the ultimate loss is not known at the time.

The "Contingent Fund" of the Bank has therefore arisen in this way. During the last few years when a failure occurred or property came into our hands, we have estimated its doubtful quality at so much money, and taken that amount from the profits to meet the contingency. This sum has varied from one

year to another, as you may have noticed by our reports.

At the end of last year the Contingent Fund had amounted to \$300,000. This sum was not a mere guess, but represented the total of careful calculations.

You will understand then that there existed a year ago certain matters which we estimated to be doubtful to this amount. Had it not been so, this \$300,000 would have been added to the "Rest" of the Bank. What then has transpired during the present year? Some Insolvent Estates of a year ago, have been wound up, and some former debtors have been finally discharged. The loss on these, instead of being an uncertain element as it was a year ago, has now become certain, and we have charged these matters against the Fund to which they properly belong. All this had nothing to do with the working of the Bank during the present year.

Whether we made more this year, or made less, had not the slightest bearing on the working of the estates represented by our last year's Contingent Fund. Nor will our future profits have anything to do with the remaining \$150,000. For this sum represents that amount of debts of former years known to be doubtful which we still have to work out.

In dealing with such matters this year we have not followed the plan of former years, but have cut off at once from any debt its doubtful element. To do this has taken a large amount of money out of the profits. But it has been done and it has left us, as you have heard, with the sum of \$533,000. Out of this \$533,000 we have paid you 7 per cent. dividends. The greater part of the residue—viz., \$125,000, has been transferred to the Reserved Fund of the Bank. If we were a private firm this would be added to our capital.

This \$125,000 is not near as much as we would like to have realized. We could have wished it twice as much, or three times as much, for we all desire to build up that Fund to a large amount. But you cannot expect such things in times like these. There were two years in which additions to the Rest were made very fast. From 1881 to 1883 the rest increased from \$500,000 to \$1,150,000. Now we are compelled to go slowly. But we do desire to go securely and what we build, whether much or little, to build solidly.

The result of the year's business must be taken in connection with the times we have been passing through. It is in times like these the losses of the Banks run up to higher figures than the average, especially with Banks that have numerous Branches and are spread over large tracts of country. Our profits have kept up as well as any friend of the Bank could expect. We have on the whole a very good business, though it is not as large as we could wish in some quarters. And in my judgment it is steadily improving. The Bank is well established and has a good circle of customers. But our expenses are large, though constant watchfulness is exercised over them, and economy is enforced at all points. But we cannot diminish our expenses in difficult times in the ratio in which profits decrease. Our expenses are now as much as they were when we earned \$100,000 a year more than we do now. And they cannot be made less. When business revives and its volume is increased, we shall have the satisfaction of conducting it with little if



any increase in expense. And the exceptionally heavy expenses of carrying on business in Manitoba will gradually assume reasonable proportions.

Hard as the times have been, it is a satisfaction that no general revulsion has overtaken the community, if we except that which has apparently just spent its force in Manitoba. The prudent warnings, given in influential quarters some time ago, both in person and through the press, were successful in stopping the tide of inflation. We have passed through a year which has consisted in great part of check and restraint in all quarters. This is always a difficult and unpleasant process; but its end is salutary.

We have had in Canada during the present year what might have become a great Banking disaster. The Bank, itself, was saved, yet with the collapse of a system of management which set the rules of prudence at defiance and maintained a style of competition that did grave injury, not only to other Banks, but to the community. This, and other indications, point to the desirableness of united action amongst the Banks generally, such as prevails in Scotland, London and New York, to the great advantage both of the Banks and the public.

Experience shows that imprudent Banking does serious damage to the mercantile community. The lavish lending of money without proper regard to security is not a benefit but an injury to all parties.

When a bank loses millions of money, it simply means that large numbers of its customers have been ruined. In a majority of cases (and I now speak from experience) they have been ruined by being able to borrow too freely from the Bank. A prudent Bank would have kept them in check and saved them. Some of this imprudence in lending money results from the foolish way in which competition is carried on. Competition there must be; but it is certainly not wise for a Bank Manager to be constantly begging people to come and borrow the money entrusted to him to lend. I do not think the Banks as a whole have made a dollar of profit by money so pushed out, the average of losses from the business being so high, and they have certainly done damage to their customers. There can be no good in reversing the natural order of things. When a trader wants to borrow the natural course for him is to go to the man who has money to lend, and explain his position and security. And instead of aiming to borrow as much as possible, it should be his ambition to borrow as little as he can possibly do with. Let him build up a character for prudent dealing and he may depend upon it that his legitimate wants will be supplied at all times.

If Banks had a mutual good understanding it would prevent one institution being played off against another. Better terms are sometimes sought. The demand in some cases may be legitimate enough. In other cases when the demand is for more money or less security, it may be refused in the customer's own interest. Another Bank may be applied to in such a case. The spirit of competition may then prevail to the extent of breaking down reasonable safeguards. Managers of branches need special care in this direction. To take an account from another Bank by offering or consenting to better terms, is often deemed a fine achievement, de-

serving special recognition by the Directors. But Boards of Directors by this time have learned to estimate such achievements at their true value. If I were to put on record the amount of money the Banks have lost in this way it would run up into millions.

Bankers would find it to their interest to have that sort of common understanding that will make it impossible for a customer to leave one Bank for another except on equal terms. The checks and restraints of prudent Banking should be so common that any customer will understand that he cannot get rid of them by changing one Bank for another. There will, of course, be preferences and repulsions, likes and dislikes. A Banker may make himself so disagreeable and unreasonable as to make it difficult to do business with him. Other Banks in that case will have the offer of accounts on perfectly equitable terms; and will be justified in taking them. What is specially deprecated here, is that spirit of ambition to extend business which will lead to its being taken on unsafe terms, or the allowance of rates which are unprofitable and unreasonable. An association of Bankers, like that of the United States, for the furtherance of mutual interests would be of great advantage both to the Banks and the public.

I will now take the liberty of making a few remarks on the subject of requiring all Bank note issues to be secured by Government debentures.

As the Bank charters have still six years to run, this can scarcely be considered a practical question at present. It may, however, be well to give the subject consideration for some time beforehand. A few remarks, therefore, may not be out of place, especially as it has been prominently brought forward by the President of our leading Bank.

To begin with, it is well to remember that this is not a new subject. It was exhaustively discussed in Parliament and through the press sixteen years ago. The Government at that time brought forward a measure for the covering of bank notes by Government bonds, but after discussion, spread over two years, the measure was withdrawn as unsuitable to the circumstances of the country. The system of bank circulation established among us has been the growth of forty or fifty years, and has spread its roots into every department of business. It could not be radically altered without serious disturbance to our commercial interests. The case is not that of considering what is the best theory on the subject, as we might do in establishing a Banking law for a new territory. Our Bank circulation, whatever its merits or demerits may be, is already established. This is no reason why it should not be modified or improved, or even, if need were shown, abolished altogether. But all must acknowledge that to bring about a fundamental alteration in the whole Bank note system of the country is a matter that should not be entered upon without weighty and pressing reasons. The gravity of the issue may be inferred from the fact that to carry it out must necessarily involve a large diminution in the supply of money available for the mercantile community.

There may be differences of opinion as to how many millions or tens of millions this diminution will amount to. But the diminution will necessarily be sufficiently heavy to make itself felt in a scarcity of money. This may or

may not be an unmixed evil; but it is certain to transpire, and due weight and consideration should be given to it by the public. This may not be a sufficient reason in itself for allowing things to remain as they are, for if we were troubled with such rotten issues as formerly prevailed in the United States and by which untold losses accrued to the people, almost any sacrifice would be cheerfully made to get a better system. But it cannot be said that the bank currency of Canada is now, or ever has been, on such a footing as this. On the contrary the loss suffered by the community during the last fifty years by the failure of banks to redeem their issues has been but a small fraction.

The case may be summed up as follows:

On behalf of alteration and the compelling all banks to cover their issues by Government bonds, it is claimed that a currency thus secured would rest on a solid basis, would circulate in all parts of the Dominion at an equal value, and if the issuing bank failed would be promptly redeemed.

That for the banks to lend large sums of money to the Government would prevent the necessity of borrowing abroad to the same extent, and would create a home market for Government securities.

That it would prevent the establishment of ephemeral and unsound institutions that are enabled to carry on business wholly by means of the facilities circulation affords them.

That it would be a benefit to the Banks themselves to lessen their power of making loans by means of circulation. Such loans, so easily contracted, leading often to inflation of prices and loss both to the merchant and the Bank.

That the system has been long tried in the United States, and has proved of great value in providing a sound currency, in which the people have perfect confidence, circulating at par in all sections of the country.

It is sometimes said also—but this is a mistake—that the circulation of Great Britain is based on this principle.

Against such a fundamental alteration as is proposed, it is argued: First, that as above stated it could not be carried out without a heavy diminution in the supply of money for mercantile purposes.

That the disadvantages, whatever they may be, of the present system, have not been so serious as to call for a remedy involving such grave consequences.

That Bank notes are sufficiently negotiable, for all practical purposes, in every part of the Dominion, and are now as secure as they can be made (even in the way proposed), by reason of their being constituted a preferential lien on the assets of the Bank.

That the system of Bank circulation, subject to constant redemption like that of Canada, is the only one that provides naturally and easily for the expansion and contraction of circulation necessary in an agricultural community.

That a system of fixed issues, which provides neither for contraction nor expansion, has proved a serious detriment in the United States, leading to unnatural scarcity of money at one time, and unnatural redundancy at another.

It is urged too, that the Banks of the United States are all local institutions, each one complete in itself and without branches, and that a system which may be readily and easily



worked in that country, might lead to serious practical difficulties in Canada where Banks have numerous branches.

It is pointed out further that this is a question that affects country districts rather than great monetary centres; that our system of Bank circulation is the one conducing to the greatest economy of capital, in doing the business of a sparsely settled country, where capital in the shape of money is not by any means abundant; and that the conditions of circulation are so radically different in monetary centres and outlying communities that no argument can be carried from the one to the other.

With regard to preventing the establishment of unsound institutions, it is contended that the responsibility of this rests with the Government, and that it could be fully secured by legislation similar to that of Sir Robert Peel's Banking Act of 1844.

I am aware that rejoinders could be made to some of these arguments. But it cannot be denied that this is a very grave question, affecting, as it does, the whole mercantile and industrial community of the Dominion, and that it should be dealt with in a cautious and conservative spirit. It is not the condition of things in this city or province only that must be considered. Banking is within the sphere of the Dominion Government, and the interests of Ontario, of the Maritime Provinces, and of Manitoba, must be looked at, and that in view of the future as well as the present.

Before the time for legislation comes, many circumstances may have transpired of which we are now in ignorance. These may affect any conclusion that we may arrive at. But my present impression is, without committing myself or the Bank to details, or in fact, definitely at all, that this country would do well, when the time comes for legislation, to follow the lines of Sir Robert Peel's acts of 1884 and 1845. On this basis the whole banking system of Great Britain has rested for the last forty years. These acts dealt with the circulation, first, of the Bank of England; secondly, of the country Banks of England and Wales; thirdly, of the Banks in Scotland and Ireland, and its provisions deserve attention whenever the subject of Bank circulation is discussed. I. With regard to the country Banks of England, it was provided, first, that no new Banks should be established having the right to issue notes; second, that existing Banks should continue to have the right to the extent of their average circulation in the three years preceding the passing of the act. The country Bank circulation is still carried on in England on this basis, and returns respecting it are periodically published. The total amount of such notes in circulation last February was £2,986,000. It is an utterly erroneous notion, though somewhat prevalent, that the Bank of England is the only Bank in England that issues notes.

II. In Scotland and Ireland as in England, no new issuing Bank can be established; but the Banks were allowed to continue their circulation on the same basis as the country Banks of England, with the additional proviso, however, that any Bank might issue beyond the three years average on holding gold for the excess. This the Banks of Scotland and Ireland take care to do; and have practically continued their issues as before. The circulation of the Irish banks, according to the latest return, was £6,224,000. The

circulation of the Scotch banks was £5,378,000.

III. The provisions of the Act with respect to the Bank of England are worth studying. For though we have no Bank in Canada corresponding to the Bank of England, our Government issues notes which are a legal tender, like those of the Bank of England, and which are redeemable in gold at the Government Treasuries. Recognizing the fact that a legal tender note, which cannot be refused, no matter how large its amount, requires to be on an exceptionally secure basis, the act provided that the Bank as heretofore might issue notes to a certain amount fixed by the act against Government securities; but that the whole excess should be represented by gold in its actual possession. To secure this latter a department of the Bank was created, whose sole function is to give gold for notes and notes for gold. Sir Robert Peel's Act, it was supposed, would accomplish many things which experience has proved it incapable of doing, such as the prevention of overtrading, inflation and their consequences in panics and revulsions. These have been as rampant and violent in England since the Act was passed as they were before. But it has done one thing beyond question. It has secured that gold should always be forthcoming whenever Bank of England notes were presented for redemption.

If the leading lines of Banking legislation in England were followed here, any new banks chartered would be prohibited from issuing notes. Existing Banks would be authorized to issue henceforth to the average of their issues of three preceding years. As the system of Scotland or Ireland is undoubtedly more applicable to Canada than that of England, they would further be allowed to issue, as need might require, on gold specifically held for the purpose. The adoption of this method would check the establishment of unsound banks, would give every needful facility for future business, would prevent any curtailment of the supply of mercantile funds, and provide for regular expansion and contraction. As to security, the Bank currency of Canada is as secure as it can be already.

Applying the same principle to the notes of our Government, I may remark that I am not now, and never have been, in favor of the Government of this or any other country issuing circulating notes. There are grave and weighty reasons against it, which reasons, I have stated at the proper time and place, and am ready to do so again if called on.

The theory of our Dominion notes, however, is not a practical question at present. But events during this very year have shown the propriety of strengthening the gold reserve for such notes. As these notes are a legal tender, in which all Banks can pay their depositors, and as the Banks are compelled by law to hold a certain percentage of such notes, instead of gold (which some of them would much prefer), I submit that it is a matter of the greatest importance that the gold basis of our government issues shall be so wide that the redemption or payment of gold for legal tender notes can be carried on with the same facility as the issue department of the Bank of England. There would be

more likelihood of this being the case if the foundation on which the act was originally based, under Sir Francis Hincks as Finance Minister, had been adhered to. I may be allowed to express the hope that this matter may receive the attention of our Government at no distant opportunity. There is no reason why a change should not be made during the next session of Parliament. Meantime it would be desirable for the Treasury to increase its holdings of gold.

With regard to the general trade of the country nothing needs to be added to the very judicious remarks lately made by the President of the Bank of Montreal. It is a time for quiet caution both on the part of bankers and traders. We have had a narrow escape, in my judgment, from a general break down. But we have escaped, for which let us be thankful, and show our thankfulness by being prudent in future.

In Manitoba the force of the financial collapse has probably spent itself. There is a marked diminution in the number of failures. Values of real estate, both in town and country, are settling down to a rational basis. It is contended by some that properties are still held too high; this, however, must gradually adjust itself. With a large area of land under cultivation, there must be a solid foundation for considerable business in the Northwest. But time must elapse before the cities and towns can be said to be generally prosperous. Meantime patience must be exercised. Large numbers of insolvent estates have still to be wound up, but with time and prudence matters will come round in Manitoba as they did in Ontario after the land panic of 1857. We know what Ontario is to-day. There is no reason why Manitoba and the Northwest generally may not be equally prosperous by and by. But prudence, I repeat, must be exercised.

In this connection, let me say, it is with pleasure that bankers note the general uprising in Manitoba itself against unjust and unwise legislation with regard to exemptions. A retroactive measure like that recently passed is most unjust to the people of the other Provinces, and it is to be hoped that the numerous petitions against it may have due weight at Ottawa and bring about its disallowance.

The interests of the Merchants' Bank in that province, as you are aware, are considerable, and notwithstanding that we vigorously shook off, at the very outset, all transactions connected with the 'boom' in property, we have found that the reflex influence of the real estate collapse has been far-reaching. Our losses have been heavy enough, but they are almost wholly losses by mercantile customers, and not by speculators, and they have not been excessive when we consider the extent of our business.

Let me take the liberty of saying one word in conclusion about another matter. Gentlemen who attend Bank meetings occasionally take the opportunity of ventilating some pet theory on the subject. To this there can be no objection; but it should be borne in mind that Banking is a very difficult business, not easy to learn in theory, and requiring uncommon care to carry out successfully in practice. Its principles have been settled now by the experience of many countries and several generations. It is not a very safe subject, therefore, for theorizing or experimenting about. But if stockholders have any



theories or views it can do no great harm for their fellow-stockholders to listen to them.

With regard, however, to matters of fact, it is reasonable to require that persons who aspire to address annual meetings of Banks should be accurate. There is reason for making this remark. A gentleman from a distance recently addressing a Bank meeting in this city spoke of certain Banks as having been 'wrecked' by bad management. He instanced several to whom the word 'wrecked' was perfectly applicable. But he included in the list two Banks to whom it was entirely inapplicable. This Bank was one of the number.

Your presence to-day at an annual meeting, which is one of an unbroken series for sixteen years, demonstrates that that assertion was false. The other instance was that of a respectable institution of former days in Upper Canada, the Gore Bank. This Bank was never wrecked at all. It brought its business to an honorable close, and made arrangements by which not only its depositors and note-holders were paid in full, but by which the stockholders received nearly, if not quite full value for their stock.

I take notice of these gross inaccuracies because many remarks made at Bank meetings are printed and published. Erroneous statements are thus scattered far and wide, sometimes to the detriment of existing institutions.

Mr. JOHN CURRAN moved and Mr. MORRISON seconded an amendment to the President's motion, "That the report be amended by including details of losses in the annual report."

The amendment was put to the meeting and the President declared it lost.

Mr. JOHN CRAWFORD said—I would like to say a few words before you adopt this motion, if it were only out of respect to the President and Directors, and to the General Manager for the very able and exhaustive report, which seems to have emanated from him. I am very much in sympathy with many of the statements in that report, and I think the suggestions contained therein commend themselves to the careful attention of the shareholders and of the public generally. It was mentioned at the recent meeting of the Bank of Montreal that there would probably great benefit accrue from the discussion on the suggestion of introducing the American banking system in lieu of our own. I think those expectations have been fully realized after I have listened to the very able remarks of our General Manager on this question—Great good must eventually arise from this free discussion, where the weak points as well as the strong points of the banking system will be developed and all will tend to judicious and wise conclusions in the end. Of course it is a difficult subject to dogmatize upon, as to whether our system has worked so badly that we should of necessity introduce a new one, and that one the American system. My own impression is that the losses sustained by the public generally and the results of insolvencies have not been such as to warrant a change. I think you all agree with me that frequent changes in the system of Banking are very undesirable unless strong reasons exist, and these reasons do not exist in the loss sustained by the public under the present system. I do not see why the public might not be protected against any possible losses by wise legislation, less cumbrous than

that proposed—I mean the American system. I think if it were necessary that even the clauses making the assets of the Bank a first charge might be even made more stringent than they are. (Several voices—"How?") The General Manager thinks they are as strong as they could be made, but I would join issue, and think they might be made stronger. At all events I am very glad that the attention of the General Manager, as well as of the Directors and President of the Bank of Montreal, has been drawn to excessive competition. The drawbacks inseparably connected with excessive competition can scarcely be over estimated. If we are to believe the journals—and they never say anything but what is true—on the shipping interest, I believe the Allans have lost some thousands of pounds on each trip. Carrying out that to its logical conclusion what will our shipping service be in a few years more if this be continued.

The PRESIDENT—Get off the tolls and some other things and we will be better. (Hear, hear.)

Mr. CRAWFORD—I have a little experience myself of this excessive competition in the cotton industry. Several years ago I subscribed—not a large amount indeed—to this business. The mill was constructed, and it was a model one. The Directors were the *creme de la creme* of the commercial community. They were prominent for their exceptionally able and sound judgment, level heads and so forth, but would you believe, Mr. President, that up to this day I have not received a single cent in the way of dividend. I do not, however, charge them with mismanagement. They have been extremely economical in the management of the institution. For instance, there have been eight or nine or ten meetings, and they have not spent one dollar for the purpose of advertising that or advising the shareholders of it. We may look forward in the end to have something out of the cotton industry. The point of my remarks is concerning excessive competition. The numerous failures, the lower dividends, the low quotations of bank stocks in a great measure discourage over competition. Now, sir, is not this a matter for capitalists to well consider, because they are the ones who supply the sinews of war. I would ask them have they counted the cost to the country of this. Have they reflected upon the many billions of money that have been ruthlessly dissipated by this excessive competition. Those are very grave conclusions. I wished, in the absence of some one else, to make a few remarks on the report before it was adopted. I may say, as I am on the floor, Mr. President, and before I, in the words of Cromwell, give place to honest men, I desire to record my belief that the country is safe. There is abundance to-day and plenty to spare. My only apprehension is, the only thing I tremble for is the people who inhabit the country. They seem to grow restless unless they can realize fortunes at a hop, step and jump, and "whopping" fortunes too. And no one knows this better than our General Manager. Is this to go on for ever? Mr. President and gentlemen, it is in your hands to decide whether it shall or not.

The report was then put by the Chairman and adopted.

#### THANKS TO THE PRESIDENT AND DIRECTORS.

Mr. JOHN CRAWFORD moved

That the thanks of the stockholders are due and are hereby tendered to the President, Vice-President and Directors, for the manner in which they have conducted the institution during the past year.

He said: Before putting this resolution, I wish to say a word or two. It is this: that the statement upon the table establishing a net profit during the past year of about 9 per cent. upon the paid-up capital of the Bank seems to me to be after all fairly satisfactory. If I were to say more than fairly satisfactory I dare say our General Manager would probably take umbrage at the remark, because he would want some words hereafter to eulogize a subsequent statement when the profits may rise to 13 or 14 per cent. Now, sir, in addition to the prostrate and unhealthy condition of the country, which the Directors have had to contend against, I hold that bankers have experienced a great difficulty in investing their funds at safe and remunerative rates. We, of course, confess to a 7 per cent. dividend. It would have been much more gratifying if the profits had been, instead of 7 per cent., 9 or 10 or 11 or 12 per cent.; but, considering that the Bank has, since its reconstruction some eight or ten years ago, paid upwards of 6½ per cent. semi-annually, with a considerable amount being added to the Rest, I think our stock should be greatly sought after to-day at more enhanced prices than it appears to be going at. I think, Mr. President, that what should be aimed at are steady and uniform dividends. Sharp fluctuations seem to me to be out of place, and above all, I would recommend you to avoid anything like advertising such as "dividend passed." That word is very suggestive and grates harshly on the ears of shareholders. But to be more serious, Mr. President, we look to the Directors for reasonable and regular dividends. It is, in my opinion, entirely in their hands under prudent management and, therefore, sir, I hope that the issue will be as satisfactory to the shareholders as it must be to the Directors.

Ald. HOOD—It gives me great pleasure, Mr. President, to second the resolution.

The resolution was unanimously adopted.

#### THANKS TO THE GENERAL MANAGER.

Mr. ALEX. EWAN moved,

That the thanks of the stockholders are due and are hereby tendered to the General Manager for his efficient management during the year.

He said:—It gives me great pleasure to move this resolution. I am thankful that the affairs of the Bank are in the hands of such a sound and experienced Manager.

Mr. WILLIAM COWIE—I have much pleasure in seconding the motion, I think a speech is altogether unnecessary, and I will not trouble you with one on this occasion.

The resolution having been carried unanimously,

The General Manager, Mr. HAGUE, said: While thanking you for this mark of appreciation, I will just say one or two words on the subject alluded to by Mr. Curran. The losses of a Bank are after all what determines its position, for all Banks make profits, but it is the losses, as I have observed on former occasions, that really determine what dividend is to be paid and what condition a Bank is in. I can assure the stockholders that the greatest possible care is taken with regard to every loan and every discount that is made



in the Bank, here at headquarters, and at the numerous branches at which we carry on business. Our managers have instructions which we call upon them to follow. We receive regular and carefully prepared reports about their business which we constantly criticize and either approve or disapprove. I do not think it would be possible to do anything more in the way of supervision, or in the way of exercising care than is done by the Directors and officers of this Bank. I do not say but that better judgment might be exercised. No man is infallible, as we have heard more than once. If we had infallible men we should never make mistakes, never be deceived, never listen to false statements without detecting their falsehood, and never risk one single dollar of your money. But banking in this world cannot be carried on in this way. Even in England—I was brought up in an English bank—although we lost but little compared with what we do here, still we did lose. Every Bank in this country has to take some share of the loss in the numerous failures that take place. When times are good failures are few and bank losses are small. I have known a time in the Bank of Toronto when for several years together we made no loss at all. Since I arrived in Montreal we had a similar year, but at that time the country was prosperous and failures few. It is impossible to do business on a broad scale without failures, and being subject to some loss. Of course we all regret this. Now, last year, and the year before, were years of numerous failures, that went on increasing and becoming more and more extensive. You, gentlemen, who are engaged in mercantile business, know well you have to share those losses. We have not been lending money to speculators. Merchants have suffered who never speculated at all. Persons conducting their business in a perfectly

legitimate way are affected by the losses of their neighbors, and brought down without any fault of their own. In this way the Bank has had to suffer. I would refer you in this respect to the very full remarks which I made last year, if you care to read them. For my own part, that is all I have to say on the subject. Mr. Curran is quite right in saying that theory and practice are different things. We try to carry out a good sound theory and give the best possible attention to our business. If our customers would conduct their business prudently there would be no loss to the Bank at all. It is because our customers fail that we lose. You may depend upon it the business of the Bank is not conducted in a hap-hazard or loose fashion. It is conducted with as much care as it can possibly be. With regard to the losses I may say this:—I am as much distressed at every loss the Bank makes as if I were losing my own money—in fact I am losing my own money, because I am a heavy stockholder in the Bank. You have, therefore, some guarantee that the losses will be reduced to the lowest minimum consistently with lending money at all. We might, of course, avoid all loss by investing wholly in Government securities, but Mr. Morrison does not seem to like Government securities. If we lend all our money to the Government at four per cent. you will only get a four per cent. dividend. It would be a very easy way of doing business, but I doubt it would be satisfactory to the shareholders.

Mr. MORRISON explained that he did not object to Government investments, but he liked them at the proper time and place.

The PRESIDENT stated that the Board had found it necessary to revise the wording of some of the By-laws, to bring them into conformity with the Banking Act; also to add a new By-law respecting the closing of the

Transfer Books before payment of a Dividend.

After the proposed By-laws had been read over, it was moved by JONATHAN HODGSON, Esq., seconded by HECTOR MACKENZIE, Esq., and resolved:—"That the By-laws Nos. 1 to 9, as now read, be adopted."

Mr. ADOLPHE MASSON proposed, seconded by Mr. JOHN CASSILS,

That Mr. W. B. Cumming and Mr. John Crawford be appointed scrutineers for the election of Directors about to take place; that they proceed to take the votes immediately; that the ballot shall close at 3 o'clock this afternoon, but if an interval of ten minutes elapse without a vote being tendered, that the ballot shall thereupon be closed immediately.

Carried.

Mr. J. P. CLEGHORN moved, seconded by Mr. MURDOCH MACKENZIE,

That the thanks of the meeting are due and are hereby tendered to the Chairman for his efficient conduct of the business of the meeting.

Mr. MURDOCH MACKENZIE—I have great pleasure in seconding this resolution, and I hope, Mr. President, that you will remain much longer in your present position.

The resolution was passed unanimously.

The PRESIDENT—Gentlemen, I am very much obliged to you for your kind resolution.

The meeting then adjourned, and the scrutineers shortly after reported the following gentlemen to be duly elected as Directors for the ensuing year:—

ANDREW ALLAN, Esq.,  
ROBERT ANDERSON, Esq.,  
Hon. J. J. C. ABBOTT,  
JOHN CASSILS, Esq.,  
WILLIAM DARLING, Esq.,  
JOHN DUNCAN, Esq.,  
JONATHAN HODGSON, Esq.,  
ADOLPHE MASSON, Esq.,  
HECTOR MACKENZIE, Esq.

The new Board met the same afternoon, when Mr. Andrew Allan was re-elected President, and Mr. Robert Anderson, Vice-President.







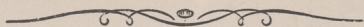
Charles Deane  
1855



# TESTIMONIAL

TO

DR. H. WOODWARD, F.R.S., &c.



In the course of the present summer the "GEOLOGICAL MAGAZINE" will be twenty-one years old. During that period Dr. H. WOODWARD has been one of its Editors, and for almost the whole time the principal Editor, on whom the burden of the work has fallen. Further, his remuneration from the Publishers has never been more than nominal, and of late years the arrangement which he made with them, in order to secure the continuance of the MAGAZINE, would have actually resulted in some pecuniary loss, but for illustrations presented by authors.

Of the ability with which the MAGAZINE has been conducted, and of its value to Geologists, there can be no question. Dr. WOODWARD'S friends, therefore, have determined to give expression to their sense of the services which he has rendered to Geology by presenting him with a Testimonial, of which a Piece of Plate will, at any rate, form a part, and they trust to receive the support not only of the readers of the MAGAZINE, but also of all other lovers of Science.

T. G. BONNEY,

*Chairman of Committee.*

*Secretary & Treasurer,* G. J. HINDE, PH.D., 11, GLEBE VILLAS, MITCHAM, SURREY,  
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| Rev. O. Fisher, M.A. ....                  | 1 | 1  | 0  |  | 3 | 3  | 0  |
| Prof. W. H. Flower, F.R.S. ....            | 5 | 5  | 0  |  | 1 | 1  | 0  |
| C. Le Neve Foster, Esq., D. Sec. ....      | 1 | 1  | 0  |  | 1 | 1  | 0  |
| Dr. J. Foulerton, F.R.S.E. ....            | 2 | 2  | 0  |  | 3 | 3  | 0  |
| Dr. W. Francis, F.L.S. ....                | 2 | 2  | 0  |  | 1 | 1  | 0  |
| Dr. Archibald Geikie, F.R.S. ....          | 3 | 3  | 0  |  | 5 | 5  | 0  |
| Prof. J. Geikie, F.R.S. ....               | 1 | 1  | 0  |  | 2 | 2  | 0  |
| Alfred Gillett, Esq. ....                  | 3 | 3  | 0  |  | 2 | 2  | 0  |
| Dr. H. Hicks, F.G.S. ....                  | 2 | 2  | 0  |  | 1 | 1  | 0  |
| Rev. E. Hill, M.A. ....                    | 2 | 2  | 0  |  | 1 | 1  | 0  |
| George J. Hinde, Ph.D. ....                | 3 | 3  | 0  |  | 2 | 2  | 0  |
| T. V. Holmes, Esq., F.G.S. ....            | 1 | 1  | 0  |  | 1 | 1  | 0  |
| J. Hopkinson, Esq., F.L.S. ....            |   |    |    |  | 2 | 2  | 0  |
| W. H. Hudleston, Esq., F.R.S. ....         |   |    |    |  | 5 | 5  | 0  |
| J. W. Hulke, Esq., F.R.S. ....             |   |    |    |  | 5 | 5  | 0  |
| Prof. E. Hull, F.R.S. ....                 |   |    |    |  | 2 | 2  | 0  |
| Prof. T. Rupert Jones, F.R.S. ....         |   |    |    |  | 1 | 1  | 0  |
| Prof. J. W. Judd, F.R.S. ....              |   |    |    |  | 3 | 3  | 0  |
| Prof. C. Lapworth, F.G.S. ....             |   |    |    |  | 2 | 2  | 0  |
| J. E. Lee, Esq., F.G.S. ....               |   |    |    |  | 4 | 4  | 0  |
| J. E. Marr, Esq., M.A. ....                |   |    |    |  | 2 | 2  | 0  |
| G. Maw, Esq., F.L.S. ....                  |   |    |    |  | 3 | 3  | 0  |
| Prof. L. C. Miall, F.L.S. ....             |   |    |    |  | 1 | 1  | 0  |
| Dr. J. Millar, F.L.S. ....                 |   |    |    |  | 3 | 3  | 0  |
| Prof. H. A. Nicholson, M.D. ....           |   |    |    |  | 1 | 1  | 0  |
| Sir Richard Owen, K.C.B. ....              |   |    |    |  | 1 | 1  | 0  |
| J. A. Phillips, Esq., F.R.S. ....          |   |    |    |  | 3 | 3  | 0  |
| George H. Piper, Esq., F.G.S. ....         |   |    |    |  | 1 | 1  | 0  |
| Prof. J. Prestwich, F.R.S. ....            |   |    |    |  | 5 | 5  | 0  |
| F. W. Rudler, Esq., F.G.S. ....            |   |    |    |  | 2 | 2  | 0  |
| Prof. H. G. Seeley, F.R.S. ....            |   |    |    |  | 2 | 2  | 0  |
| Wm. Topley, Esq., F.G.S. ....              |   |    |    |  | 1 | 1  | 0  |
| W. Whitaker, Esq., B.A. ....               |   |    |    |  | 1 | 1  | 0  |
| Rev. H. H. Winwood, M.A. ....              |   |    |    |  | 2 | 2  | 0  |
| Horace B. Woodward, Esq., F.G.S. ....      |   |    |    |  | 1 | 1  | 0  |







MONTREAL, 28TH APRIL, 1885.

DEAR SIR,

A meeting will be held in the Ladies' Ordinary, Windsor Hotel, Montreal, on Saturday, 9th May next, at 3 p.m., for the formation of a Canadian Branch of the Imperial Federation League.

A series of Resolutions will be presented, setting forth the principles of the League, the object of the organization, and the means to be adopted for its attainment; and a President and officers will be elected.

A list of some of those expected to take part in the proceedings is appended.

All persons favorable to the unity of the Empire, and desirous of promoting discussion of means whereby this may be perpetuated, its practical efficiency increased, and the resources of the various parts of the Empire consolidated, are invited to join in this movement, and to become members of the League.

Arrangements have been made with the Grand Trunk, Canadian Pacific and other Railway Companies, for issue of tickets at a fare and a-third for the return trip. These can be obtained on certificates which will be furnished by the Secretary on application.

You are respectfully requested to attend, and to invite the attendance of any others whom you know to be in sympathy with the objects of the League, or to request such, if unable to attend, to send their names to the Secretary.

A public meeting, under the chairmanship of the President elect, will be held the same evening at eight o'clock, in the Queen's Hall, when addresses will be given by Principal Grant, Mr. Dalton McCarthy, M.P., Mr. Jehu Matthews, Professor Foster, M.P., and other gentlemen, and an opportunity will be given at the close to all who may wish to join the League.

All are invited, ladies and gentlemen, to attend this meeting.

*Prof Schurman, Hon J W  
Langley, A W Mill M P  
F F Wood M P*

HENRY LYMAN,  
Chairman,

ARCH. MCGOUN, JR.,  
Honorary Secretary,

} Provisional Committee.

SECRETARY'S ADDRESS :  
19 PLACE D'ARMES.







