

The Royal Bank of Canada

INCORPORATED 1869.

Capital Authorized	-	\$	25,000,000
Capital Paid Up	-	-	11,500,000
Reserve Funds	-	-	12,500,000
Total Assets	-	-	175,000,000

HEAD OFFICE: MONTREAL

DIRECTORS:

WILEY SMITH	H. S. HOLT, President	HUGH PATON
HON. DAVID MACKEEN	E. L. PEASE, Vice-President	W. J. SHEPPARD
JAS. REDMOND	G. R. CROWE	C. S. WILCOX
A. J. BROWN, K. C.	D. K. ELLIOTT	A. F. DYMENT
	WM. ROBERTSON	
	T. J. DRUMMOND	
	W. H. THORNE	

290 Branches in Canada and Newfoundland,
28 Branches in Cuba, Porto Rico, Dominican
Republic and British West Indies.

LONDON, ENGLAND

2 Bank Buildings,
Princes Street, E. C.

NEW YORK, U. S. A.

Corner William & Cedar Sts.

SAVINGS DEPARTMENT

AT ALL BRANCHES

INTEREST PAID OR CREDITED AT HIGHEST CURRENT RATES

Savings Accounts may be opened by deposit of \$1.00

Special Facilities given to Students for depositing their money

"PATRONIZE THOSE WHO PATRONIZE US."

SUN LIFE ASSURANCE COMPANY OF CANADA

Issues every desirable form of policy on Life or Endowment plans.
The large premium income and high class investments of this Company assist in making very profitable returns to our policy-holders. Ask your neighbor what he thinks of his policy in Canada's Largest Life Insurance Company.

Write for Annual Report to
HERBERT WALKER, Manager for Nova Scotia.
DENNIS BUILDING, HALIFAX, N. S.

CONTENTS.

<i>Editorial</i>	2
<i>MacGregor: A Scottish Tribute</i>	5
<i>An Edinburgh Colleague's Estimate</i>	9
<i>The Minute of Dalhousie's Senate</i>	10
<i>MacGregor At School. John Forrest</i>	11
<i>MacGregor as a Student at Dalhousie</i>	12
<i>Macgregor as a Scientist</i>	15
<i>Library Notes</i>	19
<i>Analects from Macgregor's Lectures</i>	21
<i>One of MacGregor's Last Letters</i>	22
<i>Senate Minute on MacGregor's Admission to the Royal Society</i>	23
<i>A Dalhousie Colleague's Estimate, A. M. M.</i>	24
<i>MacGregor: Personalia</i>	27
<i>Alumni Notes</i>	31
<i>De Mortuis</i>	37-38

MIDDAY OR MIDNIGHT IS ALL THE SAME AT MADER'S CAFE

112 HOLLIS ST. (Opposite Halifax Hotel)

Open from 7 a. m. to 2 a. m. Sunday included.

TRY OUR 35 and 50 CENTS DINNERS.

Served from 11.30 a.m. to 2.30 p. m. Also Combination Breakfast from 7 a. m. to 10 a. m. Also Combination Suppers from 5 p. m. to 8 p. m.

This Restaurant has been lately Enlarged and Renovated and is the best east of Montreal.

ORDER COOKING A SPECIALTY.

COLWELL BROS., LIMITED.

H. S. COLWELL, President.

THE BEST PLACE IN HALIFAX TO BUY
**Gentlemen's Hats, Furnishings, Athletic
Goods and Baggage.**

91-95 BARRINGTON ST., HALIFAX.

Brander, Morris & Co.

22-24 BARRINGTON ST.

DEALERS IN

High-Class House Furnishings, Carpets, Floor
Oil Cloths, & Furniture of every description.
Iron and Brass Beds and Bedding,

At Buckley's Drug Stores

You will find a large assortment of Nail, Tooth, Shaving and Hair Brushes. The best stock of First-Class Drugs in the City and a nice line of Razor Stropps, Razors, Soaps, etc. Also **Dermonline**, the best preparation for chapped hands, face, etc.

We also carry Photo Supplies.

Our Syrup of Hypophosphates is excellent Tonic for Students and all Brain Workers.

BUCKLEY'S DRUG STORES

49 SPRING GARDEN ROAD.
217 PLEASANT ST.



90 BARRINGTON ST.
18 QUINPOOL ROAD.

SMOKE 

DILL'S CUT PLUG

Hobrecker's Halifax Mixture

AND

Hobrecker's Cut Plug  
English Mixture

"PATRONIZE THOSE WHO PATRONIZE US."

DALHOUSIE UNIVERSITY.

ACADEMIC STAFF.

A. Stanley Mackenzie, B. A., (Dal.) Ph. D., (J. H. U.) D. C. L. (Vind.), F. R. S. C., President of the University.

FACULTY OF ARTS AND SCIENCE.

The President, (*ex officio*.)

Rev. John Forrest, D. D., (Queen's), D. C. L., (Vind.) LL. D., (U. N. B.), Professor Emeritus.
 John Johnson, M. A., (Dub.), LL. D., (Dal.), Professor Emeritus.
 James Liechti, M. A., (Vind.), L. H. D., (Muhl.) Professor Emeritus.
 Archibald MacMechan, B. A., (Tor.) Ph. D., (J. H. U.) Munro Professor of English language and Literature.
 Howard Murray, B. A., (Lond.) LL. D., (Tor.) McLeod Professor of Classics.
 Ebenezer Mackay, B. A., (Da.) Ph. D. (J. H. U.) McLeod Professor of Chemistry.
 Howard L. Bronson, Ph. D., (Yale) Munro Professor of Physics.
 Howard P. Jones, B. A., (Vind.) Ph. D., (Heid.) McLeod Professor of Modern Languages.
 Murray McNeill, B. A., (Dal.) M. A., (Harv.) Professor of Mathematics.
 J. N. Finlayson, M. Sc. (McGill), Professor of Civil Engineering.
 Hebert L. Stewart, Ph.D., Munro Professor of Philosophy.
 James E. Todd, M. A. (Edin. et Oxon.), Professor of History and Political Economy.

D. S. MacIntosh, B. A., (Dal.), M. Sc., (McGill.) Lecturer on Geology.
 C. L. Moore, M. A., (Dal.), Assistant Professor of Biology.
 J. W. Logan, M. A., (Dal.), Lecturer on Classics.
 George K. Butler, M. A., (Dal.), Lecturer on Classics.
 C. B. Nickerson, M. A., (Clark), Instructor in Chemistry.
 J. H. L. Johnstone, B. A. (Dal.), Instructor in Physics.
 Frank D. Graham, B. A. (Dal.), Tutor in Classics.
 J. W. Falconer, M. A. (Edin.), D. D., Lecturer on Biblical Literature.
 H. A. Kent, M. A. (Dal.), Lecturer on Biblical Literature.
 M. Josephine Shannon, Reader in English.
 Robert Laing, M. A., (McGill), Examiner in History of Music.
 H. Dean, Examiner in Theory of Music.
Dean of the College, Prof. H. Murray.
Secretary of Faculty, Prof. H. P. Jones.
Registrar, Prof. McNeill.
Adviser to Women Students, Eliza Ritchie,
 Ph. D.

FACULTY OF LAW.

The President (*ex officio*.)

