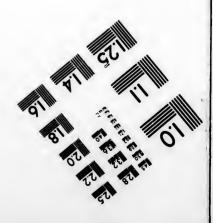


# IMAGE EVALUATION TEST TARGET (MT-3)







Ca



				of
origina featur	estitute has attempted to obtain the best al copy available for filming. Physical es of this copy which may alter any of the s in the reproduction are checked below.	qu'il li défaut	tut a microfilmé le meilleur exemplaire ul a été possible de se procurer. Certains ts susceptibles de nuire à la qualité de la duction sont notés ci-dessous.	fii Tt
				CC
		_	Coloured pages/	or
$\checkmark$	Coloured covers/ Couvertures de couleur		Pages de couleur	at
				TI
$\checkmark$	Coloured maps/ Cartes géographiques en couleur		Coloured plates/ Planches en couleur	fii in
	Pages discoloured, stained or foxed/		Show through/	
	Pages décolorées, tachetées ou piquées		Transparence	M
				u
	Tight binding (may cause shadows or			b
	distortion along interior margin)/		Pages damaged/	fo
	Reliure serré (peut causer de l'ombre ou de la distortion le long de la marge intérieure)		Pages endommagées	
<b>V</b>	Additional comments/ Fold-out Commentaires supplémentaires than the	maps, charts, et rest of the book	c., may be filmed at a different reduction ratio	
	Bibliographic Note	s / Notes bib	liographiques	
		_	Pagination incorrect/	
	Only edition available/ Seule édition disponible		Erreurs de pagination	
_	Bound with other material/		Pages missing/	
	Relié avec d'autres documents		Des pages manquent	
	Cover title missing/		Maps missing/	
	Le titre de couverture manque		Des cartes géographiques manquent	
	Plates missing/ Des planches manquent			
	Additional comments/ Commentaires supplémentaires			

Th po of fill

The images appearing here are the best quality possible considering the condition and legibility of the original copy and in keeping with the filming contract specifications.

8

The last recorded frame on each microfiche shall contain the symbol  $\longrightarrow$  (meaning CONTINUED"), or the symbol  $\nabla$  (meaning "END"), whichever applies.

The original copy was borrowed from, and filmed with, the kind consent of the following institution:

> Library of the Public Archives of Canada

Maps or plates too large to be entirely included in one exposure are filmed beginning in the upper left hand corner, left to right and top to bottom, as many frames as required. The following diagrams illustrate the method: Les images suivantes ont été reproduites avec le plus grand soin, compte tenu de la condition et de la netteté de l'exemplaire filmé, et en conformité avec les conditions du contrat de filmege.

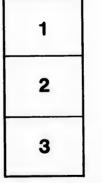
Un des symboles suivants apparaîtra sur la dernière image de chaque microfiche, selon le cas: le symbole → signifie "A SUIVRE", le symbole V signifie "FIN".

L'exemplaire filmé fut reproduit grâce à la générosité de l'établissement prêteur suivant :

La bibliothèque des Archives publiques du Canada

Les cartes ou les planches trop grandes pour être reproduites en un seul cliché sont filmées à partir de l'angle supérieure gauche, de gauche à droite et de haut en bas, en prenant le nombre d'images nécessaire. Le diagramme sulvant illustre la méthode :

1	2	3



2	3		
5	6		

# Sixty-Seventh Annual Meeting

OF THE

# British Association for the Advancement of Science

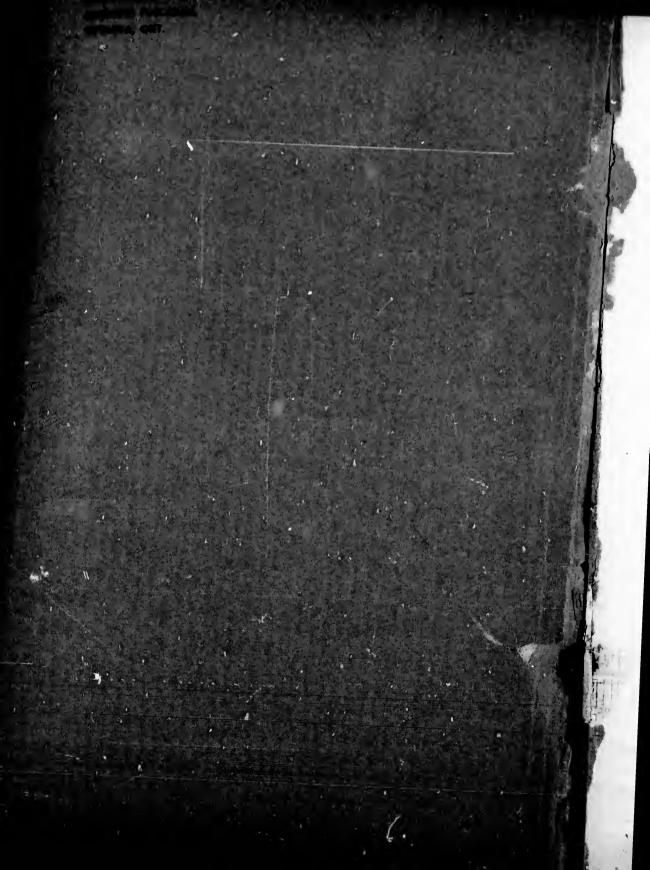
# Toronto Meeting August 18-25 1897

# PROGRAMME OF LOCAL ARRANGEMENTS

# WITH MAP OF CITY

Showing Street Railway, Plan of University Grounds and Queen's Park, and Plan of University of Tokonto Building.

TORONTO PUBLISHED BY THE LOCAL COMMITTEE



# CONNECTING LINES AND LINES OPERATED BY THE TORONTO RAILWAY-CO.

- The Toronto and Minico Electric Railway and Light Company, from Terminus of Queen Street West line to Long Branch.
- The Toronto and Scarboro Electric Railway, Light and Power Company, from Queen Street, at the junction of the Kingston Road, to Victoria Park, Country and Hunt Club and East Toronto.
- The Metropolitan Street Railway Company, from the Northern Terminus of the Yonge Street line to Richmond Hill.
- The Toronto Suburban Street Railway Co., from the City Limits at West End of Dundas Street to Weston and Lambton.

# PARKS AND PLACES OF INTEREST

### Long Branch

By the Toronto Railway to the Western Terminus of Queen Street, and there connect with the Toronto and Mimico Electric Railway.

### Mimico Asylum

By the Toronto Railway to the Western Terminus of Queen Street, and there connect with the Toronto and Mimico Electric Railway.

### **High Park**

By the Toronto Railway-King, Queen, Queen & Dundas College & Yonge and Carlton & College routes.

### **Exhibition Grounds**

By the Toronto Railway-King Street West route.

#### Queens Park, Toronto University and Parliament Buildings

By the Toronto Railway-College & Yonge and Carlton & College routes.

#### **Horticultural Gardens and Pavilion**

By the Toronto Railway-Belt Line and Carlton & College routes.

### Toronto General Hospital

By the Toronto Railway-Carlton & College and Parliament Street routes.

#### **Riverdale Park and St. James Cemetery**

By the Toronto Railway-Winchester route.

### Woodbine Race Course

By the Toronto Railway -King Street East route.

#### Victoria and Munroe Parks and Balmy Beach

By the Toronto Railway--King Street East route.

### East Toronto Village

By the Toronto Railway-King Street East to Kingston Road crossing, and there connect with the Toronto and Scarboro Electric Railway.

### **Osgoode Hall and Armouries**

By the Toronto Railway-Queen Street, Queen & Dundas and Bloor & McCaul routes.

### **Union Station**

By the Toronto Railway-Yonge and Church Street routes.

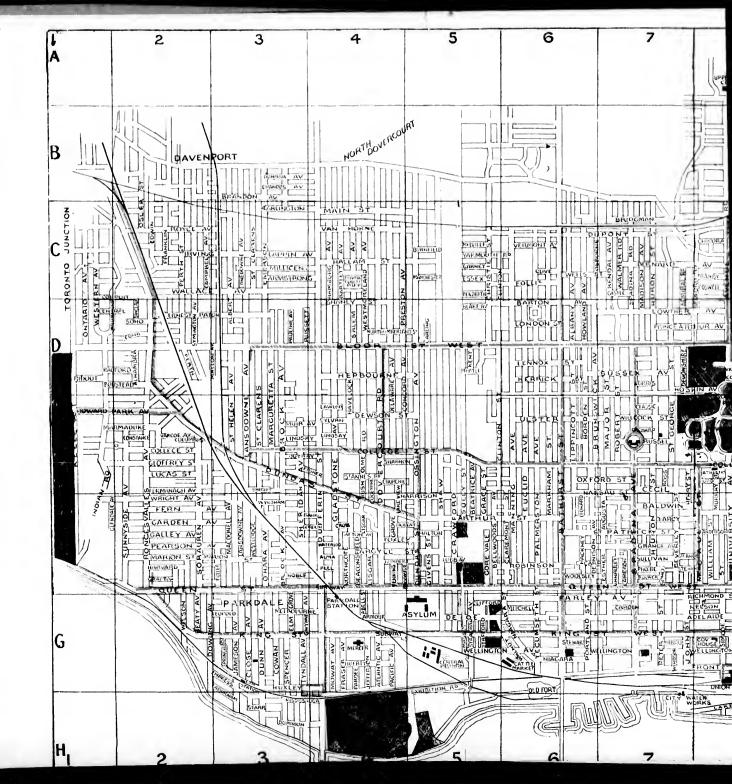
### Lambton Park (in the Village of Weston)

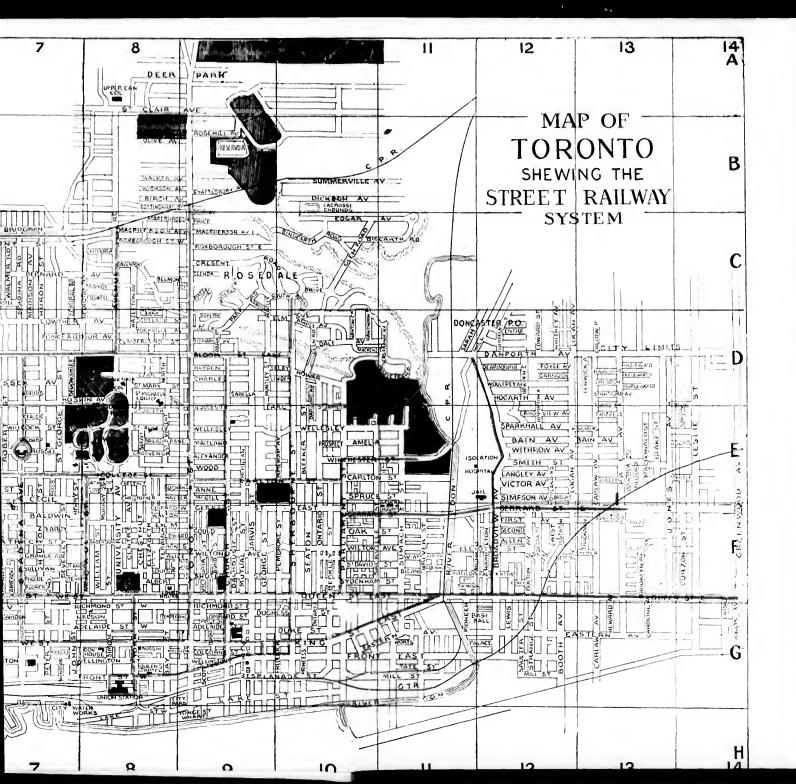
By the Toronto Railway to the Western Terminus of Dundas Street, and there connect with the Toronto Suburban Street Railway.