The following are amongst the gentlemen expected to take part in the meeting for the formation of the Branch of the League :—

HON. SENATORS ALLAN, Toronto; MACINNIS, Hamilton; NELSON, Burrard Inlet, B.C.; PLUMB, Niagara; POWER, Halifax; JAMES ARMSTRONG, M.P., South Middlesex; ED. C. BAKER, M.P., Victoria, B.C.; WM. T. BENSON, M.P., South Grenville; GEO. E. CASEY, M.P., West Elgin; HECTOR CAMERON, M.P., North Victoria; MURRAY DODD, M.P., Cape Breton; GEO. E. FOSTER, M.P., King's, N.B.; DAVID W. GORDON, M.P., Vancouver; CHARLES E. HICKEY, M.P., Dundas; LACHLAN McCALLUM, M.P., Monck; DALTON McCARTHY, M.P., North Simcoe; ALEX. McNEIL, M.P., North Bruce; HENRY N. PAINT, M.P., Richmond, N.S.; JAMES C. PATTERSON, M.P., North Essex; JOHN W. STAIRS M.P., Halifax; CHAS. J. TOWNSEND, M.P., Cumberland; CHAS. H. TUPPER, M.P., Pictou; N. C. WALLACE, M.P., West York; C. W. WELDON, M.P., St. John, N.B.; PRINCIPAL GRANT, Kingston; JEHU MATTHEWS, Author of "A Colonist on the Colonial Question," Toronto; HON. J. WILBERFORCE LONGLEY, Member of the Government of Nova Scotia; HON. A. C. BELL, Leader of the Opposition in Legislation of Nova Scotia; JOHN C. BOURINOT, Clerk of the House of Commons; CAPT. PALLISSER; MR. McLEAN, (of McLean, Rogers & Co.); MR. J. MONTAGUE LEET, Editor "Manitoba and North-West Monthly," Winnipeg.

The following are the members of the Provisional Committee in Montreal :—

MESSRS. HENRY LYMAN, Chairman; R. R. GRINDLEY, Bank of British North America; GEORGE HAGUE, Merchants' Bank of Canada; HON. DONALD A. SMITH, DR. ALEX. JOHNSON, Professor of Mathematics, and DR. MURRAY, Professor of Logic and Mental and Moral Philosophy in McGill University; ANDREW ROBERTSON, Chairman of the Board of Harbor Commissioners; WM. J. PATTERSON, Secretary of the Board of Trade; F. WOLFERSTAN THOMAS, Molsons Bank; JOHN LEWIS, Surveyor of Customs; W. GEORGE BEERS, JOHN DUNLOP, ALD. J. S. ARCHIBALD, FRED. C. HENSHAW, W. BLAIKLOCK, EDMUND BARNARD, Q.C., W. de M. MARLER, H. H. LYMAN, D. A. ANSELL, R. C. SMITH, and ARCH. MCGOUN, Jr., Hon. Secretary.







The Topography of the Pyramids and their connection with the Bahr Jusuf, Labyrinth, Mœris and Sphinx. B. A. A. of S. York. Dulau & Co., London, 1881.

Le Lac Mœris et son emplacement d'après de Nouvelles Recherches. La Revue Archéologique, Juin. Paris, 1882.

Recent Explorations in the Desert near the Fayoum; Map and Survey. Proc. Soc. Bibl. Arch. June. London, 1882.

Pyramid Hills on Lat.  $30^{\circ}$ . Hist. of Art in Anc. Egypt. Prof. Perrot and M. Chipiez. Note—Vol. I, p. 202. London, 1883.

The Mœris Basin and Wadi Fadhi. Bulletin of Am. Geog. Soc., with Appendix by Ch. Justice Daly. New York, 1882.

Compte-rendu des recherches dans le Bassin occupé par le Lac Mœris. Société Khed. de Geog. Dr. G. Schweinfurth. 20 Avril. Cairo, 1883.

The Topography of Egypt between  $28^{\circ}$  and  $30^{\circ}$  N. L. from original surveys made in 1882, 1883, with special reference to the erosions ( $-200$  feet) of the Qerun and Reian Basins, and the natural eminences ( $+950$ ) and the Pyramids ( $+650$ ) in, at or near the impounding-reservoir of Pithom-Mœris. Academy of Sciences, Mar. New York, 1884.

Lake Mœris and the Construction of the Pyramids, the Buffalo Convention of the Am. Soc. of Civil Engineers. The American Engineer, June 20th. Buffalo, 1884.

The Mœris Basin. Brit. Assoc. Adv. of Sc. August 28th. Montreal, 1884.

The Latest Researches in the Mœris Basin. Royal Geographical Society Bulletin. Trübner & Co. London, 1884.

Were the Pyramids Hills? The Critic. April 5th; Sept. 20th. New York, 1884.

Lake Mœris and the Pyramids. Engineering Magazine, Nov. New York, 1884.

Construction of the Pyramids. The Press. September 11th. Philadelphia, 1884.

Mœris: the Wonder of the World. John Wiley & Sons. New York, 1884.

The Pyramids in Lake Mœris. The School of Mines Quarterly. January, 1885.

The Pyramid-Hill of Gizeh. The School of Mines Quarterly. March, 1885.

The Building of a Pyramid: Lecture. Columbia College. March, 1885.



## THE MEETING OF THE SOCIETY OF CIVIL ENGINEERS AT BUFFALO, 1884.

### Lake Mœris and the Construction of the Pyramids.

Mr. McAlpine, in telling about the canals of Egypt, prepared the way for the advent of F. Cope Whitehouse, son of the late Bishop of Illinois, a great traveler, explorer and historian, who in four years has been to Egypt to pursue his investigations three times. He is a small, slight but compact man. His hair looks like black and white silk, and he has moustache and side-whiskers, the latter close cut and mixed like his hair, while his moustache is dark. His complexion is pale, his nose sharp in profile, and his eyes large and bright. He has a square chin, and altogether a face denoting character and courage. He is of exceeding nervous temperament and great refinement of manner. He looks like a scholar, and evidently is a very accomplished gentleman. He speaks with singular fluency, earnestness and force, and commands the closest attention. The chairman limited him to ten minutes. Mr. Whitehouse said the man who could not make his point clear to such a body in ten minutes did not deserve to be listened to, but that a volume as large as one of the Encyclopedia Britannica could be written on the subject in hand. Before the speaker's ten minutes were up, Mr. McAlpine had requested an extension of time, and so magnetic and attractive was he that there was not a dissenting voice. It was the most brilliant event of the convention, beyond question. Mr. Whitehouse gave a graphic and rapid account of his explorations in Egypt along the Nile, at the inland lakes, and on the shores of the Mediterranean, with blackboard illustrations of remarkable clearness and accuracy. He also exhibited maps of the country, including one by the Egyptians, and fully explained them. One of the charts was a genuine curiosity, having been made about the year B. C. 1800. There was nothing dry about Mr. Whitehouse's lecture, for such it may be called. He spiced his facts with reminiscences and comments, and not only instructed but amused his appreciative audience. After he had finished, the civil engineers crowded around him and eagerly asked for fuller information on points suggested during his address, to all of which the explorer gave prompt answer. He seemed a veritable fountain of Egyptian knowledge, and poured it out lavishly right and left.—*The Commercial Advertiser*, June 13.

The next address, though not down on the regular programme, was by far the most brilliant and entertaining of the whole convention. It was made, by request, by F. Cope Whitehouse, a member of the New York Geographical Society, who is not connected with the engineers' organization. Mr. Whitehouse is the son of the late Bishop Whitehouse of Illinois, and is about forty years of age. He has an excellent education and being endowed with considerable means and an inquiring mind has devoted much time to puzzling geographical questions. About twelve months ago he returned from a third visit to Egypt, where he explored the dry basin of an ancient lake of the time of Herodotus. The story of the lake is that an ancient Egyptian king, for the purpose of giving the lands of his subjects better irrigation than the regular overflows of the Nile, admitted the water of the river to a depression of the country 450 miles in circumference by means of a canal. The amount lost was replaced regularly by lifting the dams in the canal at an expense each time of what in our money would be \$60,000. Mr. Whitehouse learned all this by careful inquiry. He was the only white man who had ever visited those parts. During the lecture, which was entirely extemporaneous, Mr. Whitehouse exhibited a copy of a map whose original it was supposed Moses studied. The map, a curious collection of oblong figures bearing hieroglyphics, told of the lake.—*The Evening Republic*, June 13.

A most interesting talk was then listened to by the Society from Mr. F. Cope Whitehouse, a son of the late Bishop of Illinois. Mr. Whitehouse is an extensive traveler, a man of great culture, who has devoted his life to study. He was introduced by Mr. McAlpine, having just arrived from New York. He told of his investigations in Egypt, and of his discoveries; and showed himself to be a profound student. Justice cannot be done his talk in this report. He interested, pleased, and edified all.

The society then relaxed into the enjoyment of another hour's talk from the scholar, Mr. Whitehouse. It was interesting to see how completely he won the attention and admiration of his distinguished hearers. His talk was upon the great pyramids of Egypt. He apparently convinced all of the method of their construction, which would take too much space to describe. After the meeting adjourned, he was surrounded by engineers asking for fuller information about his remarkable explorations and discoveries.—*The Buffalo Express*, June 14.



"The Pyramids of Egypt" was the next subject, and as treated of by F. Cope Whitehouse, it proved to be one of the most agreeable things in the proceedings. The speaker has a rare command of language, a fascinating manner, and spoke, as in the forenoon, entirely without notes, illustrating his subject on the blackboard with great facility. He went to Egypt with the zeal of a geologist and traveler, and though his first inspection of the pyramids did not extend over ten days, he has seen since that time plenty to interest those who have not had the good fortune to make a personal visit to the great wonders of the east. His playful allusions to the engineers of the pyramids, as here and there a critical remark was bestowed upon their handiwork, and especially the location of the huge structures on the slope, rather than on the top of the natural rock, were evidently enjoyed by the profession. In the course of his remarks he unfolded an explanation of the pyramids of Gizeh, based upon geological and engineering considerations. "As practical men," said Mr. Whitehouse, "we have no right to assume that Egyptian engineers expended more labor than was actually necessary to take that stone from its quarry and put it in place. But where was its quarry? A profile across the desert shows that the Nile flows like the Niagara river, between two steep walls of horizontal limestone, and fills the valley when high. The pyramids stand upon a detached hill, and the rock at their feet is covered with basalt pavement, smooth blocks of limestone, granite and alabaster. It was for thousands of years a favorite spot for costly structures. But the pyramids are not very conspicuous. They cannot be seen at more than seven miles distance, because the tops are not as high as the plateau. Hills of horizontal limestone, of the same height, are of extremely common occurrence." Mr. Whitehouse showed, by a series of diagrams on the blackboard, that the direction of the Nile current had left a hill. This hill, it was explained, was probably the quarry, whence had been removed the large blocks used in the revetment of the terrace. He believed that Herodotus correctly repeated a tradition, which was in the main true, when he said that the pyramids were built "from above." The hills were honeycombed with galleries and chambers. The stones were actually quarried in the hill and lowered into place, so that the amount of labor was exceedingly small. There was

the further object of protecting the terrace from the danger of falling rocks, sand and wind. They were not only most useful but highly creditable works. It was submitted that no engineers could have been found in any age to perpetuate such monstrous acts of stupid oppression and waste as those pyramids would have been, had they been built according to the theory commonly entertained. Without clear proof Mr. Whitehouse refused to impute folly to those masters in geometry and hydraulics.

The theories advanced by Mr. Whitehouse were generally well received and no one seemed to question his views regarding the hill theory, though one gentleman took his stand on the statement of Herodotus, that derricks were used in construction, showing that the pyramids must have been built upward and not downward. In reply to this, Mr. Whitehouse pointed out that Herodotus had not spoken from observation, and had himself expressed a doubt.—*The Buffalo Courier*, June 14.

The hit of the day was made by F. Cope Whitehouse. For some years he has devoted himself to puzzling geographical questions and explorations in unheard of regions. He told yesterday of a remarkable basin in Egypt, which was irrigated in the time of Herodotus by damming the river Nile at an annual expense of \$60,000. Mr. Whitehouse exhibited a map of this region which was supposed to have been in existence in the days of Moses. The lecture was impromptu and full of the most happy turns of humor.

The closing feature of the convention was an address on the "Construction of the Pyramids" by that most brilliant and versatile of theorists, the witty Mr. Whitehouse. He gave a detailed description of the topography of the region where the great Egyptian monuments are located, dwelt at considerable length on the geological structure of the highlands bordering the Nile Valley, drew blackboard diagrams explanatory of the phenomena of erosion and finally advanced the theory that the supposed tombs of kings are nothing more or less than mounds left standing when the rest of the valley was scooped out by river action. The address was full of humorous points and apparently absurd statements which were adroitly explained away by the witty speaker.—*The Buffalo Times*, June 14.



Principal Sir J. W. Dawson Ad.  
R. P. R. P.

Past President and  
ex officio member of the Standing Committee of  
the American Association for the Advancement of Science.

Dear Sir:

The two suggestions that the Pyramids of Gizeh are : reconstructed pyramidal summits of one of the hills which have been formed by erosion in the stratified limestone of Middle Egypt ; and, that all the pyramids were in some way related to Lake Moëris, was first published in New York in May, 1881 :

"This theory is supported by a great variety of arguments, chiefly extremely technical and appealing only to those who have made Egyptology a special study. The result, however, if accepted, will relieve the mind of an incubus, and humanity of the stigma that rulers were found to order, and a nation to execute such hideous and useless objects merely as monuments of barbarous vanity."—*The Evening Post*, May 16, 1881.

At a meeting of the New York Academy of Sciences (March 24, 1884), it was shown that "there may have been such hills. They may have contained chambers. These chambers might be moved upwards through the hills, as, in fact, has been done in the quarries of Turra, by depositing on the floor of the chamber material removed from the sides and roof. There is a great deal of historical and other evidence to support this idea, which, bold as it is, has yet found no opponents."—*The Critic*, April 5, 1884.

An abstract of a paper on this subject was submitted to the Secretary of the American Association for the Advancement of Science with the assessment for the current year, and the following answer received :

CAMBRIDGE, MASS., July 30, 1884.

MY DEAR SIR—Your abstract is at hand, and entered on list for presentation to Committee.

In haste, but truly yours,  
F. W. PUTNAM.

In response to a suggestion that it should form the subject of an evening lecture, the following communication was received :

PHILADELPHIA, August 7, 1884.

DEAR MR. WHITEHOUSE :

The evening lectures are in charge of the Standing Committee—not the Local Committee. I shall take pleasure in referring your application to Prof. Putnam.

Yours, very truly,

H. CARVILL LEWIS.

On September 7, Prof. Putnam stated verbally that the abstract had been examined by the Standing Committee, and referred in due course to the Section on Geography, of which Prof. Winchell was Vice-President. The room occupied by that section could not be darkened, and application having been made for permission to read it in some other hall, (at the suggestion of Prof. Barker) the following memorandum was obtained :

"I have no objection to the withdrawal of Prof. Whitehouse's paper from our regular programme, and its being read, as proposed by him, in the Academy of Music, after the adjournment of the General Session, as it requires a darkened room. I trust you [Prof. Barker] may be able to arrange it for him."

N. H. WINCHELL.

Prof. Barker assented, upon condition that no expense should be entailed upon the Association, and that the permission of the Directors of the Academy of Music should also be secured. All the requisite steps having been taken, the paper was read on Wednesday, September 10, in due compliance with the rules of the Association.

"All those who came stayed to the end. The lecture was remarkably interesting, and the illustrations were fine. Mr. Whitehouse enunciated some singular scientific theories, based upon the most careful research. \* \* \* He enunciated other theories as to some singular natural phenomena and ancient handiwork to be found in Egypt, basing his deductions upon strong, well-founded facts."—*Philadelphia Daily Telegraph*, Sept. 10, 1884.

"There are many scientists whose opinions are entitled to weight who think that Mr. Whitehouse's services in other branches of science have been eminent. He is, for instance, recognized as an authority on the Libyan Desert."—*New York Tribune*, Sept. 11.

"At the conclusion, a vote of thanks was passed amid enthusiastic applause."—*Philadelphia Press*, Sept. 11.

15 Fifth Avenue N.Y.  
March 21<sup>st</sup> 1883.  
Yours truly  
Cape Whitehouse

Putnam  
Feb 1884



# MONOGRAPH OF THE EARTHQUAKES OF ISCHIA

A MEMOIR DEALING WITH THE SEISMIC DISTURBANCES IN THAT ISLAND FROM REMOTEST TO  
RECENT TIMES WITH SPECIAL OBSERVATIONS ON THOSE OF 1881 AND 1883.

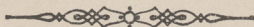
by

**H. J. JOHNSTON-LAVIS. M. D., M. R. C. S., B. es Sc., F. G. S., &c.**

Author of "Notices of the Earthquakes of Ischia", "Geology of Monte Somma and Vesuvius" &c.

WITH SOME CALCULATIONS BY

**Rev. Prof. SAMUEL HAUGHTON M. D., F. R. S., F. G. S., &c.**



*The work will be published in ROYAL QUARTO with large type on fine paper.  
The volume will contain 38 illustrations divided as follows: 19 Photo-engraved plates  
of views, most from originals taken by the author, 1 Photo-engraved folding plate*

*Johnston*

**NAPLES**

**Italy**



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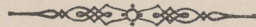
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*Only a small number of copies will be issued, thus rendering the work doubly valuable.*

*The price will be 1 pound sterling (25 francs or 5 dollars) for subscription lists sent in before the work is published, after which date an augmentation of 4<sup>s</sup> 2<sup>d</sup> (5 francs or 1 dollar) will be added.*

*It is requested that intending subscribers fill up the form in clear handwriting and return same as soon as possible.*

*Naples March 14th 1885*



NAPLES

Italy

*N.B. The amount may be sent directly to the author (see address on fourth page) by P.O.O. or by cheque, or to Messrs. TURNER, Bankers Santa Lucia NAPLES. Subscribers, should they prefer, may remit at a later date, when a second notice will be sent on day of publication announcing such TO THOSE HAVING RETURNED THEIR LISTS.*



Lavis

Nov 1885

MONOGRAPH OF THE EARTHQUAKES OF ISCHIA  
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Author of "Notices of the Earthquakes of Ischia," "Geology of Monte Somma and Vesuvius" &c.

America

Sir J. Will. Dawson C. M. G. ; F. R. S. ; F. G. S. etc.  
Principal of McGill University  
Montreal  
Canada





## COUNCIL OF THE BRITISH ASSOCIATION.

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[*Unconfirmed Minutes for the use of the Members of the Council only.*]

At a Meeting of the Council of the British Association, held at the Office of the Association, 22 Albemarle Street, London, February 3, 1885, at 3.30 P.M.

*Present,—*

LORD RAYLEIGH, President, followed by PROF. A. W. WILLAMSON, in the Chair.

PROF. W. G. ADAMS.  
PROF. T. G. BONNEY.  
SIR F. J. BRAMWELL.  
DR. W. B. CARPENTER.  
DR. DE LA RUE.  
SIR F. J. EVANS.  
PROF. FLOWER.  
FRANCIS GALTON, Esq.

DR. J. H. GLADSTONE.  
G. GRIFFITH, Esq.  
A. VERNON HARCOURT, Esq.  
J. C. HAWKSHAW, Esq.  
PROF. HENRICI.  
ADMIRAL SIR E. OMMANNEY.  
DR. W. H. PERKIN.

1. The Minutes of the last Meeting were read and confirmed.
2. The General Treasurer's Report was read and received:—Balance brought forward, £2,475. 8s. 7d.; received for life compositions and subscriptions, £88; sale of publications, £1. 7s.; received from Montreal Committee, part payment of Messrs. Cook & Son for telegrams, £7. 19s. 3d.; dividend on Consols (six months), £123. 15s. 8d.; total, £2,696. 10s. 6d. Expenditure:—Expenses of advertising (July and August), petty cash, and sundry deductions at bank, £21. 3s. 6d.; salaries (one quarter), £126. 5s. 6d.; rent (one quarter), £29. 5s.; on account of grants made at Montreal, £300; balance at Bank of England, Western Branch, £2,214. 11s. 7d.; in hands of Assistant to General Treasurer, £5. 5s. 5d.; total, £2,696. 10s. 6d.

3. The Secretary announced that the following had accepted the nominations to the Presidencies of Sections made at the last meeting of the Council:—

Section B.—Prof. Armstrong.  
Section C.—Prof. Judd.  
Section D.—Prof. M'Intosh.

Section E.—General Walker.  
Section G.—Mr. B. Baker.  
Section H.—Mr. F. Galton.

but that both Prof. J. C. Adams and Prof. Fuller (to whom he had been instructed to write, if needful,) had declined to preside in Section A, and Prof. J. Bryce in Section F. As instructed, he had written to Mr. Giffen,



but had not yet received an answer. It was resolved to nominate Prof. P. G. Tait for Section A. Directions were given to the Secretary, in the event of his declining, or of a vacancy occurring in Section F.

It was resolved to request Prof. M. Foster to give one of the evening discourses at Aberdeen, and directions were given to the Secretary in the event of his declining so to do.

It was resolved that the following gentlemen should be requested to accept office at the Aberdeen Meeting:—

*Section A.*

*Vice-Presidents.*—Prof. C. Niven, Prof. Schuster.

*Secretaries.*—Prof. W. M. Hicks (*Recorder*), Mr. R. T. Glazebrook, Mr. R. E. Baynes.

*Section B.*

*Vice-Presidents.*—Prof. Brazier, Prof. McLeod.

*Secretaries.*—Prof. Bedson (*Recorder*), Mr. H. B. Dixon, Mr. Forster Morley.

*Section C.*

*Vice-Presidents.*—Prof. J. Geikie, Prof. A. Nicholson.

*Secretaries.*—Mr. Topley (*Recorder*), Mr. De Rance, Mr. J. J. H. Teall.

*Section D.*

*Vice-Presidents.*—Prof. B. Balfour, Prof. Struthers.

*Secretaries.*—Mr. Howard Sanders (*Recorder*), Mr. W. Heape, Prof. A. M. Marshall.

*Section E.*

*Vice-Presidents.*—Prof. Donaldson, Dr. Rae.

*Secretaries.*—Mr. E. C. Rye (*Recorder*), Mr. O'Halloran, Mr. Ravenstein.

*Section F.*

*Vice-Presidents.*—Sir Rawson Rawson, Dr. H. Sidgwick.

*Secretaries.*—Prof. Foxwell (*Recorder*), Rev. W. Cunningham, Mr. F. J. Moss.

*Section G.*

*Vice-Presidents.*—Prof. Fleeming Jenkin, Prof. Unwin.

*Secretaries.*—Mr. Atchison (*Recorder*), Mr. E. Rigg, Mr. H. T. Wood.

*Section H.*

*Vice-Presidents.*—Mr. Pengelly, Prof. Turner.

*Secretaries.*—Mr. Bloxam (*Recorder*), Dr. Garson, Mr. W. Hurst.

The list of Secretaries was left incomplete, as the Secretary was not yet in a position to state what help could be obtained in the neighbourhood of the place of meeting.

5. The following list of names of gentlemen, recommended by the



Local Officers at Aberdeen for election as a Local Executive Committee, was read :

William Alexander, Esq.  
 Alexander Baird, Esq., of Urie.  
 Dr. Beveridge.  
 Sheriff W. A. Brown.  
 Dr. Bruce.  
 David Byres, Esq.  
 P. H. Chalmers, Esq.  
 Sir John F. Clark.  
 Dr. Ralph Copeland.  
 John Crombie, Esq.  
 John Crombie, Jun., Esq.  
 The Hon. & Right Rev. Bishop Douglas.  
 Alexander Edmond, Esq.  
 P. Esslemont, Esq.  
 Admiral Farquhar.  
 Col. Farquharson.  
 Dr. Farquharson, M.P.  
 R. O. Farquharson, Esq.  
 Wm. Ferguson, Esq.  
 Lord Forbes.  
 James Murray Garden, Esq.  
 Robert Gerard, Esq.  
 Rev. W. Gordon.  
 Rev. Dr. Gordon.  
 Sir Alexander H. Gordon, M.P.  
 William Henderson, Esq.  
 Dr. James C. Howden.  
 The Marquis of Huntly.  
 Col. Innes.  
 Alexander F. Irvine, Esq.  
 Dr. Patrick Jamieson.  
 George Jamieson, Esq.  
 Rev. Dr. Keith.  
 A. Kilgour, Esq.  
 The Earl of Kintore.

James Lawson, Esq.  
 J. T. Mackenzie, Esq.  
 William A. Mellis, Esq.  
 John Miller, Esq.  
 John Duguid Milne, Esq.  
 Alex. D. Milne, Esq.  
 Rev. J. Mitford Mitchell.  
 William Moffatt, Esq.  
 James Moir, Esq.  
 Professor Charles Niven.  
 Rev. Dr. Ogilvie.  
 Professor Alexander Ogston.  
 A. M. Ogston, Esq.  
 Rev. James Peter.  
 Dr. Profeit.  
 Colonel Ramsay.  
 David Rennet, Esq.  
 Alexander Ross, Esq.  
 H. Scott, Esq.  
 George J. Scott, Esq.  
 Sheriff Scott-Moncrieff.  
 Dr. Simpson.  
 Provost James Skinner.  
 James Smart, Esq.  
 Rev. James Smith.  
 Professor Smith-Shand.  
 James Spence, Esq.  
 David Stewart, Esq.  
 George Thomson, Jun., Esq.  
 Professor J. W. H. Trail.  
 Baillie George Walker.  
 Dr. Webster, M.P.  
 John F. White, Esq.  
 A. Wigglesworth, Esq.  
 A. H. Wilson, Esq.  
 Sheriff Dove Wilson.

It was resolved :

- 'That the gentlemen whose names are included in the list now presented, and who are not already Members of the Association, be now elected Members.
- 'That the gentlemen whose names are included in the list, together with the Vice-Presidents and the Local Officers, be appointed a Local Executive Committee for conducting the arrangements of the Meeting at Aberdeen, with power to add to their number.
- 'That the Local Executive Committee be authorised to admit Members and Associates for 1885.'

6. The question of the Presidency for 1886 was considered.



7. A report from the Secretaries of the McGill Medal Fund was received, which stated that up to the present time a sum of £562. 19s. 6d. had been promised; of which the whole, with the exception of £1. 10s., had been collected. The expenses had amounted thus far to £34. 9s. 4d. The Council resolved that a medal should be offered for competition to the students during the present Academical year, the cost of which should be charged to the capital account, and empowered the officers to take steps to procure a die of appropriate design for the said medal, in accordance with the power granted by the General Committee on November 11, 1884.

8. A report from the Committee on the Exploration of New Guinea was received and adopted, recommending that, in consideration of the comparatively small proportion which the grant made by the Association would bear to the total cost of the expedition, the Council should permit Mr. Forbes to have, at his own disposal, all the specimens which he might collect, on the understanding that they were to be first placed for description in the hands of competent scientific persons.

9. A report from the Committee on the Teaching of Science in Elementary Schools was received, recommending that the Lords of the Committee of Privy Council on Education should be memorialised in favour of instruction in the 'use of tools' being given in connection with Elementary Schools.

10. The consideration of the election of some additional Corresponding Members was postponed.

11. The Secretary stated that he much regretted to inform the Council that alterations in his duties at University College would make such additional demands upon his time that he should be unable to offer himself for re-election at the Aberdeen Meeting.

Resolved—'That the President, the past Presidents, the President-Elect, the General Officers, and the former General Officers be appointed a Committee to consider the steps to be taken in consequence of Professor Bonney's approaching retirement from the office of Secretary.'

12. Letters in acknowledgment of the receipt of the Memorial of the Committee relating to the Native Races of Canada (see Minutes, December 9, 1884, § 10) were laid upon the table.

13. Permission was granted to the Editors of the *Philosophical Magazine* to have, at their own expense, clichés of some wood-blocks illustrating a paper by Prof. O. J. Lodge in the forthcoming volume.

14. An application from Captain Marshall Hall relating to some unclaimed volumes was granted.

15. A report was received from the Corresponding Societies Committee, and, as therein recommended, the President and Officers were empowered to sign a circular to be addressed to the various Local Scientific Societies, calling their attention to the rules passed by the General Committee on November 11, 1884.

The Council then adjourned.



## COUNCIL OF THE BRITISH ASSOCIATION.

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At a Meeting of the Council of the British Association, held at the Office of the Association, 22 Albemarle Street, London, December 9, 1884, at 3.30 P.M.

*Present,*—

LORD RAYLEIGH, President, in the Chair.

PROF. W. G. ADAMS.  
DR. ALLMAN.  
PROF. T. G. BONNEY.  
SIR F. J. BRAMWELL.  
DR. W. B. CARPENTER.  
PROF. DEWAR.  
PROF. FRANKLAND.

FRANCIS GALTON, ESQ.  
G. GRIFFITH, ESQ.  
ADMIRAL SIR E. OMMANNEY.  
DR. W. H. PERKIN.  
SIR LYON PLAYFAIR.  
P. L. SCLATER, ESQ.  
PROF. A. W. WILLIAMSON.

1. The Minutes of the last Meeting were read and confirmed.
2. The General Treasurer's Report was read and received:—Balance brought forward, £985. 14s. 4d.; by transfer of amount deposited in Montreal Bank, £1,537. 9s. 9d.; life compositions and subscriptions, £119; sale of publications, £2. 10s. 6d.; total, £2,644. 14s. 7d. Expenditure: Balance of payment to Mr. Cottrell for services at Montreal, £19. 6s.; on account of grants made at the Montreal meeting, £150; balance at Bank of England, Western Branch, £2,468. 8s. 8d.; in hands of Assistant to General Treasurer, £6. 19s. 11d.; total, £2,644. 14s. 7d.
3. The Secretary read letters from Capt. D. Galton and Mr. Vernon Harcourt, the General Secretaries, stating that they were both, owing to pressing business, compelled to be absent from the meeting of the Council.
4. The Secretary read a letter thanking the Council for the kind manner in which they had signified their appreciation of any services which he might have been able to render in connection with the meeting at Montreal (*see* Minutes Nov. 11, § 13), but begging leave to decline to receive any payment for the same.
5. The appointment of the Committees nominated at the last meeting of the Council to consider the four resolutions referred to the Council by the General Committee (*see* Minutes Nov. 11, § 4, 5, 6, and 7), was in each case confirmed.



6. In accordance with the power conferred for this year only on the Council by the General Committee, at the meeting held at Montreal on September 3, the Council proceeded to appoint the 'Corresponding Societies Committee' (see Minutes August 27, § 3, *Corresponding Societies* (3)). It was resolved to appoint the following: Mr. F. Galton (*Chairman*), Prof. Williamson, Capt. D. Galton, Sir J. D. Hooker, Prof. Flower, Prof. Boyd Dawkins, Sir Rawson Rawson, Dr. Garson, Mr. J. Evans, Mr. J. Hopkinson, Mr. Meldola, Mr. Whitaker, Mr. Symons, and Mr. Fordham (*Secretary*). The Secretary was also instructed that any necessary expenditure on the part of the Committee might be charged to office expenses.

7. It was resolved to elect the following gentlemen Corresponding Members of the Association:

Prof. Wolcott Gibbs.  
Lieut. Greely.  
Prof. C. L. Jackson.  
Prof. D. Kikuchi.

Prof. Simon Newcomb.  
Capt. P. H. Ray.  
Prof. Thurston.

8. The Council were informed that the following gentlemen, appointed by the General Committee, had consented to act as Vice-Presidents of the Association:

The Duke of Richmond and Gordon.  
The Earl of Aberdeen.  
James Matthews, Esq. (*Lord Provost of Aberdeen*).  
Dr. A. Bain (*Rector of the University of Aberdeen*).  
Rev. Dr. Pirie (*Principal of the University of Aberdeen*).  
Sir W. Thomson.  
Professor Flower.

but that the Duke of Argyll had been obliged to decline.

9. It was resolved that the following gentlemen should be requested to accept office as Presidents of Sections at the Aberdeen meeting:

*Section A.*—Prof. J. C. Adams.  
*Section B.*—Prof. Armstrong.  
*Section C.*—Prof. Judd.  
*Section D.*—Prof. M'Intosh.  
*Section E.*—General Walker.  
*Section F.*—Prof. J. Bryce.  
*Section G.*—Mr. B. Baker.  
*Section H.*—Mr. F. Galton.

It was also resolved to request Prof. W. G. Adams to deliver one of the discourses at the above meeting, and Prof. Cossar Ewart to deliver a lecture to the working men.

10. The report of the Committee relating to the native races of Canada (see Minutes Nov. 11, § 5,) was presented, by permission of the Council, and adopted; and it was resolved that the memorial, recommended therein and annexed thereto, be signed by the President and forwarded to the Government of the Dominion of Canada as the memorial of the Council.



11. The Secretary reported with reference to the sale of the stitched-up copies of the addresses of Presidents of Sections at Montreal, that the whole edition of 250 had gone off very quickly, and more could have been sold, but that the cost per copy was nearly 7*d.*, while the selling price was 6*d.*, so that there was a slight loss, which would probably not be diminished materially by printing off an enlarged edition. The Council, however, decided to continue the price, and empowered the Secretary to order on the next occasion a larger number of copies, not exceeding 500.

12. An application from Prof. Balfour Stewart, relating to the expense of printing a statement on the subject of Magnetic Disturbances, for the use of the Committee appointed (without a grant) at the Montreal meeting to consider that subject, was considered, and the Secretary was instructed to make inquiries, and, if the cost were moderate, to order the documents to be printed at the expense of the Association.

13. An application from Mr. Doughty concerning some unclaimed volumes was granted.

The Council then adjourned.

RAYLEIGH.

*Confirmed—February 3, 1885.*



Butcher



BRITISH ASSOCIATION  
FOR  
THE ADVANCEMENT OF SCIENCE.

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22 Albemarle Street, London, W.

February 24, 1885.

There will be a Meeting of the COUNCIL at this Office on  
Tuesday next, March 3, at 3.30 P.M.

*Principal Agenda—*

- (1.) Minutes.
- (2.) Report of the General Treasurer.
- (3.) Aberdeen Meeting: Nomination to Offices of President  
(possibly) for Section F; sundry Vice-Presidencies and  
Secretaries; possibly an Evening Lecturer.
- (4.) Birmingham Meeting: Nomination of the President.
- (5.) Election of Corresponding Members.
- (6.) Circular to Corresponding Members.

And other business.

T. G. BONNEY,  
*Secretary.*



FELLOWS OF THE AMERICAN ASSOCIATION WHO ATTENDED THE  
MONTREAL MEETING.