C. Weldon, D. C. L., (Mt. All.), Ph. D., (Yale), K. C., Munro Professor of Constitutional and International Law. Lecturer on Shipping.
 Hon. B. Russell, M. A., D. C. L., (Mt. All.) Judge of the Supreme Court of Nova Scotia, Professor of Contracts. Lecturer on Bills and Notes, Sales and Equity.
 Hon. A. Drysdale, Judge of the Supreme Court of Nova Scotia, Lecturer on Partnership and Private and Municipal Corporations.
 H. McInnes, LL. B., (Dal.) K. C., Lecturer on Procedure.
 Hon. J. J. Ritchie, LL. B., (Har.) Judge of the Supreme Court of N. S., Lecturer on Insurance.

Hon. W. B. Wallace, LL. B., (Dal.) J. C. C. Lecturer, on Torts and Crimes.
 W. F. O'Connor, B. C. L., LL. B., (Dal.), Lecturer on Real Property and Wills and Administration.
 Hon. G. Patterson, M. A., LL. B., (Dal.), J. C. C., Lecturer on Evidence.
 Stuart Jenks, K. C., Deputy Attorney-General, Lecturer on Statutes and Crown Rules, and on Practice and Procedure
 T. S. Rogers, B. A. (Acad.), K. C., Lecturer on Practice and Procedure.
 B. W. Russell, B. A. (Mt. All.), LL. B. (Dal.) Lecturer on Practice.
 Dr. Weldon, *Dean,*
 Prof. Russell, *Secretary.*

FACULTY OF MEDICINE.

The President, (*ex officio*.)

Donald Alexander Campbell, M. D., C. M., (Dal.), Professor of Therapeutics; 130 Gottingen Street.
 A. W. H. Lindsay, B. A., M. D., C. M., (Dal.), M. B., C. M., (Edin.), Professor of Anatomy, 319 Pleasant Street.
 M. A. Curry, B. A., (Vind.), M. D., (Univ. N. Y.), Professor of Obstetrics and Diseases of Women and Children; 71 Morris Street.
 Murdoch Chisholm, M. D., C. M., (McGill), L. R. C. P., (Lond.), Professor of Clinical Surgery; 303 Brunswick Street.
 William Harop Hattie, M. D., C. M., (McGill), Professor of Mental Diseases; Superintendent of N. S. Hospital, Dartmouth.
 Montague A. B. Smith, M. D., (Univ. N. Y.), M. D., C. M., (Vind.), Professor of Clinical Medicine; Dartmouth.
 Louis M. Silver, B. A., (Vind.), M. B., C. M., (Edin.), Professor of Medicine, and of Clinical Medicine; 65 Morris Street.
 John Stewart, M. B., C. M., LL. D., (Edin.), Professor of Surgery; 28 South Street.
 A. F. Buckley, M. D., C. M., (Dal.), Pharm. Lic. (Montr.), Professor of Materia Medica; 209 South Park Street.

E. Mackay, B. A., (Dal.), Ph. D., (J. H. U.), McLeod Professor of Chemistry; 24 Harvey St.
 E. V. Hogan, M. D., C. M., (McGill), M. R. C. S., (Eng.), L. R. C. P. (Lond.), Professor of Surgery and of Clinical Surgery; 323 Brunswick St.
 L. M. Murray, M. D., C. M., (McGill), Professor of Medicine; 69 Spring Garden Road.
 Howard Logan Bronson, Ph. D., (Yale), George Munro Professor of Physics; 45 Seymour St.
 Clarence L. Moore, M. A., (Dal.), F. R. S. C. Professor of Biology; 87 Coburg Road.
 Murdoch Alexander Lindsay, N. Sc., (Dal.), M. B., Ch. B., (Edin.), Professor of Pathology and Bacteriology; 318 Pleasant Street.
 David Fraser Harris, M. B., C. M., M. D., (Glasg.), B. Sc., (Lond.), D. Sc., (Birm.), F. R. S., (Edin.), Professor of Physiology; 80 South Park St.
 William Bruce Almon, M. D., C. M., (Dal.), Associate Professor of Obstetrics; 35 Hollis St.
 James Ross, M. D., C. M., (McGill), Lecturer on Skin Diseases; 183 Pleasant Street.
 W. D. Forrest, M. D., C. M., (Dal.), M. R. C. S., (Eng.), L. R. C. P., (Lond.), Lecturer on Medicine; 257 Pleasant Street.

(v)

FACULTY OF MEDICINE—Continued.

The President, (*ex officio*.)

James Robert Corston, B. A., M. D., C. M.; (Dal.), Lecturer on Therapeutics and Hygiene, 337 Brunswick Street.
 W. F. O'Connor, LL. B., (Dal.), B. C. L., (Vind.), Legal Lecturer on Medical Jurisprudence; Metropole Building.
 Kenneth Angus MacKenzie, M. D., C. M., (Dal.), Lecturer on Medicine and Demonstrator of Anatomy; 263 Brunswick Street.
 Philip Weatherbe, M. B., Ch. B., (Edin.), Lecturer on Surgery and Demonstrator of Operative Surgery; 144 Spring Garden Road.
 Edward Blackadder, M. A., (Acad.), M. D., C. M., (Dal.), Lecturer on Medical Jurisprudence; 150 South Street.
 Carleton Bell Nickerson, A. M., (Clark), Instructor in Chemistry; 115 South Park Street.
 Robert Evatt Mathers, M. D., (New York), Lecturer on Diseases of the Eye, Ear, Nose and Throat; 34\$ Morris Street.

J. H. L. Johnstone, B. Sc., (Dal.), Instructor in Physics.
 J. L. Potter, M. D., C. M., (Dal.), C. P. A. M. C., Lecturer on Hygiene.
 Murdoch Alexander MacAulay, M. D., C. M., (Dal.), Demonstrator of Anatomy; 327 Brunswick Street.
 Lewis Thomas, M. D., C. M., (Dal.), M. R. C. S., (Eng.), L. R. C. P., (Lond.), Demonstrator of Practical Surgery; 299 Brunswick Street.
 E. M. McLeod, Memb. N. S. Pharm. So., Demonstrator of Practical Materia Medica.
 John Rankine, B. A., M. D., C. M., (Dal.), Assistant Demonstrator of Anatomy; Kaye and Albert Streets.
 G. A. MacIntosh, M. D., C. M., (Dal.), Demonstrator of Physiology; 566 Robie Street.
Secretary of the Faculty, Dr. Lindsay.

FACULTY OF DENTISTRY.

The President, (*ex officio*.)