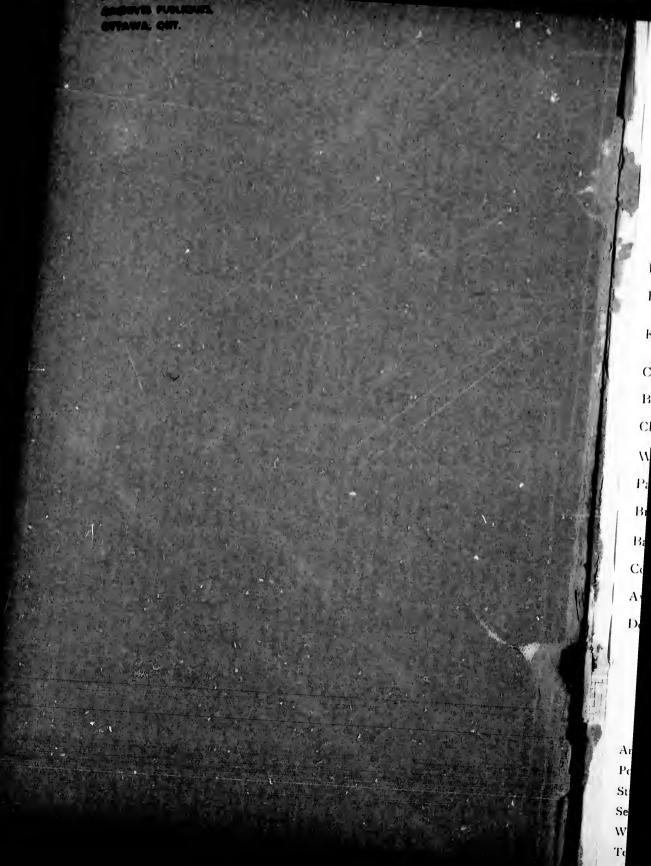
### Reservoir Park,

### Mount Pleasant and St. Michael's Cemeteries

By the Toronto Railway to Northern Terminus of Yonge Street line,







# **Toronto Railway Company**

# LIST OF NIGHT SIGNALS

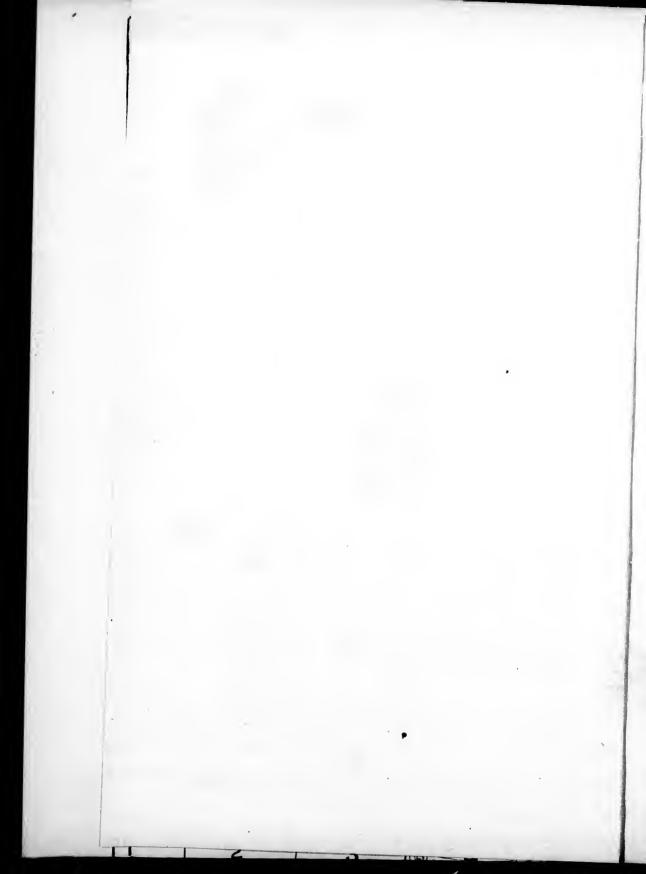
# ROUTES

# LIGHTS

Yonge StreetOne Blue
Queen StreetOne Green
Dundas StreetTwo Green
Belt LineOne Red
King Street Balsam Avenue
Carlton & CollegeOne Yellow
Bloor & McCaul
Church Street
Winchester Street Blue and Red
Parliament Street White and Yellow
Broadview Avenue Red and Green
Bathurst StreetRed and White
College & Yonge Blue and Yellow
Avenue RoadTwo White
Dovercourt RoadTwo White

# City of Toronto.

Area, within city	limits,	10,3	91 acres or	16.2 sq. miles.
Population		•••	•••	220,000.
Streets		•••		256 miles
Sewers		•••		228 miles.
Water Mains		••• •••		248 miles.
Total Assessment	of Proper	ty in city	••• •••	\$130,000,000



# Sixty-Seventh Annual Meeting

OF THE

# British Association for the Advancement of Science

# Toronto Meeting August 18-25 1897

# PROGRAMME OF LOCAL ARRANGEMENTS

# WITH MAP OF CITY

SHOWING STREET RAILWAY, PLAN OF UNIVERSITY GROUNDS AND QUEEN'S PARK, AND PLAN OF UNIVERSITY OF TORONTO BUILDING.

TORONTO PUBLISHED BY THE LOCAL COMMITTEE

OFFICERS OF THE TORONTO MEETING

1897.

(123)

### PRESIDENT

THE RIGHT HON. THE LORD LISTER, D.C.L., PRES. R.S.

#### PRESIDENT-ELECT

SIR JOHN EVANS, K.C.B., D.C.L., LL.D., D.Sc., TREAS. R.S., F.S.A., F.Z.S., FOR. SEC. G.S.

#### VICE-PRESIDENTS

HIS EXCELLENCY THE RIGHT HON. THE EARL OF ABERDEEN, LL.D., D.C.L., Governor-General of the Dominion of Canada.

THE RIGHT HON. THE LORD RAYLEIGH, M.A., D.C.L., F.R.S., F.R.A.S. THE RIGHT HON. THE LORD KELVIN M.A., D.C.L., F.R.S., F.R.S.E.

THE RIGHT HON. SIR WILFRID LAURIER, G.C.M.G., LL.D., Prime Minister of the Dominion of Canada.

HIS HONOUR SIR GEORGE AIRY KIRKPATRICK, K.C.M.G., LL.D., Lieut.-Governor of the Province of Ontario.

THE HON. ARTHUR STURGIS HARDY, Premier of the Province of Ontario.

THE HON. GEORGE W. ROSS, LL.D., Minister of Education for the Province of Ontario.

THE HON. SIR CHARLES TUPPER, BART., G.C.M.G.

THE HON. SIR DONALD A. SMITH, G.C.M.G., LL.D., High Commissioner for Canada.

SIR WILLIAM DAWSON, C.M.G., F.R.S., Montreal.

PROFESSOR JAMES LOUDON, M.A., LL.D., President of the University of Toronto.

HIS WORSHIP THE MAYOR OF TORONTO.

### GENERAL TREASURER

PROFESSOR ARTHUR W. RÜCKER, M.A., D.Sc., SEC. R.S. Burlington House, London, W.

#### GENERAL SECRETARIES

A. G. VERNON "ARCOURT, Esq., M.A., D.C.L., LL.D., F.R.S., V.-P.C.S. PROFESSOR A. A. SCHÄFER. LL.D., F.R.S.

In the ab. ... PROFESSOR SCHAFER, the duties of General Secretary will be undertaken by

PROFESSC W. C. ROBERTS-AUSTEN, C.B., F.R.S., V.-P.C.S.

#### ASSISTANT GENERAL SECRETARY

G. GRIFFITH, Esq., M.A., College Road, Harrow.

#### LOCAL SECRETARIES FOR THE MEETING AT TORONTO

PROFESSOR A. B. MACALLUM, M.B., PH.D.

B. E. WALKER, Esq., F.G.S.

J. S. WILLISON, Esq.

### LOCAL TREASURERS FOR THE MEETING AT TORONTO

JAMES BAIN, JR., Esq.

PROFESSOR R. RAMSAY WRIGHT, M.A., B.Sc.

# SECTIONS AND SECTIONAL OFFICERS

A-MATHEMATICAL AND PHYSICAL SCIENCE Fresident

PROF. A. R. FORSYTH, M.A., D.Sc., F.R.S.

Vice-Presidents

PROF. HENRICI, M.A., F.R.S. PROF. A. JOHNSON, M.A., LL.D. PROF. O. J. LODGE, D.Sc., F.R.S.

Secretaries

PROF. W. H. HEATON, M.A. (Recorder) J. C. GLASHAN, M.A.

I. L. HOWARD, D.Sc. PROF. J. G. MCGREGOR, D.Sc., F.R.S.E.

**B**-CHEMISTRY

President

:

e

r

f

PROF. W. RAMSAY, Ph.D., F.R.S.

Vice-Presidents

PROF. H. B. DIXON, M.A., F.R.S. W. R. DUNSTAN, M.A., F.R.S. PROF. B. J. HARRINGTON, PH.D. PROF. W. H. PIKE, M.A., PH.D. PROF. W. C. ROBERTS-AUSTEN, C.B., F.R.S.

Secretaries

PROF. W. H. ELLIS, M.A., M.B. A. HARDEN, PH.D., M.Sc. (Recorder) C. A. KOHN, PH.D. PROF. R. F. RUTTAN.

**C**-GEOLOGY

President

G. M. DAWSON, C.M.G., F.R.S., F.G.S.

Vice-Presidents

PROF. C. LENEVE FOSTER, D.Sc., F.R.S., F.G.S. DR. W. T. BLANFORD, F.R.S., F.G.S.

Secretaries

G. W. LAMPLUGH, F.G.S. PROF. A. P. COLEMAN, PH.D. PROF. H. A. MIERS, F.R.S., F.G.S. (Recorder).

**D**-ZOOLOGY

President PROF. L. C. MIALL, F.R.S., F.L.S.

Vice-Presidents

PROF. W. A. HERDMAN, F.R.S. PROF. R. MELDOLA, F.R.S.

PROF. E. B. POULTON, F.R.S. PROF. R. RAMSAY WRIGHT, M.A., B.Sc. Secretaries

W. GARSTANG, M.A. W. E. HOYLE, M.A. (Recorder). PROF. E. E. PRINCE, B.A., F.Z.S.

**E**—GEOGRAPHY

President J. SCOTT KELTIE, LL.D., Sec. R.G.S.

Vice-Presidents

PRESIDENT N. BURWASH, LL.D. E. G. RAVENSTEIN, F.R.G.S.

Secretaries

COL. F. BAILEY, Sec. R.S.G.S. CAPT. E. DEVILLE. H. R. MILL, D.Sc., F.R.G.S. (Recorder). J. B. TYRRELL, M.A.

## F-ECONOMIC SCIENCE AND STATISTICS President

PROF. E. C. K. GONNER. M.A., F.S.S.

Vice-Presidents

PROF. W. CLARK, M.A., LL.D. PROF. JAMES MAVOR. THE HON. SIR C. W. FREMANTLE, K.C.B.