- Atwater, W. O., Middletown, Conn.  
Baker, Marcus, U. S. Coast and Geodetic Survey, Washington.  
Bickmore, Albert J., New York.  
Blake, Eli W., jun., Providence, Rhode Island.  
Bowditch, H. P., Boston.  
Brewer, Professor W. H., Yale College.  
Brush, George J., Yale College.  
Colvin, Verplanck, Superintendent of New York State Land Survey,  
Albany, New York.  
Carhart, Henry S., North Western University, Illinois.  
Chandler, Charles H., Ripon College, Ripon, Wis.  
Claypole, E. W., B.A., F.G.S., Buchtel College.  
Capen, F. L., Boston.  
Dall, Mrs. Caroline H., Washington.  
Dimmock, George, Cambridge, Mass.  
Eddy, Professor H. T., University of Cincinnati.  
Edmonds, J. Rayner, Harvard College Observatory, Cambridge, Mass.  
Elsberg, Louis, M.D., New York City.  
Fletcher, J., Ottawa.  
Gilbert, G. K., Geological Survey, Washington.  
Green, Traill, M.D., Easton, Pennsylvania.  
Hale, Horatio, Clinton, Ontario.  
Hill, G. W., Washington.  
Hitchcock, C. H., New Hampshire.  
Hunt, George, Providence, Rhode Island.  
Jenkins, G. Hilton, New York.  
Jewell, Theo. F., Torpedo Station, Newport, Rhode Island.  
Lewis, Professor H. Carvill, Acad. Nat. Sciences, Philadelphia.  
Lintner, J. A., New York State Museum.  
Lull, Captain Edward P., U. S. Navy.  
Lupton, N. T., Vanderbilt University, Nashville.  
Mabery, C. F., Cleveland, Ohio.  
Mendenhall, T. C., Ohio State University.  
Merriman, C. C., Rochester, New York.  
Michelson, Albert A., Cleveland, Ohio.  
Minot, Charles Sedgwick, Boston, Mass.  
Moore, J. W., M.D., Easton, Pennsylvania.  
Morley, Edward W., Cleveland, Ohio.



Munroe, Professor Charles E., U. S. N. A., Annapolis.  
Newberry, J. S., Columbia College, New York.  
Nipher, Francis E., St. Louis.  
Perkins, G. H., University of Vermont.  
Phillips, A. W., Yale College, New Haven.  
Powell, J. W., Director U. S. Geological Survey, Washington.  
Putnam, F. W., Cambridge, Mass.  
Ranch, John H., Chicago.  
Rogers, W. A., Harvard College Observatory, Cambridge, Mass.  
Roosevelt, Clinton, New York.  
Sampson, W. T., U. S. N., Washington.  
Saunders, William, President of Entomological Society, Ontario.  
Scudder, Samuel H., Cambridge, Mass.  
Smiley, Charles W., U. S. Fish Commission, Washington.  
Smith, Mrs. Erminie A., Jersey City.  
Smith, Francis H., University of Virginia.  
Spencer, J. W., Missouri.  
Stallo, J. B., Cincinnati.  
Stephens, W. Hudson, Lowville, New York.  
Stockwell, John N., Cleveland, Ohio.  
Thurston, Robert H., Stevens Institute of Technology, Hoboken.  
Van der Weyde, Dr. P. H., President of New York Electric Society.  
Ward, R. H., M.D., Polytechnic Institute, Troy, New York.  
Warner, James D., Brooklyn, New York.  
Wead, Charles K., University of Michigan.  
Webb, Professor J. Burkitt, Cornell University, Ithaca.  
Webster, N. B., Principal of Webster Institute, Norfolk, Virginia.  
Wheeler, C. Gilbert, Chicago.  
Winchill, N. H., Minneapolis.  
Würtell, Louis C., Acton Vale, Quebec.  
Wylie, T. A., Indiana University.



# Ladies' Educational Association of Montreal.

PATRONESS:

HER ROYAL HIGHNESS THE PRINCESS LOUISE.

LECTURE ROOM, SYNOD HALL.

FOURTEENTH SESSION, 1884-85.

THE Programme of Lectures for the Session 1884-5 will not present any very novel or striking features, but the President and Committee hope that in the subjects to be studied there may be attraction for a large number of earnest students.

The lectures on "Zoology," unavoidably postponed last year, will be continued and completed, and the "British Essayists" will follow with advantage the former part of the series on English Literature. The lectures on Logic will take up the science in its relation to other sciences, and treat of Fallacies, omitted or briefly considered in former courses. And, as a practical course, the lectures of Dr. Roddick will, without doubt, meet with general favour.

The establishment of an Associate Membership has been, and it is hoped will continue to prove, a substantial help to the Committee, which takes this opportunity of thanking those ladies and gentlemen who have so cordially added their names to the list.



The INAUGURAL LECTURE of the Session, free to Ladies and Gentlemen, will be delivered in the Synod Hall on Monday, the 29th September, 1884, at 4 P.M.

**A Course of Ten Lectures on "Special Subjects in Applied Logic.**

BY THE REV. PRINCIPAL MACVICAR, D.D., LL.D.

*The Introductory Lecture will be delivered on Thursday, October 2d, at 4 P.M., and the Class will meet every Thursday at the same hour.*

The Course will embrace such Elements of Pure Logic as prepare the way for subsequent discussion.

Subjects will be selected and treated with strict regard to their educational value. The following are mentioned, viz. :—

The relation of Applied Logic to other sciences. Distinction between Physical, Mental and Moral Laws. Induction—Its nature and methods. Deduction and Analogy. Generalization and Probable Evidence. Credibility and Incredibility. Fallacies—Logical and Non-logical, &c.

BOOKS OF REFERENCE :—*Elements of Deductive Logic*, by Thomas Fowler, M.A. ; Jevon's *Lessons in Logic* ; Mill's *Logic*.

**A Course of Ten Lectures on English Literature—"The British Essayists,"**

BY PROF. CHAS. E. MOYSE, B.A.

*The Introductory Lecture will be delivered on Monday, October 6th, at 4 P.M. and the Class will meet every Monday at the same hour.*

OUTLINE OF THE COURSE :

The rise of the Essay and the meaning of the word. The history of the various classes of essays (serial and non-serial)—Moral, Descriptive, Philosophical, Scientific and Literary—during the following periods :—

1. The Elizabethan-Stuart Period.
2. The Augustan Period.
3. The French Revolution Period.
4. The Present Century.

The following are among typical writers of the four periods :

1. Bacon, John Earle, Cowley.
2. Steele and Addison, Shaftesbury, Johnson, Chesterfield.
3. Hume, Godwin, Burke.
4. Edinburgh and Quarterly Reviewers—Carlyle, Arnold.

[John Earle's *Microcosmographie* forms one of Prof. Arber's Reprints. Price, 1s.]



### **A Course of Ten Lectures on "Household and Personal Hygiene."**

BY PROFESSOR T. G. RODDICK, M.D.

*The Introductory Lecture will be delivered on Monday, January 12th, at 4 P.M., and the Class will meet every Monday at the same hour.*

#### **OUTLINE OF THE COURSE:**

The graver emergencies and how to treat them.

The main points to be observed in nursing the sick.

### **A Course of Ten Lectures on Zoology—"Vertebrate Animals."**

BY PRINCIPAL DAWSON, LL.D.

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Owing to the absence of Dr. Dawson in Europe, the outline of this course is unavoidably delayed, and will be published on his return.

The Introductory Lecture of each Course is free to ladies.

The Students who have attended each Course will be afforded an opportunity of submitting themselves for examination on the subjects of the Lectures, and to those who pass such examination satisfactorily certificates to that effect will be given.

A special certificate will be granted to ladies who have attended a three years' Course of the Lectures and passed all the examinations of the Association.

The "*Hannah Willard Lyman Memorial Fund*" will provide two equal prizes in books, properly inscribed, to the regular students who shall take the highest marks in the first class in the written examinations in one of the subjects at the end of the Session, under the following conditions:

1. Competitors will be required to have passed creditably in all the subjects of the Session.
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#### **LIBRARY.**

The special text-books required for the work of the Session, as well as books of reference, are contained in the Library of the Association at Mrs. Hill's, Phillips' Square. To this any member or student has access by the annual payment of 50c. for the Session, or 25c for the half Session. The Library is open daily from 10 a.m. to 6 p.m., and the books can be taken home under certain regulations.



### SCALE OF FEES.

Every subscriber of \$3 for the calendar year is an Associate Member of the Association, and has a right to vote in the election of officers and committee at the annual meeting.

Every subscriber of \$8 or \$12 for the whole session is a Member of the Association, and has a right to vote in the election of officers and committee at the annual meeting.

Any lady who is already an Associate Member may become a full Member of the Association by paying the difference in the fees.

A member subscribing \$8 is entitled to one ticket for the whole Session.

A member subscribing \$12 is entitled to two tickets for the whole Session (of which one may be a visitor's ticket.)

A member's tickets are for use in the family, or to be given to some student

One ticket for one Course of Ten Lectures, \$4.

Two tickets for one Course, or one ticket for two Courses, \$6.

A ticket for the whole Session may be exchanged for four tickets (each to admit to any single course) on the payment of three dollars additional.

Every ticket (with the exception of the Visitor's) shall bear the name of the lady who is admitted by it, *and shall not be used by any other.*

Every ticket (with the exception of the Visitor's) shall entitle the lady who is admitted by it to enter for Examination.

Ladies engaged in, or preparing for, the profession of Teaching, or in any way connected with the work of Education, may obtain a reduction of the above fees upon application to the Secretaries.

The Officers of the Association will be glad to give any information which may be desired by those who purpose entering the Classes.

Communications should be addressed to

MRS. MERCER, *Hon. Secretary.*

9, Prince of Wales Terrace ;

Or to

MISS HELEN GAIRDNER, *Assistant Secretary.*

15, St. Edward Street,

Of whom Tickets may be had.

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One ticket for one Course of Ten Lectures, \$4.

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Ladies engaged in, or preparing for, the profession of Teaching, or in any way connected with the work of Education, may obtain a reduction of the above fees upon application to the Secretaries.

The Officers of the Association will be glad to give any information which may be desired by those who purpose entering the Classes.

Communications should be addressed to

MRS. MERCER, *Hon: Secretary.*

9, Prince of Wales Terrace ;

Or to

MISS HELEN GAIRDNER, *Assistant Secretary.*

15, St. Edward Street,

Of whom Tickets may be had.

|                   |      |
|-------------------|------|
| MCGILL UNIVERSITY |      |
| ARCHIVES          |      |
| ACC. NO.          | 1763 |
| REF.              | 986  |







The **INAUGURAL LECTURE** of the Session, free to Ladies and Gentlemen, will be delivered in the Synod Hall on Monday, the 29th September, 1884, at 4 P.M.

**A Course of Ten Lectures on "Special Subjects in Applied Logic.**

BY THE REV. PRINCIPAL MACVICAR, D.D., LL.D.

*The Introductory Lecture will be delivered on Thursday, October 2d, at 4 P.M., and the Class will meet every Thursday at the same hour.*

The Course will embrace such Elements of Pure Logic as prepare the way for subsequent discussion.

Subjects will be selected and treated with strict regard to their educational value. The following are mentioned, viz. :—

The relation of Applied Logic to other sciences. Distinction between Physical, Mental and Moral Laws. Induction—Its nature and methods. Deduction and Analogy. Generalization and Probable Evidence. Credibility and Incredibility. Fallacies—Logical and Non-logical, &c.

BOOKS OF REFERENCE :—*Elements of Deductive Logic*, by Thomas Fowler, M.A. ; Jevon's *Lessons in Logic* ; Mill's *Logic*.

**A Course of Ten Lectures on English Literature—"The British Essayists,"**

BY PROF. CHAS. E. MOYSE, B.A.

*The Introductory Lecture will be delivered on Monday, October 6th, at 4 P.M. and the Class will meet every Monday at the same hour.*

OUTLINE OF THE COURSE :

The rise of the Essay and the meaning of the word. The history of the various classes of essays (serial and non-serial)—Moral, Descriptive, Philosophical, Scientific and Literary—during the following periods :—

1. The Elizabethan-Stuart Period.
2. The Augustan Period.
3. The French Revolution Period.
4. The Present Century.

The following are among typical writers of the four periods :

1. Bacon, John Earle, Cowley.
2. Steele and Addison, Shaftesbury, Johnson, Chesterfield.
3. Hume, Godwin, Burke.
4. Edinburgh and Quarterly Reviewers—Carlyle, Arnold.

[John Earle's *Microcosmographie* forms one of Prof. Arber's Reprints. Price, 1s.]



### **A Course of Ten Lectures on "Household and Personal Hygiene."**

BY PROFESSOR T. G. RODDICK, M.D.

*The Introductory Lecture will be delivered on Monday, January 12th, at 4 P.M., and the Class will meet every Monday at the same hour.*

#### **OUTLINE OF THE COURSE:**

The graver emergencies and how to treat them.

The main points to be observed in nursing the sick.

### **A Course of Ten Lectures on Zoology—"Vertebrate Animals."**

BY PRINCIPAL DAWSON, LL.D.

*The Introductory Lecture will be delivered in the PETER REDPATH MUSEUM on Thursday, January 15th, at 4 P.M., and the Class will meet every Thursday at the same hour.*

Owing to the absence of Dr. Dawson in Europe, the outline of this course is unavoidably delayed, and will be published on his return.

The Introductory Lecture of each Course is free to ladies.

The Students who have attended each Course will be afforded an opportunity of submitting themselves for examination on the subjects of the Lectures, and to those who pass such examination satisfactorily certificates to that effect will be given.

A special certificate will be granted to ladies who have attended a three years' Course of the Lectures and passed all the examinations of the Association.

The "*Hannah Willard Lyman Memorial Fund*" will provide two equal prizes in books, properly inscribed, to the regular students who shall take the highest marks in the first class in the written examinations in one of the subjects at the end of the Session, under the following conditions:

1. Competitors will be required to have passed creditably in all the subjects of the Session.
2. No Student can receive a prize more than once in any one subject.
3. In no case shall more than two prizes be awarded to the same Student.

#### **LIBRARY.**

The special text-books required for the work of the Session, as well as books of reference, are contained in the Library of the Association at Mrs. Hill's, Phillips' Square. To this any member or student has access by the annual payment of 50c. for the Session, or 25c. for the half Session. The Library is open daily from 10 a.m. to 6 p.m., and the books can be taken home under certain regulations.



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15, St. Edward Street,

Of whom Tickets may be had.

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| MCGILL UNIVERSITY<br>ARCHIVES |      |
| ACC. NO.                      | 1463 |
| REF.                          | 98a  |



Private

To be connected  
with

## THE HIGHER EDUCATION OF WOMEN.

THE Universities of McGill and of Bishops' College have jointly offered to young women who have passed the examinations for Associate in Arts the farther examination for *Senior Associate in Arts* (approximately equivalent to the University "Intermediate" examination); but the Universities have hitherto provided no means of instruction to fit candidates for these examinations, in consequence of which very few have been able to avail themselves of the advantages offered.

There are at present a number of young women who have passed as Associates in Arts, some of them with great distinction, and who desire to proceed further with their education; of these eight have applied to Principal Dawson for advice and assistance with reference to the prosecution of their studies and it is believed that there are others ready to join them.

As it is very desirable that so large a class, and the first that has yet offered, should be at once provided for, and that the higher examinations offered by the Universities should thereby be rendered effectual for the purposes intended, inquiry has been made as to the possibility of providing instructions under the auspices of the Ladies' Educational Association, should it be willing to undertake the work, and subject to the regulations of the Universities, at present in force.

It has been ascertained that gentlemen connected with McGill and Bishops' Colleges are willing to conduct the class in the work of the first year, and it is hoped that before the end of the second year the Universities or one of them may have made arrangements to continue the studies of those who may desire to go on to the final examinations.

It is estimated that a sum of from \$1000 to \$2,000 per annum and the fees of the students will suffice for the necessary expenses of the class and the object of the present statement is to ascertain if there are friends of education sufficiently interested in this matter to furnish the necessary amount.

It is thought to be expedient that the classes proposed should be under the direction of the Ladies' Association, both on account of its successful prosecution of similar work for thirteen years, and because the success of this method has been proved by the experience of the Universities of Great Britain.

Subscriptions or endowments may either be placed at the disposal of the Ladies' Educational Association or may be entrusted to either of the Universities to be expended through the Association for the higher education of women in accordance with the regulations of the Universities.

Communications may be addressed to DR. DAWSON Principal of McGill University, or to REV. CANON NORMAN Vice-Chancellor of the University of Bishops' College.

August, 1884.

|                   |      |
|-------------------|------|
| MCGILL UNIVERSITY |      |
| ARCHIVES          |      |
| ACC. NO.          | 1463 |
| REF.              | 97   |



hay was very poor, one load being sold as low as \$5.50. Straw was also in large supply, and prices were in favour of buyers, sales of nice clear and long oat straw occurring at \$4.50 per 100 bundles, and for a load of poor short stuff \$3.50 was accepted. We quote \$3.50 to \$5.50 as to quality. Farmers from the south side of the river stay to-day that they could sell their prime hay in the country to shippers for more money than can be realized on this market. Pressed hay is in limited demand and sells at \$9.50@11.50 per ton as to quality and at 55c@70c per 100 lbs. Pressed hay is quoted at 35c@45c per 100 lbs.

**LIVERPOOL PRODUCE MARKET.**

|                  | January 11. |        | January 10. |        |
|------------------|-------------|--------|-------------|--------|
|                  | s. d.       | s. d.  | s. d.       | s. d.  |
| Flour            | 10 0        | @ 11 6 | 10 0        | @ 11 6 |
| Spring wheat     | 8 0         | @ 8 6  | 8 0         | @ 8 6  |
| Red winter       | 8 4         | @ 9 0  | 8 4         | @ 9 0  |
| No. 2 California | 8 3         | @ 8 6  | 8 3         | @ 8 6  |
| No. 1            | 8 7         | @ 9 0  | 8 7         | @ 9 0  |
| Corn, new        | 5 3         | @ 0 0  | 5 3         | @ 0 0  |
| do. old          | 5 7         | @ 0 0  | 5 5         | @ 0 0  |
| Barley           | 5 6         | @ 0 0  | 5 6         | @ 0 0  |
| Oats             | 5 5         | @ 0 0  | 5 5         | @ 0 0  |
| Pease            | 6 8         | @ 0 0  | 6 8         | @ 0 0  |
| Pork             | 68          | @ 0 0  | 67          | @ 0 0  |
| Lard             | 45          | @ 0 0  | 45          | @ 0 0  |
| Bacon            | 41          | @ 42   | 40          | @ 41   |
| Tallow           | 41          | @ 0 0  | 41          | @ 0 0  |
| Cheese           | 66          | @ 0 0  | 66          | @ 0 0  |

**MOVEMENTS OF GRAIN AND PRODUCE**

|                   | Receipts. | Exports.  |
|-------------------|-----------|-----------|
| New York—Jan. 11. |           |           |
| Flour, brls.      | 795       | 19,173    |
| Wheat, bush.      | 7,000     | 122,574   |
| Corn, bush.       | 16,000    | 3,603     |
| Oats, bush.       | 2,000     | 416       |
| Rye, bush.        | 4,000     | .....     |
| Barley, bush.     | 2,000     | .....     |
| Pork, brls.       | 93        | 418       |
| Lard, lbs.        | 321,280   | 438,128   |
| Whiskey           | 344       | .....     |
| Bacon, lbs.       | .....     | 1,145,000 |
| Chicago—          |           |           |
| Pork, brls.       | 300       | 1,496     |
| Lard, lbs.        | 180,850   | 806,138   |
| Cutmeats, lbs.    | 536,559   | 1,957,942 |
| Milwaukee—        |           |           |
| Flour, brls.      | 8,675     | 9,810     |
| Wheat, bush.      | 35,000    | 11,000    |
| Corn, bush.       | 3,000     | .....     |
| Oats, bush.       | 2,000     | 1,000     |
| Rye, bush.        | 2,000     | 1,000     |
| Barley, bush.     | 18,000    | 12,000    |
| Toledo—           |           |           |
| Wheat, bush.      | 33,000    | 75,000    |
| Corn, bush.       | 12,000    | 33,000    |
| Oats, bush.       | .....     | 1,000     |

**LATEST TELEGRAPHIC MARKETS.**

**TORONTO, January 11.**  
Market inactive. Flour unchanged. Wheat quiet but steady. Oats rather firmer, but no sales reported. Barley wanted and firmer with buyers at quotations. Peas as before. Hogs scarce and firm at \$7@7.50. Quotations are:—Wheat—Fall, No. 2, \$1.07@1.08; No. 3, \$1.05 spring No. 1, \$1.11; No. 2, \$1.08 @ 1.09. Barley—No. 1, 71c; No. 2, 66c; No. 3 extra, 62c; No. 3, 51c@55c. Pease—No. 1, 76c; No. 2, 75c. Oats—No. 1, 31c@32c. Flour—Superior, \$5.00 @ \$5.10; extra, \$4.80@ \$4.85. Butter, 12c@18c.

**NEW YORK, January 11.**

Cotton—Steady and unchanged. Flour—Receipts 7,000 barrels; weak; sales, 11,000 barrels; No. 2 \$2.00 @ \$2.90; superfine, \$2.80 @ \$3.40; common \$3.25@3.85; good \$3.90@6.50; Western extra, \$6.25@6.50; extra Ohio, \$3.30@6.25; St. Louis, \$3.30@6.25; Minnesota extra, \$5.75@6.75; double extra, \$6.80@7.00. Rye flour firm at \$3.30@3.35. Cornmeal, steady at \$3 @ \$3.35. Wheat—Receipts, 7,000 bushels; weak; sales, 122,574 bush futures and 8,184,000 bush spot; exports, 154,000 bus; No. 2 spring, \$1.06; No. 2 red \$1.12½@1.13½; No. 2 red and white state, \$1.17½; No. 2 red January, \$1.06½@1.08½. Rye dull and weak. Corn—Receipts, 16,000 bushels; irregular; exports, 33,000 bushels futures and 1,248,000 bushels spot; sales, 21,000 bushels No. 2 at 66c. Oats—Receipts, 2,000 bushels; weak; sales, 690,000 bush futures and 59,000 bushels spot; mixed, 39½c@41c; white do, 43½c@44c; No. 2 January, 40½c@40¾c. Hay firm and unchanged. Hops firm. Coffee firm; Rio, 12½c @ 12¾c. Sugar steady; standard A, 7-16c @ 7½c, cut crushed, 8½c@8¾c. Molasses steady at 4¾c@7¾c. Petroleum, 9½c. Tallow unchanged. Pork dull and quiet. Cattle, Cuddles dull, @ 9.22½. Hides, 1.10c.

**IMPORTS.**

**GRAND TRUNK WEST.**  
Federal Bank 2 do; B W Raphael 125 barrels flour; A L Hurtubise 900 bushels oats; G McBean 800 do; D Robertson & Co 125 brls flour.  
**GRAND TRUNK EAST.**  
Verrett, S & Co 70 brls fish; Can Sugar Ref Co 1017 bags sugar; St. Lawrence Sug Ref Co 560 do do.

**New Advertisements.**

**SEASONABLE FURS**

**Great Reduction!**

We are now offering the following goods at greatly reduced prices.

- Raccoon Coats,
- Plucked Beaver Coats,
- Persian Lamb Coats,
- Cloth Coats,
- Fur Lined and Trimmed.

Parties requiring a good Fur Coat, would do well to call and secure a bargain.

**JOHN HENDERSON & CO.**

283 Notre Dame Street Centre.

**FOREIGN LIQUEURS**

- Kava de Vichy,
- Kirsch,
- Creme de Cacao Chouva,
- Creme de Noyeau, Red and White,
- Benedictine,
- Green Chartreuse,
- Yellow Chartreuse,
- Red Curacao,
- White Curacao,
- Anisette,
- Maraschino,
- Cherry Brandy,
- Kummel,
- Creme de Menthe,
- Creme de Moka,
- Creme de Vanilla,
- Creme de Casis,
- Absinth Swiss,
- Vermouth Bitters,
- Angostura Do,
- Orange Do,
- Ginger Brandy.

**A. McGibbon & Co.**

*Handwritten signature and date: 1881*

**Notices.**

**NOTICE.**

**MR. WILLIAM SIMONS KERRY**

Is now a member of our firm.  
**KERRY, WATSON & CO.**  
Montreal, 4th January 1884. 5

**City and District Savings Bank**

**NOTICE.**

Depositors in this Bank and the public are requested to take notice that the Head Office and Branches will be closed on

**MONDAY, the 31st inst.,**

for the closing of interest accounts.  
By order of the Board.

**HENRY BARBEAU,**  
Manager.

**The Royal Canadian Insurance Co**

will apply to Parliament, at its approaching Session, for power to allow the Shareholders, at any meeting called for that purpose, to reduce the number of Directors to not less than five.

**ARTHUR GAGNON,**  
Secretary.

Montreal, 14th December, 1883.

**NOTICE.**

**The Atlantic & Northwest Railway Co.**

will apply to the Dominion Parliament, at its next Session, for the passage of an Act confirming the sale of a portion of its Line of Railway to the Ontario and Quebec Railway Company, and granting to the Company all powers and authority requisite to give effect to the conditions of the said sale.

By order of the Board.  
**HARRY CUTT,**  
Secretary.

Montreal, 29th Nov., 1883.

**The Canadian Pacific Railway Co.**

**NOTICE** is hereby given that the Canadian Pacific Railway Company will make application to the Parliament of Canada, at its next Session, for an Act confirming the sale to the Ontario and Quebec Railway Company of that part of the Canadian Pacific Railway lying between the Towns of Perth and Smith's Falls, in the Province of Ontario; also, the lease by the Ontario and Quebec Railway Company to the Canadian Pacific Railway Company, of its consolidated line, with its leased lines and appurtenances; granting the powers required to give effect to all the provisions of the said lease; and authorizing the Company to make provision for the construction, or acquisition by purchase, lease or otherwise of branch lines of railway, with power to issue or guarantee securities thereon.

By order of the Board.  
**CHARLES DRINKWATER,**  
Secretary.

Montreal, 30th November, 1883. 238

**NOTICE IS HEREBY GIVEN THAT** application will be made at the next meeting of the Legislature of the Province of Quebec, to ratify and confirm certain resolutions of the Shareholders of the Montreal Cotton Company, authorizing the issue of Bonds to the extent of three hundred thousand dollars, and to declare the said Bonds and every necessary mortgage in all respects legal, to authorize the said Company, upon the consent of its Shareholders and if found necessary, to issue the balance of its stock remaining unissued, as preference stock, and for other purposes.

Montreal, 15th November, 1883.  
**DAVIDSON CROSS & CROSS,**  
Solicitors for Applicants.

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**GOVERNMENT NOTICE.**

**SEALED TENDERS**

Will be received at the office of the Colonial Secretary, St. John's, Newfoundland, until Noon on

Tuesday, the 12th day of February, 1884,

FOR

**THREE SUITABLE STEAMERS,**

Wood or Composite built, fitted to contend with ice, for the Postal Service, North, South, and West of St. John's, and to be employed in any other Public Service that the Governor in Council may from time to time direct.

The Service to begin about the 10th May, 1885.

Two of such Steamers to be of the burthen of Six Hundred Tons each, Gross Measurement, and to be required to give a speed of Twelve Knots an hour. Draft of Water not to exceed Fifteen feet when loaded. Each steamer to be provided with suitable accommodation for not less than Seventy Cabin and Ninety Steerage Passengers.

The third Steamer to be of the burthen of Four Hundred Tons, Gross Measurement, and to give a speed of Twelve Knots an hour. Draft of Water not to exceed Thirteen Feet when loaded; to be provided with suitable accommodation for Thirty Cabin and Forty Steerage Passengers.

Accommodation in all cases to be subject to approval of the Government.

Freight and Passage Money to belong to the Owners of the Steamers, rates being subject to the approval of the Government.

One of the larger Steamers to run North every fortnight, from about the 10th May to the 15th January in each year. The other larger Steamer and the smaller one to run alternately every fortnight throughout the year, South and West as far as practicable, and during the Summer months to a Port or Ports in the Straits of Belle Isle.

The Contract to be for a term of Twelve Years, to be computed from the time of commencement of the Service.

Tenders to specify the rate per Round Trip at which each Steamer will be performed.

Further particulars made known on application at this office.

The Government does not bind itself to accept the lowest or any Tender.

**Alternate Tenders**

will also be received until noon on the

**12 day of FEBRUARY, 1884,**

FOR

**3 Suitable Steamers**

Wood or Composite built, for the same Public Service above described, and to be as follows:—

One Steamer of Six Hundred Tons burthen, Gross Measurement, required to give a speed of Twelve Knots an hour, and to provide accommodation for 70 Cabin and 90 Steerage Passengers, her draft of water not to exceed Fifteen Feet when loaded.

The two other Steamers to be of 500 Tons burthen, each, Gross Measurement; Draft of Water not exceeding thirteen feet when loaded; required to give a speed of Ten Knots an hour, and to provide accommodation for 40 Cabin and 50 Steerage Passengers.

Contract to be for a term of Ten Years from commencement of Service.

The Routes, periods of Service, and all other Stipulations and Conditions not here specified, to be the same as set forth in the preceding advertisement.

**E. D. SHEA,**  
Colonial Secretary.

SECRETARY'S OFFICE, }  
12th November, 1883. }

3



THE BRITISH ASSOCIATION.

Meeting of the Citizens' Committee yesterday afternoon—Report of the committee on organization.

A meeting of the Citizens' Committee in connection with the meeting of the British Association for the advancement of science was held in the Mechanics' Hall yesterday afternoon. Mr. Thomas White, M. P., presided...

The CHAIRMAN said that at the last meeting a committee on organization had been appointed, to which had been entrusted the striking of sub-committees, and perfecting the organization in every way. After that meeting a request was received from the British Association that 25 or 30 names should be supplied to form an executive committee of the association.

The sub-committee named on October 10th last to recommend a completion of the organization for arrangements in connection with the meeting of the British Association for the Advancement of Science to be held in this city in August next, begs to submit the following report.

It being found necessary to at once name a local executive committee to represent the British Association here, this committee was formed and the names forwarded to the office of the Association in London, as follows, viz.:

- Thomas Cramp, Chairman. Hugh McLennan, F. Wolferstan Thomas, J. J. McLaren, M.A., Q.C., Alex. Johnson, LL.D., J. H. R. Molson, Thos. Workman, Henry Lyman, W. Osler, M. D., Hon. Sir F. Hincks, Prof. H. T. Bovey, M. A., M. L. M. E., Thos. White, M. P., R. A. Ramsay, M. A., B. C. L., E. P. Hannaford, C. E., Hon. L. O. Tallon, A. Desjardins, M. P., R. P. Howard, M. D., George Stephen.

By the rules of the British Association the vice-presidents of the Association are ex-officio members of this Executive Committee. For the proper and efficient carrying on of the work of the Citizens' Committee it was considered desirable that seven special committees should be formed, as follows, viz.:

- FINANCE. F. W. Thomas, Chairman. J. S. Shearer, Secretary. M. H. Gault, Aid. Grenier, A. D. Drummond, J. H. R. Molson, C. F. Smithers, James O'Brien, A. A. Trotter, Hugh McKay, D. Morrice, Hon. A. W. Ogilvie, G. B. Burland, Hon. D. A. Smith, E. K. Greene, J. A. U. Beaudry, Prof. C. H. McLeod, J. M. M. Duff.

- RECEPTION. Dr. T. Sterry Hunt, Chairman. J. S. McLennan, Secretary. Dr. Hingston, Dr. G. W. Stephens, M.P.P., Hon. P. J. O. Chauveau, M. H. Gault, M.P., Prof. H. T. Bovey, Dr. Osler, S. E. Dawson, Hon. Judge Ramsay, Hon. J. L. Beaudry, Hon. Judge Doherty, H. Beaugrand, Col. Oswald, A. A. Stevenson, F. C. Henshaw, G. Couture.

- CONVEYANCE AND LODGING. Dr. Hingston, Chairman. Prof. Bovey and D. A. Watt, Secretaries. Dr. T. Sterry Hunt, D. T. Irish, J. S. Shearer, T. Cramp, C. Garth, John Cassils, H. Hogan, A. Bustin, H. Sugden Evans.

- PRIVATE HOSPITALITY. Hugh McLennan, Chairman. Secretaries, F. Redpath and S. Rivard. Dr. Dawson, C.M.G., Hon. J. R. Thibaudeau, Henry Lyman, R. Moat, Dr. Hingston, Geo. Stephen, J. Hodgson, A. Allan, Alex. McGibbon, R. A. Smith, Dr. Howard, J. R. Dougall, Geo. Hague, Geo. Iles, W. C. McDonald, Hon. John Hamilton, Wm. Cassils, O. S. Wood, Rev. Prof. Murray, Hon. D. A. Smith, J. Hickson, C. F. Sise, Dr. Craik, S. E. Dawson.

- HOTELS AND LODGINGS. Chas. Garth, Chairman. Hon. L. Beaubien and W. R. Salter, Secretaries. Jas. Shearer, J. B. Rolland, A. A. Stevenson, Prof. C. H. McLeod, S. Rivard, G. B. Burland, E. K. Greene.

- ROOMS AND PLACES OF MEETING. Dr. Alex. Johnson, Chairman. Dr. McDonnell, Secretary. D. Harrington, Prof. Chandler, D. A. Watt, J. S. McLaren, Prof. C. H. McLeod.

- PROGRAMME AND LEADING. Chairman, A. Desjardins, M.P. Secretaries, J. J. McLaren and J. A. U. Beaudry. S. E. Dawson, P. B. Migneault, W. R. Salter, Edw. Murphy, W. R. Salter, R. White, Dr. Proudfoot, Jos. Tasse, M.P.

The various special committees will take charge of the work relating thereto, keeping

minutes of their proceedings, and making written reports from time to time to the Executive Committee, which committee will consist of the chairmen and secretaries of the various special committees, together with the chairmen, secretaries and treasurer, of the General Citizens' Committee, and the Chairman and Secretary of the Local Executive Committee of the British Association.

It is recommended that the various special committees shall have power to add to their numbers; and also that the Executive Committee may have power to name such other special committees as may be found necessary.

Each special committee will prepare an estimate of the amount required to carry on its work, which estimate will be laid before the Executive Committee, but no expenditure will be made by any special committee beyond the sum of \$50.00 without the approval of the Executive Committee, and no expenditure shall be made by any special committee till the same is sanctioned by the Executive Committee.

Chairman, treasurer and secretaries of general committee are ex-officio members of all special committees.

Each committee to cast but one vote in the Executive Committee.

Executive Committee to have power to secure co-operation of committees in other cities and towns where considered necessary.

The members of the Executive Committee will be as follows, viz.:

- F. W. Thomas, Hugh McLennan, J. S. Shearer, Frank Redpath, Dr. T. Sterry Hunt, G. Rivard, J. S. McLennan, Chas. Garth, Dr. Hingston, Hon. L. Beaubien, Prof. H. T. Bovey, W. R. Salter, D. A. Watt, Dr. Alex. Johnson, A. Desjardins, M.P., T. White, M.P., J. J. McLaren, B. J. Harrington, S. C. Stevenson, Ph.D., Thomas Cramp, Dr. McDonnell.

The CHAIRMAN moved the adoption of the report which was carried unanimously.

Mr. F. WOLFERSTAN THOMAS moved, seconded by Mr. J. A. U. BEAUDRY, that Mr. E. J. Barbeau be elected Treasurer of the Citizens Committee. Carried.

In answer to a question, the CHAIRMAN replied that the subscription for associates of the association was \$5, for members \$10 and for life members \$50, and expressed the hope that a large number of our citizens would become life members, as it would entitle them to receive the printed reports of the association during their life time.