A. W. H. Lindsay, B. A., M. D., C. M., (Dal.), M. B., C. M., (Edin.), Professor and Examiner in Anatomy.
 Frank Woodbury, D. D. S., (P. C. D. S.), Professor and Examiner in History, Ethics and Jurisprudence.
 G. H. Pluck, D. D. S., (P. D. C.), Lecturer in Prosthetic Dentistry.
 F. W. Ryan, D. D. S., (U. of M.), Professor and Examiner in Operative Dentistry.
 A. W. Cogswell, M. D., C. M., (Hfx. M. C.), D. D. S., (U. of P.), Professor and Examiner in Oral Pathology and Therapeutics.
 E. Mackay, B. A., (Dal.), Ph. D., (J. H. U.), McLeod Professor and Examiner in Chemistry.
 G. K. Thompson, D. D. S., (P. D. C.), Professor and Examiner in Crown and Bridge Work, Ceramics and Prophylaxis.
 S. G. Ritchie, B. A., (U. N. B.), D. M. D., (Tuft Dent. Col.), Professor and Examiner in Prosthetic Dentistry.
 F. H. Sexton, B. Sc., (Mass. Inst. Tech.), Lecturer and Examiner in Metallurgy.
 W. H. H. Beckwith, D. D. S., (U. of P.), Lecturer in Operative Dentistry.
 Howard L. Bronson, Ph. D., (Yale), Munro Professor and Examiner in Physics.
 W. C. Oxner, D. D. S., (B. C. D. S.), Lecturer in Crown and Bridge Work and Ceramics.
 R. E. Macdonald, D. D. S., (P. D. C.), Lecturer in Operative Dentistry.

F. V. Woodbury, M. D., C. M., (Dal.), L. R. C. S. and L. R. C. P., (Edin.), L. F. P. S., (Gals.) Professor and Examiner in General and Oral Surgery and Anaesthetics.
 W. W. Woodbury, B. Sc., (Dal.), D. D. S., (P. D. C.), Professor and Examiner in Orthodontia.
 A. F. Buckley, M. D., C. M., (Dal.), Pharm. Lic., (Montr.), Professor and Examiner in Materia Medica.
 David Fraser Harris, M. B., C. M., M. D., (Glas.) B. Sc., (Lno.), D. Sc., (Birm.), F. R. S. E., Professor and Examiner in Physiology and Histology.
 R. H. Woodbury, D. D. S., (P. D. C.), Lecturer in Prosthetic Dentistry.
 M. A. Lindsay, B. Sc., (Dal.), M. B., Ch. B., (Edin.) Professor and Examiner in Pathology and Bacteriology.
Demonstrators in Dental Subjects—
 Dr. F. W. Ryan, Dr. W. W. Woodbury,
 Dr. G. K. Thomson, Dr. R. H. Woodbury,
 Dr. W. C. Oxner, Dr. S. G. Ritchie.
Dean of Faculty, Dr. Frank Woodbury, 318 Pleasant St., Halifax, N. S.
Recording Secretary of Faculty, Dr. F. W. Ryan.
 All correspondence should be addressed to the Dean.
Dean of College—Professor Howard Murray;
Secretary of Senate—Professor Howard Murray;
Librarian—Dr. MacMechan; Curator of Museum—
 D. S. McIntosh; *Assistant Librarian Arts—Miss G.*
 U. Smith, M. A.; *Law Librarian—F. G. Bradley.*

ALUMNI ASSOCIATION.

President—G. Fred. Pearson, L. L. B.; Vice Presidents—C. J. Burchell, L. L. B., F. V. Woodbury, M. D. C. M.; Secretary Treasurer—Murray MacNeill, M. A.; Executive Committee—George Henderson, Jas. H. Trefry, M. A., J. S. Roper, M. A., H. H. Blois, A. H. Buckley, Gazette Editor—R. A. Clemens, B. A.

A. PUBLICOVER

The Students' Barber

Four Barbers. We hone Razors and guarantee satisfaction. First class Shoe Shine 5 cents.

23 Spring Garden Road.

RAY B. MULLONEY

DENTIST

139 Barrington St.

Foot of St. Paul's Hill.

TELEPHONE 1419J.

THE
NOTMAN PHOTO STUDIO

30 DUKE STREET

(SOUTH SIDE)

HALIFAX, :: N. S.

Between Barrington and Granville Street.

STUDENTS!

It will pay you to look over our line of Slater Shoes.
If its Footwear, we have it.

Repairing and Cleating a Specialty.

L. CUVELIER

12 DRESDEN ROW, PHONE 780W HALIFAX, N. S.

STUDENTS!

Of the University make a good appearance when
wearing our make of SUITS and OVERCOATS
we supply either

"TAILOR MADE OR READY TO WEAR"

We appreciate your patronage by prompt service
and good values.

W. S. MUNNIS, COR. JACOB and WATER STS.
HALIFAX, :: N. S.


AFTER COLLEGE:—

THE WIDE WIDE WORLD !!

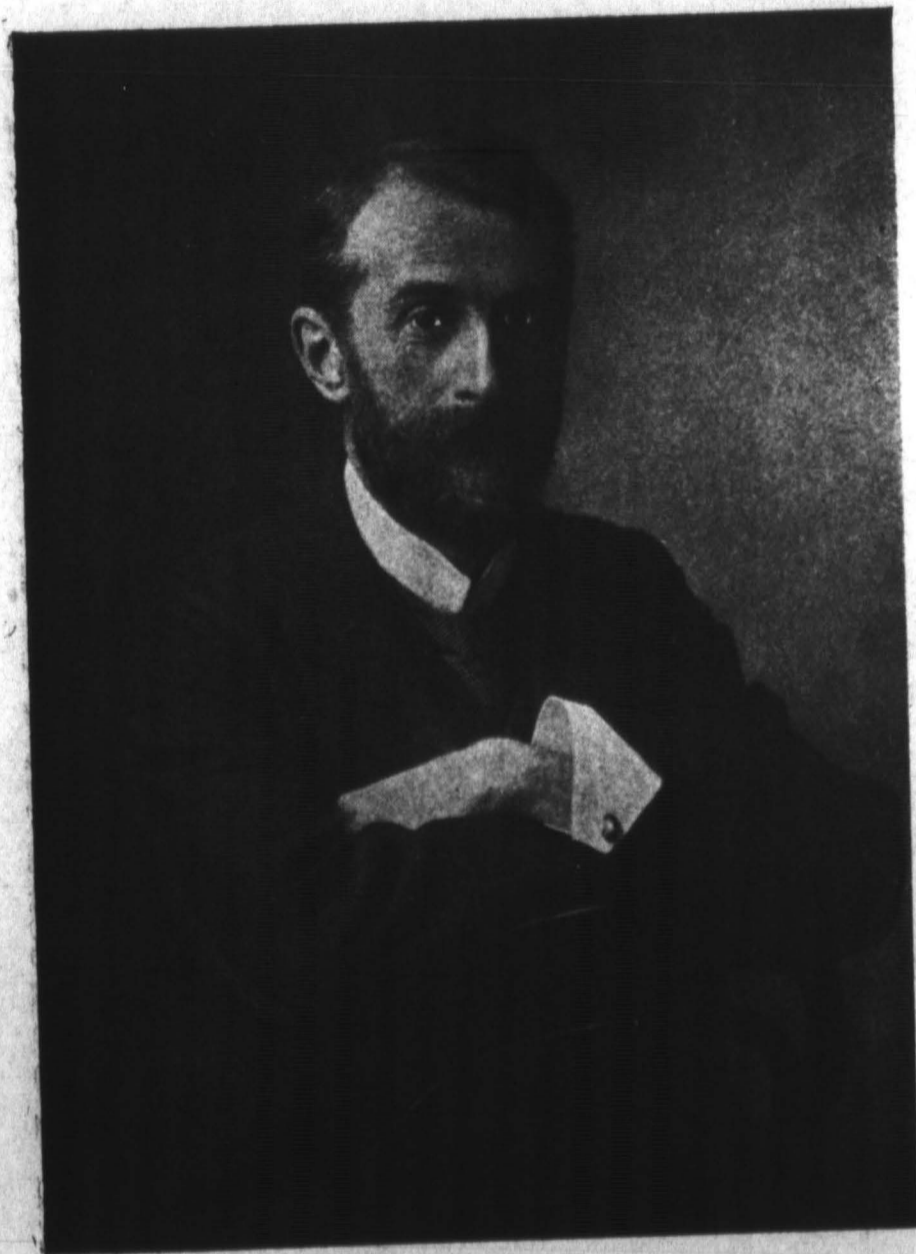
Some sweet day you will furnish a cosy nest.