Secretaries

E. CANNAN, M.A., F.S.S. H. HIGGS, LL.B., F.S.S. (Recorder). PROF. ADAM SHORTT, M.A.

### G-MECHANICAL SCIENCE President

G. F. DEACON, M.INST.C.E.

### Vice-Presidents

PROF. W. E. AYRTON, F.R.S. PROF. H. T. BOVEY, M.A. SIR. C. DOUGLAS FOX, M.INST.C.E. PROF. JOHN GALBRAITH, M.A.

#### Secretaries

PROF. T. HUDSON BEARE, F.R.S.E. (Recorder). PROF. H. L. CALLENDAR, M.A., F.R.S. PROF. DUPUIS, M.A. W. PRICE, M.A.

### **H**-ANTHROPOLOGY

President

PROF. SIR W. TURNER, M.B., LL.D., F.R.S.

Vice-Presidents

E. W. BRABROOK, C.B., PRES. ANTH. INST. R. MUNRO, M.A., F.R.S.E

Secretaries

A. F. CHAMBERLAIN, M.A., PH.D. H. O. FORBES, LL.D. PROF. A. C. HADDON, M.A., D.Sc. J. L. MVRES, M.A., F.S.A. (Recorder).

### I-PHYSIOLOGY

President

PROF. MICHAEL FOSTER, M.A., LL.D., SEC. R.S.

Vice-Presidents

W. H. GASKELL, M.D., F.R.S. PROF. A. B. MACALLUM, M.B., PH.D. PROF. A. D. WALLER, M.D., F.R.S.

Secretaries

PROF. RUBERT BOYCE, M.B. (Recorder). A. KIRSCHMANN, PH.D. PROF. C. S. SHERRINGTON, M.D., F.R.S. DR. L. E. SHORE.

## **K**-BOTANY

President

PROF. H. MARSHALL WARD, D.Sc., F.R.S., F.L.S.

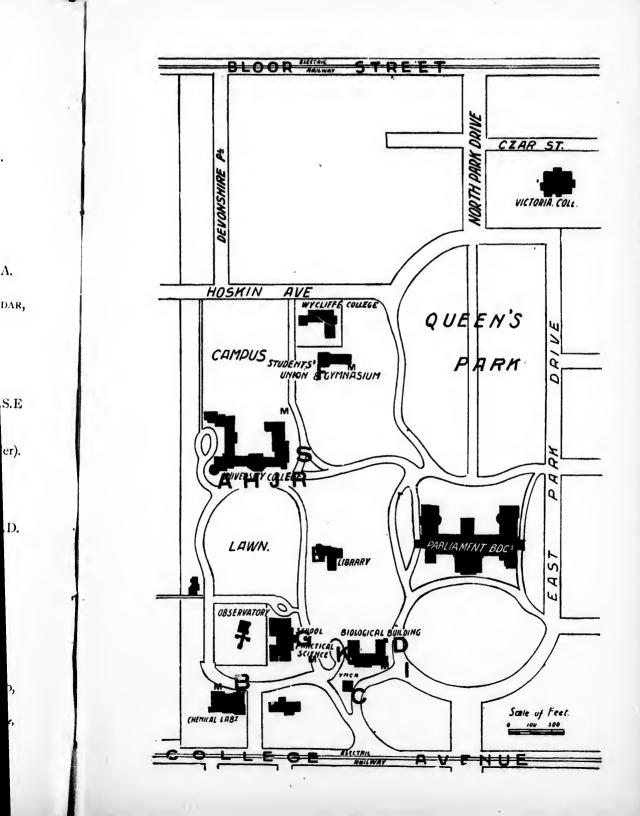
Vice-Presidents

PROF. F. O. BOWER, D.Sc., F.R.S. PROF. D. P. PENHALLOW.

Secretaries

PROF. J. B. FARMER, M.A., F.L.S. E. C. JEFFREY, B.A. A. C. SEWARD, M.A., F.G.S. PROF. F. E. WEISS, B.Sc., F.L.S. (Recorder).

This List of Sectional Officers will be completed, and will be submitted to the General Committee, on Wednesday, August 18.





# LOCAL ARRANGEMENTS.

# MEMBERSHIP.

Only those who are Members can attend the meetings of the Association. There are three classes of Membership in the Association: (a) Life; (b) Annual; (c) Associate. The fee for Life Membership is  $\pounds 10$  (\$50.00); that for the first year of Annual Membership is  $\pounds 2$  (\$10.00), and subsequently  $\pounds 1$  (\$5.00); Associates pay, on admission,  $\pounds 1$  (\$5.00).

Associates are not eligible to serve on Committees or to hold office in the Association, nor do they receive the reports of the Association, except on payment of an additional sum.

Annual Members are eligible to serve on Committees and to hold office in the Association. They receive, gratuitously, the Reports of the Association for the year of their admission, and for all subsequent years in which they continue to pay, without intermission, the annual fee.

Life Members receive, gratuitously, the Reports of the Association which may be published after admission to Membership and are eligible to all the offices of the Association.

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  $f_{I}$  (\$5.00).

On election, each Member will be furnished with a ticket, without which no one will be admitted to the Meetings.

New Annual and Associate Members can join the Association and obtain tickets by applying to the Local Secretaries at the Reception Room, University of Toronto, on Monday, August 16th, from 2 p.m. to 6 p.m., and on subsequent days from 8 a.m. to 6 p.m.

5

# MEMBERSHIP IN THE AMERICAN ASSOCIATION.

Members of the American Association for the Advancement of Science are entitled, by the resolution of the General Committee (Liverpool Meeting, 1896), to be enrolled as Members of the Association for the year 1897 on the payment of \$5.00 to the Local Treasurers.

# RECEPTION ROOM.

The Reception Room, in the Main Building of the University of Toronto, will be opened on August 16th at 2 p.m., and on the following week days at 8 a.m., for the issue of Tickets to Members, Associates and Ladies. At 6 p.m. the Reception Room will be closed.

On Sunday, August 22nd, the Reception Room will be opened from 9 to 10 a.m.

The position of the Reading and Writing Rooms for Members and Associates will be found indicated on the plan of the University Building.

Ladies' Drawing and Retiring Rooms are adjacent to the Reception Room (see plan).

The following will be found in the Reception Room :

1. Special offices of the General and Local Officers.

2. Offices for tickets for excursions and entertainments.

3. Office of the Hotels and Apartments Committee, and for giving information to strangers on arrival.

4. Office for the distribution of the Official Journal, Handbook, etc.

5. A Book stall, at which books, newspapers and stationery may be obtained, is placed in the Front Hall of the University.

The Post Office and the Telegraph Office are to be found in the first room to the left of the main entrance of the University Building. In the immediately adjoining room is the office of Cook & Son, the Conveyance Ageuts of the Local Committee.

For the convenience of the gentlemen, a Smoking Room is provided in the tent erected in the Quadrangle.

# CAN

Advancement al Committee mbers of the \$5.00 to the

f the Univerp.m., and on of Tickets to a Reception

loom will be

oms for Meme plan of the

jacent to the

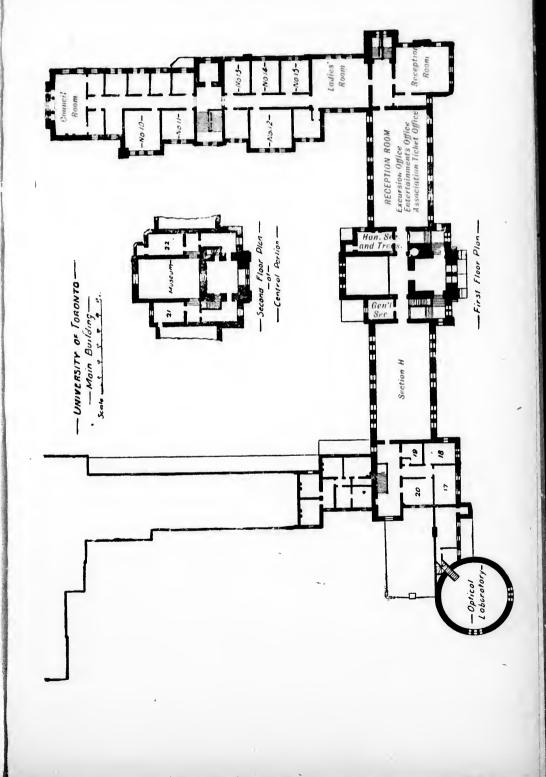
loom : icers.

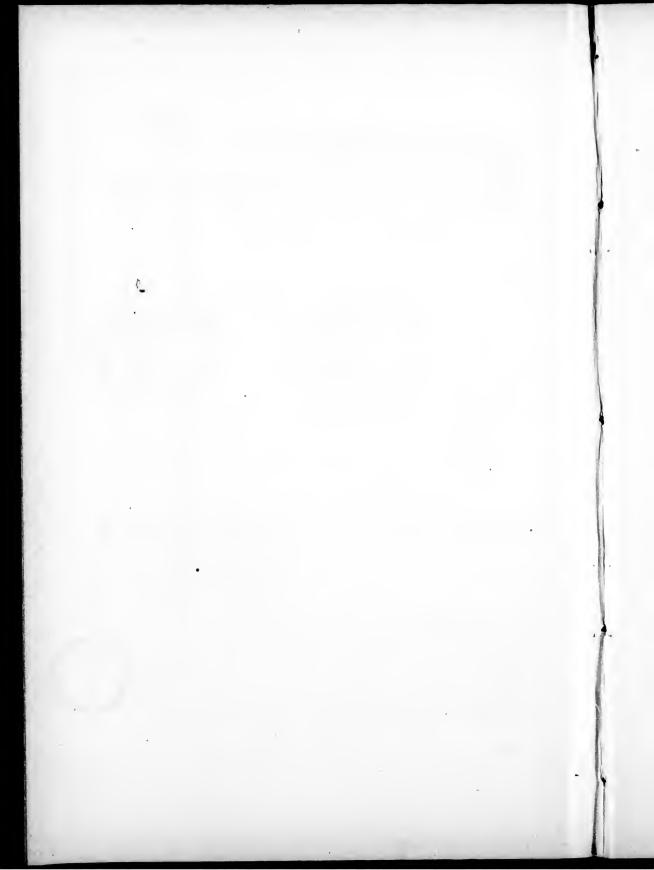
inments.

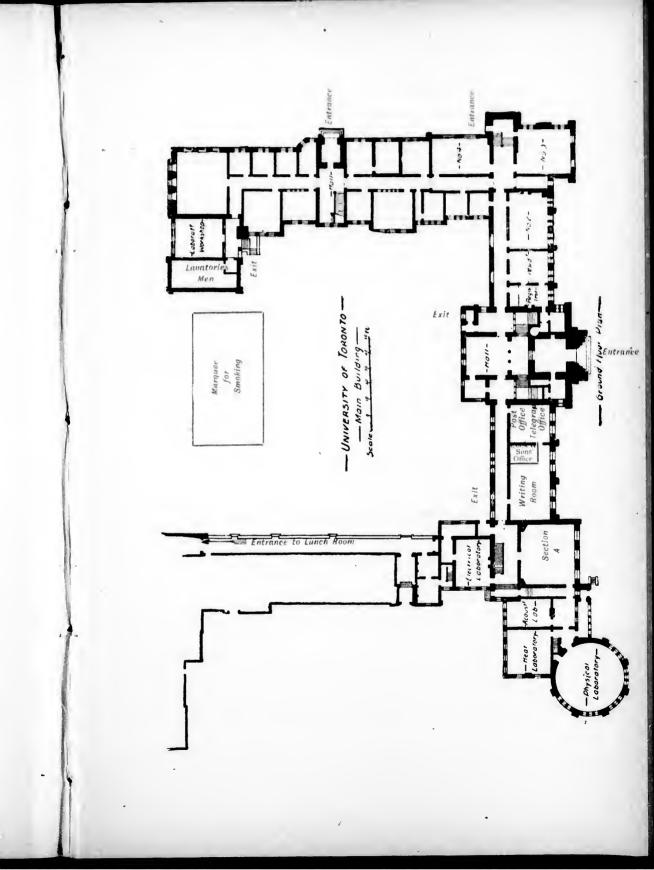
ittee, and for

urnal, Hand-

nd stationery University. to be found in the University the office of Committee. noking Room







. D e: of M bu B M as ar in pc pla tri . As an Co SE SE SE SE Se SE SE

Luncheon, tea and coffee may be obtained in the College Dining Room during the week days, Saturday, August 21st, excepted.