Mr. D. A. P. WATT moved that a deputation, consisting of the members of the House of Commons and Senate who were members of the Citizens' Committee, be appointed to wait upon Sir John Macdonald, with a view to increase the subscription of \$20,000 towards the transportation expenses of the meeting of the British Association. Carried.

Mr. WATT said that a small committee had been appointed by the City Council in connection with the meeting of the association, and suggested that the chairman and secretary should communicate with this small committee.

The CHAIRMAN said he had good reason to believe that the Finance Committee of the City Council would give them a liberal grant of money towards the expense of receiving and entertaining the members of the British Association, and in that case the members of the small committee which had been appointed might be made members of the Executive Committee. This suggestion was agreed to.

Hon. JAMES FERRIER said that he had received a letter from Dr. Dawson with reference to members of the association who wished to leave England before the larger body, in order that they might go west or elsewhere and see the country before the meeting of the association, and asked what arrangements had been arrived at with regard to this matter. So far as the Grand Trunk Railway was concerned, they would be quite willing to accommodate any members who wished to go over their road before the meeting of the association.

Dr. HINGSTON, as chairman of the conveyance and excursion committee, said that though the large excursion was not possible after the meeting, the privilege would be given to those who wished to go over the road before the meeting.

They had arranged to give the members of the association free passes over their roads, and the arrangements had not yet been completed with other roads, but all the railway officials upon whom they had waited had received them in the most liberal spirit.

A letter was read from Professor Bonney, secretary of the British Association, stating that at least 500 members from England would attend the meeting in Montreal.

Dr. JOHNSON moved that a sub-committee, consisting of Messrs. H. McLennan, W. J. Patterson, and G. Hague, with power to add to their number, be appointed to induce competent writers to prepare for the meeting of the British Association, statistical papers on the following topics:—Agriculture, Education (primary, scientific, and technical), Fiscal Policy and Foreign Trade, Fisheries, Immigration and Population, Pauperism, Tariff, Forests, Mines, &c.

He said that these papers were intended for Section F, and that it was desirable that abstracts of the papers should be delivered in London by June next.

The motion was carried.

Dr. JOHNSON suggested the appointment of a committee to enquire into and report whether in connection with the section of anthropology it was desirable and practicable to make a loan collection classifying scientifically all objects tending to throw light on the bodily structure, habits and customs, history, origin, &c., of the aboriginal races of America, said collection to be exhibited at the section in August next.

The matter was referred to the Executive Committee of the Association.

After some further conversation the meeting adjourned.

CITY HALL MATTERS.

Meetings of the Health and Fire Committees.

The members of the Board of Health yesterday afternoon had an interview with the Hon. Senator Paquet in regard to a bill that it is proposed to introduce for the prevention of adulteration of food.

FIRE COMMITTEE.

A meeting of the Fire Committee was held yesterday afternoon, when there were present: Ald. Hood (in the chair), Mount, Genereux, Beausoleil, Tansey, and Berger; also, Aid. Grenier and Gauthier.

A number of petitions from parties to erect steam engines on their premises were received, and it was resolved to report to Council, recommending that they be granted.

The CHAIRMAN then submitted the annual report of the Building Inspector, Mr. Lacroix, which was received and ordered to be printed.

It was resolved to advertise at once for summer clothing, the tenders to be received within fifteen days and the goods to be delivered by the 1st of May.

Ald. TANSEY suggested that rubber coats should be obtained for the members of the brigade.

The CHAIRMAN was of opinion that these rubber coats were of no use in case of fire; they had been tried before and found useless.

Chief Patten was also of the same opinion. The next business was the appointment of a guardian for the Hochelaga Station. Applications were received from Messrs. Peltier, Homo, Dubois and Naud. After some discussion, Mr. John Naud was appointed to the position.

After the consideration of some accounts, the meeting adjourned.

One of the most popular medicines now before the American public is Hop Bitters. You see it everywhere. People take it with good effect. It builds them up. It is not as pleasant to the taste as some other Bitters, as it is not a whiskey-drink. It is more like the old-fashioned bone-set tea, that has done a world of good. If you don't feel just right, try Hop Bitters.—Nunda News.



# THE BRITISH ASSOCIATION.

## Meeting of the general local committee.

A meeting of the General Local Committee in connection with the coming meeting of the British Association for the Advancement of Science was held in the Long Room of the Mechanics' Hall at four o'clock yesterday afternoon. The chair was occupied by Mr. Thos. White, M. P., and among those present were ex-Mayor Rivard, Ald Hood, Dr. Alex. Johnston, Prof Moyses, Prof Chandler, Prof Darcy, Rev Prof Murray, Dr T Sterry Hunt, Major Latour, Dr Hingston, Prof Harrington, Dr Rottot, Messrs M H Gault, M P, A Desjardins, M P, J R Dougall, Edward Murphy, Hugh McLennan, Chas Alexander, R White, J J MacLaren, M P Ryan, J A U Beaudry, D A P Watt, Jas Hutton, John S Shearer, R A Ramsay, J F Nott, John Kennedy, H S Evans, and S C Stevenson, (Secretary).

The minutes of the last meeting were read and confirmed, after which the secretary announced that he had communicated the action of the late meeting to Sir Charles Tupper, and received the following reply —

92 VICTORIA CHAMBERS,  
London, S. W.,  
23rd August, 1883.

DEAR SIR,—I am in receipt of your letter of the 9th inst, in which you acquaint me that the Montreal Committee in connection with the meeting of the British Association for the Advancement of Science in that city in 1884, have been so good as to make me its representative in Great Britain.

I have much pleasure in accepting the position, and shall be glad to render the committee any assistance that may be in my power.

Yours faithfully,  
CHARLES TUPPER.

Mr. WHITE said he had called the Committee together in consequence of letters which he had received, and which he thought should be submitted to them at the earliest possible moment. The first was a report from Mr. Dawson and Dr. Hunt, who attended the meeting of the American Association at Minneapolis, addressed to him, Mr. White, as chairman of the committee, giving some particulars of the meeting, and making some suggestions, as follows:—

To THOMAS WHITE, ESQ., M.P., Chairman of the Citizens' Committee.

DEAR SIR,—We, the undersigned, beg leave to state for the information of the Committee, that we had the pleasure of attending the meeting of the American Association for the Advancement of Science at Minneapolis, in August last, and of announcing to that body the approaching visit of the British Association to Montreal. This announcement was received most cordially; a committee was named to consider the matter, and a resolution passed unanimously, inviting all members of the British Association to attend and to take part in the scientific proceedings of the American Association at its next meeting in 1884. To give further effect to this invitation, the date of the meeting of next year, which is to be held in Philadelphia, was fixed as late as September 3. Representatives of the City of Philadelphia also expressed the wish of that city to extend its hospitalities to all members of the British Association. Several of the prominent members of the American Association have announced their intention to be present at the Montreal meeting.

In view of these facts, it would seem proper that the local Committee should send a notice in due time of the Montreal meeting of the British Association to the members of the American Association, and to the officers of the local Committee at Philadelphia, and should, moreover, extend to the members of the Standing Committee of the American Association the same hospitality as to the members of the British Association.

We remain,

Yours truly,  
J. W. DAWSON,  
T. STERRY HUNT.

Montreal, September 4, 1883.

The next paper he had to refer to the committee was a letter from Mr. Colmer, the corresponding secretary in England of the committee, in which the results of a visit to Liverpool, undertaken at the request of Sir Charles Tupper, and in company with Dr. Bovey, to confer with the steamship companies as to passage rates, were stated. The letter concluded by stating that "Sir Charles Tupper will be happy to be of any service that is in his power with the object of ensuring the success of the meeting in Montreal in 1884." Accompanying it was a report, which he would not detain them by reading, but which conveyed the gratifying intelligence that, with one exception, all the steamship companies offered substantial reductions in the rates of passage to members of the Association, and some of them, notably the Allan and Dominion lines, proposed, if necessary, to place special steamships at the service of the members coming out. He had also received a letter from Dr. Dawson, which, although not intended for publication, as to the whole of it, he would read. The following are the leading portions of this letter:—

SOUTHPORT, September 24, 1883.

"MY DEAR MR. WHITE—At the meeting of the General Committee to-day, after some remarks by Sir C. Tupper, Dr. Carpenter, Captain Bradford Pym, and myself, a resolution to hold the meeting in Montreal on the 27th August, 1884, was passed unanimously and with much cordiality, and even enthusiasm. There seems a very general wish to come out to Canada, and the most complete confidence that Montreal will do her part well. The feeling altogether is very good, and even gentlemen who strongly opposed the Montreal meeting last year, are now quite reconciled to it. It now remains that the Montreal committee should do its part, and in this I think it well to give some suggestions, while the matter is fresh in my mind.

"One important point is the wish which many of the younger naturalists express, to spend some time in Canada before the meeting, and to be able to go to Philadelphia after the meeting. To meet this, Sir C. Tupper and I promised that arrangements would be made to have facilities for the longer excursions before the meeting as well as after.

"I do not really think that many will avail themselves of this privilege, but it will be of importance to some."

"Another matter which seems somewhat urgent is the furnishing of exact information as to routes, rates, accommodation, &c. We must not reckon on people here knowing much on these points, unless it is very plainly laid before them. Mr. Colmer is to prepare a tabular view of the several lines of ocean steamers, their rates, reductions of rates, times of departure, &c., &c., but he wishes to have also clear statements as to the conveyances and rates in Canada and the United States, and the amount of free accommodation in Montreal, and the rate of that to be paid for. It would also be well to have a map prepared showing the steamer routes, the principal railways, places of interest, &c. Also a short explanatory note which Dr. Hunt could prepare, or I could write it on this side, as to leading geological and topographical features. The different local excursions in the vicinity of Montreal could also be mentioned, as for instance, Ottawa, Quebec, Lachine Rapids, &c.

"These materials might be sent over to Mr. Colmer in MS., and if before the middle of November I could go over them with you, they might then be finally submitted to your committee in Montreal before printing.

"Nearer the time of meeting, a guide to Montreal should be prepared, and I shall send you a copy of a very useful and practical one issued by the Southport local committee, and which we would do well to imitate.

"The meeting here has been eminently successful. The number of members and associates (each paying £1 at least), has been over 2,500, and the arrangements are very good on the whole. Southport has a magnificent winter garden or large conservatory, with large exhibition halls, seating rina, lecture hall and aquaria, the whole capable of easily accommodating 3,000 people. It has also admirable reception rooms and offices for secretaries, &c., and the town is very neat and clean. In these points, and in a fine park and botanic garden, it surpasses us; but we can furnish much better rooms for the section meetings, and closer together; and a tent for luncheon, such as we had at the American Association, would be an agreeable novelty.

"You may use anything in this rough letter that you think likely to be useful for the benefit of the local committee or the public; but it is intended merely for your information and that of the acting officers of the local committee.

"The Council has left the vice-presidents and honorary secretaries as suggested by your committee, but has added some public men (the Governor-General, Sir J. A. Macdonald, &c.) to the vice-presidents, and has added the chairman and secretary of the local committee to the list of honorary secretaries.

"The list of the vice-presidents of sections to be named at a later date by the Council, will include representative scientific men from different parts of Canada. This is following the

ordinary precedent of the Association. Such men as Dr. Wilson, Dr. Dawson, Dr. Selwyn, Prof. Cherriman and others will be recognized in this way.

Sincerely yours,  
J. W. DAWSON.

Mr. WHITE proceeded to say that they found themselves now in a different position from that in which they met formerly. Up to the present time their work had had for object the presentation of such a case to the meeting of the British Association as would induce that body to carry out the resolution arrived at last year to hold its next meeting in this city. In this work they had been eminently successful, and we now had the assurance not only that the Association would meet here, but that the meeting would be one of the most important in its history. They had now to enter upon the work of ensuring that success in those features in which success depended upon our efforts, and he thought it would be a wise course to reorganize the committees, and in other respects to perfect the organization. To that end he would ask them to accept his resignation as Chairman of the Committee. He would be glad to give any assistance in his power to make the meeting next year a successful one, but to that end a reconstruction of the organization he believed would be most desirable.

Mr. D. A. P. WATT called attention to the fact that at the first meeting he had given a notice of motion on the subject of organization. He thought, however, that it would be altogether premature to accept any resignation from the chairman, Mr. White, or that any reorganization should take place in that form, but the other suggestion made by the chairman, viz, the appointment of a small committee to take up the question of organization and also that of finance was a very proper one. This organization should have a scientific president and a series of scientific vice-presidents. He did not wish to interfere with the General Local Committee, as at present constituted, of which he thought Mr. White should continue to be the chairman. He would therefore move that the question of organization be referred to a committee to be named by the chairman.

Dr. T. STERRY HUNT seconded the motion. The CHAIRMAN referring to the suggestion that a number of scientific men should be appointed as vice-presidents said that it must be remembered that these would be appointed by the Association itself, with which they had nothing to do. The only thing required of them was to practically carry out the reception of the Association.

Dr. HUNT said he saw the force of Mr. White's remarks. The Association itself had already nominated scientific men in Ottawa, Toronto, Kingston, Halifax, &c., to honorary positions. What he wanted was a small committee to carry out the work in Montreal, and for this we could get very little aid outside of our own city.

Mr. WATT said he alluded to the officers of the local committee and not of the Association. It had been usually that the place which invited them to hold the meeting of the Association there should put its own scientific men prominently forward, but he simply moved the appointment of the committee, and left details of that kind for its future consideration.

Dr. JOHNSON asked if the resolution referred to the sub-committees already appointed, or would they be left as at present.

Mr. WATT said that his intention was to accept the present organization so far as possible. In reply to Dr. Hingston, he said his object was to put on this committee a series of scientific men as vice-presidents, and to organize a committee of finance.

Dr. HINGSTON said that the general local committee had already named a finance committee, a conveyance committee and a private hospitalities committee. The organization was therefore tolerably well advanced, and he thought it would be unwise for them now to undo what they had already done.

The SECRETARY then read the names of the gentlemen composing the various sub-committees, which had already been appointed, to which Dr. Hingston referred, and by which it appeared that at least twenty or thirty gentlemen were on each of these committees.

The CHAIRMAN said that these committees were altogether too large, and was of the opinion that, for instance, three practical business men were all that was required for the conveyance committee, and would be more successful in obtaining satisfactory arrangements with the various railway and steamboat companies than twenty or thirty would be.

Dr. HINGSTON said that, with one exception, the Montreal meeting of the American Association was the most successful that the Association had ever held, and the various sub-committees on that occasion were all large.

Mr. HUGH McLENNAN was in favor of small committees for doing the actual work of the organization.

Mr. J. J. MACLAREN, Q.C., thought the difficulty might be got over by appointing a small executive committee from each sub-committee to do the work. The Private Hospitalities Committee, for instance, should be a large one, as also the Conveyance Committee, and the prominent men connected with the various railway and steamboat companies, etc, should be members of the latter.

Mr. EDWARD MURPHY asked if Mr. Watt's motions were carried would it not set aside the functions of those committees already appointed.

Dr. HINGSTON was of the opinion that Mr. Watt's motion would have been a very good one if it had been carried at the first meeting, but it would likely do harm now. For instance, Prof. Bovey had already done an immense amount of work which would thus be practically undone. He thought the only thing they could do was to suggest such names as they considered ought to be added to the various committees. Last year the work fell on two or three, and he presumed it would be the same this year; the other names were simply ornamental.

After some further discussion, on motion of Mr. Watt, it was finally resolved that the following gentlemen be a committee to recommend a completion of the organization for arrangements for the coming meeting of the British Association for the Advancement of Science:—Messrs Thomas White, M.P., President; David Morrice, Treasurer; S C Stevenson, Secretary; Hugh McLennan, A Desjardins, M.P, F W Thomas, ex-Mayor Rivard, Dr Hingston, Dr T Sterry Hunt, J H R Molson and D A P Watt.

The meeting then adjourned.

## THE VICEREGAL BALL.

A brilliant event assured—Extensive preparations.

The ball to His Excellency and Her Royal Highness promises to be a most brilliant success. The lists are fast filling up, and as the subscribers are too numerous for any delivery of tickets at their residences to be possible, it would be well that during the remainder of the week subscribers obtain their tickets either at Dawson Brothers' or at the Windsor. A leading railroad magnate has invited Messrs. W. K. and Cornelius Vanderbilt, of New York, who will very probably be present with their wives.

A visit to the Windsor shows that active preparations are in progress for the event. A very extensive suite of rooms is being made ready for the Viceregal party on the parlour

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sacks of flour has also been engaged for Liverpool at 12s. Last year at this time grain freights were 1s to 1s 3d higher at 3s 3d to Liverpool. Very little American grain is coming through at the moment which causes the present dulness in spot freights. In New York ocean grain freights are steady at 4d steam to Liverpool against 5d at this time last year.

**ALMERIA GRAPES.**

About 2,000 brls of Almeria grapes are on the way to this city, a good portion of which has been sold to arrive at \$5 00 per brl. Sales on spot have also been made at the same figure, which has, it is said, been shaded for ordinary lots. If prices keep reasonable during the coming season a large consumption may be depended upon, as this fruit is well liked in Canada, owing to its excellent keeping quality. We quote prices \$4.50 to \$5.25 as to quantity and quality.

**WHEAT.**

While the receipts of wheat at the principal American grain markets yesterday were heavy, the shipments were comparatively light. In New York, for instance, 236,000 bushels were received, while only 8,193 bushels were exported. In Chicago the receipts were 202,000 bushels and the shipments 96,000 bushels. The total receipts in New York, Chicago, Toledo, Detroit and Milwaukee were 745,000 bushels, and the total shipments only 206,193 bushels. It is expected that the visible supply to-day will reach 28,000,000 bushels, as the stocks in New York and Chicago show an increase of over 1,000,000 bushels during the week.

**HORSES.**

The past week has been almost a blank in the export trade in horses, the only shipment being that of a stallion pony, costing \$50, against 43 horses, costing \$5,303, for the week previous. The fall sale of horses at Grand's Repository, Toronto, on Tuesday afternoon, was well attended by buyers from all quarters of the province, Montreal and New York. A large number of fine animals were put up for sale and the bidding was very spirited. Over one hundred horses were disposed of at prices ranging from \$90 to \$545, the latter price being paid by Mr. Charlebois, of Montreal, for a magnificent black gelding, the property of Capt. Dickson, of Niagara. Several road horses and hunters were sold at from \$200 to \$380 each. Thirty-four horses were purchased by Mr. Tumblin for the Detroit Coupe Car Company. The Albany, N. Y., market was reported as follows:—"The demand is good and trade rather brisk. The sales of P. L. Eastman include a trotter, with a record under 2.30, for \$600; one pair of carriage horses for \$750, one heavy worker for \$300, one do. for \$200, one do. for \$190, and one driver for \$300."

**THE HAY MARKET.**

MONTREAL, October 10.

The supply of hay was only fair and the demand was poor, the best timothy being quoted at \$8.50 per 100 bundles, ordinary to fair at from \$5 to \$8. Straw was quiet and unchanged at \$4 to \$5 per 100 bundles. Pressed hay sells at \$10.50 to \$13 00 per ton wholesale, and at 60c to 70c per 100 lbs. retail. Pressed straw sold at 40c to 50c per 100 lbs retail, as to quality.

**GERMAN CROPS AND RUSSIAN DEPRESSION.**

Translated from Chas. Regel's Paris circular of 15th September:—  
Germany—The crop of rye, the chief bread making grain in this country, is appraised at 80 to 85 per cent. of an average. The average production being 53,000,000 of metrical quintals, the deficit would be 8,000,000 to 10,500,000 quintals, or 12,000,000 to 15,000,000 of hectolitres (34,080,000 to 42,600,000 bush). The crop of potatoes, on the contrary, is good, and promises to reach, if not exceed, an average. The market maintains its dulness. Property is more freely offered than asked for, and prices weaker, without tempting speculators.  
Note—Mr. Regel seems to estimate the average rye crop at high figures—it was under 52,000,000 of quintals in the exceptional year, 1881, when the production of potatoes was 907,000,000 of bush.  
In Austro-Hungary complaint is similarly made of want of an outlet, and holders who wish to sell have to accept lower prices.  
Russia—Advices from this country reflect the prevailing depression. In the northern and southern ports business languishes, and prices have declined. The arrivals at Black Sea ports are not as important as was expected.

**THE CHEESE MARKET.**

UTICA, N. Y., October 8.

The Board of Trade looked very slim today, so many salesmen were absent. Knowing that the cheese market was a little "off," they concluded not to ship this week, and thus help to strengthen the price. Sales today take stock down to the middle of September, and probably include some of the finest cheese of the season. But salesmen disliked to take less than they did last week. It was rumoured that about half a dozen lots got 12c, but no such reports were given to the secretary, and Little Falls beat us by a clean 1/2c. The lowest sales were four lots of 500 boxes, at 11 3/4c. Then came 42 lots, 3,669 boxes, at 11 3/8c; 5 lots, 529 boxes, at 11 3/8c; 14 lots, 1,787 boxes, at 11 3/8c; 5 lots small cheese, 450 boxes, at 11 1/4c; and 4 lots, 410 boxes, at private terms. Sales, 7,345 boxes; commissions, 821; total, 8,166 boxes. Ruling price, 11 3/4c. Marketings of corresponding day in 1882 were 7,040 boxes; in 1881, 7,065 boxes, and in 1880, 6,399 boxes.

LITTLE FALLS, October 8.

CHEESE.—The market has ruled firm today, and prices slightly better than they were last week, upon the average. The cheese sold was very nearly, if not quite, all September make and fine. The home trade continues brisk, and the cheese adapted to this business is in strong demand. Purchasers of goods for export say they cannot afford to pay within one-fourth cent of the prices paid by the home trade, and, as a consequence, some of the former dealers made very light purchases to day. Factorymen are not disposed to hold stocks back when they can secure prices now ruling, and factories have only the ordinary amounts on their shelves. Crows are doing very fairly for this time in the season. We append the usual list of transactions:—

| Lots.   | Boxes.     | Price  |
|---------|------------|--------|
| 31..... | 254.....   | 11 1/4 |
| 31..... | 2,554..... | 11 1/4 |
| 32..... | 3,650..... | 11 1/4 |
| 1.....  | 70.....    | 12     |
| 14..... | 1,280..... | Com.   |

—Utica "Herald."

**MANITOBA CROP REPORTS.**

The Manitoba Department of Agriculture has issued the crop bulletin for October. The following are the comments on the wheat and oat yields:—

WHEAT.—The frost of the 7th September caused great anxiety regarding the injury done to the crops, particularly to wheat. The crop was reported at a standstill for a considerable time in June, but was pushed on rapidly and promisingly by the rains of the early part of July, and the continued favorable growing and filling weather of August. The ripening season was, however, backward, and the ripening process checked. The backwardness of the season caused quite a large proportion of the wheat crop to be still green and unfit for cutting when the frost came on the 7th September, consequently from all parts of the province reports come in giving estimates of the damage, varying from 2 1/2 to 50 per cent. In some parts no damage whatever is reported, and where the grain was ripe and cut the frost has been powerless for harm. The earliest date on which the wheat harvest is reported as having commenced is in township 2, range 22 west, where it began on the 4th of August. The average date on which it began throughout the province was the 29th of August, and of ending, the 19th of September. Correspondents speak universally of the high quality of the sample of the wheat crop, and where not injured by the frost, it is plump, clear, hard and bright. In estimating the average yield per acre correspondents were asked not take the average of the best crop of the township, but the average of the total acreage under crop, even though the returns in some cases be no more than the seed sown. To this 255 have answered, showing an average yield per acre of 23.63 bushels. They were also asked to give the comparative quality of the grain as compared with the average of other years, 100 representing the general average quality year by year. Almost all have answered this question, and the result gives an average quality for the province of 102. All wheat standing at the time of the frost is reported injured according to its degree of ripening, but to what extent a great many do not say, not feeling disposed to do so until after the grain is threshed. As the difference in the dates of the ripening of the wheat throughout the province has only varied but a few days, the loss will be very evenly felt, and with the exception of some scattered localities all the townships have suffered alike. Correspondents simply report the grain as "injured," but to what extent they do not say, so far as the quality is concerned.

Oats—A large area has been sown and a large yield was looked forward to, despite the dry weather of June and the early part of July. The dates of the beginning and ending of the oat harvest vary so triflingly in the different parts of the province that it is not necessary to particularize. The average date of the beginning of the oat harvest was the 28th of August, and that of the ending the 21st of September. Average yield and comparative quality have been universally answered by the correspondents as far as they were able, which make an average yield per acre over the province of forty-four bushels, and the quality 100. All oats cut before the frost are secure, those uncut and unripe have been injured in proportion to the degree of ripeness attained at the time the frost appeared. Though the grain escaped injury of all kinds in a great many places, still there are a great many others in which serious loss to the late ripening grain has been felt. The loss reported varies from 5 to 30 per cent., and in one case 50 per cent. of the oat crop is reported "probably injured." Where the crop was cut and secured before the frost it is invariably reported good, clean and solid in the grain, but is generally reported short in the straw. Unless where the crop was exceptionally green, it is hoped the loss may not be all reported as the oat is a grain well protected, for with its thick chaff and heavy hull it is capable of standing a pretty severe attack of frost.

**THE BOSTON PRODUCE MARKET.**

BOSTON, October 8.

FLOUR.—Trade continues quiet, the unsettled tone to wheat causing buyers to only meet their actual requirements. Prices are fairly steady and unchanged. We quote fine at \$3 00 @ \$3 25 per barrel; superfine at \$3 50 @ \$3 75; common extras at \$4 00 @ \$4 25; medium extras at \$4 25 @ \$4 50; choice extras at \$4 50 @ \$5 00; Canada extras at \$5 50; Canada superior at \$5 85, and Canada patents at \$6 40 @ \$6 60; Minnesota bakers' at \$5 50 @ \$6 00; New York roller at \$5 90 @ \$6 00; Michigan at \$5 40 @ \$5 50; Michigan roller at \$5 50 @ \$5 75; Ohio, Indiana, Southern Illinois and St. Louis patents at \$6 50 @ \$6 75; Ohio, Indiana, Southern Illinois and St. Louis straights at \$6 00 @ \$6 25.

BUTTER.—The market is firm for the best fresh stock, but ice-house is rather easy, with more pressure to sell. Receipts were 460 tubs and 2 boxes. We quote choice fresh-made Western creamery at 26c @ 30c; fair to good fresh-made do at 26c @ 27c; choice ice-house do at 24c @ 25c; Northern do at 25c @ 26c; Western dairy at 20c @ 22c; lard-packed at 14c @ 17c; fair to good at 12c @ 14c; fresh Northern creameries at 28c @ 30c; fancy higher; fresh New York dairy at 24c @ 25c; do Vermont at 24c @ 25c; Franklin County at 26c @ 28c; straight dairies at 21c @ 23c; fair to good at 17c @ 19c.

CHEESE.—The market continues very strong, but prices are no higher. Liverpool is 6d higher at 57s. Receipts were 1,885 boxes. We quote good to choice Northern at 12c @ 12 1/2c; fancy at 13c, with best Western at 11c @ 12c, and the lower grades according to quality.

EGGS.—The market has ruled very strong indeed for all fresh stock, which will readily command (never mind where from) 25c, and the best of that 23c. Receipts were 7 boxes, 5 barrels and 720 cases. We quote fresh Eastern at 25c @ 26c; New York and Vermont at 24c @ 26c, fancy higher; Northern at 24c @ 25c; Island, Nova Scotia and New Brunswick at 23c @ 25c; Western at 22c @ 23c.

BEANS.—The demand has been fair, but the supply is light and prices correspondingly firm. Receipts were 442 brls. We quote large hand-picked pea-beans at \$2 90 @ \$3 00 per bush; choice New York State small hand-picked do at \$3 23 @ \$3 24; do Vermont at \$3 31 @ \$3 32, and choice screened do at \$3 61 @ \$3 62; hand-picked medium at \$2 85 @ \$3 00, and choice screened do at \$2 60 @ \$2 70; common beans at \$2 20 @ \$2 40; choice improved yellow-eyes at \$3 30 @ \$3 35; old-fashioned yellow-eyes at \$3 20 @ \$3 25, and red kidneys nominal at \$3 25 @ \$3 50. Canada peas continue quiet at 85c @ 95c for common roasting and at \$1 10 @ \$1 15 for choice. Split peas are at \$3 40 @ \$6 65 per brl, with green peas at \$1 20 @ \$1 30 per bush for choice Western, and 85c @ \$1 for Northern.

FRUIT.—The market has been dull in the inquiry for apples. An auction sale of foreign fruit is reported elsewhere. Receipts of apples were 1,078 barrels. We quote Gravensteins at \$3 50 @ \$4 00; choice cooking apples at \$2 10 @ \$3 00 per brl; ordinary, \$1 50 @ \$1 75, and \$4 00 @ \$6 00 per barrel; cooking at \$2 00 @ \$3 00. Evaporated russets are at 13c @ 17c per lb, and Northern and Eastern quartered and sliced command 8c @ 10c. We quote choice Florida lemons at \$4 00 @ \$5 50 per box; do oranges at \$4 50 @ \$5 00 per box; Palermo lemons at \$3 50 @ \$6 50 per box. Aspinwall bananas sell in a small way at \$1 75 @ \$2 75; Jamaica bananas at \$1 25 @ \$1 50.

TRUCK.—The supply is ample, and the demand has been fair at unchanged prices. We quote beets at 75c @ \$1 00 per bush; turnips at 60c @ 80c per bush; native onions at \$2 per brl; choice Cape cranberries at \$10 00 @ \$11 00, fancy higher, and country at \$3 00 per brl; cabbage at \$8 @ \$10 per 100; Hubbard squash at \$30 per ton; marrow squash at \$18 @ 20 per ton; turban squash at \$25 per ton; lettuce at 15c @ 20c per dozen; carrots at 6c @ 7c per bush; parsnips at \$1 @ 1 25 per bushel; celery at \$1 50 @ 2 00 per doz; egg-plant at \$1 50 @ 1 75 per doz.

HAY.—There is very little choice hay here and prices are firm for such. The demand is light. Receipts were 37 carloads. We quote old choice prime hay at \$8, and new at \$17 @ 18 per ton; medium to good hay at \$15 @ \$16; choice Eastern fine at \$18 @ \$15; poor at \$12 @ \$13, with Eastern swale at \$9. Rye straw at \$12 @ 13, and oat straw at \$9 per ton.

POTATOES.—The market is less firm and prices are about 2c lower. Receipts were 40 car-loads and 845 bushels command, and 4,303 barrels sweets. We quote New Hampshire rose at 55c @ 58c; choice per bushel; Houghton rose at 55c @ 58c; A. Oostook rose at 55c, and Northern rose at 50c @ 55c; Burbank seed-



# SOUTHPORT.

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## BRITISH ASSOCIATION

FOR

### *THE ADVANCEMENT OF SCIENCE.*

LONDON OFFICE—22 ALBEMARLE STREET, PICCADILLY, W.

(THE OFFICE WILL BE CLOSED FROM SEPTEMBER 14 UNTIL OCTOBER 1.)

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The Fifty-third Annual Meeting of this Association will commence on Wednesday, September 19, 1883.

#### **PRESIDENT ELECT.**

ARTHUR CAYLEY, Esq., M.A., LL.D., F.R.S., V.P.R.A.S., Sadlerian Professor of Mathematics in the University of Cambridge.

#### **VICE-PRESIDENTS ELECT.**

THE RIGHT HON. THE EARL OF DERBY, M.A., LL.D., F.R.S., F.R.G.S.  
THE RIGHT HON. THE EARL OF CRAWFORD AND BALCARRES, LL.D., F.R.S., F.R.A.S.  
THE RIGHT HON. THE EARL OF LATHOM.  
\*PRINCIPAL J. W. DAWSON, C.M.G., M.A., LL.D., F.R.S., F.G.S.  
J. G. GREENWOOD, Esq., LL.D., Vice-Chancellor of the Victoria University.  
PROFESSOR H. E. ROSCOE, Ph.D., LL.D., F.R.S., F.C.S.

*\* Nominated by the Council.*

#### **GENERAL TREASURER.**

PROFESSOR A. W. WILLIAMSON, Ph.D., LL.D., F.R.S., V.P.C.S., *University College, London, W.C.*

#### **GENERAL SECRETARIES.**

CAPTAIN DOUGLAS GALTON, C.B., D.C.L., F.R.S., F.L.S., F.G.S., F.R.G.S.  
A. G. VERNON HARCOURT, Esq., M.A., F.R.S., V.P.C.S.

#### **SECRETARY.**

PROFESSOR T. G. BONNEY, M.A., F.R.S., F.S.A., F.G.S.

#### **LOCAL SECRETARIES.**

J. H. ELLIS, Esq.  
DR. VERNON.  
T. W. WILLIS, Esq. } *Town Hall, Southport.*

#### **LOCAL TREASURER.**

THE MAYOR OF SOUTHPORT.



### OBJECTS OF THE ASSOCIATION.

The objects of the British Association are:—to give a stronger impulse and a more systematic direction to scientific inquiry; to promote the intercourse of those who cultivate Science in different parts of the British Empire with one another, and with Foreign Philosophers; to obtain more general attention for the objects of Science, and the removal of any disadvantages of a public kind which impede its progress.

### MEETINGS.

The Association meets annually, for one week or longer. The place of each Meeting is appointed by the General Committee two years in advance; and the arrangements for it are intrusted to the Officers of the Association.

### MEMBERS AND ASSOCIATES.

New Members and Associates can join the Association by applying to the General Treasurer, whose address is subjoined, or to the Local Secretaries at Southport, on the following terms:—

- I. New Life Members for a composition of £10, which entitles them to receive gratuitously the Reports of the Association which may be published after the date of payment.
- II. New Annual Members for a payment of £2 for the first year. They receive gratuitously the Reports for the year of their admission and for every following year in which they continue to pay a Subscription of £1 *without intermission*.
- III. Associates for this Meeting only for a payment of £1. They are entitled to receive the Report of the Meeting at two-thirds of the publication price. Associates are not eligible to serve on Committees or to hold any office.

Gentlemen who have in any former year been admitted Members of the Association may renew their Membership, without being called upon for Arrears, on payment of £1. They will, however, not be entitled to receive any Reports.

Ladies may become Members or Associates on the same terms as Gentlemen, and Ladies' Tickets (*transferable to Ladies only*) may be obtained on payment of £1.

### TICKETS.

Tickets for the Meeting may be obtained of the Local Secretaries at Southport on and after September 6, and from that date to September 13 at the Office of the Association, 22 Albemarle Street, London, W., or on application by letter to the General Treasurer, Professor A. W. WILLIAMSON, British Association, University College, London, W.C. On making this application Annual Members will be so good as to send the amount of their Annual Subscription (£1) together with the Invitation Circular. Life Members are requested to return their Invitation Circulars on making application for Tickets.

On and after Monday, September 17, Members, and persons desirous of becoming Members or Associates or of obtaining Ladies' Tickets, are requested to make application in the Reception Room, Southport.