Let **FRANCIS** supply the goods.

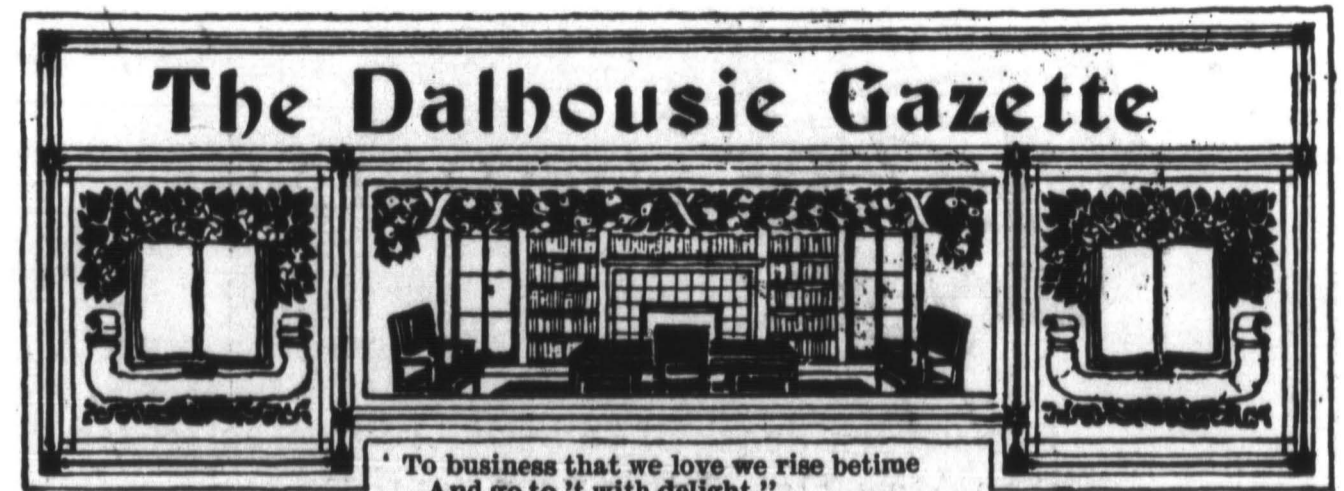
103 to 111 ARGYLE ST.,
22 to 28 BUCKINGHAM ST., **HALIFAX.**

 The House of the Nimble Sixpence.

"PATRONIZE THOSE WHO PATRONIZE US."



THE LATE DR. J. G. MACGREGOR.



'To business that we love we rise betime
And go to 't with delight.'
Antony and Cleopatra.

"ORA ET LABOR."

Vol. XLVI. HALIFAX, N. S., SEPTEMBER, 1913. No. 1.

The Dalhousie Gazette.

FOUNDED 1869.

Published monthly, during the college term, by the authority of the
University Students' Council of Dalhousie University, Halifax, Nova Scotia.

Editorial Staff.

W. MC. NELSON, B. A., LAW '14, *Editor-in-Chief.*

H. G. MACLEOD, Arts, '14.

C. W. PARKER, Dent, '14.

J. MARTIN, Arts '16.

H. W. KIRKPATRICK, Med. '15.

C. M. MCINNES, Arts, '15.

Lady Editors:—{ MISS E. K. ALLEN, Arts '13.
MISS E. MACKENZIE, Arts, '14.

Alumni Editors:—{ R. A. CLEMEN, B. A.
MISS GEORGENE FAULKNER, B. A.

Business Manager:—P. MACAULAY, Arts, '14.

Asst. Business Manager:—J. N. LYONS, Med. '15

The subscription price is \$1.00 per year. Single copies ten cents each.
Remittances should be made payable to the order of THE DALHOUSIE
GAZETTE, and should be made by Money Order, Postal Note, or Cheque,
cheque should include enough for exchange.

Subscriptions are not discontinued till all arrears are paid.

Advertising Rates will be sent on application to the Business Manager.





EDITORIAL

A
GREAT
LOSS.

The sudden death of James Gordon MacGregor on May 21st of this year deprived Dalhousie of her most distinguished alumnus. As an undergraduate, as Gilchrist scholar, as a graduate student in Great Britain and Germany, as Professor of Physics in Dalhousie, and as successor to Tait in the Chair of Natural Philosophy at Edinburgh, he conferred distinction on his *alma mater*. As early as 1874, a class-mate, A. P. Seeton, described him with pardonable enthusiasm as, "Then as now, the hope and pride of our University," and the phrase indicates the general attitude of his students and colleagues towards him, during the twenty-two years of his professorship at Dalhousie. Not only did he make Dalhousie widely known by his scientific researches, not only did he spend himself in class-room and laboratory, but he exercised a great influence on the administration, the curriculum, and general policy of the institution, a debt which can hardly be accurately estimated. His devotion to the interests of Dalhousie was life-long. When the news of his death came this spring, a volume of scientific papers addressed in his bold, flowing hand was lying in the Professors' room. MacGregor is gone, but he has left behind him an example and a tradition which will never pass away in the college he loved so well.

CHANGES
IN THE
STAFF.

The universal flux and flow of the world is seen also in our little college. Men come and go with almost bewildering rapidity. Dalhousie is becoming a sort of academic turnstile. Last year Professor Laird succeeded Dr. Magill. At the end of the session, he was promoted to the Chair of

(2)

Philosophy at Belfast, and Professor Herbert Stewart was selected by our Board of Governors to take his place. Unfortunately, owing to family affliction, Professor Stewart will not be able to take up his work here until after Christmas, but Mr. Lodge, a nephew of the famous President of Birmingham University will act as substitute. Professor Howe is succeeded by Professor Finlayson, a brother of G. D. Finlayson ('08) now in the Department of Finance at Ottawa; and Professor Todd follows Professor Estey who has returned to England to carry on his researches in his special subject. The reputation of both these new instructors has preceded them and they have already produced the most favorable impressions upon all who have had the good fortune to meet them. Dalhousie bids them a hearty welcome.

PROGRESS
AT
STUDLEY

Since Convocation, the contract for the Chemical and Physical Laboratory has been let, the builders have begun work, and every day the walls are rising higher. By July 1914, it will be ready for occupation. When finished, it will look like the Cathedral blended with Government House and it will be bigger than the Nova Scotia Technical College. Another notable work is the laborious formation of a playing field. Soil is scarce on the peninsula, but the Governors are striving to convert the one level part of Studley on South St. into a smooth stretch of turf. The first step was to remove all the soil, hoarding it like so much gold dust. Next the inequalities in the bed-work were blasted into something like an even plain. The final processes are covering this with a layer of coal ashes, then putting back the precious soil as a top-dressing. It costs several thousands, but it is the only way to have an athletic ground of our own. This provision for college sport is much appreciated.