The Ladies' Rooms in the East Wing of the Main Building of the University are available for retiring cooms for the Lady Members of the Association. There are lavatories in all of the buildings in which the sections meet, as well as in the Main Building. The lavatories for gentlemen are marked on the plan M and their position in the several buildings indicated so far as possible.

The Official Journal, containing announcements of the arrangements for each day, may be obtained at the Journal Office in the Reception Room.

Lists of Members in attendance will be issued as soon as possible after the commencement of the Meeting, and will be placed in the Journal Office in the Reception Room for distribution.

The published volumes of the Reports of the British Association can be ordered in the Reception Room by Members and Associates only at the reduced prices determined by the Council.

# SECTIONAL MEETING ROOMS.

SECTION A.—Mathematical and Physical Science. In the Physical Lecture Room in the University Building.

SECTION B.—Chemistry. In the Lecture Room, Chemical Laboratory.

SECTION C.—Geology. In the University Young Men's Christian Association Building.

SECTION D.—Zoology. In the Lecture Room, Biological Building, East Wing.

SECTION E.—Geography. In the Reading Room, University Library.

SECTION F.—Economic Science and Statistics. In the Students' Union.

SECTION G.—Mechanical Science. In the Chemical Lecture Room, School of Practical Science. ECTION H.—Anthropology. In the West Hall (opposite Reception Room) in the University Building.

SECTION I.—Physiology. In the Physiological Laboratory, Biological Building; East Wing.

SECTION K.—Botany. In the Anatomical Lecture Room, Biological Building, West Wing.

# PRESIDENT'S ADDRESS AND EVENING LECTURES.

## These will be delivered in Massey Hall.

# PRESIDENT'S ADDRESS.

The first General Meeting will be held on Wednesday Aug.st 18th, at 8 p.m., when Sir John Evans, K.C.B., D.C.L., LL.D., Treas. R.S., will assume the presidency and deliver an address.

## FIRST EVENING LECTURE.

On Friday, August 20th, at 8.30 p.m., Professor W. Chandler Roberts-Austen, C.B., F.R.S., V.-P.C.S., Chemist to the Royal Mint, will deliver a lecture on "Canada's Metals."

# SECOND EVENING LECTURE.

On Monday, August 23rd, at 8.30 p.m., Professor John Milne, F.R.S., will deliver an address on "Earthquakes and Volcanoes."

Plans of Massey Hall may be seen in the Reception Room on Monday, August 16th, at 2 p.m., and numbered and reserved seats for the three evenings can be taken on and after that date. No seat will be allotted except on presentation of an Association Membership Ticket, so that persons wishing to sit together should arrange to present their tickets simultaneously.

For the convenience of Members and Associates, a portion only of the seats in Massey Hall will be allotted on Monday, August 16th, a second portion on Tuesday, August 17th, and the remainder on Wednesday, August 18th.

# LECTURE TO THE WORKINGMEN OF TORONTO.

H. O. Forbes, LL.D., F.Z.S., will lecture to the workingmen of Toronto, in the Pavilion, Horticultural Gardens, on Saturday, August 21st, at 8 p.m., subject: "British New Guinea, the country, its people and the problems which the region offers to Naturalists and Geographers." Admission by tickets to reserved seats; other seats free.

# VICE-REGAL RECEPTION.

Their Excellencies the Governor-General of Canada and the Countess of Aberdeen will give an evening Reception to the Officers, Members and Associates in the Legislative Buildings on August 19th, at 9 p.m.

# CONVERSAZIONE.

A Conversazione will be given on the invitation of the Local Executive Committee, in the University Building, on Tuesday, August 24th, at 8.30 p.m.

# DINNER.

A dinner in honor of Lord Kelvin, Lord Lister and Sir John Evans, will be given in the Pavilion, Horticultural Gardens, on Wednesday, August 25th, at 7.45 p.m.

# UNIVERSITY CONVOCATIONS FOR CONFER-RING HONORARY DEGREES.

A special Convocation of the University of Toronto will be held on August 20th, at 3 p.m., in the Pavilion, Horticultural Gardens, to confer the Honorary Degree of Doctor of Laws on the Rt. Hon. the Lord Kelvin, the Rt. Hon. the Lord Lister, Sir John Evans, K.C.B., and Professor Wolcott Gibbs.

A special Convocation of the University of Trinity College will be held or. Tuesday, August 24th, at 3 p.m., to confer the Honorary Degree of Doctor of Civil Law on the Rt. Hon. the Lord Lister, Sir John Evans, K.C.B., and other distinguished members of the Association.

# ADDRESS OF WELCOME.

The Mayor and Council of the City of Toronto will present an address of welcome to the Association, on Wednesday, August 18th, at 4 p.m., in the Pavilion of the Horticultural Gardens.

# AFTERNOON ENTERTAINMENTS.

# GARDEN PARTIES.

Applications for cards of invitation to the Garden Parties must be made on forms to be obtained in the Reception Room. Each individual application must be made on a separate form; in cases where Members wish to accompany each other to any particular Party, the applications must be fastened together. As the numbers invited to the several Parties are limited, preference will in all cases be given to Members and Associates visiting Toronto.

Applications for cards must be made before 6 p.m. on the day previous to the Garden Party which it is desired to attend, and replies will be delivered at the Reception Room Post Office on the morning of the day on which such Garden Party is given.

Omnibus Tickets may be had at the Excursion Counter.

## TUESDAY, AUGUST 17TH.

The Master of the Hounds, and the Directors of the Country and Hunt Club, invite 100 Members, Associates, and holders of Ladies' Tickets to an At-Home, at the Club, Scarborough, at four o'clock. Cars by King Stree East and Norway. A private car for a limited number will start from the Queen's Hotel at three o'clock.

### THURSDAY, AUGUST 19TH.

The Royal Canadian Yacht Club (Toronto Island), invite 750 Members, Associates and holders of Ladies' Tickets to a Garden Party at Centre (Toronto) Island, from 4.30 to 6 p.m. The wharf may be reached by the Yonge St. cars; a Ferry Boat will convey guests to Centre Island at 4.15. The return Ferry fare is ten cents.

# FRIDAY, AUGUST 20TH.

Mr. and Mrs. E. B. Osler invite 700 Members, Associates and holders of Ladies' Tickets to a Garden Party, 4.30-6 p.m., Craigleigh, Rosedale. Mr. Osler's residence may be reached by the Belt Line Electric Railway *via* Bloor East, changing to a Church Street car going north. Street Railway Map C. 10.

Colonel and Mrs. Sweny invite 300 Members, Associates and holders of Ladies' Tickets to a Garden Party, 4.30 to 6 p.m., Rohallion, 160 St. George Street. Street Railway Map, D. 7.

41

# FRIDAY, 20TH, AND SATURDAY 21ST AUGUST.

The Toronto Cricket Club invite the Members, Associates, and holders of Ladies' Tickets to the annual interprovincial Cricket Match between Ontario and Quebec, to be held on the University Campus (see plan), on the afternoons of Friday and Saturday. An At-Home will be given on Saturday afternoon. Admission on presentation of British Association Ticket.

## SUNDAY, 22ND AUGUST.

Special services will be held in the following churches at eleven o'clock forenoon:

St. James's Cathedral (Anglican), King Street, cor. Church Street. [Street Railway Map, G.9. Church marked in green on map]. Preacher:—The Right Rev. Bishop Sullivan.

Metropolitan Church (Methodist), Church Street. [Street Railway Map, F. 9].

St. James's Square (Presbyterian) Church, Church Street. [Street Railway Map F. 9]. Rev. President Patton, LL.D., Princeton University.

St. Michael's Cathedral (Roman Catholic), Church Street. [Street Railway Map G. 9]. Special music, contributed by Rev. Francis Ryan. 100 seats reserved for members of the British Association. Tickets to be had on application at St. Michael's Palace.

## MONDAY, 23RD AUGUST.

President and Mrs. Loudon invite 200 Members, Associates and holders of Ladies' tickets to a Garden Party, 4.30-6 p.m., 83 St. George St. Street Railway Map, E. 7.

Professor and Mrs. Mavor invite 200 Members, Associates and holders of Ladies' tickets to a Garden Party, 4-6 p.m., 8 University Crescent. Street Railway Map, E. 7.

Dr. and Mrs. Ryerson invite 300 Members, Associates and holders of Ladies' tickets to a Garden Party, 4.30-6 p.m., 60 College St. Street Railway Map, E. 8.

Professor and Mrs. Goldwin Smith invite 200 members to a Garden party, 4.30-6 p.m., "The Grange." Street Railway Map, F. 7.

## TUESDAY, 24TH AUGUST.

Mr. and Mrs. Nordheimer invite 400 Members, Associates and holders of Ladies' tickets, to a Garden Party, 4.30-6 p.m., Glendyth. Electric cars to Roxborough St., Avenue Road, then walk 200 yards; or take omnibus from Reception Room, 25 cents each way (or walk one mile from University) via St. George St. Street Railway Map, C. 7.

Dr. J. W. and Mrs. Spencer invite 200 Members, Associates and holders of Ladies' tickets, who are especially interested in Geology and Biology, to a Garden Party, 4.30-6 p.m., 152 Bloor St. Street Railway Map, D.

The Provost of Trinity College and Mrs. Welch invite 500 Members, Associates and holders of Ladies' tickets, to a Garden Party, 4.30-6 p.m., Trinity College, Queen St. Electric cars pass the College gate. Street Railway Map, F. 5. College coloured Green on map.

## WEDNESDAY, 25TH AUGUST.

The President and Directors of the Toronto Street Railway Company invite 660 Members, Associates and holders of Ladies' tickets, to an Excursion to the Parks and other places of interest on the Street Car route. Cars will leave Queen's Hotel, Front St., at 4.30 p.m. punctually.

Mr. T. G. Blackstock invites 100 Members, Associates and holders of Ladies' tickets to an afternoon cruise, on his yacht the S. S. Cleopatra. The vessel will leave the wharf of the Royal Canadian Yacht Club at 3 p.m. Car to the foot of York Street, walk across bridge.

Mr. George Gooderham invites 50 Members, Associates and holders of Ladies' Tickets to an afternoon cruise on his schooner yacht "Oriole." The vessel will leave the wharf of the Royal Canadian Yacht Club at 4 p.m. punctually.

# ATHLETIC CLUB.

Honorary Membership of the Athletic Club is offered to the Members and Associates of the British Association. College St. Application to be made to Col. G. A. Sweny.