**Without a proper Ticket, obtained as above, no person is admitted to any of the Meetings.**

### PROCEEDINGS OF THE MEETING.

The Reception Room at Southport will be opened on Monday, September 17, at 1 p.m., and on the following days at 8 a.m., for the issue of Tickets to Members, Associates, and Ladies, according to the statement given above, and for supplying Lists and Prices of Lodgings, and other information, to Strangers on their arrival. No Tickets will be issued after 6 p.m.

In the Reception Room there will be offices for supplying information regarding the proceedings of the Meeting. The 'Journal,' containing announcements of the arrangements for each day, will be laid on the Table on Wednesday, September 19, and the following mornings, at 8 a.m., for gratuitous distribution. Lists of Members present will be issued as soon as possible after the commencement of the Meeting, and will be placed in the same Room for distribution. The published Volumes of the British Association can be ordered in this Room, for Members and Associates only, at the reduced prices appointed by the Council. The Tickets will contain a Map of Southport and particulars as to the rooms appointed for Sectional and other Meetings.

For the convenience of Members and Associates, a Branch Post Office (which will be available also for communication between Members attending the Meeting) will be opened in the Reception Room.

Members and Associates may obtain information about local arrangements and facilities afforded by the Railway Companies, on application to the Local Secretaries, Southport.

### GENERAL COMMITTEE.

The General Committee consists of the following classes of Members:—

#### CLASS A. PERMANENT MEMBERS.

1. Members of the Council, Presidents of the Association, and Presidents of the Sections for the present and preceding years, with Authors of Reports in the Transactions of the Association.
2. Members who by the publication of Works or Papers have furthered the advancement of those Subjects which are taken into consideration at the Sectional Meetings of the Association. *With a view of submitting new claims under this Rule to the decision of the Council, they must be sent to the Secretary at least one month before the Meeting of the Association. The decision of the Council on the claims of any Member of the Association to be placed on the list of the General Committee is to be final.*



## CLASS B. TEMPORARY MEMBERS.

1. The President for the time being of any Scientific Society publishing Transactions, or, in his absence, a delegate representing him. *Claims under this Rule to be sent to the Secretary before the opening of the Meeting.*
2. Office-bearers for the time being, or delegates, altogether not exceeding three, from Scientific Institutions established in the place of Meeting. *Claims under this Rule to be approved by the Local Secretaries before the opening of the Meeting.*
3. Foreigners and other individuals whose assistance is desired, and who are specially nominated in writing, for the Meeting of the year, by the President and General Secretaries.
4. Vice-Presidents and Secretaries of Sections.

The first meeting of the General Committee will be held on Wednesday, September 19, at 1 P.M., for the election of the President and Sectional Officers, and the despatch of business usually brought before that body. The General Committee will meet again on Monday, September 24, at 3 P.M., for the purpose of appointing Officers for 1885, and of deciding on the place of Meeting in 1885. The concluding Meeting of this Committee will be held on Wednesday, September 26, at 1 P.M., when the Report of the Committee of Recommendations will be received.

## COMMITTEE OF RECOMMENDATIONS.

The General Committee appoints at each Annual Meeting a Committee to receive the Recommendations of the Sectional Committees, and to report to the General Committee the measures which they would advise to be adopted for the Advancement of Science. This Committee will meet at 3 P.M. on September 21 and September 25, and (if necessary) on September 26, at 10 A.M.

## GENERAL AND EVENING MEETINGS.

The First General Meeting will be held on Wednesday, September 19, at 8 P.M. *precisely*, when Sir C. W. SIEMENS, D.C.L., LL.D., F.R.S., F.C.S., M.I.C.E., will resign the Chair, and Professor CAYLEY, M.A., LL.D., F.R.S., V.P.R.A.S., President Elect, will assume the Presidency, and deliver an Address. On Thursday Evening, September 20, at 8 P.M., a Soirée; on Friday Evening, September 21, at 8.30 P.M., a Discourse on Recent Researches on the Distance of the Sun, by Professor R. S. BALL, LL.D., F.R.S., Astronomer Royal for Ireland; on Monday Evening, September 24, at 8.30 P.M., a Discourse on Galvani and Animal Electricity, by Professor J. G. MCKENDRICK, M.D., LL.D., F.R.S.E., Professor of Physiology in the University of Glasgow, and in the Royal Institution of Great Britain; on Tuesday Evening, September 25, at 8 P.M., a Soirée; on Wednesday, September 26, the Concluding General Meeting will be held at 2.30 P.M.

## SECTIONAL MEETINGS.

The Sections are:—A. Mathematical and Physical Science; B. Chemical Science; C. Geology; D. Biology; E. Geography; F. Economic Science and Statistics; G. Mechanical Science.

The Presidents, Vice-Presidents, and Secretaries of the several Sections are nominated by the Council, and have power to act until their names are submitted to the General Committee for election.

From the time of their nomination they constitute Organising Committees for the purpose of obtaining information upon the Memoirs and Reports likely to be submitted to the Sections, and of preparing Reports thereon, and on the order in which it is desirable that they should be read, to be presented to the Committees of the Sections at their first meeting. The Sectional Presidents of former years are *ex officio* members of the Organising Sectional Committees.

The Organising Committees may hold such preliminary meetings as the President of the Committee thinks expedient, but shall, under any circumstances, meet on the first Wednesday of the Annual Meeting at 11 A.M., to settle the terms of their Reports, after which their functions cease.

The different Sections will assemble in the rooms appointed for them, for the Reading and Discussion of Reports and other Communications, on Thursday, September 20, Friday, September 21, Saturday, September 22, Monday, September 24, and Tuesday, September 25, at 11 A.M.

*Notice to Contributors of Memoirs.*—Authors are reminded that, under an arrangement dating from 1871, the acceptance of Memoirs, and the days on which they are to be read, are now, as far as possible, determined by Organising Committees for the several Sections *before the beginning of the Meeting*. It has therefore become necessary, in order to give an opportunity to the Committees of doing justice to the several Communications, that each Author should prepare beforehand an Abstract of his Memoir, of a length suitable for insertion in the published Transactions of the Association, and the Council request that he will send it, together with the original Memoir, by book-post, on or before August 22, addressed thus—'General Secretaries, British Association, 22 Albemarle Street, London, W. For Section.....' Authors who comply with this request, and whose Papers are accepted, will be furnished *before the Meeting* with printed copies of their Reports or Abstracts. If it should be inconvenient to the Author that his Paper should be read on any particular days, he is requested to send information thereof to the Secretaries in a separate note.

Reports on the Progress of Science, and of Researches intrusted to Individuals or Committees, must be forwarded to the General Secretaries, for presentation to the Organising Committees, accompanied by a statement whether the Author will be present at the Annual Meeting.

**No Report, Paper, or Abstract can be inserted in the Report of the Association unless it is in the hands of the Secretary before the conclusion of the Meeting.**

A room will be provided for the reception of Apparatus and Specimens illustrative of papers communicated to the Sections.

## EXCURSIONS.

Excursions to places of interest in the neighbourhood of Southport will be made on the afternoon of Saturday, September 22, and on Thursday, September 27.



## THE SECTIONS ARE THE FOLLOWING :

### A.—MATHEMATICAL AND PHYSICAL SCIENCE.

*President.*—PROFESSOR HENRICI, PH.D., F.R.S., President of the London Mathematical Society.  
*Vice-Presidents.*—Professor BALFOUR STEWART, M.A., LL.D., F.R.S., F.R.A.S.;  
Professor STOKES, M.A., D.C.L., LL.D., Sec.R.S.  
*Secretaries.*—W. M. HICKS, M.A.; Professor O. J. LODGE, D.Sc.; D. MACALISTER, M.A., M.B., B.Sc.  
(*Recorder*); Professor ROWE, M.A., B.Sc.

### B.—CHEMICAL SCIENCE.

*President.*—J. H. GLADSTONE, PH.D., F.R.S., V.P.C.S.  
*Vice-Presidents.*—HUGO MÜLLER, PH. D., F.R.S., For. Sec. C.S.; Professor T. P. MORPE, PH.D., F.R.S., F.C.S.  
*Secretaries.*—Professor P. PHILLIPS BEDSON, D.Sc., F.C.S. (*Recorder*);  
H. B. DIXON, M.A., F.C.S.; H. FORSTER MORLEY, M.A., B.Sc., F.C.S.

### C.—GEOLOGY.

*President.*—PROFESSOR W. C. WILLIAMSON, LL.D., F.R.S.  
*Vice-Presidents.*—Professor W. BOYD DAWKINS, M.A., F.R.S., F.S.A., F.G.S.; J. W. HULKE, F.R.S., Pres. G.S.  
*Secretaries.*—R. BETLEY, F.G.S.; C. E. DE RANCE, F.G.S.; W. TOPLEY, F.G.S. (*Recorder*);  
W. WHITAKER, B.A., F.G.S.

### D.—BIOLOGY.

*President.*—PROFESSOR E. RAY LANKESTER, M.A., F.R.S., F.L.S.  
*Vice-Presidents.*—Professor GAMGEE, M.D., F.R.S.; W. PENGELLY, F.R.S., F.G.S.;  
Professor SCHÄFER, F.R.S.; W. T. THISELTON-DYER, M.A., B.Sc., F.R.S., F.L.S.  
*Secretaries.*—G. J. HASLAM, M.D.; W. HEAPE; Professor A. M. MARSHALL, M.A., M.D., D.Sc.;  
HOWARD SAUNDERS, F.L.S., F.Z.S. (*Recorder*); Dr. G. A. WOODS, F.R.M.S.

### DEPARTMENT OF ANTHROPOLOGY.

W. PENGELLY, F.R.S., F.G.S. (*Vice-President*), will preside.  
*Secretaries.*—G. W. BLOXAM, M.A., F.L.S. (*Recorder*); WALTER HURST.

### E.—GEOGRAPHY.

*President.*—LIEUT.-COLONEL H. H. GODWIN-AUSTEN, F.R.S., F.G.S., F.R.G.S.  
*Vice-Presidents.*—Sir RAWSON W. RAWSON, K.C.M.G., C.B., F.R.G.S.;  
The Rev. Canon TRISTRAM, M.A., LL.D., F.R.S., F.L.S.  
*Secretaries.*—JOHN COLES, F.R.A.S., F.R.G.S.; E. G. RAVENSTEIN, F.R.G.S.;  
E. C. RYE, F.Z.S. (*Recorder*).

### F.—ECONOMIC SCIENCE AND STATISTICS.

*President.*—R. H. INGLIS PALGRAVE, F.R.S., F.S.S.  
*Vice-Presidents.*—Professor R. ADAMSON, M.A., LL.D.; J. HEYWOOD, F.R.S., F.S.A., F.G.S., F.S.S.  
*Secretaries.*—GEORGE BADEN POWELL, M.A., F.R.A.S., F.S.S.; Professor H. S. FOXWELL, M.A., F.S.S.;  
J. N. KEYNES, M.A., B.Sc., F.S.S.; CONSTANTINE M'LOÿ (*Recorder*).

### G.—MECHANICAL SCIENCE.

*President.*—JAMES BRUNLEES, F.R.S.E., F.G.S., Pres. I.C.E.  
*Vice-Presidents.*—W. H. BARLOW, F.R.S., M.I.C.E.; Professor OSBORNE REYNOLDS, M.A., F.R.S.  
*Secretaries.*—A. T. ATCHISON, M.A., C.E.; EDWARD RIGG, M.A.; H. T. WOOD, B.A. (*Recorder*).

*This list of Sectional Officers will be completed and will be submitted to the General Committee on Wednesday, September 19.*

T. G. BONNEY,  
*Secretary.*



## SAGRI PALAZZI APOSTOLICI

Si permette al Sig. *Marchese De Stefano & famiglia*  
con qualche persona di sua compagnia, non dovendo eccedere il numero  
di quattro, di visitare il Museo del Vaticano nei giorni e nelle Ore sta-  
bilite.

L'ingresso è dal Cancello principale del giardino percorrendo  
la Via dei Fondamenti.  
Dal Vaticano il **2 GIUGNO 1883**

IL MAGGIORDOMO DI S. S.  
AUGUSTO THEODOLI

È proibito di toccare gli oggetti d'arte, di  
fumare, e d'introdurre i cani.  
Gli ombrelli ed i bastoni dovranno deposi-  
tarsi nel luogo appositamente destinato.

Rilasciato **GRATIS**





## SAGRI PALAZZI APOSTOLICI

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Si permette al Sig.  
di visitare le Camere e le Loggie di Raffaello, la Pinacoteca, e la Cappella Sistina al Vaticano nei giorni e nelle Ore stabilite con qualche persona di sua compagnia non dovendo eccedere il numero di quattro.  
L'ingresso ai sopradetti locali è dal Portone di Bronzo e Scala Regia.

Dal Vaticano il

2 MARZO 1883

IL MAGGIORDOMO DI S. S.  
AUGUSTO THEODOLI

È proibito di toccare gli oggetti d'arte, di fumare, e d'introdurre i cani.

Gli ombrelli ed i bastoni dovranno depositarsi nel luogo appositamente destinato.

Rilasciato **GRATIS**





Vatican  
Semite

SAGGI PALANCI AL-  
BOLICI

... permette al ...  
di visitare le Grotte e le Logge di Raffaello, la Pinacoteca e la Cappella Sistina al Vaticano nel giorno e nelle Ore stabilite con qualche  
persona di sua compagnia non dovrebbe eccedere il numero di quattro  
... ..

... ..  
... ..

IL MACCARDONO DI S. S.  
AGOSTO THODOL

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[The following letter, written in answer to some enquiries, has been printed by Professor Stuart with a view to facilitating reply to those who ask information as to the opportunities for learning Engineering afforded in the University of Cambridge.]

CAMBRIDGE,

June 9, 1883.

MY DEAR SIR,

The Engineering workshops which I established here have been gradually enlarged, and the system connected with them developed, till we now can give a complete preparatory training to an engineer. That is to say, we can, besides theoretical work, give him drawing and designing, and practical work in fitting, turning, pattern making, smithing and founding; so that, when he leaves us, he will be in a position to go at once to learn the special branch of engineering which he may intend to take up. We pay particular attention to the principles of designing, and the establishment contains several competent workmen besides three demonstrators or junior assistants, and is all under the superintendence of a practical engineer, who is also a University graduate and has had a varied experience in different shops.

When a pupil leaves us we advise him, if he is to be a mechanical engineer, to go into some shop or drawing office, where he can become familiar with the class of work which he is about to pursue, and also where he can see larger work than we do. A year spent in this way should complete his engineering education, so far as education can be said ever to be completed; and in general we would advise him to go in the capacity of a workman and to get what wages he can earn during that time. We can turn a man out capable of earning wages; I have two of my pupils at present working for me at 25s. a week, and they are worth the money. I aim, in fact, at paying some of my best pupils wages when they are willing to stay on an extra year, as it gets them into workmanlike habits and the keeping of regular hours. Our training is distinctly that for a mechanical engineer, but we regard that as the true foundation also for the civil and for the electrical engineer; and, if a man were to leave us for either of these pursuits, we would advise him, as far as possible, to follow the same lines, namely, to get a definite job rather than to go in a general way as a pupil, except when, as pupil, he would distinctly have the advantage of seeing varied work in a comprehensive way, and details of that work which he might not otherwise have the opportunity of seeing. For the electrical engineer there is teaching in electrical principles in the Cavendish laboratory here, and we have also good chemical and geological teaching as well as in general physical principles. Whenever a man is a good mathematician we urge him to study mathematics with a tutor, as far beyond the limits of our regular course as his ability will permit him to go; and, if he aims at taking a degree, we prefer to see him take one in mathematics. There are other allied means of taking a degree for those who are not mathematicians, such as physics and chemistry; and a degree can also be taken in the applied science special examination, which includes mechanism, heat and practical work.



The courses of lectures which we provide for our pupils are three in each term, thus forming a three years curriculum as follows :

|           |                         |                                                                |
|-----------|-------------------------|----------------------------------------------------------------|
| 1st year. | <i>Michaelmas Term.</i> | Mechanism and Applied Mechanics (General Introductory Course). |
|           | <i>Lent Term.</i>       | Elementary Mathematics (Algebra and Trigonometry).             |
|           | <i>Easter Term.</i>     | Statics and Hydrostatics.                                      |
| 2nd year. | <i>Michaelmas Term.</i> | Dynamics.                                                      |
|           | <i>Lent Term.</i>       | Machine Construction and Heat.                                 |
|           | <i>Easter Term.</i>     | Conics and Differential Calculus.                              |
|           | " "                     | Surveying and Levelling (Practical Class).                     |
| 3rd year. | <i>Michaelmas Term.</i> | Integral Calculus and Solid Geometry.                          |
|           | <i>Lent Term.</i>       | Theory of Structures and Strength of Materials.                |
|           | <i>Easter Term.</i>     | Rigid Dynamics.                                                |

The above list of lectures will be subject to modification as the progress of our experience may suggest. There will always be a number of pupils who will take only the first or only the last year's course, or otherwise select their subjects owing to the particular state of their information.

Each term lasts for at least eight weeks, and we add a fourth term in the Long Vacation in July and August, during which, however, there are no Lectures.

Any person may attend the shops daily from 8 to 1, and from 2 to 6, including attendance at all lectures given, for the fee (covering eight weeks in each of four terms) of forty-eight guineas. The minimum fee charged is £3 3s., which permits of attendance three forenoons or three afternoons for each week during eight weeks of one term, and a larger number of attendances is charged proportionally. A pupil pays for the materials he uses, but there are no other extra charges. He takes away his own work when finished, and in some cases this reimburses him for the greater part of the fee he has paid.

As to the practical work done in the shops, and the order of that practical work, we adapt this to the condition of each pupil. They all begin for a short time on a definite job in the fitting and turning shop to familiarize them with the tools; and, in all cases, from the beginning of their course to the end, they are engaged on real practical jobs, and not on toy work, and have to turn out everything in a thorough workmanlike manner. They work from drawings made by themselves, or similar to others which they have made or are about to make. Some pupils begin by designing, others do not go to designing till they have been some while in the shops;—this depends on their capabilities. We make a point of never copying a drawing; the pupils have to think out at the drawing board the practical application of their theoretical knowledge. As we do a good deal of work for the University and for others, there is always plenty of opportunity for the pupils to make designs, and we apportion that work among them in the way we find to be most educational. In fact the place is an engineering workshop, where the work is arranged



and distributed with a view to give the pupils every facility for learning. To prevent our falling into the danger of omitting the economic aspect of our work, we lay it down as a principle that the shops must clear their own way; and they do so, paying five per cent. on the capital, and 10 per cent. to provide for deterioration on the machinery. As we have a regular system of book-keeping, which the pupils, I should mention, have the opportunity of learning in detail, we are able to keep the economic aspect always in view. What in another shop would be profit is with us practically absorbed in education.

The sort of work we do in the shops will be evident from the list of the principal jobs at this moment in hand.

1. Plans for a larger foundry with core-stove and furnace for malleable cast iron.
2. Shaping machine; 12" stroke 5' bed.
3. Circular saw-bench, with rising table 3' by 2'.
4. Double geared fixed headstock for a 5" centre lathe.
5. Three lathes with 5" and 6" centres.
6. Pattern-maker's lathe with 9" centres.
7. Pair of small horizontal engines, 3" diameter of cylinder, 6" stroke, to drive a dynamo machine.
8. Siemens' dynamo machine to absorb five horse-power.
9. Large gunmetal heliostat driven by worm-wheel gearing.
10. Four-jawed chuck 3' diameter.

For all these the designs, patterns and castings, have been made or are being made in the shops.

We have also an instrument-making department, chiefly for electrical work such as galvanometer making. And we have a carpentry and cabinet-making department, and some of our pupils, especially a few who intend to emigrate, learn general carpentering.

There are at present about 40 pupils, the greater number of whom are intending to enter the engineering or allied professions. A great deal of time would be saved if they knew mathematics including trigonometry, and also elementary statics and dynamics, before they came to us, and also if they had got some familiarity with the use of tools while at school. I find those who have had that training get on more quickly.

As to the number of hours a pupil actually works in the shops, that is a good deal regulated from term to term by the University examinations which he may have to go through and the amount of preparation he requires to make for these. From the point of view of my department we do not much care whether a pupil goes in for a degree or not; but in general the reading for a degree gives definiteness to his work. I do not, however, confine the workshop at present to those reading for a degree. A good many pupils attend the workshops for three or four forenoons or afternoons per week, each attendance generally being from three to four hours, and increase this in those terms when there are no University examinations, and then stay for a few terms



after taking their degree, attending then during ordinary working hours. The amount of time which I would advise a pupil to devote to reading for his degree and to my department respectively, would depend partly on his state of preparation, partly on the future line of life he intended to pursue, and partly on whether the subject of his degree was one in which he would be more or less directly helped by his work with me.

The following is a list of the departments and the principal machinery which we have:

- 1st. *Drawing Office.* This is capable of accommodating about 15 pupils at a time and is fitted up with a large stock of drawing boards and instruments. All work done in the shops is first drawn, and the drawings traced on vellum cloth and these tracings are sent into the shops for the pupils to work from.
- 2nd. *Machine shop.* This contains a three horse-power gas engine which drives three self-acting screw-cutting lathes with a number of smaller lathes, and drilling, shaping, slotting and planing machines.
- 3rd. *Erecting shop.* In this shop the fitting and erecting is carried on, there are a dozen vices and a cast iron marking-off table 6' x 2' for setting out work.
- 4th. *Smithy.* Containing a hearth fitted with water tuyere with power blast and capable of welding a 4" shaft.
- 5th. *Foundry.* This contains a brass furnace and cupola for iron melting, in which all the castings at present used in the shops are made up to 4 cwts. A new foundry is being designed and will be shortly built in which castings upwards of a ton may be made, and also a complete plant will be added for the conversion of castings into malleable iron.
- 6th. *Pattern and Carpenters' shop.* Circular saw, morticing machine and eight carpenters' benches, with sets of tools.
- 7th. *Instrument shop.* Containing four foot lathes, four vices and a large assortment of small tools.
- 8th. *Office and stores.*

There is also a museum containing sectional and other models.

I should not like to terminate this letter without saying that, though there may be special opportunities afforded to a pupil to learn, no one need come here with the expectation that there is afforded any royal road to engineering which he can follow without hard work. He must be willing to work hard and conscientiously, and must continually bear in mind that when he leaves he will be judged, and his success as an engineer will be determined, not by where he has been but by what he can do.

I am,

yours faithfully,

JAMES STUART.

James Stuart  
Oct 1893



# PROSPECTUS

OF THE

## Canadian Pacific Mining Company (Limited).

Application has been made to the British Columbian Legislature to incorporate a company under the above name, with a capital of two hundred thousand dollars, divided into 2000 shares of \$100 each, to carry on mining, smelting and reducing operations of all kinds in the Province of B. C.; and also to construct roads and docks, and to transport freight and passengers by land or water within the boundaries of said province."

As soon as subscriptions have been received for one-fourth of the stock (\$50,000), it is proposed to despatch a party equipped with all necessary surveying and assaying apparatus to the Kootenay district of B. C., to report upon the value and prospects of the wonderful discoveries of silver, lead and copper ores recently announced, and to bond the most desirable locations. Mr. R. E. Sproule, a prospector, arrived in Victoria towards the end of February with about twenty-five pounds of specimens of galena from a ledge on Kootenay Lake, which he reports to be over one hundred feet in width. At least 250,000 tons of ore were estimated to be in sight in the croppings. He reports great veins of pure copper to be visible on the hill sides. This report is probably too highly coloured. But all that is known of this region tends to confirm his story.

Kootenay Lake occupies a long narrow valley between the Purcell and Selkirk Ranges of mountains; which Dr. Geo. M. Dawson, F.G.S., considers to be the British representatives of the famous Bitter Root Ranges of Idaho, from whose spurs and flanks such immense quantities of the precious metals are now being extracted. The mineral wealth of these mountains bids fair before long to surpass the out-put of the famous silver mines of Utah, further south, and there is no possible reason why the metalliferous character of these ranges should abruptly change at our international boundary.

This lake is not very difficult of access even now. The Northern Pacific Railroad has a station at Sand Point on Pend d'Oreille Lake in Northern Idaho, whence it is only some sixty miles to the point where the Kootenay River crosses the boundary. Thence the river is navigable down to Kootenay Lake. This road is now open from Portland to Sand Point, and will soon be completed through to Duluth.

In order to form some idea of the mineral deposits we may reasonably hope to find along the shores of Kootenay Lake, let us quote from the official records of a few of the more prominent mines of Idaho on the same geological formations and immediately south-east of this region.



1. THE CHARLES DICKENS. When it was first discovered its owners crushed the quartz in hand mortars and extracted many thousand dollars. Then they began to assort their ore and ship the best on pack animals to Ogden. This shipped ore sampled from \$1000 to \$3700 per ton. In 1878 they built an arrastra with a capacity of 2 to 2½ tons per day. It produced over \$32,000 worth of bullion in two months. It continues (1882) to yield from \$8000 to \$12000 per month. The main vein is 2 to 12 feet in width, much of the ore in which is very high grade. Recently a new vein was struck on this property 18 to 24 inches in width. About 8000 tons of ore on the dump were estimated from samples to contain \$40,000 to \$45,000. The ore in sight (to a depth of 300 feet from surface) is estimated at \$150,000.

2. THE GENERAL CUSTER. This ledge lies 1½ miles east of the Charles Dickens and was discovered in 1877. In that year and in 1878 the discoverers shipped \$60,000 worth of ore from an open cut 30 by 40 feet; the greater part of which sampled \$500 per ton. The mining engineers who examined the property in 1878, reported three million dollars worth of ore in sight. In July 1879, it was sold for about \$160,000. Then a twenty stamp mill was erected, which actually shipped in the first twelve months of its career 433 bars of bullion worth \$1,143,000. This mill crushes 25 tons of ore per day, which is fed to it without assorting; very little of which yields less than \$100 per ton. It generally yields from \$120 to \$180 per ton.

3. THE UNKNOWN. This mine lies directly east of the Custer, and is on the same vein: which is here 2½ to 5 feet in width and has been opened to a depth of 300 feet. During 1877 and 1878 nearly \$100,000 worth of ore was shipped from this property, averaging about \$450 per ton. No stoping (1881) has yet been done. The ore shipped was taken out in sinking shafts, and driving galleries. The ore in sight is variously estimated to be worth from one to two million dollars.

4. THE MONTANA.—This mine on Mount Estes has a vein from 4 to 15 feet in width, carrying good ore from one wall to the other. One lot of 610 pounds yielded \$925. Ten lots with a total weight of 135,482 pounds were crushed at the Bay Horse Smelter and yielded \$72,247.

These instances of rapid and rich developments could be freely multiplied, if necessary.

As for copper, the St. Charles mining district contains copper ore assaying 60 to 80 per cent and native copper of great purity. This deposit can be traced 35 miles. A number of mines are successfully worked and many locations have been made. Along the S. W. edge of Camas prairie is an extensive net work of copper veins from one to six feet in width, their ores containing about 40 per cent copper. Near Brownlee's ferry, 120 miles north of Boise City, are several large veins running 60 per cent copper. There are many other copper deposits, and large quantities of the silver ores of the territory contain from 15 to 20 per cent copper.

The iron and coal deposits of Idaho are also very extensive, as well as her salt springs.

Ninety miles N. E. of Boise there are two ledges, each eight to ten feet wide, of mica. They are being developed and thousands of tons of mica are on their dump. Clear, merchantable sheets, 4 by 6 inches in size, can be extracted in vast quantities. Deposits of mica are also known to exist near Pend d'Oreille Lake and south of Lewiston in Northern Idaho.



In Kootenai County of Idaho, Messrs. Dobson & Irwin have recently discovered a vein of fine gold ore 4 feet thick, assaying from \$60 to \$700 per ton. The main shaft is 50 feet deep and there are several other openings on the vein, all in fine looking ore. Some other promising quartz claims have been found in this vicinity. Fifty miles north of this district, in the mountains flanking Pend d'Oreille River, croppings of heavy lead ore, rich in silver, have been found. Still further north from 50 to 100 miles and stretching across the British line is a gold quartz, and placer belt.

The entire region from Snake River to the British possessions, a distance of nearly 400 miles, is full of metal-ribbed mountains.

"The record of the past is good, but promise of the future is glorious. Sufficient development has been made to demonstrate the fact that Idaho is the richest and most extensive mineral belt ever found. Its climate is mild and conducive to economical mining operations all the year round. Its smelting facilities of fuel, lime, water and all varieties and grades of ore are unexcelled."

These remarks apply with equal force to the valleys of the Selkirk and Purcell Ranges in S. E. British Columbia. There the facilities for smelting operations are even greater than in Idaho, for those valleys are occupied by navigable lakes and rivers whereby to transport the ores and fluxes to the furnaces at some central point.

To show the profits of the smelting business let me mention the Bay Horse Mining and Smelting Co., an Omaha organisation, operating three miles west of Salmon River, on Bay Horse Creek. Their plant consists simply of a water-jacket furnace, a battery of five stamps and a Blake crusher; all run by a Leffel turbine of 40 horse-power. It was completed and fired up on 1st Oct., 1880, at a total cost of \$35,000. In the first run of thirty days it produced base or lead bullion to the value of \$100,000; and it is said that the profit on this one month's work almost paid the entire outlay on the smelter and running expenses. Its capacity is 25 tons of ore daily, and the product is from 3 to 4 tons of base bullion daily, worth \$800 to \$1400 per ton.

At the time that this smelter was erected its site was as far from the railroads as Kootenay Lake is now distant from the Northern Pacific R. R. Therefore a similar smelter for silver-lead ores, or for copper, might be erected at a central point on Kootenay Lake for a similar sum and yield as large returns.

It is intended that if the preliminary report from Kootenay Lake is sufficiently favorable (which may be confidently anticipated), the remaining 90 p. c. of the subscribed capital should be called up to purchase suitable mining and mill locations and prepare for the erection of smelting works for next season. The present owners of locations on Kootenay Lake would probably co-operate with our Company, in order to obtain milling and smelting facilities, by giving us an interest in their claims or else by very profitable contracts to reduce their ores.

J. FRASER TORRANCE,

*Mining Engineer.*

16 St. John Street,  
MONTREAL, 21st March, 1883.



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At the time that this smelter was erected its site was as far from the railroads as Kootenay Lake is now distant from the Northern Pacific R. R. Therefore a similar smelter for silver-lead ores or for copper, might be erected at a central point on Kootenay Lake for a similar sum and yield as large returns.

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J. FRASER TORRANCE.  
MONTREAL, 21st March, 1883.

*John Fraser*



# SOCIETY OF SAINT GEORGE.

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E. H. BAYLEY.  
WALTER BESANT, M.A.  
LAMAN BLANCHARD.  
Col. FREDK. BRINE, R.E.  
LORD ALFRED CHURCHILL.  
HYDE CLARKE, *Fellow of the Royal Colonial Institute, Chairman of the Executive Committee.*  
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Genl. FREDK. COTTON, R.E., C.S.I.  
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JAMES YOUL, C.M.G., *Fellow of the Royal Colonial Institute.*

### Secretary.

JOHN FENTON, Esq.

### Offices.

8, JOHN STREET, ADELPHI, W.C.

### Treasurer.

R. BIDDULPH MARTIN, Esq., M.P.

### Bankers.

MESSRS. MARTIN & Co., LOMBARD STREET.

*Subscriptions, ONE GUINEA per Annum. Life Composition, FIVE GUINEAS.*



# SOCIETY OF SAINT GEORGE.

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## REPORT OF THE CHAIRMAN OF THE EXECUTIVE COMMITTEE.

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AFTER the successful inauguration of the Society on St. George's Day, 1879, and the constitution of a large General Committee, the Executive Committee was appointed with ample powers, and proceeded with the work of organization.

A succession of fortuitous circumstances here and on the other side of the Atlantic contributed to delay this task. Illness and death thinned the ranks of the active members and paralysed operations. The loss of Mr. W. HEPWORTH DIXON, a friend of the movement which led to the initiation of the Society, was a serious discouragement. Mr. B. F. COBB, who energetically conducted the duties of Honorary Secretary, was obliged from illness and pressure of business to decline the office.

No success attended the efforts to obtain a centre of operations, and the Royal Colonial Society, among whose members we had many supporters, declined to aid us. The Society of Arts, on which we had less claim, kindly allowed us to hold meetings in their hall, but could not let the Society have its address there.

The Executive Committee, although impeded, has not discontinued its labour. It has arranged with Mr. JOHN FENTON, that he should act as one of the Honorary Secretaries, and allow the business to be transacted at 8, John Street, Adelphi, without liability to the Society, until such time as the state of its progress may allow an arrangement to be made of a remunerative character, and with the provision that it shall be of a retrospective character, dating back from the 1st January, 1883.

The Committee have made no effort to collect subscriptions. Some small amounts have been paid into the account of the Honorary Treasurer, Mr. R. B. MARTIN, M.P., of Messrs. Martin & Co.'s. By this means, but chiefly by the Chairman, all accounts for printing and other disbursements have been discharged, and no liabilities exist.

A considerable correspondence has been maintained.

One object the Committee have had in view was to ascertain to what extent the observance of ST. GEORGE'S DAY is still maintained, and on this they obtained information showing that though in general there is considerable ignorance and neglect, many celebrations still take place by ancient guilds dating from many centuries, and by old institutions.



It appeared desirable to the Committee, in reference to this state of affairs, that a better HISTORY OF ST. GEORGE should be available, and it is gratifying to announce that the Rev. Dr. BARON, F.S.A., is engaged on this subject. Hitherto one of the chief authorities in reference to England was the "Royal Windsor" of our late Member, Mr. HEPWORTH DIXON.

Colonel JOSEPH LEMUEL CHESTER, F.S.A., a native of New England, devoted his life and fortune, during a residence here, to the investigation of the descent of the Pilgrim Fathers, and the founders of the United States. These labours were of a most remarkable character, and the records of them are an enduring contribution towards the genealogy of our people. On his lamented death last year, the Chairman applied to Dr. BRADLEY, the Dean of Westminster, referring to the services of Colonel CHESTER in special connection with Westminster Abbey, and pointing out how desirable it was that, as a tribute to America, the interment should take place in the Abbey. The Dean, in consultation with the Chapter, was unable so to appropriate any portion of the small space at their disposal, as would have been their natural desire. The Dean, however, himself performed the service at the funeral; and the Dean and Chapter will, at their own expense, erect a tablet in the Abbey.

The proposition of a monument in Westminster Abbey to the POET LONGFELLOW was made last year by the devoted friend of our cause, Dr. W. C. BENNETT, who has for years laboured to promote the union of feeling with our brethren beyond the seas and throughout the empire. His arduous labours have been attended with great success, and there can be no doubt that a most useful impression had been made in the public mind.

The illness and death of GENERAL GARFIELD, while it tended greatly to promote a general feeling of sympathy among our people, such as had never before been manifested, seriously interfered with the proceedings of the NORTH AMERICAN UNION of the ST. GEORGE'S SOCIETIES. The annual convention for 1881 was to have been held at Washington, but the illness of the President compelled its postponement, thereby impeding many measures of organization.