THE
PRESIDENT'S
REPORT

The past academic year witnessed a new departure in our procedure, which calls for decided approval,—a public report from the Presi-

dent. A neat pamphlet of thirty-two pages, it contains information which will be simply invaluable to the future historian of Dalhousie. The formation of the Dalhousie Medical School and of the Nova Scotia School of Pharmacy is noted, with all the important details. Careful tables show the 'curves' of our attendance, the hours of instruction and number of students in each department. The Forward Movement is outlined; the elevation of the chemical physical laboratory, now in course of construction, forms the frontispiece, while another illustration shows the plan to be followed in laying out the grounds and the sites of the buildings that are to be. The list of contributors to the funds covers nearly nine closely printed pages with double columns. It is cheering to find that Dalhousie has so many friends who show their faith in her by such handsome gifts. Perhaps the most important feature of this very important document is the statement of Receipts and Expenditures, pp. 22, 23. This is the first time that such a statement has been made public, and it will silence much criticism. Our income is nearing the \$50,000 mark, but, of course, it is inadequate. All friends and supporters of Dalhousie are entitled to such a knowledge of college affairs as this report gives them. It can only inure to the progress of the institution we have all so much at heart. Henceforward the annual appearance of the President's Report will be an event all Dalhousians will watch for with deep interest.



MACGREGOR: A SCOTTISH TRIBUTE.

Dr. J. G. MacGregor, Professor of Natural Philosophy in the Edinburgh University, died with startling suddenness yesterday morning. To all appearance he was in ordinary health when he rose. He had his bath, and returned to his bedroom to dress. There he was taken suddenly ill, called for his son, and died almost immediately afterwards. The news of the Professor's sudden death was received by a wide circle of friends with the deepest regret.

James Gordon MacGregor was born on March 31, 1852, in Halifax, Nova Scotia, where his father was a well-known Presbyterian clergyman. After graduating M. A. in Dalhousie College, Halifax, with all the honours and distinctions open to him, he was awarded the Gilchrist Scholarship, as a holder of which he was expected to study for a London University degree. He resolved to prepare himself for this degree by studying in Edinburgh, where accordingly, in 1871, he began what promised to be a most distinguished career. Unfortunately, in those early years overwork broke down his health; but although he was debarred by medical advice from taking part in strenuous competition for class honours, he devoted himself steadily to the pursuit of his favourite sciences of physics and chemistry. As early as 1872, in Professor Tait's laboratory, he was associated with Mr. A. E. Ewing (now Sir Alfred Ewing) in an experimental investigation of the electrical conductivity of certain saline solutions. The research was soon after published in the *Transactions of the Royal Society of Edinburgh*.

After further study in Leipzig, Professor MacGregor graduated B. Sc. in London University in 1874, and gained his doctorate two years later. In this year, 1876, the famous Loan Exhibition of Scientific Instruments was being held in South Kensington; and on the

day succeeding his examination MacGregor met one of his examiners in the Exhibition, and was able to instruct him in the use of certain of Sir William Thomson's instruments, which the said examiner was unfamiliar with! Meanwhile Gordon MacGregor occupied what might be called his leisure time helping Tait in various investigations and pushing on his own researches in the conductivity of liquids.

The company of enthusiastic workers whom Tait gathered round him at that time never felt their number complete until MacGregor returned from Germany, or from Halifax and set up his troughs and wires and galvanometers in the old physical laboratory. He was admired by all for his all-round mental endowments for the clear logic of his thinking; and he was beloved for his own sake as a friend, trusty, true, and loyal.

For two years,* 1877-79, MacGregor was Physics Master in Clifton College, under the headmastership of Dr. Percival, now Bishop of Hereford. Here he had a very serious breakdown in health, occasioned by the accidental shooting of one of the masters, beside whom he was sitting in a railway carriage on their return from a shooting competition. A gun in the hands of one of the boys in the neighbouring carriage went off accidentally with fatal results. MacGregor set off full speed for a doctor, and the untoward exertion and nervous shock quite prostrated him for several months.

In 1879, Gordon MacGregor was called back to his native town as the first * Professor of Physics in Dalhousie College, the lectureship which he had held previously for one year having been elevated into a

*Note—This statement is not quite accurate, MacGregor was Lecturer in Natural Philosophy in 1877-8, but John J. MacKenzie, M. A., Ph. D. is designated "Professor of Experimental and Mathematical Physics" in the newly organized "Department of Science" in the calendar for 1878-9. MacKenzie died of pneumonia in February, 1879, and was succeeded by MacGregor. It must have been in 1878-9 that MacGregor was Master at Clifton for his name appears as Lecturer in Natural Philosophy in the calendar of 1877-8

chair through the munificence of Mr. Munro. Here for twenty-two years he taught with remarkable success, all the more remarkable when we bear in mind the limited resources at his disposal. In the earlier years of his Halifax professorship, he was in the habit of spending his summers in Edinburgh, where Tait in his usual generous way gave him the run of the physical laboratory. These yearly visits became only occasional after his marriage with Miss Marion Taylor, an Edinburgh lady; but they served to keep up his acquaintanceship with his friends on this side. Accordingly, when, in 1901, he was elected to the Chair of Natural Philosophy, vacant through the resignation of Professor Tait, it was no stranger whom academic Edinburgh welcomed to its midst.

Professor MacGregor's main work during these twelve years in Edinburgh has been the development of the Natural Philosophy Department. The old Infirmary in Drummond Street has been transformed into a well-equipped physical laboratory; and the methods of instruction have been brought into line with modern requirements. The original plans which Professor MacGregor drew up had to be departed from on account of lack of money; but even in its less perfect form it is undoubtedly a splendid monument to his devotion and thoughtfulness.

But although his main interest was the perfecting of the facilities for instruction and research in physical science, Professor MacGregor was actively employed in other important directions. From 1902 he represented the University on the Heriot Trust, and gave unsparingly of his time and strength to the considerations of this great educational body. He never shirked his duty at Faculty and Senatus meetings; and as Fellow and Councillor in the Royal Society of Edinburgh he has done excellent service.

The official duties of his Chair have prevented him carrying out scientific research during these later years; but he has suggested lines of work to his senior or post-graduate students, and has been a source of inspiration

and encouragement to all. He was eminently accessible to the students, and always placed their interests first. The chief line of research, which he followed out both in Canada and Edinburgh, was in a sense a continuation of the first piece of work which he did with Sir Alfred Ewing. Electrical conduction, depression of boiling points, viscosity, and the many curious connected physical properties of liquids, may be mentioned specially.

Another project which latterly occupied his attention was the collection of funds to establish a second Chair on the mathematical side of Natural Philosophy in memory of his old master, Professor Tait. With Tait's roll-books as a guide, he hunted through county directories and all kinds of lists, so as to trace as far as possible the careers of these old students. A large number of them had, of course, passed away, and many could not be traced at all. A considerable number of circulars came back; but yet the appeal must have reached thousands of those who had listened to Tait expounding the principles of Natural Philosophy. It is a pity that the response has not been so great as Professor MacGregor had hoped.