# COUNTRY AND HUNT CLUB.

Honorary Membership of the Country and Hunt Club is cordially offered to 100 Members, Associates, and holders of Ladies' Tickets. Application to be made to Col. G. A. Sweny.

# VICTORIA CLUB-HURON STREET.

Honorary Membership of the Victoria Club is cordially offered to a limited number of Members and Associates of the British Association. Applications for this privilege should be made to Col. G. A. Sweny, Vice-Chairman of the Hospitality Committee, 160 St. George St.

# GOLF.

The Captain and Members of the Toronto Golf Club cordially invite the members of the British Association who may be Golfers, to become Honorary Members of the Club during their visit to Toronto. Any member desirous of availing himself of this invitation, is requested to write, enclosing his card, to Colonel G. A. Sweny, 160 St. George St., after which the privileges of honorary membership of the Golf Club may be enjoyed by him without further intimation. Trains leave G. T. R. Station, Union Station, at 2.10, 2.40 and 5.10 p.m., passengers alight on the grounds of the Club. Street cars—King street East to Coxwell Ave., every ten minutes, return by Street car from same place.

NOTE.—These invitations apply only to the Members of the Association who are visiting Toronto.

# PARKS AND PLACES OF INTEREST.

### REFERENCE.

High Park	Street Rail	way Ma	p D. E. & F. I.
Exhibition Grounds	66	"	H. 4.
Victoria Park	"	• •	beyond G. 14.
Queen's Park	"	**	D. & E. 8.
Horticultural Gardens and Pavilion	66	6 6	E. 9.
Armouries	"	• •	F. 8.
Law Courts, Osgoode Hall, Queen St.	"	* *	F. 8.
New Court House and Town Hall	•		
Queen St		66	<b>F.</b> 8.
Old Court House and Town Hall	,		
Adelaide St.		"	G. 9.
Public Library	"	* 6	G. 9.
Lunatic Asylum, Queen St	"	"	G. 5.
Toronto Island, Base Ball and Lacrosse	e ·		
Grounds, by Ferry	<b>66</b>		yond H. 6,7,8,9.
Base Ball Grounds	"	**	G. 12.
Lacrosse, Etc., Grounds	· · ·	""	В. 10.
Normal School		66	F. 9.

# MUSEUMS AND SCIENTIFIC COL-LECTIONS.

### BIOLOGICAL MUSEUM.

The Biological Museum forms the central portion of the buildings of the Biological Department of the University of Toronto. Principal entrance on West side.

### GEOLOGY AND MINERALOGY.

The Ferrier collection recently purchased by the University of Toronto and placed at present in the Biological Museum, contains a practically complete series of Canadian minerals, arranged for educational purposes. Further collections of minerals are to be found in the Mineralgoical Department of the University, and in the School of Practical Science.

Trinity University possesses a Mineral collection as well as other collections in its Museum.

#### ETHNOLOGY.

The principal Ethnological collection in Toronto, made under the auspices of the Canadian Institute, is to be found in the Museum of the Education Department at the Normal School. Map, F. 9. Ethnologists will receive every facility and attention from Mr. David Boyle, Curator.

There is also a small Ethnological collection in the main building of the University of Toronto. Collections of Ethnographic interest are to be found in Victoria College and in Knox College (Formosa, etc.).

### LIBRARIES.

In addition to the libraries of the University of Toronto, Trinity University, Victoria and Knox Colleges, and other Educational Institutions, there are in Toronto, the Free Public Library—Circulating and Reference— (with an excellent collection of Canadian Historical material), the Library of the Law Society at Osgoode Hall, the library of the Legislative Assembly, Parliament Buildings, and a small Law Library at the old Court House. The Library of the Canadian Institute, Richmond street, (Map G. 9) contains an excellent collection of Exchanges and Transactions of Scientific Societies throughout the world.

# TORONTO RAILWAY COMPANY.

#### FARES.

Cash Fare, 5.30 a.m. till midnight, from any point to any other point, 5 cents. Cash Fare, midnight till 5.30 a.m., 10 cents. Tickets, 6 for 25 cents; 25 for \$1. Limited Tickets: (a) Good only between 5.30 a.m. and 8 a.m., and between 5 p.m. and 6.30 p.m., 8 for 25 cents. (b) Good only on Sundays and during the limited hours on week days, 7 for 25 cents.

Transfer Tickets are given on application, which should be made when the fare is paid. These transfer tickets enable the passenger to change cars at an intersection of routes. Should he desire, he can change a second time at another intersection on intimating his intention to the conductor, and retaining his transfer ticket. By means of these transfers, any point on the street railway line may be reached from any other point for a single fare of five cents.

The points on the street railway line nearest to the University are:--from South, East and West: the corner of McCaul and College Streets, by College and Yonge, Bloor and McCaul, or Carlton and College cars; from North, via Spadina Avenue by Belt Line cars, stop at Harbord St. or Russell St., or via Yonge St., stop at corner of St. Alban and Yonge Streets.

### TIME TABLE.

LAST CAR

	TIME TUDE	12.4+				0
				GOIN		OMING,
				From o		To city.
	DOUTED			North	and Se	outh and
D. January of Com	ROUTE. From		Period.			East.
Designation of Car.		To	Every	1	.m.	p.m.
Yonge St Unic	on StationNorth	Toronto	4 m	inutes	11.50	11.32
Belt LineKing	st. and Sher-					
	urneBloor	and Spadie	na			
				66	11 64	11.30
Discourse MaCaul Enon					11.54	11.30
Bloor and McCaulFron						
St	Lansd	owne Ave. ar	ld			
	Blo	or St	. 10	"	11.25	12.00
Church StUnic				66	11.52	11 30
Avenue RoadBloo				66	11.44	•
Dovercourt Road Quee				**	11.20	-
King StRond					11.14	11.49
Queen StG. T					11.52	
Dundas St Hum				""	11.56	11.32
College and YongeLans	downe AveFront	and Church.	. 10	**	11.25	11.55
BathurstC.P.	RFront	and Church.	. 8	**	11.29	11.02
Winchester Sum				66	11.39	12.00
Parliament St Pape				**	11.25	
					11.23	11.30
Carlton and CollegeSwo						
		ne Ave		"	11.30	12.00
Broadview AveDani	forth AveChurc	h and Front	. 10	"	11.45	11.20

### NIGHT CAR SERVICE.

- YONGE ST.—Leaves corner of Yonge and King Sts., going North: 12.05, 12.45, 1.25, 2.05, 2.45, 3.25 a.m. Leaves North Toron:0, going South: 12.21, 1.01, 1.41, 2 21, 3.01 a.m.
- BELT LINE (Each way).—Leaves King and Yonge: 12.05, 12.45, 1.25, 2.05, 2.45 and 3.25 a.m.
- QUEEN ST. WEST.—Leaves G.T.R. crossing going East and South : 12.05, 1.05, 2.05 and 3.05 a.m. Leaves King and Yonge, going North and West : 12.04, 12.08, 12.12, 12.16, 12.20, 12.35, 1.35, 2.35 and 3.35 a.m.

KING ST. EAST.—Leaves King and Yonge, going East: 12.35, 1.35, 2.35 a.m. Leaves Woodbine: 1.05, 2.05, 3.05 a.m.

#### SUNDAY CARS.

Route.							
Yonge St	. Ever	·y 8	minutes	till	10.28 1	5. <b>m</b> .	
Belt Line	. "	8	66	66	10.44	**	
Church St		12	" "	"	10.24	"	
Bloor and McCaul	. "	16	**	**	10.36	"	
Avenue Road		20	**	"	9.40	"	
Queen St	**	14	66	"	9.57	"	
Dundas	. "	14	"	"	9.57	"	
Bathurst	. "	10	" "	**	10.20	"	
College and Yonge	. "	10	* * *	"	10.00	66	
King St	. "	8	"	61	10.20	**	
Winchester		15	"	"	10.45	"	
Parliament		18	**	"	10.12	**	
Carlton and College	. "	20	**	"	9.35	**	
Broadview Ave	. "	20	**	"	10.20		

The times noted above are the times of departure from one terminus. The time of departure from the opposite terminus is, in most cases, a little later.

# SPECIAL LOCAL EXCURSIONS.

1d

0

00259025200

0

1.	Toronto to	Niagara Falls and return	
2.	**	Hamilton, Niagara Falls and return	Sat. Aug
3.	66	Muskoka and return	at. t Aug.
4.	" "	Penetanguisheneand return	21
5.	66	Peterborough and return	to. Mon g. 21-23.
6.	66	Kingston and return)	φ. 'n.
7.	66	Montreal and return, G.T.R	
	**	" " " C.P.R	
8.	* *	Ottawa " " C.P.R	Th
9.	"	Kingston (rail) boat to Montreal and return, G.T.R	Thursday, A Sept.
10.	""	Penetang, Parry Sound, Algonquin Park, Ottawa, Montreal and return, G.T R	y, Aug. ept. 1.
11.	" "	Brockville (rail), boat to Montreal, return by rail, G.T.R	26
12.	"	Ottawa (rail), boat to Montreal, rail to Toronto, C.P.R	to

For details of these Excursions, see Excursion Guide issued by Local Committee.

# RAILWAY RATES.

ONTARIO, QUEBEC, MARITIME PROVINCES.—The railway authorities of Canada have made special arrangements (to be valid between July 1 and September 30) for Members and Associates who come from Great Britain and the Continent to attend the Meeting. Such Members will present their membership tickets either to the offices of the railways at Quebec or Montreal, or, after arrival at Toronto, to the local offices of the Association, and will, upon presentation, be issued a railway certificate which will entitle them to purchase first-class tickets at one-half of the regular first-class rates between any stations in Canada east of and including Port Arthur. These certificates 'vill be valid for all purchases made between July 1 and September 30.

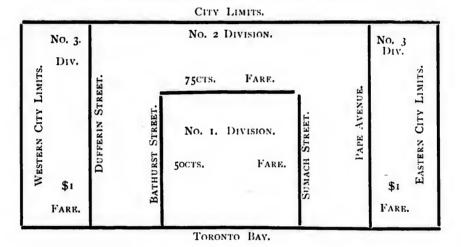
MANITOBA, NORTH-WEST TERRITORIES, BRITISH COLUMBIA.—Special firstclass return tickets from Toronto to Manitoba and the Pacific Coast over the Canadian Pacific Railway may be obtained at reduced fares.

# CAB FARES.

RATES OF FARES AUTHORIZED BY CITY ORDINANCES.

Every cabman on each occasion when his cab is hired, shall hand his card to the person employing him. No fare is to be paid to any cabman who refuses to hand his card to the person employing him, or who demands a greater rate than allowed by the following tariff.

# THE CAB LIMITS.



The Divisions are shewn on the following plan :--

#### ONE OR TWO HORSE CABS.

1st Division-1 or 2 persons, 50 cents ; each additional person, 25 cents.

2nd Division--1 or 2 persons, 75 cents; each additional person, 25 cents. 3rd Division-1 or 2 persons, \$1.00; each additional person, 25 cents.

The fare by the hour for one or four persons in a two horse cab is \$1.00, each additional person, 25 cents.

The fare by the hour for over three persons in a single horse cab is 75 cents, and for each subsequent hour 60 cents.

### NIGHT TARIFF.

The charge for cabs after 12 o'clock midnight to 6 a.m., shall be one-half more than the aforesaid tariff.