The Convention in 1882, although of a remarkable character and noticed in the "Times," and other papers, was still incomplete.

Captain ST. ANDREW, of Farmville, Virginia, one of the founders of our Society, had consented to act as Delegate to the Convention, but before it met, was suddenly carried off by illness. At the desire of the Convention, His Grace the DUKE OF MANCHESTER, then in the States, was requested to honor the Convention with his presence, but was unable to do so.

While the Convention was being assembled, and while feeling was in tension in the States through the loss of General GARFIELD, Mr. ALFRED TENNYSON, proposed a new national song for English-speaking men, in which he omitted all reference to



those in America. This caused great offence there, and Mr. GEORGE DAWSON, President of the Convention, proposed an additional verse to meet this omission, which met with notice in the "Athenæum" and other papers here.

Mr. BENJAMIN, Secretary of the Union, had made application that this Society should engage in the controversy relative to salutes by English men-of-war in the Pacific, on the American celebration of Independence Day, and Washington's birthday. This, however, appears to be beyond our scope.

On an application from the Philadelphia St. George's Society for co-operation in the formation of a LIBRARY in the magnificent St. George's Hall, the Chairman was able to assist their views. On his suggestion, the Library is to be particularly devoted to the illustration of the influence of the connection with England, and the influence of English principles and institutions on the formation and constitution of the United States.

The great facts affecting the welfare and the future of the English-speaking races of the world are furnished by the Census of the United States in 1881, and that of these islands in 1882. The American Census brings out the number of fifty millions, that of this country, thirty-five millions, and we now know that the number of the English-speaking population of the world, is one hundred millions, and the number of men found under our rule, is four hundred millions, or nearly one half of the population of the world. The consequences which must result from these facts will seriously engage the attention of this and other Societies, and will afford inducement for many earnest labours.

Sir DONALD CURRIE has recently pointed out that, in the island of Mauritius, all English sympathies are suppressed by French dominance to the serious prejudice of our Home, Colonial, and Indian interests.

It may be useful for this Society to authorise the Executive Committee to confer with those interested as to the means of promoting the use of the ENGLISH LANGUAGE in Mauritius, and its dependencies, Saint Lucia, and Trinidad. This may also be a means of rallying supporters to this Society.

On each St. George's Day, since the foundation of the Society, a St. George's Dinner has been held, and it appears desirable that in this year, a more public commemoration should take place.

The Executive Committee regret to report their diminution by deaths, and propose that they shall be strengthened by the nominations of the Hon. Secretary, of Mr. E. H. BAYLEY, Major DAVIS, and Mr. WALTER BESANT.

HYDE CLARKE.

3rd February, 1883.

*St George's  
Society*



LECTURES

COURSE OF FREE LECTURES  
ON THE  
GEOLOGY OF THE LANDS OF THE BIBLE

By DR. DAWSON.

IN THE PETER REDPATH MUSEUM,  
**ON WEDNESDAY, NOVEMBER 15th,**  
AND FOLLOWING WEDNESDAYS,  
AT FOUR P.M.

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**SUBJECTS :**

*The Earth and the Heavens as known to the  
Ancients.*

*Geology of Egypt, Sinai and Palestine.*

*Prehistoric Palestine.*

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The Lectures are free to all Graduates and Students  
of the University and of affiliated Colleges.

City Ministers and gentlemen holding tickets for the  
Museum are also invited.

November 6, 1882.



Lectures

COURSE OF THREE LECTURES  
OF THE  
GEOLOGY OF THE LANDS OF THE BIBLE

BY DR. DAWSON

IN THE PETER WEDDATH MUSEUM  
ON WEDNESDAY, NOVEMBER 15th,  
AND FOLLOWING WEDNESDAYS  
AT FOUR P.M.

SUBJECTS :

The Earth and the Elements as known to the  
Ancients.  
Geology of Egypt, Syria and Palestine.  
Prehistoric Palestine.

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of the University and of affiliated Colleges.  
City Ministers and gentlemen holding tickets for the  
Museum are also invited.

London, 8, 1882.



# The Morning Herald

TUESDAY, JULY 11, 1882.

## An Opposition Organ on the Syndicate Scheme.

There are two opposition organs published in this city,—the *Chronicle* and *Recorder*. We have for some time been trying to get from these spokesmen of the Weeks Brigade an authoritative declaration of what that combination would do with the Syndicate Scheme if intrusted with power previous to its completion. The *Chronicle* which generally gives expression to the views of Mr. Weeks has steadily refused to give any sign. It admits having previous to the election pledged the party to the repeal of the whole syndicate legislation, and it contents itself since the election by promising that they will not repeal the Syndicate Act if they are not able to do so. Beyond that and the further assurance that it regards the result of the elections as an emphatic condemnation of the Syndicate, nothing can be got from it. Though repeatedly questioned it prefers to take refuge in silence. The *Recorder*, however,—which is the personal organ of Mr. Wilberforce Longley,—second only to Mr. Weeks in rank and influence in the Brigade—is not quite so reticent. The organ of Mr. Longley evidently feels ashamed of the cowardice of Mr. Week's organ, and in its issue of yesterday noon takes up the HERALD'S question, though in an indirect manner. It is true it does not squarely answer our question, for being only the organ of the second in command it does not feel itself in a position to do so, but it gives us what is just as good a very frank expression of the present views of the Brigade on the railway question. These views are of course interesting, because they are the opinions of a gang of men who are clamoring to be allowed to govern the province. After giving a brief outline—according to its own ideas—of the history of the Syndicate scheme since its passage last winter, the organ of Mr. Wilberforce Longley goes on to say :

“But to return to Mr. Creelman. The probabilities are that he took with him the Provincial Bonds guaranteeing Messrs. Baring Bros. \$225,000 a year for forty-one years. But it is perfectly manifest that as he only arrived there about the 9th of June, no use could have been made of these bonds up to election day. On the 21st the present rump knew they were defeated, AND THAT THEY WERE VERY LARGELY DEFEATED ON THEIR SYNDICATE POLICY. They were, of course, bound as honest men, to stay all proceedings in this matter. Mr. Creelman should have been telegraphed to the effect that the Government had been defeated, and he must consequently withhold the bonds from the market until it was known what the policy of the incoming administration would be. *This is what they were in honor bound to do, and we cannot believe they have pursued any other course.*”

But there are many circumstances which go to indicate that this is not the course they have pursued. Nothing has been heard of Mr. Creelman, whereas he ought to be home by this time, if he had been told to stop all further proceedings. We find members of the Government still making insulting offers, and specious talk among those members of the opposition who voted for the Syndicate scheme last winter. We have more. Some members of the rump have the shamelessness to boast that the Government had so pushed the scheme, or would so push it, that it would be impossible to prevent its consummation. This means, of course, that Mr. Creelman will be instructed to hand over the guaranteed bonds of the Province to Messrs. Baring Bros., so that there will be no means of preventing the Province from having a millstone about its neck in the shape of an annual liability for interest of \$225,000. A man who would boast of anything so infamous has lost all conception of shame.

Having thus stated the real position of matters, we must again point out the vital importance involved in this matter of the Syndicate. The present rump ought to make a public declaration in the matter. It



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Having thus stated the real position of matters, we must again point out the vital importance involved in this matter of the Syndicate. The present rump ought to make a public declaration in the matter. It is a serious question if any action they may take, after being defeated and reduced below a quorum, would have any binding force in law, and not be voidable at the will of the incoming administration."

Aside from the impertinence of Mr. Wilberforce Longley's organ calling any body of gentlemen "a rump," much less a body of gentlemen of whom Hon. Messrs. Thompson, Bell and Creelman are members, we cannot but regard the above article as a valuable contribution to our political literature. It cannot but be regarded as an official utterance of the Brigade, and as such deserves more than a passing notice. It will be observed that it holds:—

1. That the government have been defeated principally on account of the Syndicate measure.

2. That the Syndicate measure amounts to "a millstone" of \$225,000 a year forever around the necks of the people of this Province. And

3. That the government (assuming them to be defeated) should not move a step forward in completing the Syndicate scheme, but should recall Mr. Creelman at once from London.

Now, since our little mid-day contemporary has been so frank, we shall endeavor to meet it in a similar spirit. We cheerfully admit that, for an out and out opponent of the Syndicate scheme, as it has always been, the above remarks are both consistent and logical. We must admit that if the government has been defeated it has been defeated, largely, as our contemporary says, on account of the Syndicate scheme; and we must also admit that to our minds for the government, if thus defeated, to go on and conclude the Syndicate scheme would be pretty high-handed proceedings. But we may just here take our contemporary sufficiently into our confidence to assure it that unless the government receive such assurance of support as will convince them that they will not be defeated when the legislature meets, they have no idea of completing the Syndicate scheme, and our contemporary is in error in asserting that they have ever intimated that they would. We may also say to our contemporary that the withdrawal of Mr. Creelman from London for the reasons alleged will dispose most effectually of the Syndicate scheme or of any similar scheme for a decade at least. Already the Barings have intimated their unwillingness to risk a dollar in the enterprise if the party represented by the Halifax *Chronicle* are to obtain control of our provincial affairs. And Mr. Creelman's withdrawal from London means their immediate withdrawal from the Syndicate scheme, and the consequent collapse of that or any similar effort for a great number of years.

So that neither our contemporary nor its friends need give themselves any uneasiness about having both the local government and the Syndicate thrust upon them. They may rely upon it that success in securing one must inevitably involve the loss of the other.



## PROSPECTUS.

# The Montreal Coffee-House Association

CAPITAL, \$50,000, IN 500 SHARES OF \$10 EACH.

### Provisional Board.

M. H. GAULT, Esq., M.P.  
D. MORRICE, Esq.  
G. B. BURLAND, Esq.  
HUGH McLENNAN, Esq.  
J. R. DOUGALL, Esq.

JOHN RITCHIE, Esq.  
E. K. GREENE, Esq.  
CHAS. GARTH, Esq.  
H. A. NELSON, Esq.  
HY. LYMAN, Esq.

SECRETARY,

REGINALD H. BUCHANAN.

Address 662 CRAIG STREET.

The Association which now solicits the sympathy and support of the Citizens of Montreal, and especially of the advocates of temperance reform, has for its object the supply of a long felt want, namely: The establishment in various parts of our City, of Coffee-Houses similar to those which have been so beneficial in England and elsewhere, in which the public may be furnished with wholesome refreshments and beverages, without the evils inseparably connected with saloons.

The promoters desire to combine business enterprise with philanthropic motives, and believing that the most successful schemes are those that are conducted on business principles, they have, after careful investigation, every confidence, that under efficient management, a profitable return may be anticipated.

In addition to such returns, social benefits of a marked character have followed wherever such establishments have been in operation. In Montreal there are about 700 licensed places for the sale of liquor, 300 taverns and saloons and about 400 licensed grocers, besides a number of other unlicensed drinking places, with a population of about 140,000.

With the strong temperance movement now prevailing, it is confidently expected that such Coffee-Houses, established in different parts of the City, will yield profitable results, besides being a valuable boon to a large number of the citizens, without incurring the risk of injurious competition with existing private enterprises.

Application is now being made to the Quebec Legislature for a Charter under the Limited Liability Act, with a Capital of \$50,000.

Subscription Books are now open at the Mechanics Institute, Corn Exchange, and Young Men's Christian Association.

MONTREAL, *April 22nd, 1882.*



PROSPECTUS

The Montreal Coffee House Association

CAPITAL IN 100 SHARES OF \$10 EACH

- M. H. GARDNER, Esq., M.P.
- G. MORRICE, Esq.
- G. B. BURKLAND, Esq.
- HUGH MERRIMAN, Esq.
- J. R. DOUGALL, Esq.
- JOHN FITCHIE, Esq.
- E. K. GREENE, Esq.
- CHAS. GARTH, Esq.
- H. A. NELSON, Esq.
- W. TAMM, Esq.

REGINA H. BUCHANAN

The Association which now solicits the sympathy and support of the Citizens of Montreal, and especially of the advocates of temperance reform, has for its object the supply of a long felt want, namely: The establishment in various parts of our City of Coffee Houses similar to those which have been so beneficial in England and elsewhere, in which the public may be furnished with wholesome refreshments and beverages, without the evils inseparably connected with saloons.

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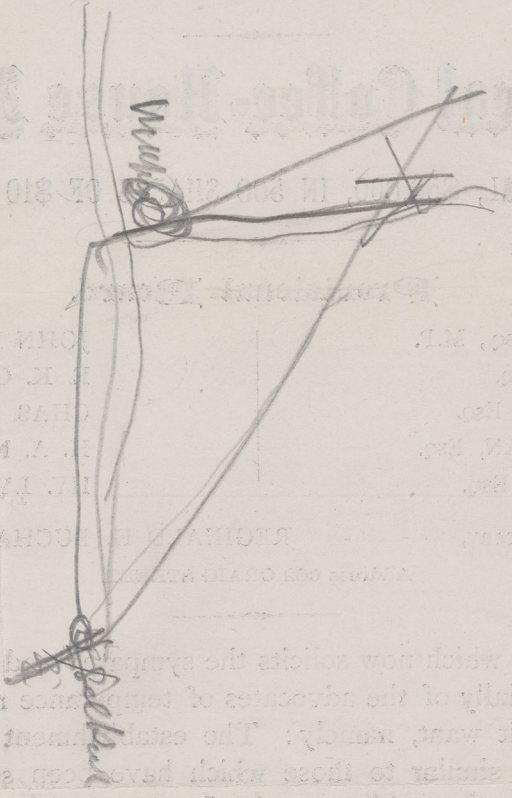
With the temperance movement now prevailing, it is confidently expected that the Coffee House established in Montreal will yield profitable results, besides being a valuable boon to a large number of the citizens, without incurring the risk of injurious competition with existing private enterprises.

An Act has now been made to the Quebec Legislature for a Charter under the Limited Liability Act, with a Capital of \$20,000.

Subscription Books are now open at the Mechanics Institute, Corn Exchange, and Young Men's Christian Association.

Montreal, 17th April 1882.

Coffee House





# PROSPECTUS.

## The Montreal Coffee-House Association

CAPITAL, \$50,000, IN 500 SHARES OF \$10 EACH.

### Provisional Board.

M. H. GAULT, Esq., M.P.  
D. MORRICE, Esq.  
G. B. BURLAND, Esq.  
HUGH McLENNAN, Esq.  
J. R. DOUGALL, Esq.

JOHN RITCHIE, Esq.  
E. K. GREENE, Esq.  
CHAS. GARTH, Esq.  
H. A. NELSON, Esq.  
HY. LYMAN, Esq.

SECRETARY, - - - REGINALD H. BUCHANAN.

Address 662 CRAIG STREET.

The Association which now solicits the sympathy and support of the Citizens of Montreal, and especially of the advocates of temperance reform, has for its object the supply of a long felt want, namely: The establishment in various parts of our City, of Coffee-Houses similar to those which have been so beneficial in England and elsewhere, in which the public may be furnished with wholesome refreshments and beverages, without the evils inseparably connected with saloons.

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Subscription Books are now open at the Mechanics Institute, Corn Exchange, and Young Men's Christian Association.

MONTREAL, *April 22nd, 1882.*



PROSPECTUS

The Montreal Coffee House Association

CAPITAL \$250,000, IN 250 SHARES OF \$10 EACH

Directors

JOHN RITCHIE, Esq.  
L. K. GRIMM, Esq.  
CHAR. GASTAL, Esq.  
H. A. HENSON, Esq.  
H. J. LAMONT, Esq.

M. H. GAULT, Esq., M.P.  
D. MONTGOMERY, Esq.  
G. W. HURD, Esq.  
HUGH McLELLAN, Esq.  
J. R. DOUGLAS, Esq.

REGINALD H. BUCHANAN

Secretary

Address and Office

The Association which now solicits the sympathy and support of the Citizens of Montreal and especially of the advocates of temperance reform, has for its object the supply of a long felt want, namely: The establishment in various parts of our City of Coffee-Houses similar to those which have been so beneficial in England and elsewhere in which the public may be furnished with wholesome refreshments and beverages, without the evils inseparably connected with saloons.

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Subscription Books are now open at the Mechanics Institute, Corn Exchange and Young Men's Christian Association.



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IN MEMORIAM

Lewis H. Morgan, LL.D.,

Son of Jeddediah and Harriet Morgan,

Born at Aurora, Cayuga Co. N.Y.,

Nov. 21<sup>st</sup>, 1818;

Was Graduated at Union College, 1840;

Practiced Law in Rochester, N.Y.

From 1844 to 1862.

Author of

League of the Iroquois, 1851;

The American Beaver and his Works, 1867;

Systems of Consanguinity and Affinity  
of the Human Family, 1870;

Ancient Society, 1877;

House Life and Architecture of the

North American Indians, 1881.

Fell on Sleep,

Dec. 17<sup>th</sup>, 1881.

“At evening time it shall be Light.” Zech. 14. 7.



# Merchants Bank of Canada.

## REPORT OF THE DIRECTORS TO THE SHAREHOLDERS.

*Presented at the Fourteenth Annual Meeting, held in the Banking House, in  
Montreal, the 15th day of June, 1881.*

*Merchants Bank  
June 15*

The DIRECTORS of the MERCHANTS BANK OF CANADA in reporting to the Stockholders the operations of the year just closed, beg to state that the business of the Institution has made very satisfactory progress since the last Annual Meeting.

The year has witnessed a considerable change for the better in all the leading departments of industry and commerce, and the result has been manifest in a steady and continued improvement in Banking operations.

In this improvement the MERCHANTS BANK has fully participated.

The Net Profits of the year's business, after deducting charges, interest on deposits, and provision for the bad and doubtful debts of the year, have amounted to . . . \$651,600.25

(N.B.—Included in this are sundry sums recovered from former appropriations and other sources extraneous to the ordinary business of the Bank )

|                                                  |              |
|--------------------------------------------------|--------------|
| Add Profits brought forward from 1880, . . . . . | 4,911.47     |
|                                                  | \$656,511.72 |

This sum has been disposed of as follows :—

|                                                                     |              |
|---------------------------------------------------------------------|--------------|
| To amount of Dividend No. 24, at 3 per cent. . . . .                | \$166,439 20 |
| “ “ No. 25, at 3 per cent. . . . .                                  | 168,348 10   |
|                                                                     | \$334,787.30 |
| To amount written off Bank Premises and Furniture Account . . . . . | 23,506.16    |
| To amount added to the “ Rest ” . . . . .                           | 50,000.00    |
| To amount transferred to Contingent Account . . . . .               | 235,953.67   |
| To Balance carried forward to next year . . . . .                   | 12,264.59    |
|                                                                     | \$656,511.72 |

The Profits of the year, it will be noted, have not only enabled a considerable sum to be transferred to the Contingent Fund, but a substantial amount to be added to the Rest.

It has been thought desirable also to continue the policy of reducing the amount representing the value of the Bank's various premises and office furniture.

The Board have watched very carefully the progress of various matters connected with the business of former years, and, before closing the books, wrote off every debt that appeared in their judgment to be irrecoverable.

They have also made considerable appropriations on account of such debts as are partially secured, and the working out of which is not yet completed.



These various amounts have been charged to the Contingent Fund, the balance of which they look upon as sufficient to cover any remaining residue of the doubtful assets of the Bank.

Considerable progress has been made during the year in the sale of Real Estate, but the Board, in view of probable continued improvement in the times, have not been anxious to press properties on the market that yield a fair revenue. They have however, not let any opportunity pass by of realizing any property when a reasonable price was offered for it. The amount of unproductive property, as will be noted on reference to the accompanying balance sheet, is reduced to a comparatively small amount.

The Deposits, Circulation, and Profits of the Bank have steadily improved during the year, and the losses have been few in number, and small in amount.

The business of the country, to all appearance, is on a much sounder basis than formerly, and there is a fair prospect at present, with such caution as former reverses suggest, of a higher average of success in mercantile and manufacturing pursuits.

Should this expectation be realized the Banks are likely to reap the benefit in a diminished average of losses, and more satisfactory results generally.

The usual Balance Sheet of the Bank as on the 31st May, (being the closing day of the year) is hereto appended, and the Directors have pleasure in calling attention to its various items as compared with those reported to the shareholders a year ago, the evidence of substantial improvement therein being clearly manifest.

The Inspection Department of the Bank has carried on its labours during the year with zeal and efficiency, and the Board have every reason to be satisfied with the thoroughness with which the work has been done. Every Office of the Bank has been inspected during the year.

The General Manager and the other Officers of the Institution have discharged their duties to the satisfaction of the Directors, and are entitled to your thanks for the care bestowed on the business entrusted to their charge since the stockholders last assembled.

The whole respectfully submitted.

(Signed),

JOHN HAMILTON,

President.

MONTREAL, June 6th, 1881.

|            |                                                           |
|------------|-----------------------------------------------------------|
| 8334787.30 | To amount written off Bank Premises and Furniture Account |
| 23906.18   | To amount added to the "Rest"                             |
| 50000.00   | To amount transferred to Contingent Account               |
| 238953.67  | To Balance carried forward to next year                   |
| 12264.59   |                                                           |
| 8686311.73 |                                                           |



GENERAL STATEMENT  
**MERCHANTS BANK OF CANADA,**

*At the close of the Books on 31st May, 1881.*

**LIABILITIES.**

|                                                                                               |                |                 |
|-----------------------------------------------------------------------------------------------|----------------|-----------------|
| Notes in circulation .....                                                                    |                | \$2,835,519.00  |
| Deposits bearing interest (including interest accrued to date).....                           | \$4,816,810.48 |                 |
| Deposits not bearing interest.....                                                            | 2,858,436.03   |                 |
|                                                                                               |                | 7,675,246.51    |
| Balances due to other Canadian Banks keeping Deposit Accounts with<br>the Merchants Bank..... |                | 494,010.05      |
| Balances due to other Canadian Banks in daily Exchanges.....                                  |                | 4,849.73        |
| Balances due to Banks in Great Britain.....                                                   |                | 35,211.84       |
| Dividends unclaimed .....                                                                     |                | 4,937.84        |
| Dividend No. 25, payable 1st June.....                                                        |                | 168,348.10      |
|                                                                                               |                | \$11,218,123.07 |
| Capital paid up.....                                                                          | 5,611,603.33   |                 |
| Reserve.....                                                                                  | 525,000.00     |                 |
| Contingent Fund.....                                                                          | 235,000.00     |                 |
| Balance carried forward to Credit of Profit and Loss Account of next<br>year.....             |                | 12,264.59       |
|                                                                                               |                | \$17,601,990.99 |

**ASSETS.**

|                                                                                                        |                 |                 |
|--------------------------------------------------------------------------------------------------------|-----------------|-----------------|
| Gold and Silver Coin on hand.....                                                                      |                 | \$385,149.17    |
| Dominion Notes on hand.....                                                                            |                 | 899,660.00      |
| Notes and Cheques of other Canadian Banks on hand.....                                                 |                 | 442,277.22      |
| Balance due by other Canadian Banks in daily Exchanges .....                                           |                 | 58,414.96       |
| Balances due by Agencies of the Bank in the United States, and by<br>United States National Banks..... |                 | 1,715,521.61    |
|                                                                                                        |                 | \$3,501,022.96  |
| Total Assets immediately available .....                                                               |                 | \$3,501,022.96  |
| Loans, Discounts and Advances on Current Account.....                                                  | \$12,565,924.10 |                 |
| “ “ overdue, and not specially secured.....                                                            | 226,194.66      |                 |
| “ “ “ secured .....                                                                                    | 117,653.31      |                 |
|                                                                                                        |                 | \$12,909,772.07 |
| Mortgages and other interest-bearing Bonds and Securities.....                                         |                 | 264,419.19      |
| Real Estate—productive .....                                                                           | \$157,386.22    |                 |
| “ unproductive .....                                                                                   | 284,362.14      |                 |
|                                                                                                        |                 | 441,748.36      |
| Bank Premises and Furniture.....                                                                       |                 | 470,000.00      |
| Other Assets not included under the foregoing heads.....                                               |                 | 15,028.41       |
|                                                                                                        |                 | \$17,601,990.99 |

(Signed),

G. HAGUE,

General Manager.



It was moved by the Hon. JOHN HAMILTON, President :

Seconded by JOHN McLENNAN, Esq., M.P., and carried unanimously :

“That the Report of the Directors, as submitted, be, and the same is hereby adopted and ordered to be printed for distribution amongst the Stockholders.”

On motion of RICHARD HOLLAND, Esq., seconded by W. Ross, Esq., it was unanimously resolved :

“That the thanks of the Stockholders are due and are hereby tendered to the President and Vice-President and Directors for the manner in which they have conducted this Institution during the past year.”

On motion of J. P. CLEGHORN, Esq., seconded by E. IDLER, Esq., it was unanimously resolved :

“That the thanks of the Shareholders are due and are hereby tendered to the General Manager, for his efficient management of the Bank during the year, and to the officers of the Bank for their efficient services.”

It was moved by HECTOR MACKENZIE, Esq., seconded by Wm. DARLING, Esq., and resolved :

“That MESSRS. W. B. CUMMING and W. S. EVANS be appointed Scrutineers of the election of Directors about to take place, that they proceed to take the votes immediately, and that the ballot shall close at three o'clock, p.m., this day, but if an interval of ten minutes elapse without a vote being cast, that the ballot shall thereupon be closed immediately.”

On motion of ANDREW ALLAN, Esq., seconded by JONATHAN HODGSON, Esq., it was unanimously resolved :

“That the thanks of the meeting are due, and are hereby tendered to the Chairman, for his efficient conduct of the business of the meeting.”

The election of Directors for the ensuing year was then proceeded with, when the scrutineers reported the following gentlemen re-elected :

ANDREW ALLAN, Esq., SIR HUGH ALLAN, ROBERT ANDERSON, Esq., Wm. DARLING, Esq., Hon. JOHN HAMILTON, JONATHAN HODGSON, Esq., ADOLPHE MASSON, Esq., HECTOR MACKENZIE, Esq., JOHN McLENNAN, Esq., M.P.

The meeting then adjourned.

A special meeting of the Directors took place immediately afterwards, when the Hon. JOHN HAMILTON was re-elected President, and JOHN McLENNAN, Esq., M.P., Vice-President.

By order of the Board,

G. HAGUE,

*General Manager.*

MERCHANTS BANK OF CANADA,

Montreal, 15th, June, 1881.







Manitoba, 4, and British Columbia 6. Upon the basis of the present census, Ontario will be entitled to 92 members, a gain of 4, against a gain of 6 members in 1871, while New Brunswick loses 1 member, her representation being reduced to 15. The net increase in the representation is, therefore, 3, and the House of Commons, after the next election, will contain 209 members.

THE ARGENTEUIL ELECTION.

We publish in another column the address of the Hon. J. C. Abbott to the electors of Argenteuil. It is a manly, straightforward document, and is certain to commend itself favorably to the attention of the electors of the county. Mr. Abbott's reference to the cruel persecution to which he has been subjected, is at his suggestion that the law which permits mad-cap lawyers, with bees in their bonnets on the subject of politics, to indulge in such persecutions, should be amended, will generally be concurred in. We would not consent to mitigate in the slightest degree the severity of the law. Painful and appalling as it is, it is the result of a long and honorable career, and it is not to be tampered with. It is a law which has been given the force of law by the Legislature, and it is not to be tampered with. It is a law which has been given the force of law by the Legislature, and it is not to be tampered with.

The increase of 664,337 in the population of the Dominion during the past ten years is undoubtedly a very satisfactory indication of the progress which has been made. During the first four years of the decade the population increased very rapidly, both by reason of immigration and natural growth, and at the beginning of 1875 was probably nearly equal to that of 1865. It was, however, during the five years of the depression which then fell upon the country, it is very problematical if we did more than hold our own, for although the stream of immigration continued to flow it was with greatly diminished vigor, and the gain thereby was fully offset by the emigration of Canadians to the United States. This exodus was due wholly to the effects of the crisis, factories being compelled to cease operations and operatives to seek employment in other lands, large numbers of traders going out of business and casting their lot elsewhere, and farmers' sons being induced to try their fortunes in the Western States, which in the past decade have proved so strong an attraction to venturesome young men. Had the census been taken two years earlier there are few who would have had the confidence to predict so large an increase of population as has occurred. And this increase, exceeding as it does by more than one hundred and fifty thousand the increment between 1861 and 1871, is the more remarkable when it is remembered that during the latter period the United States was convulsed by civil war and with its vast attractions, while Canada enjoyed a period of trade prosperity and offered a profitable field of labor for the European emigrant. The percentage of increase in the past ten years has been 18.02 per cent, against 15 per cent in 1861-71. This growth may, perhaps, be thought unsatisfactory when it is compared with the increase of 30 per cent made by the United States in the same period; but it is manifestly unfair to compare the two countries, for the United States, which gives this large percentage of growth, occurred almost wholly in the Western States. With the Canadian Northwest now opened for settlement, with railway communication throughout that territory being rapidly pushed to completion, and with more active energy in promoting immigration to that country, there can hardly be a doubt that the decade upon which we have recently entered will witness quite as large a percentage of growth as has been enjoyed by the Western States in the past, or will be made in the future. But the percentage of increase in the five older provinces of the Dominion is about equal to that of the New England States of the United States, viz., 14.55 per cent, while Ontario shows a growth of 3 per cent, more than the New England States, and only about 2 per cent less than that of the Middle States.

The increase of population in the cities of Canada was as follows:—

| City     | 1871    | 1881    | Increase | Per cent |
|----------|---------|---------|----------|----------|
| Montreal | 107,225 | 140,682 | 33,457   | 31       |
| Toronto  | 59,022  | 83,445  | 24,423   | 41       |
| Ottawa   | 21,675  | 27,417  | 5,742    | 27       |
| Hamilton | 23,516  | 25,665  | 2,149    | 9        |
| Kingston | 12,407  | 14,093  | 1,686    | 14       |
| Quebec   | 58,009  | 62,447  | 4,438    | 8        |
| Halifax  | 29,852  | 31,102  | 1,250    | 4        |
| St. John | 28,805  | 29,123  | 318      | 1        |

It will be seen that while Montreal has made the largest actual increase the percentage of growth is greater in both Toronto and Hamilton, the population of the former, with its suburbs, now approximating one hundred thousand. The population of Montreal shows a very gratifying increase, and with the suburbs is now about one hundred and seventy thousand, the population of the county of Hochelaga being 40,079, of which fully two-thirds is in the villages surrounding this city. The decrease in the population of St. John, New Brunswick, has been undoubtedly caused by the fire in 1877, which devastated the city, and from the effects of which it has not yet recovered. Taking the cities altogether we believe the population, as given by the census, very closely approximates the popular estimate of it, and from that fact we may form an idea of the general accuracy of the returns.

The following table shows the growth of the five older provinces during the past forty years—

| Province          | 1842    | 1852    | 1861      | 1871      | 1881      |
|-------------------|---------|---------|-----------|-----------|-----------|
| Ontario           | 487,053 | 623,004 | 1,069,091 | 1,629,851 | 1,913,409 |
| Quebec            | 677,581 | 880,251 | 1,111,556 | 1,310,516 | 1,358,409 |
| N. B. Acadia      | 108,900 | 129,047 | 158,591   | 181,129   | 181,129   |
| N. S. Nova Scotia | 276,551 | 330,857 | 387,878   | 440,555   | 440,555   |
| P. E. I.          | 8,877   | 9,024   | 10,751    | 10,751    | 10,751    |

As we have said the change in the representation of the several provinces in the House of Commons, by the redistribution of seats on the basis of the new census, will be unimportant. By the British North America Act it is declared that Quebec shall have 65 members, and each of the other provinces is to have such a number of members as bears the same relation to its population as 65 bears to the population of Quebec, any fraction over one-half the unit of representation giving an additional member. The House of Commons now consists of 206 members, divided as follows:—Ontario, 88; Quebec, 65; New Brunswick, 16; Nova Scotia, 21; Prince Edward Island, 6; Manitoba, 4; British Columbia, 6.

The Princess Louise Victoria, Duchess of Albany, and her children, were in Montreal on the 29th inst. The Princess and her children, were in Montreal on the 29th inst. The Princess and her children, were in Montreal on the 29th inst.

SECOND CENSUS OF CANADA.

Unrevised Statement of Population, compared with preceding Censuses.

| Province          | 1871      | 1881      | Increase  | Per cent |
|-------------------|-----------|-----------|-----------|----------|
| Canada            | 3,288,306 | 4,330,033 | 1,041,727 | 31.71    |
| Ontario           | 1,629,851 | 1,913,409 | 283,558   | 17.40    |
| Quebec            | 1,310,516 | 1,358,409 | 47,893    | 3.65     |
| N. B. Acadia      | 158,591   | 181,129   | 22,538    | 14.21    |
| N. S. Nova Scotia | 440,555   | 440,555   | 0         | 0        |
| P. E. I.          | 10,751    | 10,751    | 0         | 0        |

SPORTS AND PASTIMES.

SIXTH FUSILIERS RIFLE MATCHES.

The annual shooting competition of the 6th Fusiliers Rifle Association came off at noon under favorable auspices on Saturday afternoon at the range near the depot. The meeting was very successful and reflects credit on the officers forming the executive. The following are the results:—

| Competition                        | 1st Prize               | 2nd Prize                  | 3rd Prize                  | 4th Prize                  | 5th Prize                  |
|------------------------------------|-------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| First Competition—Maiden Stakes    | Pvt D. Currie, No 1 Co. | Pvt J. Forrester, No 2 Co. | Pvt J. Macdonald, No 3 Co. | Pvt J. Macdonald, No 3 Co. | Pvt J. Macdonald, No 3 Co. |
| Second Competition—Battalion Match | Pvt D. Currie, No 1 Co. | Pvt J. Forrester, No 2 Co. | Pvt J. Macdonald, No 3 Co. | Pvt J. Macdonald, No 3 Co. | Pvt J. Macdonald, No 3 Co. |

PROVINCE OF QUEBEC.

| City     | 1871    | 1881    | Increase | Per cent |
|----------|---------|---------|----------|----------|
| Montreal | 107,225 | 140,682 | 33,457   | 31       |
| Toronto  | 59,022  | 83,445  | 24,423   | 41       |
| Ottawa   | 21,675  | 27,417  | 5,742    | 27       |
| Hamilton | 23,516  | 25,665  | 2,149    | 9        |
| Kingston | 12,407  | 14,093  | 1,686    | 14       |
| Quebec   | 58,009  | 62,447  | 4,438    | 8        |
| Halifax  | 29,852  | 31,102  | 1,250    | 4        |
| St. John | 28,805  | 29,123  | 318      | 1        |

PROVINCE OF ONTARIO.

| City     | 1871    | 1881    | Increase | Per cent |
|----------|---------|---------|----------|----------|
| Montreal | 107,225 | 140,682 | 33,457   | 31       |
| Toronto  | 59,022  | 83,445  | 24,423   | 41       |
| Ottawa   | 21,675  | 27,417  | 5,742    | 27       |
| Hamilton | 23,516  | 25,665  | 2,149    | 9        |
| Kingston | 12,407  | 14,093  | 1,686    | 14       |
| Quebec   | 58,009  | 62,447  | 4,438    | 8        |
| Halifax  | 29,852  | 31,102  | 1,250    | 4        |
| St. John | 28,805  | 29,123  | 318      | 1        |

THE ARGENTEUIL ELECTION.