Professor MacGregor was deeply interested in the foundations of dynamical science, and wrote several papers, some of which appeared in the *Philosophical Magazine* and some in the *Transactions* of the Royal Society of Canada. His views on this thorny subject were no doubt the outcome of his endeavours to write a logically constructed book on dynamics. His *Kinematics and Dynamics* (Macmillan & Co.) was published in 1887, and the third edition appeared in 1909. Although based essentially on the methods of Thomson and Tait, the treatment of the fundamental principles is original in many respects. It follows the methods he had himself tested in teaching, and has the advantage over many other books on dynamics, inasmuch as it gives a complete view of the whole subject, including the dynamics of fluids and of elastic bodies.

Professor MacGregor's sudden death has removed from our University one who was emphatically a born

teacher, enthusiastic and thorough. He spared no pains in the preparation of his lectures, having his mind constantly on the outlook for new and better illustrations, and devoting himself entirely to the best interests of the students. Many will mourn him as a true-hearted friend, who never thought or spoke an unkind word or ascribed a false motive. All will sympathise with his wife and family in the suddenness of the calamity which has overtaken them.

—*The Scotsman*, May 22, 1913.

AN EDINBURGH COLLEAGUE'S ESTIMATE.

In the class of English Literature, Professor Saintsbury made reference to the sudden death of Professor MacGregor, "Professor MacGregor was," he said, "especially distinguished for the pains he took to secure extra apparatus, material, and advantages of all kinds for the students of natural philosophy at Edinburgh University. There were variations in the amount of energy a man had to expend, and variations in the clearness with which he saw where his duty lay, but it might be said that Professor MacGregor thought night and day how best to advance that department of the University which lay under his charge."



THE MINUTE OF DALHOUSIE'S SENATE.

"Having learned with profound regret of the untimely and lamented death of Professor James Gordon MacGregor of the University of Edinburgh, the Senate desire to place on record their sense of his worth as an alumnus, as a teacher and as a friend.

As an undergraduate he secured almost every honor and distinction his college had to offer. After graduation he won the Gilchrist scholarship, standing among the foremost candidates. His brilliant career at Edinburgh was interrupted by a serious illness, which left behind a permanent weakness of constitution, but, in spite of this disadvantage, he soon established his reputation as a scientific investigator. After wide and thorough preparation, he returned to Dalhousie to become Professor of Physics. During his tenure of office at Dalhousie, his researches in the department of Physics made him and the institution widely known, and won for him the coveted recognition of a fellowship in the Royal Society. At the same time, he proved himself to be a zealous and most successful teacher of his subject, never sparing time or energy in preparation for his various courses and in devising means to make them more efficient. He also took no small part in the general administration of the college, in every way striving unselfishly to further the interests of Dalhousie and of higher education throughout his native province. As a colleague, he was always generous, considerate, helpful and loyal. No graduate of Dalhousie has attained to greater distinction in his chosen field of study, or left a more shining example of devotion to duty, of obedience to the dictates of honor, and of lifelong interest in his *alma mater*."



MACGREGOR AT SCHOOL.

I understand that the *Gazette* purposes to print a number of articles on the life and work of our greatly lamented friend, Professor J. Gordon MacGregor. As I knew him from his very childhood, I have been asked to write a brief account of him as a boy.

His boyhood was not at all eventful. He was always so quiet, studious and well behaved that there is nothing of an exciting nature to record and yet his whole life was of such a character that it offers a most profitable lesson for the students of his Alma Mater.

During the years 1862-6 I was in charge of the old Academy in Gerrish Street. We had a number of intelligent boys, many of whom afterwards distinguished themselves as students and professional men. Among them was our friend MacGregor. He was in the school when I began teaching and continued there till a short time before he entered Dalhousie. Although slight in build and not very robust, he always enjoyed good health and took an active part and hearty interest in all the sports of the playground. Good natured and kind in disposition he was a favourite both with his teachers and schoolfellows.

From his very childhood he was clearly marked out as a student. I knew him intimately through the whole course of his life, and as I look back over his brilliant career, I feel that the same characteristics which assured his success in college and afterwards in his professional career, could be traced all through his life. If any one were to ask me what was the most marked feature of MacGregor as a boy, student and professor, I would unhesitatingly reply, it was the uniform faithfulness with which he performed every piece of work expected of him. And this faithfulness was as clearly seen in his childhood as in his mature years. Possessed of great natural ability he used it to the very best advantage, never allowing play or anything else to interfere with the faithfulness of his work. In all my experience with him I never knew him to come with an

excuse for neglected lessons. His work was always done and done thoroughly. He left nothing unfinished behind him.

There were two other boys of the same type in the Academy classes with him. It was a pleasure to teach them. When we started Latin we used the old Edinburgh Academy text books and going slowly through the leading points of the grammar, the work was so completely mastered that there was no need of going back for revision and when we started reading the old Delectus it was plain sailing; and this was the marked feature of his work right on to the end. He entered Dalhousie in 1867 taking the first year as a general student and devoting his time to the Classics and Mathematics. He matriculated the following year and being thoroughly prepared for the work he never made less than first class in any subject of his course.

I spent a good deal of time with him in Edinburgh a few years ago and felt that he was just the same as he used to be in the old school in Gerrish Street. It was summer and all the other professors were off on vacation but MacGregor had work to do and he would not leave till it was done.

The lesson which his whole life has for the students of Dalhousie may be expressed in the words of the wise man, "Whatsoever thy hand findeth to do, do it with thy might."

JOHN FORREST.

MACGREGOR AS A STUDENT AT DALHOUSIE.

MacGregor first entered Dalhousie in the session of 1866-67, as a general student, and confined his attention to Classics and Mathematics. In his examination in these subjects, he obtained second-class standing; he was fifteen years of age. Next year he matriculated

STUDENTS AT DALHOUSIE, 1869-70.

J. G. MacGregor.



as an undergraduate, winning the entrance scholarship, and thence forward, his record is a monotonous series of first-classes as below:—

1868. First Year.	Classics,	Cl. I
	Mathematics,	Cl. I
	Rhetoric,	Cl. I

University Prizes in Classics and Mathematics. Second Prize Rhetoric, and Certificate of General Merit, ranking First Class (alone) at the end of the session.

1869. Second Year.	Classics,	Cl. I
	Mathematics,	Cl. I
	Logic and Psychology,	Cl. I
	Junior Chemistry,	Cl. I

University Prizes in Classics, Mathematics, Logic and Psychology. Certificate of General Merit, first-class.

1870. Third Year.	Classics,	Cl. I
	Metaphysics,	Cl. I
	Senior Chemistry,	Cl. I
	Natural Philosophy,	Cl. I
	French,	Cl. I
	German,	Cl. I

University Prizes, Classics and Natural Philosophy. Certificate of General Merit, first-class.

1871. Fourth Year	Classics,	Cl. I
	Experimental Physics,	Cl. I
	Ethics,	Cl. I
	History,	Cl. I
	French,	Cl. I
	German,	Cl. I

University Prizes in Classics, Ethics, History, Modern Languages. Certificate of General Merit, First-class. Young Prize (\$20.00) for essay, "The Function of Money."