#### BAGGAGE.

One trunk and articles that may be placed inside the cab are to be carried free. For every other article placed on the outside of the cab the cabman is entitled to 5 cts.

# POSTAL INFORMATION

A Branch Post Office will be opened for the use of Members, in Main Building of University College-East Hall-for the postage and delivery of letters and parcels, and for the sale of Stamps.

Letters intended for delivery in the Reception Room must be deposited in the letter box for the purpose.

Hours of Attendance :- Week days, 8 a.m. to 6 p.m.; Sunday, 9 a.m. to 10 a.m. Delivery of Letters :--- 8 and 11 a.m. and 3 p.m.

Collections will be made at 8.30 and 11 a.m., and at 2.30 and 5 p m.

e

NOTE. -- Members of the British Association are requested to use Letter Boxes in the Reception Room, rather than the Pillar Box in the University Grounds.

Postage :- Letters addressed to places in Canada, United States and Newfoundland, 3 cents per cz, or fraction thereol; Great Britain (by Canadian or New York Mail Steamers), 5 cents per 1/2 oz. or fraction thereof.

The Postage to all Countries included in the Universal Postal Union is as follows :--Letters, 1/2 oz. 5 cts. ; Postal Cards, each 2 cts. ; Books, 2 oz. 1 cent ; Newspapers, 2 oz. I cent ; Registration, 5 cts.

Post Cards :- For Canada and the United States, one cent each. For Great Britain, Newfoundland, and all Postal Union countries, two cents each. Reply Cards, for Canada only, two cents each. Nothing must be attached to a Post Card.

Private post cards, duly prepaid one cent each by postage stamp, may be posted in Canada for delivery within Canada and the United States, under the following regulations :-

The material used to be ordinary cardboard, not thicker than that used for the cards issued by the Department.

Size not to exceed 6 inches in length by 35% inches in width, nor to be less than 314 inches in length by 214 inches in width.

The words "Private Post Card" to be written or printed on the address side near the top.

Private post cards may, if prepaid 2 cents, be posted in Canada, addressed to any of the following countries :- Austria, Hungary, Belgium, France, Great Britain, Italy, Newfoundland and Switzerland.

Post Bands and Stamped Envelopes :- One cent post bands for newspaper or book packet wrappers, and one and three cent stamped envelopes are issued by the Department, and may be had at the stamp vendor's counter; also three cent perforated letter cards.

Jubilee Stamps :- Complete sets of the stamps issued by the Postmaster-General on the occasion of Her Majesty's Jubilee, may be had at the stamp counter at the General Post Office, value \$16.22. Smaller sets can be got at \$2.21 and \$1.21.

NOTE :-- Postage Stamps of the United States are not valid in Canada. Letters so stamped are sent to the Dead Letter Office.

First-Class Matter—Letters : - Register all valuable letters. Address all complaints and inquiries respecting late or incorrect delivery to the Postmaster. With a view to facilitate investigation always transmit the envelope of a letter which is the subject matter of inquiry.

Letters for the United States should bear the name of the State as well as that of the Post Office.

Letters containing Gold or Silver Money, Jewels or anything liable to Customs duties, cannot be torwarded by post beyond the Dominion, except to the United States.

Letters addressed to places in Canada must be at least partially prepaid and those addressed to the United States must be prepaid at least a full rate (3c.). Otherwise they will be sent to the Dead Letter Office.

Letters addressd to places in Canada and partly prepaid, will be forwarded, subject on delivery to double the amount of unpaid postage.

Re-Directed Letters :---Re-directed letters are not liable to any additional postage if handed back to the Post Office with a changed address at the moment of delivery or as soon as possible thereafter, provided always the change in the address does not require the letter to be sent to any place to which the postage rate is higher than was at first payable.

Re-directed letters should not be dropped into a Post Office Box or receiver unless additional postage has been put on to carry them to their second destination.

Request Letters :- Letters from places in Canada, the United States, and Newfoundland, covered by envelopes bearing a request either printed or written that the letters be returned to the sender it not delivered within a certain specified time, will be returned requested if not delivered in the time stated.

Second Class Matter: -- Newspapers and Periodicals posted from the office of publication, are authorized to pass free of postage to regular subscribers in Canada, the United States and Newfoundland.

The postage on newspapers and periodicals issued less frequently than once a month, and addressed to regular subscribers or news agents, and on all specimen newspapers, is 1 cent per lb. or fraction of a lb.

British periodical publications and other foreign publications, can be remailed by newsdealers to subscribers in Canada, at the bulk rate of tc. per lb.

Third Class Matter: --Newspapers and Periodicals—Transient newspapers for any place in Canada or United States, ic. ber 4 oz.: but a paper not nore than 1 oz. will go for  $\frac{1}{2}$ c. Local newspapers and periodicals not weiging more than 1 oz., for delivery in city  $\frac{1}{2}$ c. each. For Great Britian and other European countries, see Foreign Postal Table attached to this guide.

Books, etc., and Miscellaneous Matter :- The postage on Books, Pamphlets, occasional publications, etc., addressed to Canada, is 1 cent per 4 oz. to the United States, Newfoundland, Great Britain and all other countries, 1 cent per 2 oz. The Postage on Printed Stationery, Printer's Proof Sheets, Maps, Prints, Drawings, Engravings, Lithographs, Photoographs, Sheet Music, (whether printed or written, including music books, whether stitched or bound), etc., addressed to Canada, the United States, Newfoundland, Great Britain, or any European Country is 1 cent per 2 oz. Manuscript to foreign countries with the exception of the United States must be prepaid as commercial papers. No package must exceed 2 feet in length by 1 foot in width or depth. The limit of weight for Canada, United States and United Kingdom, is 5 lbs.; for other Postal Union Countries, 4 lbs. Limit ot weight for a single book addressed to places in Canada is 7 lbs.

Legal Documents and Commercial Papers (including bank pass books) may be sent to Great Britain, Newfoundland, United States, and all Foreign countries, at 5 cents for the first 10 ounces, and 1 cent for every additional 2 ounces. These Papers, when posted for delivery in Canada, must be prepaid at Letter or Parcel Post rates—but Deeds, Mortgages, Wills and Insurance Policies may be sent if prepaid 1 cent per 2 ozs.

Fourth Class Matter :--Closed Parcels --Parcels for Canada must be prepaid 6 cents for 4 oz., and must not exceed 5 lbs. in weight, nor 2 feet in length, by t foot in width or depth. No correspondence must be enclosed.

Invoices, accounts, or receipts may be enclosed in parcels.

Parcel Post :--With the United Kingdom, Newfoundland, Japan, Hong Kong, Jamaica, Barbadoes, Leeward Islands, New South Wales, and certain other countries---Closed parcels may be sent to the United Kingdom and to all countries and colonies with which the United Kingdon maintains a Parcel Post. No correspondence must be enclosed. A customs Declaration of the contents and value of each parcel must be filled up at the Post Office, or one of the branches, by the sender.

Parcels for the United Kingdom must be prepaid 16c. for the 1st lb., and 12c. for each additional lb. or fraction of a lb., and must not exceed 11 lbs. in weight, nor 2 feet in length, by 1 foot in width or depth. Information as to other countries to which parcels may be sent, and the rates applicable to each, may be obtained on application at the Inquiry Wicket, General Post Office, or at any of the Branch Offices.

ige

or

not

at

ess

he be

of

he

h,

is

by

ny go in

tal

ts, ed

he v-

ng

pt

n-

n. er

ht

br

d

s,

ts h

5

e

t

Letters and Papers should be addressed to Street and Number at which to<sup>\*</sup>be delivered, otherwise there may be delay. Change of Residence should be promptly notified to the Postmaster in WRTTING. Printed forms for that purpose can be filled up at the Inquiry Wicket in the Public Hall at the General Post Office, or at the Post Office Counter in the Reception Room.

#### REGISTRATION.

Every article intended for registration must be handed in at the wicket, and a re ceipt obtained therefor.

The fee on all classes of articles addressed to countries to which matter may be registered is 5 cents.

The sender of a registered article addressed to any Postal Union country may entitle himself to a certificate as to the disposal of the said article by the Postmaster at the office addressed, on payment of an additional fee of 5 cents. All classes of matter may be registered to all destinations in Canada and throughout the Postal Union; and *letters* may be registered to most of the countries not included in the Union.

#### MONEY ORDER OFFICE.

In sending money by mail it is best to transmit by Money Order when possible. Money letters should always be registered. Money orders issued and paid from 9 a.m. to 4 p.m. at General Post Office.

#### COMMISSION ON MONEY ORDERS.

On Money Orders drawn by any Money Order Office in Canada on any other Money Order Office in the Dominion, is as follows :---

						Over	\$40	and up	to\$	50, 200	:.
Over \$	52.50 and	up	to	5.00,	4c.	۰۰	50	"		60, 240	:.
6 6	5.00	44		10.00,	6c.		60	66		70, 280	:.
** 1	10.00	"		20.00,	10C.	**	10	**		80, 320	:.
	20.00	"		30.00,	120.		80			90, 360	2.
" 3	30.00	"		40.00,	15c.	**	90	"	• • • • • • • • • •	100, 400	:.

No single Money Order, payable in the Dominion of Canada, can be issued for more than 100; but as many of 100 each may be given as the remitter requires. Limit on American orders, 50; on English and Foreign orders, 50.

The rates of Commission on British and Foreign orders are as follows :

If 1	ot	exceeding	z	\$10, 1	oc.	Over	\$30,	not	exceeding	ıg	\$40, 40c.
Over \$10											
" 20	66	"		30, 3	oc.						

House Delivery of Letters :- There are three deliveries in almost every part of the city.

General Post Office :---Adelaide Street ; Office hours from 7 a.n. to 7 p.m. Street Railway Map, G. 9.

Money Order and Sivings Baok : -Office hours from 9 a.m. to 4 p.m., except on Saturdays, when it is closed at 3 p.m.

Mails leave the General Post Office for places in Canada and the United States as follows: Montreal, etc., 6 a.m. and 8 p.m. Winnipeg, etc., 12 noon. Nova Seotia, 8.10 a.m. and 8 p.m. Detroit, 6.25 a.m., 1.10; 9.30 p.m. New York, etc., 6 25 a.m.; 1.10, 4.30 and 9.30 p.m.

ENGLISH MAILS.-To be closed at this office during August.