Address of the Hon. J. C. Abbott—A spirited appeal—The contest described—How the law was used as an engine of persecution.

To the free and independent electors of the County of Argenteuil:—

GENTLEMEN.—You are aware that immediately upon the declaration of my election as your representative in the House of Commons in February, 1880, a petition was filed against my return, which was followed by a detail of charges of gross corruption against me personally, and against nearly every respectable man, not out of the county, holding Liberal-Conservative principles, who have ever interested himself in its affairs. Upon this petition, I immediately challenged enquiry, casting aside all preliminary questions which might have caused delay, and you were witnesses of the injurious persecution to which I was subjected at Lachute for the period of seven weeks. My private books and papers were forced into the hands of my brother, and my confidential correspondents interrogated, and even as to my family affairs. Every one who was even suspected of having spoken to me or received letters from me was placed in the box and forced to produce the most complete statement of his communications placed under rigid examination on three different occasions, and was compelled to make public every letter which I had received from any one of you; and copies of every letter I had written to any one of you; no matter what its contents, and in conformity with reference to the whole period between September, 1878, and January, 1880. The charges against me were so vaguely and indefinitely framed that practically every man

was liable to be included in the net of the law. I was fully exonerated from all charges of personal corruption made against me; and from all knowledge of, or participation in, the hundreds of charges of corruption and intimidation by agents.

The Judge has found three of these letters charged to be established as respects date, and upon those grounds has voided my election, declaring, however, in his judgment that I had done everything in my power to prevent the commission of any illegal act, which you all know is strictly true. The grounds upon which he annulled the election are considered questionable by good judges of the law. It is contended that the messenger who gave two tickets to voters at the Montreal station had no authority from me, and was acting in violation of the authority he had received; that every election officer in the county, in not charging his men for their time while voting, provided they went and came straight to and from the poll, was only acting in conformity with the custom which had prevailed in every election in the county since that of Dr. Christie in 1878. And that the privilege was granted to all alike, irrespective of party, and that I have determined to assert that the alleged discharge of Robinson was the result of his treachery and disobedience; and that the consequence of his being voted, as other people who voted against me in a straightforward manner, were not discharged. I have been advised to appeal from the decision to a higher Court, and it is probable that by so doing I might have retained the seat for another session, if not for a longer period. And I have determined to appeal from it, but not to any Court of Justice, I appeal to you, the electors of the county. I come to you entirely exonerated as respects myself from any personal charge of any description, and I submit myself to your verdict as to whether or no I insist continuing to represent you. If you wish me to do so, I am prepared to serve as your member to the best of my ability. If you do not wish me to represent you, I am determined that I will not hold the seat by any legal proceedings.

As to my principles and mode of conduct, I have already followed in Parliament. I think it unnecessary to speak of them, I have now represented you for nearly a quarter of a century. My career has continued under your eyes for more than half a century, and I can say could give you more intimate acquaintance with me, or with my principles and probable course of action, than that which you have obtained from experience. I have always identified myself with the interests of the county, and I believe, during my late term in Parliament, have not been unsuccessful in many local matters of importance. I have improved and extended the post office facilities of the county and united in the back country the two great lines of communication by way of Grenville and by way of St. Jerome. The roads have been improved, and little remains to be done to give permanent access to the centre of the village. I have been moderately successful in improving your internal means of communication in such matters as the extension of the railway bridge, the Beavans lake road; and in the improvement of the roads through out the back part of the county; more especially in the furthering of a direct road to the county town, and in the Millie Isles, which I have long recommended and advocated as giving a short route to Montreal for the inhabitants of the rear west side of the county, which road, I trust, will be completed next year.

As respects the public affairs of the Dominion, I have sustained the policy which is now conferring so large a measure of prosperity upon the country generally; and when the prosperity of its agriculture and manufactures has been thoroughly established, I shall be prepared to assist in re-adjusting the tariff, if any re-adjusting be required, to prevent our financial policy from being burdensome to any section of the people. Beyond my hopes, I have lived to see the highway of trans-continental trade passing through the county, and while I have never relaxed my exertions in furtherance of this great object, I have lately become more closely connected with the movement for the completion of that highway which I regard as essential to the well-being of the Dominion; by increasing its population, promoting its trade and consolidating its immense resources. And I look to the great results I have mentioned, and among them to the opening up of the fertile fields of the North-West by young men as objects to which any man may be proud to contribute.

I therefore now place myself in your hands, and can only regret that my enforced absence at Winnipeg during the next fortnight will prevent for the moment a personal visit.

I am, gentlemen,  
Your obedient servant,  
J. C. ABBOTT.  
Montreal, 23rd July, 1881.

CANADIAN AGRICULTURAL PRODUCTS AT DERRY.

One of the interesting features of the miscellaneous exhibits at the Royal Agricultural Show was the section containing the produce from Canada. It consisted of samples of wheat, barley, oats, rye, peas, &c., from Manitoba, and also some fine specimens of wild and cultivated grasses, besides bundles of wild hops, wild peas, and many other articles which present a very good idea of the quality of the soil and the suitability of the climate for agricultural purposes. A large number of pamphlets, issued by the Government, were also distributed, and the show proved a great attraction, being crowded with visitors every day. His Royal Highness the Prince of Wales inspected the exhibit on Friday, and examined with much interest the various specimens of produce which it included. His Royal Highness was received by Mr. Dyke, the agent for the Canadian Government at Liverpool, who arranged for the exhibit of the produce, with whom he spent some fifteen minutes, and expressed his desire to revisit Canada at an early date.

—London Daily News, July 20th.

—Belief in witchcraft is still to be found in Scotland. Recently an office-bearer in the Free Church not 100 miles from Kilmuir went to a Justice of the Peace, offering to give his oath that everything he had on his hands was bewitched by a woman who was his neighbor and required to be sharply dealt with at once. The Justice of the Peace, refused to interfere.

—In the case of the Rev. Charles Strong, a famous Presbyterian heretic in Australia, his Presbytery have adopted a declaration regretting the negative character of Mr. Strong's paper, and his failure to make distinct mention of the divine person of Christ and his atonement, and of a supernatural revelation, and urging him to correct these errors in the future.

—The United Free Gospel Churches of England, a Methodist body 80 years old, reports a considerable increase in the past year.

—The Princess Louise Victoria, Duchess of Albany, and her children, were in Montreal on the 29th inst. The Princess and her children, were in Montreal on the 29th inst.

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Ottawa Field Naturalists' Club,

ORGANIZED, MARCH, 1879.

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Patron :

HIS EXCELLENCY THE GOVERNOR-GENERAL.

---

President.

JAMES FLETCHER.

---

Vice-Presidents.

W. D. LESUEUR, B.A. | R. B. WHYTE.

---

Committee.

W. P. ANDERSON, H. BEAUMONT SMALL, S. McLAUGHLIN.  
P. B. SYMES. J. MARTIN.

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Secretary-Treasurer.

W. H. HARRINGTON.



1880.

## SOIREEES.

1881.

## 1880.

1. Tuesday, Dec. 7th..... Inaugural Address ..... J. FLETCHER, President.
2. Tuesday, Dec. 21st..The Relations between Literature and Science..W. D. LESUEUR, B.A.  
    "      "      Herbert Spencer's Biology ..... J. G. WHYTE.

## 1881.

3. Tuesday, Jan. 11th.On some Fungi found at Ottawa.....Rev. A. F. KEMP, M.A., LL.D. ✓
- "      "      The Chaudière Gold-Fields ..... R. J. WICKSTEED, B.C.L., LL.D.
4. Tuesday, Jan. 18th.Meteors and Meteorites ..... H. BEAUMONT SMALL.  
    "      "      Iron Deposits of the Ottawa District. .... H. M. AMI, B.A.
5. Tuesday, Feb. 1st.Notes on some Diatoms found in the Ottawa..Prof. G. BAPTIE, M.A.  
    "      "      On some Coleoptera injurious to our Pines.... W. H. HARRINGTON.
6. Friday, Feb. 11th.The Brain—the Gymnasium of the Mind.... J. A. GRANT, M.D., F.R.C.S, F.G.S  
    "      "      Notes on some Fossils found at Ottawa.... W. R. BILLINGS.
7. Friday, Feb. 25th.Liliaceæ ..... Lieutenant-Colonel WM. WHITE.  
    "      "      On the Study of Botany..... J. MARTIN.
8. Friday, March 11th.The Fauna and Flora of the North-West Prairies.Prof. JNO. MACOUN, F.L.S.

The Soirées will be held in the Museum of the Ottawa Literary and Scientific Society on the above dates, at 8 p.m.

In addition to the papers advertised for the several evenings, interesting specimens will be exhibited.

There will also be Microscopes for the examination of special structures and minute organisms.

**Tickets of Admission for Members, 5c.—6 for 25c.**

“          “          **Non-Members, 10c.—6 for 50c.**

In addition to the above, Elementary Lectures upon Botany and Entomology will be delivered during the Winter, by the President and Secretary, if a sufficient attendance can be obtained.

W. H. HARRINGTON,

(Post Office Department),

*Secretary-Treasurer.*

Copies of the **Transactions** of the Club for 1879-80, (over 60 closely printed pages, with 2 fine plates) can be obtained from the Secretary at the following rates:—Members, single copy, 20c.; 6 for \$1. Non-Members, single copy, 25c.; 5 for \$1.

**The Annual Meeting** will be held in the Museum at 8 p.m., on TUESDAY, March 15th, 1881.

Free Press Print.



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1881

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*[Handwritten scribble]*

*[Faint, mostly illegible text from the reverse side of the page, including names like W. H. HARRINGTON and various titles.]*

McGILL UNIVERSITY  
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ACC. NO. 2211  
REF. 75/120



# The Canada Sunday-School Union.

## A P P E A L.

This Society has been in operation for more than forty years, and its field extends throughout the Province of Quebec and portions of the adjoining Provinces.

It labors especially in the more neglected and thinly peopled portions of the country, in organizing Sunday-schools, in aiding and encouraging them, and in supplying them with books and other requisites, either at low prices or gratuitously.

It is a non-denominational Society, organizing union schools where none have formerly existed, but aiding also the schools of any evangelical denomination.

In the past year it was the means of organizing 22 schools, with 96 teachers and 793 scholars, and of visiting and otherwise aiding 144 schools; and its agent delivered, in connection with his visits, 230 sermons and addresses. In some previous years the work has much exceeded these figures. In 1878 as many as 53 schools were organized.

The present appeal is made for subscriptions to liquidate a debt of about \$3,000, which has for some time impaired the operations of the Society, and also for contributions to the annual income.

It is felt by the Committee that the importance of the work of this Society, and its broad Christian character should appeal to the sympathy and liberality of all friends of the religious training of the young; and the special need of caring for the spiritual welfare of the young people growing up in the scattered Protestant communities of this Province, should commend itself with special force to the Christian people of this city.

Contributions are requested to be sent to the Treasurer.

J. W. DAWSON, LL.D., *President.*

GEO. H. WELLS, *Cor.-Secretary.*

JAMES COURT, *Treasurer.*

Montreal, 1st December, 1880.



Appeal  
CSS Union  
Dec/86

|                   |
|-------------------|
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| ACC. NO. 2211     |
| REF. 73/50        |



FINANCIAL STATEMENTS  
TWENTY-SECOND YEAR ENDING 31st DECEMBER 1879.  
CASH ACCOUNT

## TWENTY-SECOND ANNUAL REPORT

OF THE DIRECTORS OF THE

# Montreal Loan and Mortgage Co.

*For the Year ending 31st December, 1879.*

---

The Directors beg to submit statements of the business transacted for the year 1879, and have pleasure in stating that they consider the result of the operations of the Company to be quite satisfactory, and ask the attention of the Shareholders to the Cash Statement and Balance Sheet now before them.

Since the last Report an improvement has taken place in the demand for Real Estate, but it did not to any extent begin to manifest itself until after the close of the past Financial Year of the Company; since the beginning of this year a number of properties have been sold, and in every case, at an advance on the price at which they appear in the Company's Books; it will be satisfactory to the Shareholders to know that in most cases a fair rental has been received from the properties owned by the Company. The general principle on which the rental of the houses owned by the Company has been dealt with, is to take credit only for the *net revenue* after deducting cost of repairs and taxes.

The new loans made during the year have not been numerous, and they have been principally for small amounts, to old members who have been satisfactory borrowers in the past.

Your Board paid during the past year two Dividends, one of 4 per cent., March 15th, and one of 3½ per cent., September 15th, leaving \$1,384.92 to be added to Profit and Loss Account, which now stands at \$12,736.60, to which must be added the Contingent Account of \$64,000; making in all a surplus of \$76,736.60.

The usual careful examination of the Books of the Company and the Cash transactions has been made by the Auditor.

The Directors who retire by rotation, but are eligible for re-election, are Messrs. Thomas Caverhill, Theodore Hart and Thomas Craig.

GEORGE W. CRAIG,

*Secretary-Treasurer.*

M. H. GAULT,

*President.*

*Stock at 107 Sent dividend 7 per cent  
John deposits for one year at 5 per cent*



# FINANCIAL STATEMENTS

FOR THE

TWENTY-SECOND YEAR, ENDING 31st DECEMBER, 1879.

## CASH ACCOUNT.

| RECEIVED.                            |            | PAID.                             |            |
|--------------------------------------|------------|-----------------------------------|------------|
| Bal in Alliance Bank, 31st Dec., '78 | 82.11      | Exchange Bank Overdraft ..        | 4,072.85   |
| Mortgages .. .. .                    | 159,200.34 | Mortgages .. .. .                 | 77,347.98  |
| Capital Stock .. .. .                | 55,262.94  | Dividends .. .. .                 | 43,533.23  |
| Interest on Bank account .. ..       | 58.53      | Expenses .. .. .                  | 4,376.70   |
| Commissions .. .. .                  | 404.49     | Board Fees .. .. .                | 2,000.00   |
| Deposits .. .. .                     | 80,258.11  | Sterling Debentures .. .. .       | 100,654.51 |
| Overdrawn in Bank .. .. .            | 417.19     | Deposits .. .. .                  | 47,344.62  |
|                                      |            | Interest on Debentures & Deposits | 16,353.82  |
|                                      | 295,683.71 |                                   | 295,683.71 |

## PROFIT AND LOSS ACCOUNT.

| RECEIVED.                       |           | PAID.                             |           |
|---------------------------------|-----------|-----------------------------------|-----------|
| Balance from last year .. .. .  | 11,351.68 | Dividends .. .. .                 | 43,346.82 |
| Interest on Mortgages & Rentals | 66,999.24 | Expenses .. .. .                  | 4,376.70  |
| Interest on Bank Account .. ..  | 58.53     | Board Fees .. .. .                | 2,000.00  |
| Commissions .. .. .             | 404.49    | Interest on Debentures & Deposits | 16,353.82 |
|                                 |           | Balance carried forward .. ..     | 12,736.60 |
|                                 | 78,813.94 |                                   | 78,813.94 |

## BALANCE SHEET.

| ASSETS.                         |            | LIABILITIES.                       |            |
|---------------------------------|------------|------------------------------------|------------|
| Mortgages and Real Estate .. .. | 962,289.03 | Overdrawn in Bank .. .. .          | 417.19     |
| Office Furniture .. .. .        | 659.51     | Capital { Subscribed \$1,000,000.  |            |
|                                 |            | Paid .. .. .                       | 612,532.49 |
|                                 |            | Dividends Unpaid .. .. .           | 978.58     |
|                                 |            | Prepayments .. .. .                | 740.80     |
|                                 |            | Sterling Debentures .. .. .        | 56,027.47  |
|                                 |            | Deposits & Bills Payable .. .. .   | 215,515.41 |
|                                 |            | Contingent Account .. .. .         | 64,000.00  |
|                                 |            | Profit & Loss—Balance to next year | 12,736.60  |
|                                 | 962,948.54 |                                    | 962,948.54 |

GEORGE W. CRAIG,

Secretary-Treasurer.

TO THE PRESIDENT AND DIRECTORS:

*Gentlemen,*

I have carefully audited the Books, Accounts, and Vouchers of the "MONTREAL LOAN AND MORTGAGE COMPANY," for the year ending 31st December last, and have found them strictly correct.

The above Statement of Receipts and Expenditure, the Profit and Loss Account, and Balance Sheet, have likewise been carefully examined and found to correspond exactly with the Company's Books.

Respectfully yours,

G. F. C. SMITH,

*Auditor.*

MONTREAL, March, 1880.



# TEACHERS' ASSOCIATION

In Connection with McGill Normal School.

*The Committee*

*Request the pleasure of the company of*

*Principal Dawson,*

*and Friends, at a*

## CONVERSAZIONE

*to be held in the*

*Hall of the McGill Normal School*

*on the*

*Evening of February 20th, 1880,*

*at 8 o'clock.*

President :

F. W. KELLEY, PH. D.

Secretary :

A. PEARSON, Esq.

|                               |
|-------------------------------|
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| REF. 70151                    |



# Michipicoten Native Copper Company,

LIMITED.

HEAD OFFICE, MONTREAL.

*To be incorporated by Special Act of Parliament.*

**CAPITAL: 44,000 Shares of \$10 each—\$440,000**

TO BE ISSUED AS FOLLOWS:—

22,000 "A" Shares — \$220,000

22,000 "B" Shares — 220,000 \$440,000

The "A" Shares to be payable as follows:—

10 per cent on allotment.

10 " in 3 months.

10 " in 6 "

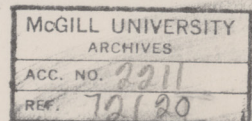
10 " in 9 "

10 " in 12 "

And subsequent instalments as may be required. It is believed that before more than 50 per cent be called up, dividends will be paid.

The "B" Shares, fully paid up, to be handed over to the Quebec and Lake Superior Mining Association on the transfer by them of their Michipicoten Location of 6,400 acres for which these shares are to be taken in payment.

The "B" Shares to draw no dividends until the holders of the "A" Shares be reimbursed their whole expenditure out of profits, after which the "B" Shares are to share *pari passu* with the "A" Shares.





# Michipicoten Native Copper Company, LIMITED.

## PRELIMINARY PROSPECTUS.

The present general revival of business in Canada and throughout the world, after a long period of unexampled depression, appears to offer a fitting opportunity for embarking in new enterprises of a meritorious character. No branch of industry has suffered more from the prevailing stagnation of business than that of copper mining; and at the present time few offer better promise of benefitting by the revival. Already the price of copper has greatly advanced within the last few months; with every prospect of increasing demand and enhanced prices.

It is well known that the copper mines of the South Shore of Lake Superior are the most productive and remunerative in the world. On the North or Canadian shore of the lake, at certain points, the metal occurs in rocks of the same formation, and, so far as yet developed, apparently in as great proportion and under equally favorable conditions. Hitherto the principal developments of this nature have been confined to the QUEBEC MINE on Michipicoten Island, the property of the Quebec and Lake Superior Mining Association; and the results of the preliminary workings have fully justified the most sanguine expectations of the proprietors.

This mining property, comprising ten square miles in extent, is situated towards the western extremity of the Island of Michipicoten. At the north end of the property several shafts have been sunk to considerable depths, and exploratory levels, cross-cuts and adits have been driven; proving the existence of at least three extensive, contiguous and at some points very rich native copper bearing *Ash-beds* similar to those of the great mines of the South Shore. These workings, as well as the general geological and mineralogical character of the property, have been carefully examined by Dr. Sterry Hunt, L.L.D.; F.R.S.; F.G.S., Mr. Charles Robb, Mining Engineer of Montreal and other competent authorities, whose reports are uniformly of the most encouraging nature.

It has been estimated that over \$50,000 have been expended in exploratory works and other improvements on this property. Such mines—as shewn by experience on the South Shore—prove more remunerative in proportion to the extent of their operations; and as further capital is required to open up and work the Quebec Mine to the desired extent, the Association have decided on offering it as the basis of a Joint Stock Company, upon the terms and conditions hereto appended.

From the Reports above referred to, it will be seen that the conditions at the Quebec Mine very closely resemble those at the Quincy Mine, on the South Shore, which up to 1st January last has divided over \$2,230,000 in profits on a capital of \$200,000; while their \$8 shares are now selling at \$25. At the Quincy Mine the average percentage of copper rock treated is no more than one and a quarter; while at the Quebec Mine it is fairly estimated to be about double this amount, and the beds are thicker. By the recent introduction of diamond drills for under ground exploration, and of rock-drills and air-compressors for blasting, and by other great improvements in mining and dressing, the cost of working such mines has been reduced to about one half of what it was formerly.

As to the prospect of profitable returns, besides the more extended reports of Dr. Hunt and Mr. Charles Robb, reference is made to the letter, hereto annexed, from Dr. Hunt, who is regarded as one of the best authorities on the native copper deposits of Lake Superior. And a better proof of the convictions of the



present proprietors on this point cannot be given than the fact of their willingness to transfer so valuable a property, and abide the result by waiting until the new Company are entirely reimbursed their outlay before claiming any share of the profits.

In the immediate vicinity of the mine (which is nearly at the level of Lake Superior) and on the property of the Association, is a small lake at a height of 220 feet, with abundant supply of water, which will probably give all the power necessary for dressing purposes. Should auxiliary steam power be required, fuel for this purpose can be obtained off the Company's lands at a cost of about \$1.25 per cord.

A farm has been laid out near the mine where about 200 acres will be under crop next year; and an additional 100 acres will be ready for seeding the following spring; so that vegetables, fresh meat and dairy products can be furnished to the miners at a cheap rate. After next year, this farm will be capable of supporting 50 to 100 cows. The existence of valuable fishing grounds near the mine will add another source of cheap food supply.

The probable immediate construction of a railroad to Sault Ste. Marie gives promise of direct and speedy access to the property from the Head Office in Montreal, and will afford additional means of carriage of supplies to and products from the mine.

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LETTER FROM DR. T. STERRY HUNT L.L.D; F.R.S; F.G.S.

MONTREAL, 4<sup>th</sup> Dec., 1879.

W. W. STUART, Esq.,

*President Quebec and Lake Superior Mining Co.*

MY DEAR SIR,

The plan which you have submitted to me for a Company to furnish capital for developing your Copper Location on Michipicoten Island seems to me very liberal. I have already, on more than one occasion, expressed my opinion, based on personal inspection in 1872, and on the reports of subsequent explorations, that the property in question is of great value. I believe that in its present state, the mine, with a comparatively small outlay, may be made to yield large quantities of copper, and by judicious management become a source of great profit.

It has long been a reproach that the Canadian copper deposits on Lake Superior have been left undeveloped; and I am satisfied, from my own observations, that no territory on the southern shore of Lake Superior offers greater promise than the Island of Michipicoten.

Wishing you all success in your enterprise.

I remain,

Very truly yours,

T. STERRY HUNT.



present proprietors on this point cannot be given than the fact of their willingness to transfer so valuable a property, and abide the result by waiting until the new Company are entirely reimbursed their outlay before claiming any share of the profits.

In the immediate vicinity of the mine (which is nearly at the level of Lake Superior) and on the property of the Association, is a small lake at a height of 250 feet, with abundant supply of water, which will probably give all the power necessary for dressing purposes. Should auxiliary steam power be required, fuel for this purpose can be obtained off the Company's lands at a cost of about \$1.25 per cord.

A farm has been laid out near the mine where about 200 acres will be under crop next year; and an additional 100 acres will be ready for seeding the following spring; so that vegetables, fresh meat and dairy products can be furnished to the miners at a cheap rate. After next year, this farm will be capable of supporting 50 to 100 cows. The existence of valuable fishing grounds near the mine will add another source of cheap food supply.

The probable immediate construction of a railroad to Sault Ste. Marie gives promise of direct and speedy access to the property from the head Office in Montreal, and will afford additional means of carriage of supplies and products from the mine to the market.

*Chickensucker*  
*mine*  
*May/80*

LETTER FROM DR. T. STERRY HUNT L.D., P.R.S.E.S.

IN W. STUART ESQ.  
 President Quebec and Lake Superior Mining Co.  
 My Dear Sir,  
 The plan which you have submitted to me for a Company to furnish capital for developing your Copper Location on Michipicoten Island seems to me very liberal. I have already on more than one occasion, expressed my opinion, based on personal inspection in 1875, and on the reports of subsequent explorations, that the property in question is of great value. I believe that in its present state, the mine with comparatively small outlay, may be made to yield large quantities of copper and by judicious management become a source of great profit.

It has long been a reproach that the Canadian copper deposits on Lake Superior have been left undeveloped; and I manifested from my own operations, that no territory on the southern shore of Lake Superior offers greater promise than the Island of Michipicoten. It is, I think, the only small island in the north which will give you all success in your enterprise.

Very truly yours,  
 T. STERRY HUNT.

Dr. Hunt has been a resident of the Island of Michipicoten for several years, and has been engaged in the development of the copper mines on that island. He has been successful in his operations, and has been able to produce large quantities of copper. He has also been engaged in the development of the iron mines on that island, and has been successful in his operations, and has been able to produce large quantities of iron. He has also been engaged in the development of the lead mines on that island, and has been successful in his operations, and has been able to produce large quantities of lead.



The American Academy of Arts and Sciences  
will celebrate its 100<sup>th</sup> Anniversary on the 26<sup>th</sup> day of May, 1880.

An Address will be delivered by the President of the Academy,  
the Honorable Charles Francis Adams L. L. D. to be  
followed by a Reception.

The Academy hopes for the presence on this occasion  
of many of its Foreign Honorary Members, as well as of  
its Associate Members in other parts of the United States.

The company of  
John William Dawson, L. L. D.,  
Principal of McGill College is respectfully invited.

Robert C. Winthrop, Chairman.

|                    |                            |                        |
|--------------------|----------------------------|------------------------|
| John Amory Lowell, | } Centennial<br>Committee. | H. H. Munnewell,       |
| Asa Gray,          |                            | J. Ingersoll Bowditch, |
| Nathaniel Thayer,  |                            | Josiah P. Cooke, Jr.,  |
| William B. Rogers, |                            | Alexander Agassiz,     |
| B. E. Cotting,     |                            | Theodore Lyman,        |
| Robert Amory,      |                            | Edward Atkinson,       |

The favor of an answer is requested,

addressed to Theodore Lyman, Secretary of the Committee.

Boston, Mass. U. S. A. January 1<sup>st</sup> 1880.



|                               |
|-------------------------------|
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| ACC. NO. 2211/67              |
| REF. 55                       |

To

The Most Noble the Marquis of Torne,

GOVERNOR GENERAL OF CANADA,

AND

Her Royal Highness the Princess Louise,

THIS VOLUME, ENTITLED,

“BORTHWICK CASTLE ; OR, SKETCHES OF SCOTTISH HISTORY  
TO THE DEATH OF MARY,”

IS MOST RESPECTFULLY DEDICATED AND INSCRIBED, BY ONE WHO

WELCOMES TO “THIS CANADA OF OURS” THE HEIR APPARENT

OF ONE OF THE OLDEST AND MOST FAMOUS OF ALL

CALEDONIA'S HISTORIC NAMES, WITH HIS

ILLUSTRIOUS CONSORT,

AND WHO—PRAYING ALMIGHTY GOD, LONG TO BLESS AND PROSPER THEM IN

“HEALTH, WEALTH AND ESTATE,”—SUBSCRIBES HIMSELF

THEIR MOST OBEDIENT AND HUMBLE SERVANT,

THE AUTHOR.

May, 1879.



Some time after, Angus, while he was hawking near the Castle of Borthwick, with a single attendant, met Kilspindie. "What reason had ye" said the grim earl "for making question of my manhood? Thou art a big fellow, and so am I, and one of us shall pay for it." They fought, and the Earl of Angus with a single stroke cut Spen's thigh asunder, so that he died on the spot. "Go now," he said to the servant of the slain Knight, "tell my gossip, the King, that there was nothing but fair play, I know my gossip will be offended, but I will get me into Liddesdale, and remain in my Castle of Hermitage till his anger be abated."

After this, the King married the daughter of Henry VII. of England, by name Margaret Tudor. Lamberton Church, three miles from Berwick, was the "first Kirk in fair Scotland" to receive the bride.

On a beautiful day in midsummer, several gaily adorned and decorated tents stood pitched beside this little church. A train of Scottish barons and Lords waited beside the tents. Soon was seen approaching another company, at the head of which was the Earl of Surrey, and at his side rode Margaret Tudor, a young and very beautiful girl in the gushing season of maidenhood. With very stately courtesy did the English Knight deliver his precious charge into the Scottish baron's care. This fair girl, so ceremoniously handed over by the Rose to the Thistle, became a mother and a grandmother, and a great grandmother, viz : the great grandmother of King James the VI. of Scotland and I. of England, and thus afterwards were wedded indissolubly in the royal arms of Britain, the Thistle and the Rose



Quarrelling with England, James led an army against the enemy and encamped on the Field of Flodden. Sir Walter Scott says of James, previous to the battle.

And why stands Scotland idly now,  
 Dark Flodden ; on thy airy brow,  
 Since England gains the pass the while,  
 And struggles through the deep defile ?  
 What checks the fiery soul of James ?  
 Why sits the champion of the dames  
 Inactive on his steed,  
 And sees between him and his land  
 Between him and Tweed's southern strand  
 His hosts, Lord Surrey lead ?  
 What 'vails the vain Knight-errant's brand ?  
 Oh Douglas for thy leading wand !  
 Fierce Randolph for thy speed !  
 Oh for one hour of Wallace might !  
 Or well-skilled Bruce to rule the fight,  
 And cry—" St. Andrew and our right !"  
 Another sight had seen that morn,  
 From Fate's dark book a leaf been torn,  
 And Flodden had been Bannockburn.

The only distinct details of the Battle of Flodden are to be found in Pinkerton's History.

When James saw that the English had skilfully gained a position between him and his country he resolved to fight. Burning his tent, he descended the hill and the battle began. Surrey moved on and slowly crossed in narrow file the bridge spanning the river Twisel. BORTHWICK, the commander of the artillery, earnestly asked permission to cannonade the bridge while the English were crossing.

This *Borthwick* by name *Robert* was the master Gunner to the King. He made seven great guns or



From the top of an eminence the Queen had observed the arena of battle, and now seeing all was over, she descended with haste to the plain and mounting a horse, attended by a few servants and friends, she neither halted, nor stopped, nor slackened her speed till she had placed no less a distance than 60 miles between herself and her now inveterate foes. Faint and weary the cavalcade arrived at a lonely cottar's hut and asked for food. The guidwife had nothing but oat-cake and milk to set before her guests. Queen Mary eat greedily of the simple fare, and when about to leave for Dundrennan Abbey, she gave as a parting gift to the hind or cottar, her beautiful gold watch and a remarkably fine solitaire, saying that their fugitive Queen needed them no more. These antiques remained in the possession of the Torrance family till last year, when at the death of Revd. Alex. Torrance, Presbyterian and Parish Minister of Glencross, near Edinburgh, they were willed by him to the Antiquarian Society of that city. Large sums had been offered to the Revd. Gentleman during his life-time, for Queen Mary's watch, but they were invariably refused, as it was an heirloom and had descended from father to son, through many generations.

When the Queen arrived at Dundrennan Abbey, she gazed a moment on the waters, and shortly after chose a vessel in which she embarked for England instead of France.

Queen Elizabeth having heard of her arrival on English soil, gave the royal fugitive a royal journey from Workington to Carlisle. After some little time, war ceased in Scotland, and the Regent made



You are earnestly requested—

- (1st) To obtain for this circular Invitation an insertion in local Newspapers, Magazines, and other periodicals.
- (2nd) To promote the holding of United Prayer Meetings during the week in your neighbourhood.
- (3rd) To COMMUNICATE TO THE SECRETARY of the British Branch of the Evangelical Alliance (7, Adam Street, Strand, London), any circumstances of interest arising out of the observance of the Week of Prayer.

UNUM CORPUS SUMUS IN CHRISTO.

EVANGELICAL ALLIANCE.

ANNUAL INVITATION

FOR THE

WEEK OF UNITED AND UNIVERSAL PRAYER.

AT THE COMMENCEMENT OF THE YEAR.

JANUARY 5-12, 1879.

BELoved CHRISTIAN BRETHREN,

At the close of one eventful year, and at the opening of another, the events of which are still in the hands of Him who heareth and answereth prayer, the British Council of the Evangelical Alliance, and their colleagues in various countries, once more lift up their voice to invite you to set apart the first week of the New Year for united intercession. The cordial and practical response, which to so large an extent these annual invitations have met with during the last thirty-two years, encourages us to hope that the first week of 1879 will witness even a more general manifestation of fraternal sympathy between the members of various Churches and nations than any preceding year, and that this sympathy will be displayed in acts of Christian fellowship, and above all in a concert of "supplications, prayers, intercessions, and giving of thanks" for all men.

The Council, grateful for the many evidences supplied by the past that this Annual Week of Prayer has been a solemnity neither barren nor unfruitful, and also for those tokens of the blessing of Almighty God which in the year now closing have accompanied the work of the Alliance, feel increased confidence in renewing their appeal, and would affectionately urge their Brethren of every nation to make the first week of 1879 memorable as a season of fervent prayer.

In the midst of ancient churches, and on mission stations where churches are only being planted; in countries long accustomed to religious freedom, and in countries, where as yet that boon is denied or restricted; let us, Beloved Brethren, join together with one accord, calling in every place upon our common Lord with earnest supplication for every blessing needful for the churches and for the nations.