In fact, he won almost every distinction the college could offer to the able and ambitious student. But MacGregor did not confine his attention to his studies; he was strongly interested in the life of the college. He was one of the founders of the *Gazette*, being secretary of the meeting at which a college paper was projected,

in January, 1869, and, later, his name appears in the list of editors. The copy of the rare first volume in the Professors' Room* was presented by him and contains his autograph. At graduation, MacGregor delivered the first valedictory. Of it the *Gazette* of May 5, 1871, remarks:—

“A very pleasing feature was introduced at this convocation for the first time. A valedictory address to the Governors, Professors, and students was delivered by J. G. MacGregor on behalf of the graduating class. He accounted for the small number of the class, and sketched shortly the history of the men with whom he had matriculated. He dwelt upon the intellectual joys of undergraduate life, and the lasting friendships that are formed and cemented among students. By an apt classical allusion, he illustrated the struggle of the University since its inception, comparing it to the struggle of the infant Hercules with the two serpents. One serpent—the ill-will of many Nova Scotians—had almost been strangled, and the other—Poverty—though still fighting and apparently stronger than ever, would assuredly meet with the same fate; and as Hercules had been enabled in after years to perform his twelve mighty physical labours, so would ‘Dalhousie’ yet make greater achievements in a higher and nobler sphere.”

Immediately after graduation, MacGregor won the Gilchrist. The *Gazette* notes with pride that he ranked “higher than 600 of the 630 candidates who went up from India, Australia, Canada, and Great Britain to matriculate at the London University.”

Nor did MacGregor forget his college, or his college paper when he went abroad to study. He arrived at Edinburgh just at the beginning of the trouble of admitting women to the study of medicine, and he has several long and interesting letters on this subject. The letters signed ‘Mac’ describing Oxford, Edinburgh, Germany make good reading still; they are written in MacGregor’s vigorous, manly style. His interest continued keen all through his term as professor of Physics at Dalhousie.

MACGREGOR AS A SCIENTIST.

Professor MacGregor received the stimulus which turned him towards science from professors Macdonald and Lawson. At Edinburgh he studied under the great Tait, and to him he owed the spirit of scientific investigation which directed his future career. His stay at the German universities opened his mind to the value of modern methods in the teaching of physics, and to the economic advantage to a country of scientific knowledge and scientific research. When he returned to Nova Scotia there was almost no one in his class of thoroughly trained scientific men, as his fellow countryman and fellow student and predecessor in the chair of Physics at Dalhousie, Mackenzie, had just died, and the third of that well-known trio, Bayne, had gone to R. M. C. Kingston, Ont. He had, consequently, a broad field all to himself, and his influence in stimulating men to enter upon scientific study was great. He became professor of Physics in 1879, and that the following well-known men, among others, were drawn to his advanced classes, shows how early in his career his influence was felt, and gives one reason why Dalhousie has been so prominent in the production of scientific scholars:—H. Graham Creelman, Dr. George M. Campbell, Archibald McColl, A. Gordon Reid, Prof. D. A. Murray, Dr. George G. Campbell, Robert T. Locke, Principal George E. Robinson, President A. S. Mackenzie, Kenneth J. Martin, Prof. E. Mackay, N. F. Mackay, M. P., Dr. Dugald Stewart, M. P., Alex. M. Morrison, Prof. Henry M. Mackay—all within the next ten years. The long line was continued through Prof. D. F. Campbell, W. H. Magee, G. A. R. Rowlings, Prof. C. L. Moore, Mrs. (Prest.) A. Ross Hill, F. J. A. McKittrick, Prof. Douglas McIntosh, Prof. Murray Macneill, Prof. D. S. McIntosh, Prof. E. H. Archibald, Principal Melville Cumming, Prof. T. C. McKay, Charles F. Lindsay, Prof. James Barnes, J. A. Benoit, Prof. R. S. Boehner, Prof. T. C. Hebb, Prof. Laurie L. Burgess, G. H. T. Mackay, etc.

After all, the striking feature about MacGregor was his strong personality. His brain fairly suffered from restlessness, and his energy was inexhaustible, and his attention unflagging. His thoughts came swift and clear as a mountain torrent, and when he spoke the fire in his eye showed the pace at which his mental machinery was running. The keen eager student caught the fire by a sort of electro-magnetic induction, and the brain of even the dullest was visibly actuated. But of course, the pace was too keen for the dullard, and soon stirred to exhaustion his brain settled into lethargy, and it is doubtful whether he profited much by MacGregor. But the brighter, abler students learned to think, and to think clearly, and went away with a grasp of physical principles such as few teachers of that subject can claim the credit of giving to their students.

Thoroughly devoted to his own subject especially, and to science in general, he was yet catholic in his interests. A vigorous walk with him round the Park was the occasion for many keen comments on men and movements then engaging public attention. Any movement for the betterment of the Province in any way, and particularly in an educational way, had his sympathy and active support. Whatever he went into, he went into with his whole horse power, and his presence was felt.

A deep metaphysical interest coloured his thinking, and some of his best papers were written on the fundamental conceptions of abstract dynamics, a most difficult field for even the most brilliant and skilful of philosophic minds. A Friday evening se'ance at Prof. Macdonald's—Charlie's—when these two philosophers engaged in dialectic battle, with a few of us to act as picadors was an interesting and profitable occasion—to us.

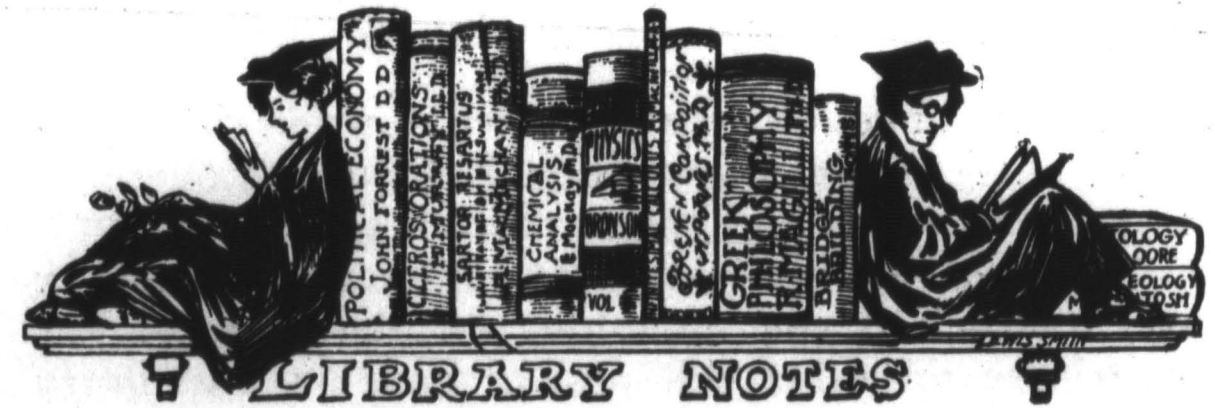
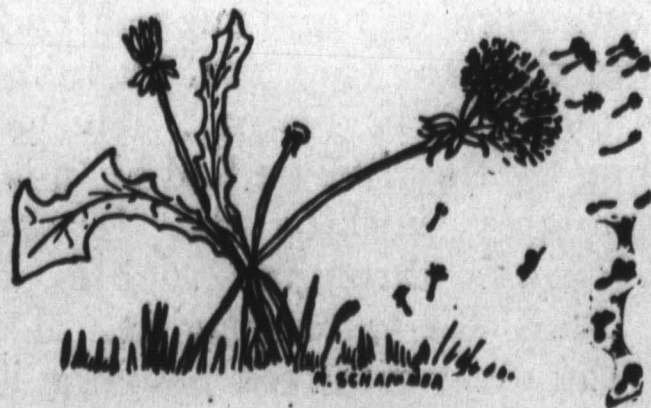
Most men situated as was MacGregor, with a laboratory in name only, would have given that as a reason for doing no productive work, and have vegetated. Not so MacGregor; he chose subjects for research which

could be followed up with scant appliances, or with such as he could borrow or manufacture himself, and published a long series of articles alone or in collaboration with his students such as astonished those who knew the conditions of working. And it was all good work too; the best proof of which was his election as a Fellow of the Royal Society, the ambition of every British scientific man. He took a leading part in the formation of a Royal Society for Canada, and was one of its active officers, and read many of his papers before that body.