1

OF CL	OF CLOSING.	HOUR. P.M.	STEAMER.	LINE.	SAILING.	NO	
Monday A	Διισ 2	02.0	Maiestic	White Star	Vew Vork	Wednesday.	Aug. 4
		00.1	Maiestic. Supplementary	White Star			•••
Tuesday		0: 30	Columbia	Hamburg-American Packet Co.	New Vork.	Thursday	
Thursday		0.30	Lucari-	Cunard	New York	Saturday	7
Friday	" 6	00.1	Luca a, Supplementary	Cunard	New Vork.	Saturday	2
Saturday		7.15		Canadian Mail Packet	Rimouski	Sunday	S
Monday		9.30	St. Louis.	American	New York.	Wednesday	••• II •••
Tuesday	" IO	1.00	St. Louis, Supplementary	American.	New Vork	Wednesday	11 ,,
Tuesday	,, IO.	I.00	*Germanic	White Star	New York.	W ednesday	· · · · · · · · · · · · · · · · · · ·
Thursday	" 12	9.30	Etruria		New Vork	Saturday	
Friday	11	1.00	Etruria, Supplementary	Cunard	New York.	Saturday	
Saturday	" Id	7.15		Ganadian Mail Packet	Kimouski	Sunday	
Monday	16.	0.30	Teutonic	White Star	New Vork.	Wednesday	4 IS.
Tuesday	", I7.	8.1	Teutonic. Supplementary		New York.	W ednesday	1S
Wednesday	" IS	CO.I	Fuerst Bismarck	erican Packet Co.	New	Thursday	
Thursday	" I9	0.30	Campania	Cunard		Saturday	
Friday.	" 20	00.1	Campania, Supplementary	Cunard	New Vork.	Saturday	21
Saturday	21	7.15		Canadian Mail Packet	Rimouski	Sunday	22
Monday	" 23	0. 0	St. Paul.	•••••	New York	Wednesday	
Tuesday	" 24	1.00	St. Paul, Supplementary	American	New Vork	W ednesday	
Wednesday	25	1.00	Normannia	Hamburg-American Packet Co. New	New York.	Thursday	26
Thursd-v	" 26	9.30	Umbria	Cunard	New Vork.	Saturday	41 2S.
Friday	" 27	00.1	Umbria, Supplementary	Cunard	New York	Saturday	·· 2S
Saturday	" 28	7.15		Canadian Mail Packet.	Rimouski.	Sunday	
Monday	30	0. 30			New York.		ept. I
Tuesday		00.1	Supplementary White Star	White Star	New York.	Wednesday	···· I ,.
Tuesday		0.30		Hamburg-American Packet Co. New	New Vork.	Thursday	

22

without any new charge for postage to and from countries in Postal Union. N.B.-Letters for New York and Eastern States mailed on postal car of the 5.20 p.m. train for Hamilton are delayed at the Bridge. As the above information is contained in extracts from the Postal Guide, Members are recommended to apply, in case of doubt, to the officials at the Post Office counter in the Reception Room.

## TELEGRAPHS.

The rates for telegrams in Canada and in the United States vary according to distance. The rates may be learned in each case on application to the clerk at the Telegraph counter in the Reception Room. The rate for cablegrams to England is 25 cents  $(1/\cdot)$  per word.

## TELEPHONE.

There is a public telephone in the Janitors office, in the Main Building of the University.

## SUBURBAN ELECTRIC RAILWAYS.

The Toronto and Mimico Electric Railway. Leave Sunnyside 5.30 a.m., and every 30 minutes until 11.30 p.m., last car. Leave Long Branch 6.00 a.m., and every 30 minutes until 12 miduight. Between Sunnyside and Long Branch, 15 cents return ; 10 cents single. Between Sunnyside and New Toronto, 10 cents return ; 8 cents single. All intermediate points, 5 cents cash.

The Toronto and Scarboro' Electric Railway—Victoria Park Route.—Leave Queen and Kingston Road 6.00 a.m., and every 30 minutes until 12 midnight. Leave Victoria Park 6.15 a.m., aud every 30 minutes until 12.15 a.m.

Little York Route.—Leave Queen and Kingston Road 5.45 a.m., and every hour until 11.45 p.m. Leave Gerrard and Main at 6.00 a.m., every hour until 12 midnight. Cash fare 5 cents, and 6 tickets for 25 cents.

midnight. Cash fare 5 cents, and 6 tickets for 25 cents. Toronto Suburban Street Railway Co., Limited. Rates of fare : cash fare, 5 cents. Tickets : Regular tickets, 6 for 25c. Good (with Transfer, if required) from any point on the road to any other point. Limited Tickets, 8 for 25c; Good as above between 5.30 a.m. and 8 a.m., and between 5 p.m. and 6.30 p.m. Special Tickets, 10 for 25c. Good in either direction between Weston and the limits of Toronto Junction on the south side of Black Creek Hill, and also between Bathurst Street and the Northern Railway on Davenport Road. Good also within the limits of the Town of Toronto Junction. Transfers—On payment of cash fare, or regular, or limited ticket, a transfer will be given to any point required ; but on a special ticket a transfer will be given good only within the limits for which the ticket is used.

## TIME TABLE.

Between Bathurst Street, Davenport Road, and Evelyn Crescent, via Dundas St.

GOING WEST.		GOING	EAST.
	Cars due		Cars due
	at cor.		at cor.
Cars leave	Keele and	Cars leave	Keele and
Bathurst	Dundas	Evelyn	Dundas
Street.	Street.	Crescent.	Street.
6.30 a.m.			
7.15 "		8.00 a.m	
8.40 "			9.25 "
9.50 "			
12.20 p.m		1.00 p.m	I.15 p.m.
I.40 "	2.00 "	2.15 "	2.30 "'
2.55 "	3.15 "	3.30 "	3 45 "
4.10 **			5.00 "
5.25 "			6.15 "
6.40 "			7.30 "
7.50 "			8.45 "
9.10 "			
10.25 "	10.45	11.00 "	
11.35 ''			

WESTON.—Cars leave Weston at 6 a.m., and then every thirty minutes, leaving on the hour and half hour until last car leaves at 11 p.m. Cars for Weston leave Humberside Avenue Junction with city cars at 6.30 a.m., and every thirty minutes, leaving on the hour and half hour until last car leaves at 11.30 p.m.

LAMITON.—Cars will leave at 7.00 and 7.30 a.m., and then every half hour, leaving on the half hour, until last car leaves at 11.30 p.m. Cars for Lambton will leave City Cars at Humberside Avenue at 7.15 a.m., then every half hour, on the quarter past and quarter to, until last car at 11.15 p.m.

DUNDAS STREET.—B:tween City Cars at Humberside Avenue and corner Keele and Dundas Streets there is a fifteen minute service, and to Lansdowne Avenue or Frederick Street a thirty minute service.

#### FREE CABLEGRAMS.

The Associated Atlantic Cable Companies, together with the Great North-Western Company of Canada and the Western Union Telegraph Company of America, have very liberally permitted Members of the British Association visiting Canada to send and receive without charge telegraphic messages under the following restrictions:

- (1) The free privilege to be limited to messages of a strictly social or family character, passing between Members of the Association to their triends in the United Kingdom, and vice versa; the free privilege to cease after the messages have left the termini of the Companies concerned.
- (2) The Association to designate the officers authorized to send and receive the messages in question in London and Toronto respectively, and no other persons to be allowed to act.
- (3) The messages to be considered as 'service messages,' to be forwarded only when the cables are tree from paid traffic.
- (4) The privilege is to commence on August 16th and cease September 4th.
- (5) The privilege is to be used by or for Members only who have been elected in England, not Associates or Members elected in Toronto.
- (6) Each Member to be allowed to send and to receive free of charge two telegrams. Each telegram to consist of ten words, including the addresses.
- (7) Twenty-five cents (1/) to be paid for the retransmission in the United Kingdom of each message.

As the office of the Association is closed during the time of the Meeting, it has been arranged with Messrs. Cook & Sons, of Ludgate Circus, E.C. (who have, with great liberality, placed their services at the disposal of the Association), that they should act as the authorized officers in London designated above in condition (2). The authorized officers at Toronto will be the local Secretaries there. The use of the voucher number will abbreviate the address of the member sending or receiving a telegram; *Compon, London*, ensures the message being delivered to Messrs. Cook & Sons, Ludgate Circus, who will then telegraph the message to the member's address in Great Britain or Ireland.

Suppose, for instance, that Mr. Brown, whose member's ticket number is 1000, and who lives at 10 Forge Road, Hammersmith, wishes to telegraph home from Toronto. His message runs thus :—From 1000 to Coupon, London (so and so). The message is delivered to Messrs. Cook; they look in the numbered Association list, and telegraph the message on to the above address of No. 1000. (For this Mr. Brown must pay 25 cents to the local officers of the Association at Toronto.) If Mr. Brown's friends wish to telegraph to him, they send their message to Messrs. Cook's office, whence it is forwarded, and it will run thus :—From 1000 to Macallum, Toronto (so and so). The message is delivered at the office of the Association, and is then handed or telegraphed to Mr. Brown at his Canadian address.

A short code of familiar phrases, for which we have to thank Messrs. Cook, is appended. This may be of service to members in enabling them to condense their messages.

Cable Address of Local Committee : Macallum, Toronto,

#### CODE WORDS

#### To be used by members of the British Association in telegraphing to friends through 'Coupon,' London (Thos. Cook & Son).

Package-Arrived safely, all well Padding-Had a good passage Paganism-Had a bad passage Pageant-Inform friends of your having heard from me (us) Painful-Have been delayed by-Paint-All letters which may arrive for me (us) by the-Palace - All letters arrived for me up to now please send to --Palatable-Have received yours of-Pale - Have not received yours of-Palette-Have you received my letter ? Palpitate-Have you received my telegram ? Pampered-Telegraph at once in reply Pumphlet-Make me (us) telegraphic remittance through Thos. Cook & Son, Ludgate Circus, London, E.C.-Pang-Pay for my account to-Panorama-Send me by post-Panoply-Have sent you-Pantaloon-Communicate this at once to-Pantomime - Please send me at once-Paper-Itinerary will be shortened by days Parable-Itinerary will be lengthened by days Paragraph-Expect to leave-Parasite-Expect to arrive-Parchment-Weather fine Pardon--Weather bad Parochial-Am sending full report by post Parody-Please meet nie at-Partake-Will write you a letter from-Passage - Want to know about-Pastoral-Next letters should be addressed to-Patent-All well here Pathetic-Let me (us) know how you are getting on

Portion-Let me (us) know where to write to you next

on

on

av.

ve

ast

nd

ck

rn

VC

nd

ily

in

he

he

er

ly

in

e-

d

n

t t d

r

; e n

1

s

1

5

# PUBLICATIONS BY THE LOCAL COM-MITTEE.

#### HANDBOOK OF CANADA.

This Handbook contains a series of papers which together give a comprehensive and systematic account of the country—its physical features, history and resources. The Local Committee have arranged that each Member and Associate who attends the meeting shall have a copy. The Handbook may be obtained at the counter in the Reception Room on and after Wednesday, 18th August.

#### EXCURSION GUIDE.

A Guide to the Excursions arranged by the Excursion Committee will be furnished to each Member and Associate.

#### PRELIMINARY PROGRAMME.

A Preliminary Programme, containing a general account of the topography of Canada, with illustrations, was published by the Local Committee in 1896; and circulated among the members of the Association at the Liverpool meeting.

#### LIST OF HOTELS AND LODGINGS.

This list may be obtained on application at the counter in the Reception Room.

# PUBLICATIONS BY THE COUNCIL OF THE BRITISH ASSSOCIATION.

Daily Journal, List of Members present at the Toronto meeting, President's Address. All of these may be obtained in the Reception Room.

# SPECIAL COMMITTEES.

## 1. THE FINANCE COMMITTEE.

B. E. Walker, Hon. S. C. Wood, J. Herbert Mason, J. Short McMaster, W. R. Brock, E. Gurney, S. Caldecott, J. Shaw, Geo. H. Bertram, Walter S. Lee, E. B. Osler, Chairman Board of Control City Council. *Chairman*, Mr. B. E. Walker.

## 2. THE COMMITTEE ON CONVEYANCE.

Barlow Cumberland, E. Gurney, D. H. Alexander, S. Caldecott, the Rev. Chancellor Wallace. *Chairman*, Mr. Barlow Cumberland.