On behalf of the Members of the Evangelical Alliance,

|                                          |                                         |                                                |                                |                                    |                                    |                                     |                 |
|------------------------------------------|-----------------------------------------|------------------------------------------------|--------------------------------|------------------------------------|------------------------------------|-------------------------------------|-----------------|
| HARRY VERNEY, <i>President.</i>          | } <i>British Organisation, England.</i> | HENRY WILKES, D.D., LL.D., <i>Pres.</i>        | } <i>Canada.</i>               | G. S. LÖWENHIELM.                  | } <i>Sweden.</i>                   |                                     |                 |
| JOHN FINCH, <i>Treasurer.</i>            |                                         | J. W. DAWSON, LL.D., F.R.S., <i>Vice-Pres.</i> |                                | ERIK NYSTRÖM, <i>Secretary.</i>    |                                    |                                     |                 |
| J. S. BLACKWOOD, D.D., LL.D.             |                                         | } <i>Hon. Secs.</i>                            | GAVIN LANG, <i>Secretary.</i>  | } <i>Paris Committee.</i>          | HENRY R. DUNCAN, <i>Treasurer.</i> | } <i>Spain.</i>                     |                 |
| EDWARD STEANE, D.D.                      |                                         |                                                | E. CASALIS.                    |                                    | M. HANSEN.                         |                                     |                 |
| DONALD FRASER, D.D.                      | GEORGES FISCH, D.D.                     |                                                | H. P. BERGH, <i>Secretary.</i> |                                    |                                    |                                     |                 |
| WILLIAM ARTHUR, M.A.                     | } <i>Scotland.</i>                      | M. KELLER.                                     | } <i>French Branch.</i>        | T. H. BRUCE.                       | } <i>Norway.</i>                   |                                     |                 |
| JAMES DAVIS, <i>Secretary.</i>           |                                         | LEONARD ANET.                                  |                                | T. H. BRUCE.                       |                                    |                                     |                 |
| J. H. BALFOUR, M.D., <i>Prof., Pres.</i> |                                         | G. ROCHEDIEU.                                  |                                | TEOFILO GAY, <i>Secretary.</i>     |                                    |                                     |                 |
| JOHN HOYES.                              | } <i>Secs.</i>                          | A. VISCHER-SARASIN, <i>Pres.</i>               | } <i>Brussels Committee.</i>   | JULIUS MILLINGEN, <i>President</i> | } <i>Italy.</i>                    |                                     |                 |
| WILLIAM LECKIE, } <i>Treasurers.</i>     |                                         | ED. BERNOULLI, <i>Secretary.</i>               |                                | E. E. BLISS, D.D.                  |                                    | } <i>Turkey.</i>                    |                 |
| J. MURRAY MITCHELL, } <i>Secs.</i>       |                                         | VON BISMARCK-BOHLEN, <i>Pres.</i>              |                                | GEORGE F. HEERICK } <i>Secs.</i>   |                                    |                                     |                 |
| J. D. FINDLAY ANDERSON.                  | } <i>Hon. Secs.</i>                     | EUGEN BAUMANN, <i>Secretary.</i>               | } <i>Switzerland.</i>          | M. D. KALOPOTHAKES,                | } <i>Greece.</i>                   |                                     |                 |
| WAVENEY, <i>President.</i>               |                                         | VAN WASSENAER VAN CAT-                         |                                | } <i>Germany.</i>                  |                                    | A. P. CONSTANTINIDES, <i>Sec.</i>   |                 |
| H. W. TOWNSEND, M.A.                     |                                         | WIJCK.                                         |                                |                                    |                                    | } <i>Holland.</i>                   | J. B. CHARLIER, |
| W. B. KIRKPATRICK, D.D.                  |                                         | VAN WEDE VAN DÏKVELD.                          |                                |                                    |                                    |                                     | PAUL BAARTS,    |
| THOS. A. MCKEE.                          | M. COHEN STUART, D.D., <i>Sec.</i>      | EDWIN R. LEWIS.                                |                                |                                    |                                    |                                     |                 |
| J. LAMBERT JONES, <i>Treasurer.</i>      | } <i>Hon. Secs.</i>                     | C. H. KALKAR, D.D.                             | } <i>Denmark.</i>              | JAMES S. DENNIS, <i>Secretary.</i> | } <i>Syria.</i>                    |                                     |                 |
| DAVID MULLAN, <i>Secretary.</i>          |                                         |                                                |                                |                                    |                                    | J. W. YULE, D.D., <i>President.</i> |                 |
| WM. E. DODGE, <i>President.</i>          |                                         |                                                |                                |                                    |                                    | G. LANSING, D.D., <i>Secretary.</i> |                 |
| CALEB T. ROWE, <i>Treasurer.</i>         | } <i>Secs.</i>                          |                                                | } <i>United States.</i>        |                                    | } <i>Egypt.</i>                    |                                     |                 |
| S. IRENEUS PRIME, D.D.                   |                                         |                                                |                                |                                    |                                    |                                     |                 |
| PHILIP SCHAFF, D.D., LL.D.               |                                         |                                                |                                |                                    |                                    |                                     |                 |



Topics suggested for daily exhortation and intercession.

SUNDAY, JANUARY 5th.

SERMONS:—"The years of the right hand of the Most High."—*Psalm lxxvii.* 10.

MONDAY, JANUARY 6th.

PRAISE:—Praise to God for His long-suffering kindness and mercy; for the goodness of His providence; and especially for salvation in Jesus Christ, and for the blessings enjoyed under the present dispensation of the Holy Ghost. Thanksgiving for the cessation of war and the peaceful settlement of European questions; also for the Divine blessing which has attended the international meetings and services held in the *Salle Evangélique*, the distribution of the Holy Scriptures, and other Christian work during the Universal Exhibition in Paris. Confession of unbelief and unfruitfulness. *Ps.* cxvii.; *Ps.* cvii., 33-43; *Rom.* xi. 33-36; *Acts* ii. 14-21; *Ps.* xlvi. 6-11; *Dan.* ix. 3-10.

TUESDAY, JANUARY 7th.

PRAYER:—For the power of the Holy Spirit to rest upon and operate in the Church of God everywhere, so that the disciples may be led into all the truth; that errors in doctrine, and corruption of Scriptural worship may be stayed; that faith and hope, brotherly kindness and charity, may be increased; and that the general tone of spiritual life may be elevated in communion with the Lord. Intercession for believers who are afflicted. *John* xviii. 36-38; *John* xvi. 13; *2 Tim.* iii. 1-5; *Rom.* xii. 9-18; *Eph.* i. 15-23; *Ps.* xxxiv. 17-19.

WEDNESDAY, JANUARY 8th.

For the energetic operation of the Holy Spirit in the world at large, convincing men of sin, of righteousness, and of judgment; and bringing those who are merely nominal Christians under the quickening and transforming power of the Truth. Prayer also for Christian families; for the training of the young in the fear of the Lord; that they may be kept from error and evil, and especially that the grace of God may be upon them. *John* xvi. 7-11; *Gen.* xviii. 17-19; *Col.* iii. 16-24; *Prov.* xxii. 6; *1 Chron.* iv. 9-10.

THURSDAY, JANUARY 9th.

For the effusion of the Holy Ghost "upon all flesh;" for the continuance of peace; for the establishment of righteous government; for the spread of enlightenment, goodwill, and the love of justice among all nations, and for their conversion to Christ; for the removal of intemperance and other social evils; special prayer for the nation, its Sovereign, and all in authority. *Is.* xi. 1-10; *Prov.* xiv. 14-27; *Is.* lxi.; *Gal.* v. 19-26; *1 Tim.* ii. 1-4.

FRIDAY, JANUARY 10th.

For the blessing of the Spirit of God to accompany evangelistic and missionary labours, and render them fruitful to Christ; for the turning of all Israel to the Lord; for the growth and stability of the young Churches gathered from heathen communities; for the revival of Bible Christianity in Eastern Lands; for the preaching of the Gospel among all nations, and for "cheerful giving" on the part of those who go not themselves to this work. *Mat.* xxviii. 19-20; *Rom.* xi. 26; *Acts* xi. 19-30; *Mat.* xxiv. 14; *Phil.* iv. 10-19.

SATURDAY, JANUARY 11th.

For those who preside over the Churches of the Saints, and for all who are called to preach and to teach; for the due observance of the Lord's day; for the wise guidance of biblical translators and critics; for successful resistance to secularism and infidelity; and for the Divine blessing to accompany and follow the General Conference of Christians of various Nations to be held this year in Switzerland. *Eph.* vi. 18-19; *Is.* lviii. 13-14; *2 Tim.* ii. 15-19.

SUNDAY, JANUARY 12th.

SERMONS:—Looking for "the coming of our Lord Jesus Christ."—*1 Cor.* i. 7, and *Matt.* xxiv. 42-51.



PICTOU, Dec'r 2nd, 1878.

*Having received a Notice for a Foreclosure of Mortgage against the PICTOU GAS LIGHT COMPANY, a Special Meeting of the Shareholders of the above Company will be held at my Office, on Thursday afternoon, the 12th inst., at 3 o'clock, when a full attendance is requested, as a call upon Shareholders will be required to meet the above mortgage.*

CHARLES E. DAVIES,  
President P. G. L. Co.



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*Peter fur to*  
*Dec 28*



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| ACC. NO.                      | 2211/62 |
| REF.                          | 22      |

AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.  
TWENTY-SEVENTH MEETING,  
TO BE HELD AT ST. LOUIS, MISSOURI, AUGUST, 1878.

THE ASSOCIATION having, at the Nashville Meeting, accepted the invitation from St. Louis, the Twenty-seventh meeting of the Association will be held at St. Louis, Missouri, commencing at 10 o'clock, A. M., on *Wednesday, the 21st day of August, 1878.*

The Headquarters of the Association will be at the LINDELL HOTEL on the Monday and Tuesday preceding the day of the meeting; on Wednesday it will be transferred to the Reception Room of the Local Committee at ARMORY HALL, but the former place will also be continued for the use of members when the Association is not in session. The General sessions, Meetings of Sections, Committee meetings, etc., will all be held at ARMORY HALL, which is about three minutes walk from the LINDELL HOTEL.

Members will report and register at the Headquarters immediately on arrival.

The Local Committee will in due season issue a circular to members of the Association, giving a general sketch of proposed arrangements, and the details relating to the arrangements made for the accommodation of members while in St. Louis, and such other information as may be of interest to those intending to be present at the meeting, including any facilities offered by the railroads, reduction of hotel prices, contemplated excursions, etc.

The *Permanent Subsection of Chemistry* which has been well sustained at the late meetings will be continued at St. Louis, under the chairmanship of Prof. Clark, of Cincinnati.

The *Permanent Subsection of Microscopy*, organized at the Buffalo Meeting, was continued at Nashville, and the coöperation of microscopists is requested for the approaching meeting, when the subsection will be presided over by Dr. Blackie, of Nashville.

The *Permanent Subsection of Anthropology* was united with Section B at the Nashville Meeting, a day having been specially allotted to anthropological papers. A chairman was not elected for the St. Louis Meeting, but it was understood that this subsection could reorganize at St. Louis should the anthropologists present consider it desirable.

The attention of entomologists is directed to the action taken by the entomologists at the recent meetings, and to the annual meeting of the Entomological Club of the Association which will be held at St. Louis, on Tuesday, August 20th (the day preceding the meeting of the Association), at which all interested are invited to be present.

Further information in relation to the several subsections will be given by the respective Chairmen.

In order to receive the circular of the Local Committee without fail, and to aid the Committee in their labor, it is desired that all members now planning to attend the meeting should communicate at once with Prof. J. K. REES, *Secretary of the Local Committee*, St. Louis, Missouri.

All communications relating to the local arrangements for the St. Louis meeting must be made to the *Local Secretary*, at St. Louis, Mo., while all matters relating to membership and to the presentation of papers will be attended to by the *Permanent Secretary*.



Attention is specially requested to the following articles of the Constitution of the Association.

ART. 3. Any person may become a Member of the Association upon recommendation in writing by two members or fellows, nomination by the Standing Committee, and election by a majority of the members and fellows present in general session.

(Blank forms for recommendation to membership will be furnished on application to the Permanent and Local Secretaries, and, until the day of the meeting, they will receive the recommendations for the General Secretary; after the meeting has begun recommendations must be given to the General Secretary.)

ART. 4. Fellows shall be nominated by the Standing Committee from such of the members as are professionally engaged in science, or have by their labors aided in advancing science. The election of fellows shall be by ballot and a majority vote of the members and fellows present in general session.

ART. 5. Any person paying to the Association the sum of one thousand dollars shall be classed as a Patron, and shall be entitled to all the privileges of a member and to all its publications.

ART. 7. The name of any member or fellow two years in arrears for annual dues shall be erased from the list of the Association, provided that two notices of indebtedness, at an interval of at least three months, shall have been given; and no such person shall be restored until he has paid his arrearages or has been reelected.

ART. 33. The admission fee for members shall be five dollars in addition to the annual assessment. On the election of any member as a fellow an additional fee of two dollars shall be paid.

ART. 34. The annual assessment for members and fellows shall be three dollars.

ART. 35. Any member or fellow who shall pay the sum of fifty dollars to the Association, at any one time, shall be exempt from all further assessments, but this payment shall not entitle him to the publications of the Association, and all money thus received shall be invested as a permanent fund, the income of which shall be used only to assist in original research.

(By special vote of the Standing Committee, Life Members, by making a single payment of *ten* dollars, will be entitled to the following annual volumes of Proceedings.)

ART. 36. All admission fees and assessments must be paid to the Permanent Secretary, who shall give proper receipts for the same.

ART. 27. All members and fellows must forward to the Permanent Secretary, as early as possible, and when practicable before the convening of the Association, full titles of all the papers which they propose to present during the meeting, with a statement of the time that each will occupy in delivery, and also such abstracts of their contents as will give a general idea of their nature; and no title shall be referred by the Standing Committee to the Sectional Committee until an abstract of the paper or the paper itself has been received.

(Blank forms for giving the titles of papers will be furnished by the Permanent Secretary on application. The Standing Committee particularly request, in order to facilitate the arrangement of the programme, that the abstracts should be forwarded so as to reach the Permanent Secretary *at least as early as the day before* the meeting. At the Buffalo Meeting a rule was made by the Standing Committee to the effect that titles and abstracts will not be considered after the *Saturday following* the opening of the meeting.)

ART. 28. If the author of any paper be not ready at the time assigned, the title may be dropped to the bottom of the list.

Any errors in the printed list of Members of the Association, any change of residence, and information respecting the decease of Members, should be sent to the Permanent Secretary in order that due notice may be taken of the same in the next volume of "Proceedings." It is particularly requested that the Permanent Secretary be notified at once of any errors in the names and addresses as given in the list that will appear in the Nashville volume, as another edition will be printed for circulation at the St. Louis meeting.

The Nashville volume (vol. 26) will be sent, immediately on its publication, to every member who has paid the assessment for the Nashville meeting. The volume is now nearly through the press.

The volumes of the Proceedings of the Association (26 in number) can be obtained from the Permanent Secretary, at the price of \$1.50 a volume; or any member wishing for ten or more volumes, in order to complete a set, may obtain them at \$1.00 a volume. The volumes may be had bound in cloth for the extra price of 50 cts. each, or in one-half Turkey morocco for the extra price of \$1.00 each. Uniform cloth covers for the volumes will be furnished by mail at 30 cts. each, or by express for 25 cts. each.

The Memoir on Fossil Butterflies, by Mr. S. H. Scudder, published by the donation of Mrs. Elizabeth Thompson, 4to, 1875, will be furnished at \$2.00 a copy. The Transactions of the Association of Geologists and Naturalists, 1 vol., 8vo, 1843, bound in cloth, can be obtained at \$3.00 a copy.



It will save much time and confusion on the first day of the meeting if members will send their assessments *in advance* to the Permanent Secretary, at Salem, Mass.; in return for which a Member's ticket bearing a receipt for the St. Louis meeting will be forwarded. Assessments paid at Salem during the period of the meeting in St. Louis will be receipted for after the meeting. Members not intending to be present at St. Louis are particularly requested to send their assessment to Salem, and to those who specially request the same a copy of the St. Louis programme will be mailed.

The address of the Permanent Secretary will be *Salem, Mass., until Wednesday, August 14th*; after that time, and until the meeting has adjourned, St. Louis, Mo.

F. W. PUTNAM,

*Permanent Secretary.*

SALEM, MASS., May 11, 1878.

### OFFICERS OF THE ST. LOUIS MEETING.

*President*,—O. C. MARSH, of New Haven.

*Vice President, Section A*,—R. H. THURSTON, of Hoboken.

*Vice President, Section B*,—A. R. GROTE, of Buffalo.

*Chairman of Permanent Subsection of Chemistry*,—F. W. CLARK, of Cincinnati.

*Chairman of Permanent Subsection of Microscopy*,—G. S. BLACKIE, of Nashville.

*Permanent Secretary*,—F. W. PUTNAM, of Cambridge.

*General Secretary*,—H. CARRINGTON BOLTON, of Hartford.

*Secretary of Section A*,—F. E. NIPHER, of St. Louis.

*Secretary of Section B*,—GEORGE LITTLE, of Atlanta.

*Treasurer*,—WILLIAM S. VAUX, of Philadelphia.

### STANDING COMMITTEE.

*Past Presidents*.—JOSEPH HENRY, of Washington; BENJAMIN PEIRCE, of Cambridge; JAMES D. DANA, of New Haven; JAMES HALL, of Albany; STEPHEN ALEXANDER, of Princeton; ISAAC LEA, of Philadelphia; F. A. P. BARNARD, of New York; J. S. NEWBERRY, of New York; B. A. GOULD, of Boston; T. STERRY HUNT, of Boston; ASA GRAY, of Cambridge; J. LAWRENCE SMITH, of Louisville; JOSEPH LOVERING, of Cambridge; JOHN L. LECONTE, of Philadelphia; J. E. HILGARD, of Washington; WILLIAM B. ROGERS, of Boston.

*The President, Vice Presidents, Secretaries and Treasurer of the Meeting.*

*Officers of the Preceding Meeting*.—SIMON NEWCOMB, of Washington; EDWARD C. PICKERING, of Cambridge; WILLIAM H. DALL, of Washington.

*From the Association at large*.—Six Fellows to be elected on the first day of the meeting.

### SPECIAL NOTICE TO THE MEMBERS OF THE STANDING COMMITTEE.

The Constitution requires that the Standing Committee shall meet on the *day preceding* each annual meeting of the Association and arrange the programme for the first day of the session. There will therefore be a meeting of the Standing Committee at the LINDELL HOTEL on TUESDAY, AUGUST 20th, at 3 P. M., at which it is expected that every member of the Committee will be present, if possible.



# LOCAL COMMITTEE

FOR THE ST. LOUIS MEETING.

*Chairman*:—Chancellor W. G. ELIOT.

*Treasurer*:—Judge CHARLES SPECK.

*Secretary*:—Prof. JOHN K. REES.

## SUB-COMMITTEES.

### *On Reception.*

HON. THOMAS ALLEN, *Chairman*; HENRY HITCHCOCK, *Mayor* OVERSTOIZ, JAMES B. EADS, THEODORE MEIER, THOMAS RICHESON, Judge SAMUEL TREAT, WM. T. HARRIS, Dr. J. B. JOHNSON, Gen. J. H. SIMPSON, GERARD B. ALLEN, Dr. C. W. STEVENS, ALBERT TODD, Dr. GEORGE ENGELMANN, J. R. SHEPLEY, JAMES E. YEATMAN, GEORGE D. HALL, Dr. E. S. LEMOINE, R. M. SCRUGGS, Gen. J. W. TURNER, Judge NATHANIEL HOLMES, JAMES O. BROADHEAD, JOHN T. DAVIS, M. DWIGHT COLLIER, Capt. SILAS BENT, MOSES FRALEY, CHARLES PARSONS, Rev. J. C. LEARNED, HENRY SHAW, Dr. LEET, EDWIN HARRISON, Dr. S. H. SONNESCHEIN, J. K. CUMMINGS, WM. GLASGOW, jr., ERASTUS WELLS, JOHN B. MAUDE, JULIUS S. WALSH, Rev. Dr. NICCOLLS, NATHAN COLE, M. J. LIPPMAN, Rev. Dr. M. SCHUYLER, Judge H. M. JONES, MORRIS ROSENHEIM, D. R. GARRISON, S. M. DODD, Judge LINDLEY, Prof. W. B. POTTER, Hon. ENOS CLARKE, Prof. F. E. NIPHER, A. KRIECKHAUS.

### *On Finance.*

Judge CHARLES SPECK, *Chairman*; GEORGE BAIN, E. O. STANARD, R. M. SCRUGGS, THOMAS E. TUTT, M. FRALEY, JOHN B. MAUDE, CHARLES BARSTOW, S. H. LAFLIN, AUGUSTE FRANK, GEORGE J. ENGELMANN, REGIS CHAUVENET, W. J. LEMP, Dr. W. C. GLASGOW, JOHN N. DYER, ADOLPH BUSCH, WM. M. SENTER, WM. P. SHRYOCK.

### *On Excursions and Entertainments.*

GEORGE BAIN, *Chairman*; E. T. ALLEN, E. A. HITCHCOCK, EBEN RICHARDS, JOHN A. SCUDDER, D. K. FERGUSON, Rev. JOHN SNYDER, C. P. JOHNSON, ISIDOR BUSH.

### *On Railroads.*

WM. TAUSSIG, *Chairman*; JOHN E. SIMPSON, C. W. BRADLEY, WM. DUNCAN, JOHN J. MITCHELL, C. C. COBB, A. W. SOPER, GEORGE H. HEAFFORD, JAMES F. HOWE, R. P. TANSEY.

### *On Printing.*

ENNO SANDER, *Chairman*; WM. HYDE, D. M. HOUSER, B. M. CHAMBERS, JOHN A. DILLON, CARL DAENZER, E. PRETORIUS, A. E. LEVISON, R. P. STUDLEY.

### *On Telegraph and Mail.*

CHAUNCEY I. FILLEY, *Chairman*; Col. R. C. CLOWREY.

### *On Microscopes.*

Dr. GEORGE J. ENGELMANN, *Chairman*; Dr. JOHN GREEN, Dr. A. LITTON, Dr. G. HAMBACH.

### *On Arrangements.*

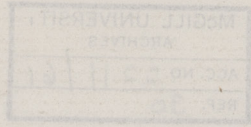
W. H. PULSIFER, *Chairman*; Prof. W. B. POTTER, E. C. SIMMONS, F. A. CHURCHILL.

*Wm. H. Pulsifer*  
*1892*  
*St. Louis*



The President and Fellows  
of Harvard College,  
request the honor of the company of  
John W. Dawson, L.L.D.,  
at the exercises and the dinner,  
in Memorial Hall, on  
Commencement Day, June 26, 1878  
Guests will assemble in Massachusetts Hall at 10 o'clock.





## INTIMATION.



THE TRUSTEES of the late NICHOLAS CATHIE, Clothier and Outfitter, 51 George IV. Bridge, Edinburgh, having resolved to continue the business for behoof of his family, beg to intimate that in future the same will be carried on under the firm of

N. CATHIE & SON,

under the immediate management of Mr CHARLES CATHIE.

In soliciting from Customers and Friends their future patronage, the Trustees feel confident that they will meet with every attention from Mr CHARLES CATHIE, who for many years was associated with his Father in conducting the Business.

EDINBURGH, 1st May 1878.



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| MCGILL UNIVERSITY<br>ARCHIVES |         |
| ACC. NO.                      | 2211/61 |
| REF.                          | 30      |

*Latta*

*Charles & Son*

INTIMATION.

The Trustees of the late NICHOLAS CATHIE, Clerk,  
and Office, 21 George IV. Bridge, Edinburgh, having  
resolved to continue the business for behoof of his family,  
beg to intimate that in future the same will be carried on  
under the firm of

N. CATHIE & SON

under the immediate management of Mr CHARLES CATHIE.  
; In soliciting from Customers and Friends their future  
patronage, the Trustees feel confident that they will meet  
with every attention from Mr CHARLES CATHIE, who  
for many years was associated with his Father in con-  
ducting the business.

Edinburgh, 14<sup>th</sup> May 1858.



ABSTRACT OF REPORT  
ON THE  
PHOSPHATE LANDS  
OF THE  
TEMPLETON & NORTH OTTAWA MINING COMPANY.

Having made a careful examination of the PHOSPHATE LANDS of the TEMPLETON AND NORTH OTTAWA MINING COMPANY, I can express my thorough conviction that the property of the Company is of more than ordinary value as a field for mining enterprise. Without attempting to claim for it anything beyond its legitimate due, it is certainly unsurpassed by any other phosphate property of the Ottawa Region. Omitting details and purely scientific considerations, my Report on these Lands may be condensed into the following summary :

(1). The ground acquired by the Company comprises altogether 4715 acres, lying in the Townships of Templeton and Portland, in Ottawa County, Province of Quebec. A considerable portion of the ground (945 acres) is possessed by the Company in fee simple, the other portions being held by possession of mining rights (including the power to cut timber for mining use, the right of roadway, &c.) or by lease at the low royalty of fifty cents per-ton of saleable phosphate.

(2). The larger and more important portion of the property is compactly situated on the shores of MacGregor's Lake and its prolongations—an extensive sheet of navigable water, by which the transport of the phosphate is greatly facilitated. The Company possess two good wharves, a large scow, blacksmith's shop, storing and cobbing sheds, and tools and plant sufficient for working gangs of at least forty men.

(3). The phosphate is conveyed partly by water carriage, and partly by teaming, over a good road, to Dunning's Wharf on the Ottawa River—about nine miles distant from the Company's lower wharf—from whence it is shipped, at a cost of \$1 or \$1.20 per ton, directly to Montreal.

(4). The lots or part lots owned by the Company amount to no less than twenty-five in number. On all of these lots, phosphate occurs in good and promising leads; and from several of the lots a large amount has already been obtained. One of the openings on lot 12 of the 12th Range of Templeton has yielded 320 tons (representing a profit of nearly \$2000), and 150 tons have been taken from another opening on the same lot; whilst other pits more recently opened, within a few yards of the above, are now furnishing good yields. Altogether, about one thousand tons of dressed phosphate have been raised within a working period of about eleven months; and during this period the actual work of excavation has been carried on by only a small number of men, the other hands having been employed in exploring the unopened ground belonging to the Company. Fresh shews of good promise have thus been constantly discovered, and similar discoveries are still being made.

(5). It is evident, therefore, that a very large amount of workable phosphate must be contained within the limits of the property. It is not possible for anyone to go carefully over the ground without arriving at this conclusion. I believe, moreover, that the phosphate masses are imbedded in regular veins, other workable masses will be found in these veins at lower depths. Places, therefore, from which the surface phosphate has been excavated, may still prove productive ground.

(6). From my examination of the dressed piles of phosphate on the property, and my analysis of various samples, I consider that an average richness of 80 per cent, (tribasic phosphate of lime) could easily be maintained. My later analyses indicate, indeed, a higher percentage; but taking 80 per cent. as a fair average, the selling price of the phosphate in Montreal may be put, at present, at from \$18 to \$19 per ton, whilst the maximum cost of mining and dressing the material, and transporting it to that market, does not exceed \$11.25 per ton.

(7). A consideration of the above facts—the favorable situation of the property, the large amount of workable material evidently contained within its limits, the good quality of the phosphate, the large margin of profit between the getting and selling price—sustains incontestably my recorded opinion, that, in these lands, the Templeton and North Ottawa Mining Company possess a phosphate property of the highest commercial value. The details given in my Report amply confirm this view; and as the Report has been drawn up without the slightest attempt to exaggerate the natural value of the ground, its statements are confidently submitted to the closest examination.

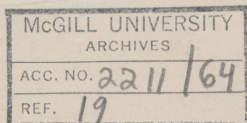
E. J. CHAPMAN, PH. D., &c.,

Professor of Mineralogy and Geology in University College, Toronto,  
and Consulting Mining Engineer,

TORONTO, July, 1878.

To F. W. HENSHAW, Esq., &c., &c.

MONTREAL,





ABSTRACT OF REPORT  
ON THE  
PHOSPHATE LANDS  
OF THE  
TEMPLETON & NORTH OTTAWA MINING COMPANY.

Having made a careful examination of the Phosphate Lands of the Templeton and North Ottawa Mining Company, I can express my thorough conviction that the property of the Company is of more than ordinary value as a field for mining enterprise. Without attempting to claim for it anything beyond its legitimate due, it is certainly unpassed by any other phosphate property of the Ottawa Region. Omitting details and purely scientific considerations, my Report on these Lands may be condensed into the following summary:

(1) The ground acquired by the Company comprises altogether 475 acres, lying in the Township of Templeton and Portland, in Ottawa County, Province of Quebec. A considerable portion of the ground (975 acres) is possessed by the Company in fee simple, the other portions being held by possession of mining rights (including the power to cut timber for mining use, the right of roadway, &c.) or by lease at the low royalty of fifty cents per ton of salable phosphate.

(2) The larger and more important portion of the property is completely situated on the shores of MacGregor's Lake and its prolongations—an extensive sheet of navigable water, by which the transport of the phosphate is greatly facilitated. The Company possess two good wharves, a large saw, blacksmith's shop, storing and cooping sheds, and tools and plant sufficient for working gangs of at least forty men.

(3) The phosphate is conveyed partly by water carriage, and partly by teaming, over a good road, to Dunning's Wharf on the Ottawa River—about nine miles distant from the Company's lower wharf—from whence it is shipped, at a cost of \$1 or \$1.25 per ton, directly to Montreal.

(4) The lots or part lots owned by the Company amount to no less than twenty-five in number. On all of these lots phosphate occurs in good and promising leads; and from several of the lots a large amount has already been obtained. One of the openings on lot 12 of the 12th Range of Templeton has yielded 320 tons (representing a profit of nearly \$2000), and 150 tons have been taken from another opening on the same lot; whilst other pits more recently opened, within a few yards of the above, are now furnishing good yields. Altogether, about one thousand tons of dressed phosphate have been raised within a working period of about eleven months; and during this period the actual work of excavation has been carried on by only a small number of men, the other hands having been employed in exploring the unopened ground belonging to the Company. Fresh shows of good promise have thus been constantly discovered, and similar discoveries are still being made.

(5) It is evident, therefore, that a very large amount of workable phosphate must be contained within the limits of the property. It is not possible for anyone to go carefully over the ground without arriving at this conclusion. I believe, moreover, that as the phosphate masses are imbedded in regular veins, other workable masses will be found in these veins at lower depths. Places, therefore, from which the surface phosphate has been excavated, may still prove productive ground.

(6) From my examination of the dressed piles of phosphate on the property, and my analysis of various samples, I consider that an average richness of 80 per cent. (tribasic phosphate of lime) could easily be maintained. My later analyses indicate, indeed, a higher percentage; but taking 80 per cent. as a fair average, the selling price of the phosphate in Montreal may be put at present at from \$8 to \$19 per ton, whilst the maximum cost of mining and dressing the material, and transporting it to that market, does not exceed \$11.25 per ton.

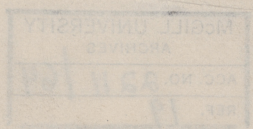
(7) A consideration of the above facts—in the light of the situation of the property, the large amount of workable material existing within its limits, the large margin of profit, the quality of the phosphate, the large margin of profit, the selling and selling price—strongly indicates that in these lands the phosphate property of the highest commercial value. For the reasons given in my Report amply confirm this view; and as the Report has been drawn up without the slightest attempt to exaggerate the natural value of the ground, its statements are confidently submitted to the closest examination.

E. J. CHAPMAN, B.Sc.,  
Professor of Mineralogy and Geology in University College, Toronto,  
and Consulting Mining Engineer.

Toronto, July, 1878.

To F. W. HANSHAW, Esq., &c., &c.,  
MONTREAL.

*Chapman*





PRESENTED BY THE  
QUEBEC EXECUTIVE  
OF THE  
DOMINION ALLIANCE,  
1878.

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J. R. DOUGALL,      R. IRWIN,      S. A. ABBOTT,  
CHAIRMAN.      TREASURER.      SECRETARY.

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|                          |                     |                  |
|--------------------------|---------------------|------------------|
| COM. ON MEMBERSHIP,      | R. M. BARRATT,      | <i>Chairman.</i> |
| “      LEGISLATION,      | J. R. DOUGALL,      | <i>do.</i>       |
| “      ELECTORAL WORK,   | J. M. M. DUFF,      | <i>do.</i>       |
| “      VIGILANCE,        | HON. JAMES FERRIER, | <i>do.</i>       |
| “      FINANCE,          | R. IRWIN,           | <i>do.</i>       |
| “      GENERAL PURPOSES, | H. MORTON,          | <i>do.</i>       |



# Dominion Alliance

FOR THE

## Total Prohibition of the Liquor Traffic.

If you desire to aid the Alliance in its important work, please fill up the annexed blank with your name, address, and the amount you are willing to contribute.

Mr. Barratt, Chairman of Committee on Membership, will call upon you in a few days.

August 6. 1878



To the Secretary of the Alliance.

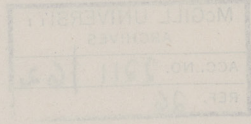
Please enroll me as a Member of the  
Alliance, and put me down for a subscription

of \$..... to the fund.

Name.....

Address.....

Date.....



*Dear Sir*  
*Thank you for*  
*your letter*



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John Allan  
~~Lead Card~~  
Work

*[Faint, illegible handwriting, likely bleed-through from the reverse side of the page]*



Cumulative Memo  
wraps - 1.35 -

Baptus Cuzc Sol  
\$ 8

Drills by La Pabel 1.65

Cells Do \$ 6

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| REF. 93                       |



CIRCULAR.

SHAFTESBURY HALL,

TORONTO, 17th August, 1878.

*At a preliminary meeting of Christians held in Brantford during July 9th, 10th, and 11th, at which most of the Evangelical Churches were represented, the undersigned were appointed a Committee to make arrangements for holding a Conference of Christians in Toronto, early in the ensuing month of October.*

*The proposed Conference seeks to advance the Kingdom of our Lord and Saviour Jesus Christ, by instilling into the minds and hearts of God's children a deeper interest in the study of His Word, and by setting forth the necessity of a more thorough and unreserved consecration to the work and Person of the Lord.*

*THIS CIRCULAR is sent out for the purpose of creating a prayerful interest among all who are in sympathy with such a gathering. We therefore trust that on receipt of this information you will make the contemplated Conference a subject of earnest and unceasing prayer, and will do all you can to interest others in its furtherance and welfare. As this Conference will precede the Autumn and Winter work of the Churches, it is most earnestly hoped that such an outpouring of the Holy Spirit may be experienced as will lead to a great ingathering of precious souls.*

*The Committee are very anxious that they may be guided by the Spirit of the Lord, in arranging topics, speakers and other necessary details, and would therefore ask special interest in your prayers for wisdom and guidance.*

*We are, in the bonds of Christian love,*

S. R. BRIGGS, }  
W. P. CROMBIE, } *Secretaries.*

S. H. BLAKE,  
JOHN McMURRICH  
ROBT. BALDWIN,  
WM. GOODERHAM, JR.,  
GEORGE FOSTER,  
T. J. WILKIE.

Isaiah xlv. 3. Acts ii. 1-4.

**Circulars giving Topics and Speakers will be forwarded in due time.**



James Robley  
Sept 1/88

SHAFTESBURY HALL

TORONTO, 17th August, 1878.

At a preliminary meeting of Christians held in Bradford during July 20th and 21st, at which most of the Evangelical Churches were represented, the undersigned were appointed a Committee to make arrangements for holding a Conference of Christians in Toronto, early in the ensuing month of October.

The proposed Conference seeks to advance the Kingdom of our Lord and Saviour Jesus Christ, by instilling into the minds and hearts of God's children a deeper interest in the study of His Word, and by setting forth the necessity of a more thorough and unreserved consecration to the work and Person of the Lord.

This Circular is sent out for the purpose of creating a general interest among all who are in sympathy with such a gathering. We therefore trust that on receipt of this information you will make the contemplated Conference a subject of earnest and unceasing prayer, and will do all you can to interest others in its furtherance and welfare. As this Conference will precede the Autumn and Winter work of the Churches, it is most earnestly hoped that such an outpouring of the Holy Spirit may be experienced as will lead to a great ingathering of precious souls.

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ROBT BALDWIN,  
W. M. GOODERHAM, JR.,  
GEORGE FOSTER,  
T. J. WILKIE.

S. R. BRIGGS,  
W. F. GROMBE

Isaiah xlv. 1. Vers II. 1-4

Speakers giving Topics and Speakers will be forwarded in due time.