## 3. THE COMMITTEE ON PUBLICATION AND PRINTING.

Prof. R. Ramsay Wright, Prof. A. P. Coleman, R. F. Stupart, Prof. William Clark, A. Blue, G. M. Dawson, J. A. Paterson, Prof. J. Mavor. *Chairman*, Prof. R. Ramsay Wright.

## 4. THE COMMITTEE FOR SECURING THE CO-OPERATION OF SCIENTIFIC AND LITERARY INSTITUTES, ASSOCIATIONS, ETC.

A. Harvey, J. J. Cassidy, the Rev. Chancellor Burwash, Prof. Johnson, the Rev. Principal Grant, Prof. A. B. Wilmott, Prof. Montgomery. *Chairman*, A. Harvey.

## 5. THE COMMITTEE TO SECURE POSTAL, TELEGRAPH AND TELEPHONE FACILITIES.

H. P. Dwight, T. C. Patteson, H. Neilson, G. B. Sweetnam, Managers of Dominion Express Co., and Canadian Express Co. *Chairman*, H. P. Dwight.

## 6. THE COMMITTEE ON ROOMS.

President Loudon, the Hon. A. S. Hardy, the Rev. Chancellor Burwash, Prof. Galbraith, A. Rutherford, Prof. Wm. Clark, H. H. Langton, W. H. Pike, C. S. Gzowski, D. B. Dick, P. H. Bryce, Rev. J. R. Teefy. *Chairman*, President Loudon.

## 7. COMMITTEE ON HOTELS AND LODGINGS.

T. McGaw, S. McAllister, J. M. Clark, A. T. DeLury, Prof. A. C. McKay, E. C. Jeffrey, T. Kirkland, Rev. Prof. Mitchell, W. M. Clark, Q.C., Rev. Prof. Rigby. *Chairman*, T. McGaw.

## 8. PRESS COMMITTEE.

A. H. U. Colquhoun, J. S. Willison, J. R. Robertson, W. Douglas, E. E. Sheppard, Wallace McLean, W. H. Bunting, A. Fraser. *Chairman*, A. H. U. Colquhoun.

## 9. THE HOSPITALITY COMMITTEE.

E. B. Osler, Esq., M.P., Major A. M. Cosby, Rev. Provost Welch, W. D. Matthews, Esq., B. E. Walker, Esq., Prof. A. B. Macallum, Ph.D., Dr. Grasrett, J. S. Willison, Esq., D. R. Wilkie, Esq., J. K. Kerr, Q.C., D'Alton McCarthy, Q.C., M.P., C. Robinson, Q.C., Licut.-Col. Otter, T. G. Blackstock, Esq., Commodore A. R. Boswell, Nicol Kingsmill, Q.C., Col. G. A. Sweny, William Mortimer Clark, H. P. Dwight, Hon. G. W. Allan, Æmilius Jarvis, James Bain, Jr., J. Herbert Mason. *Chairman*, E. B. Osler, M.P.; *Vice-Chairman*, Col. G. A. Sweny

#### **10. THE RECEPTION COMMITTEE.**

The President of the Canadian Institute, Hon. Edward Blake, Hon. G. W. Ross, President Loudon, Vice-Chancellor Mulock, Hon. G. W. Allan, Rev. Provost Welch, Rev. Chancellor Burwash, Principal Galbraith, Rev. Chancellor Wallace, Rev Principal Sheraton, Rev. Principal Caven, Rev. J. R. Teefy, Hon. Chancellor Boyd, Hon. Chief Justice Meredith, Hon. Justice McLennan, Dr. Hoskin, Thos. Hodgins, the Mayor and Members of the City Council, F. C. Denison, M.P., E. Coatsworth, M.P., G. R. R. Cockburn, G. S. Ryerson, M.P.P., O A. Howland, M.P.P., G. F. Marter, M P.P., T. Crawford, M.P.P., Prof. Baker, Prof. Alexander, Prof. Reynar, Prof. Bain, Prof. Hutton, Prof. Wrong, Prof. Vander Smissen, Prof. Ellis, J. S. Willison, E. E. Sheppard, W. F. McLean, M.P., W. Douglas, J. Ross Robertson, M.P., J. C. Hamilton, B.A., L.L.B., R. F. Stupart, F. F. Payne, Rev. Prof. Rand.

## THE LOCAL EXECUTIVE COMMITTEE.

Prof. A. B. Macallum, M.B. Ph.D., Chairman ; A. H. U. Colguhoun, Secretary ; Jas. Bain Jr. Treasurer ; J. C. Hamilton, B.A., LL.B., B. E. Walker, F.G.S., Arthur Harvey, F.R.S.C., President Loudon, M.A., LL.D., Prof. R. Ramsay Wright, M.A., B.Sc., Hon, Edward Blake, LL.D., M.P., H. P. Dwight, Thos. McGaw, A. H. U. Colquhoun, M.A., Rev. Chancellor Wallace, M.A., Rev. Chancellor Burwash, M.A., LL.D., Hon. G. W. Allan, D.C.L., Rev. Provost Welch, M.A., D.C.L., Hon. G. W. Ross, LL D., John Hoskin, LL.D., Hon. Richard Harcourt, M A., O. A. Howland, M.P.P., T. Hodgins, M.A., O.C., His Worship the Mayor, the Chairman of the Executive Committee City Council, J. A. Paterson, M.A., G. E. Lumsden, Daniel Clark, M.D., Prof. James Mavor, Prof. W. H. Ellis, M.A., M.B., Prof. A. P. Coleman, M.A., Ph.D., Barlow Cumberland, M.A., Rev. Prof. Wm. Clark, M.A., D.D., Sir William Dawson, C.M.G., LL.D., F.R.S., J. S. Willison, J. Ross Robertson, M.P., William Lount, M P., E. E. Sheppard, E. B. Osler, M.P., E. M. Dawson, C.M.G., LL.D., F.R.S., Prof. Adam Shortt, E. F. Clark, M.P., Col. G. A. Sweny, W. J. Douglas, W. F. McLean, M.P., W. J. Douglas, Jr.

## SUB-COMMITTEE ON CONVERSAZIONE.

Dr. Macallum, Prof. Fraser, C. S. Gzowski, Esq., J. C. McLennan, B.A., C. H. C. Wright, B. Sc, Col. Sweny, President Loudon, Prof. Ramsay Wright, John A. Paterson.

## ADDENDUM.

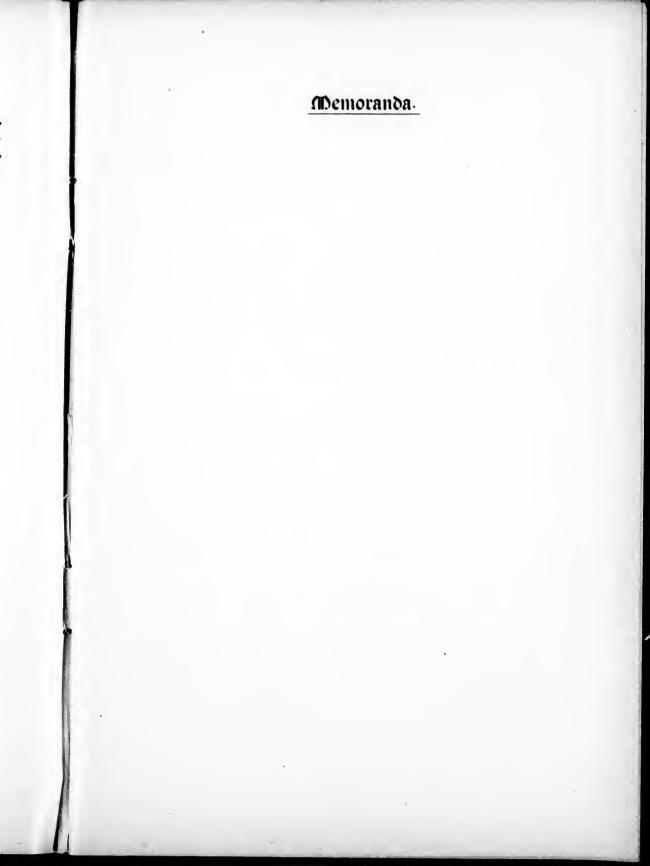
## SUBURBAN RAILWAYS.

### METROPOLITAN RAILWAY COMPANY.

Cars leave C.P.R. crossing, Yonge street, for Richmond Hill, 7.20, 9.40, 2.40, 5 40, 7.45.

Returning, 9.40, 12.00, 5.30, 8.00, 10.30.

Single fare, 35 cents ; return, 55 cents.



# SUMMARY OF THE DAILY PROGRAMME.

MONDAY, AUGUST 16TH.

Reception Room open at 2 p.m.

TUESDAY, AUGUST 17TH.

Reception Room open at 8 a.m.

WEDNESDAY, AUGUST 18TH.

Reception Room open 8 a.m. to 6 p.m.

Meeting of Council at 10 a.m.

Meeting of General Committee at 1 p.m.

Address of the President, SIR JOHN EVANS, K.C.B., LL.D., Treas. R.S., in Massey Hall at 8 p.m.

THURSDAY, AUGUST 19TH.

Sectional Meetings in most cases, 10.30 or 11 a.m. to 3 p.m. Garden Parties 4.30 to 6.30 p.m.

Reception by His Excellency the GOVERNOR-GENERAL and the COUNTESS OF ABERDEEN, in the Legislative Buildings, 9 to 11.30 p.m.

FRIDAY, AUGUST 20TH.

Sectional Meetings in most cases, 10.30 or 11 a.m. to 3 p.m. Garden Parties 4 to 6.30 p.m.

Lecture by PROFESSOR W. C. ROBERTS-AUSTEN, C.B., F.R.S., V.-P.C.S., on "Canada's Metals," in Massey Hall at 8.30 p.m.

SATURDAY, AUGUST 21ST.

Sectional Meetings, 10 a.m. to 1 p.m.

Cricket Match, University Campus, 3 p.m.

Excursion of Members of Section G (Mechanical Science) to Niagara, 9 a.m. to 6 p.m.

Excursions to Hamilton, Niagara Falls and Muskoka Lake Region, returning on Monday morning.

Lecture to Artizans by H. O. FORBES, LL.D., F.Z.S.,

on "Borneo," in the Pavilion, Horticultural Gardens. MONDAY, AUGUST 23RD.

Sectional Meetings in most cases, 10.30 or 11 a.m. to 3 p.m. Excursion of Members of Section C (Geology) to Scarboro'

Heights, I to 6 p.m.

Garden Parties 4 to 6.30 p.m.

Lecture by PROFESSOR J. MILNE, F.R.S., on "Earthquakes and Volcanoes."

TUESDAY, AUGUST 24TH.

Sectional Meetings in most cases, 10.30 or 11 a.m. to 3 p.m. Garden Parties 4 to 6.30 p.m.

Garden Party at Trinity College, 4 to 6.30 p.m.

Conversazione in the University Building, 8.30 to 11.30 p.m. WEDNESDAY, AUGUST 25TH.

Some Sectional Meetings, 10 a.m. to 1 p.m.

Concluding General Meeting, 2.30 p.m.

Garden Parties, 4 to 6.30 p.m.

Yachting Excursion, S.S. Cleopatra (by invitation).

Banquet in honor of Lord Kelvin, Lord Lister and Sir John Evans, 8 p.m.

THURSDAY, AUGUST 26TH.

Excursions to Niagara Peninsula, Kingston, Thousand Islands, Ottawa, Montreal, Upper Lakes, Manitoba and British Columbia. (See Excursion Guide.)