His research work ended with his stay at Dalhousie. Called to Edinburgh to take the chair left vacant by the death of his old chief, Tait, he threw himself heart and soul into the modernizing of the method of teaching Physics at that great university, and it absorbed all his energy, and he collapsed at the lever just as he had about completed his task. Tait did not teach physics by the laboratory method; he lectured, and then took into his own private laboratory the choice spirits who wanted to follow up the subject, and let them work with him on his problems. In trying to change this MacGregor ran against a solid wall of conservatism and tradition. It was a long struggle to get the University to approve of laboratory teaching; but he won. He got the cold permission to collect the money needed to build and equip a laboratory; and he raised it. He had to be his own architect and superintendent; and he managed to find time for that too, by taking his vacations when he ought to be resting. He had the satisfaction of finding by the time he had his new laboratory open and thoroughly working that it would not accommodate the crowds thronging to him, and he was carrying out plans for extending it. The end was obvious; even the most vitalized machine is finite, and it stopped, suddenly, and for ever.

The leading exponent of the value of scientific education, and the preacher of the necessity of providing facilities for technical training in Nova Scotia, his conceptions in this respect were separated as far as pole from pole from the ideas of those who would foist

on us the narrow, petty utilitarianism of the cult of today. He would have had us add something to our previous opportunities, for intellectual and economic development, not substitute science for everything that had already stood the test of time; and his breadth of vision and grasp of the many-sidedness of real mental training would not have tolerated for a moment the preposterous idea that in a real democracy you dare turn lads out from the schools fit to earn early in life a livelihood in one direction, and unfit for everything else,—a direct reversion to the caste conception of the Hindu and an effort to put us in the category with China. The effort is foolish, and is bound to fail; but in the meantime we shall hear much less about the old proud boast of the number of intellectual men Nova Scotia exports to the rest of the world.



"Bibliotheca valde desiderate."

Plans.—The requirements of the Macdonald Memorial Library have been the subject of much thought during the summer vacation. The problem is not an easy one, but is on its way to solution. Competing designs for the facade are now in the hands of the consulting architect.

Model Letter.—The curious fact that a Library book looks exactly like one of your own, if standing with them on the same shelf is being continually observed. It has been noticed even by professors, and in the case of a recent alumnus, has resulted in benefit to the Library. His letter is a model of manly frankness. "Some time ago I found, very much to my surprise, that I had in my possession 'Smith's Solid Geometry' bearing the stamp of Dalhousie College. I had often seen it in my bookcase, but as I had bought a copy for myself while at college I was under the impression all the time that the book was my own. I am quite unable to explain how the Library copy has come to be in my possession, unless the books got mixed in class and mine was returned to the Library.

However, I am returning it along with two other books — — to be placed in the Library in atonement and as a sort of peace offering for my past offences. I have no doubt . . . some other books which would be of more service in the college library than in mine. Some day when I have the time I shall try to select a few which may be of use."

Comment.—Any confessor could tell this Good Dalhousian that it is the intention that makes the sin. He was entirely innocent in intention and he has made ample amends for an oversight. But where, oh where

are the other missing volumes noted down in the stock-taking sheets? Let other Good Dalhousians overhaul their book-shelves and their consciences!

Another Model.—"You remember when in Halifax last, I promised you something for the Library. As my trip to the other side and to Panama was pretty expensive I have been rather short of funds and have not sent it to you before this. . . . Anytime there is anything special you need, just let me know and I shall try and help you out. Just at present I am fairly prosperous and can easily afford something occasionally. . . . P. S. I can practically promise you the amount of the enclosed cheque per year"

The cheque was for twenty-five dollars. The same Good Dalhousian is sending a student to us all the way across the continent.

Gifts.—The Library is indebted to Dr. A. P. Reid for two more donations of *The Scientific American* with its *Supplement*, to Mr. E. T. Sutcliffe for the 1797 edition of the *Encyclopaedia Britannica* and to Dr. E. Mackay for a long set of *The Review of Reviews*.

Appointment.—Miss G. U. Smith, M. A., has been appointed Assistant Librarian, Miss Gray having resigned.

Accessions.—One of the acquisitions to the Library is a long set of the *Philosophical Magazine* which is being supplied by a German bookseller. It will be placed in the Physical Laboratory.

MacGregor's Gift.—MacGregor's lifelong interest in his *alma mater* is well shown by his gift to the college of eleven volumes of the *Philosophical Transactions* of the Royal Society, series B. (vols. 193-203), thirteen volumes (unbound) of the *Proceedings of the Society*, as well as twenty-seven reports presented before it on the Sleeping Sickness, Mediterranean Fever, etc. In the same box, he included two bound volumes of Dalhousie calendars from the reorganization, and a memorial volume of scientific papers from St. Andrews University. The publications were sent at the suggestion of our professor of Biology, and were accompanied by two characteristic letters from MacGregor in his strong, swift handwriting.

ANALECTS FROM MACGREGOR'S LECTURES.

"Failure is one of the best schools of success."

"Scientific scepticism is intellectual honesty."

"The theories of science and the forms of religion may change. But they are only the outer garments which are renewed from age to age, and their changes serve but to indicate the permanence of that which is clothed upon."

"We work together here that we may learn more and more to be able to see that which is true, to appreciate that which is beautiful, and to love that which is good."

—*The Conditions of Scientific Progress.*

"I hold Physics to be, next to Literature, the best of all subjects of study as a means of general education."

"The Calculus dodgers are a most respectable body of men. The most artful dodger of them all is Clerk Maxwell, whose book on the theory of Heat . . . has obtained a wide popularity In Electricity, Cumming dodges more laboriously, it is true, but still to good purpose. In Optics, Glazebrook takes the same course, and to men of small mathematical equipment throws a flood of light on a region that was cloudy and dark before May we not rank even Newton himself as a dodger, though he had no Calculus to dodge?"

—*Calculus Dodging and Other Educational Sins.*

"The Upper Provinces possess comparatively well endowed Universities and Schools of Applied Sciences. The Maritime Provinces have only small, weak, ill-endowed colleges. So far as the potent factor of education is concerned, therefore, we have made success easy for our competitors. We can put our young men on an equal footing with those of the Upper Provinces only by the establishment of a well-equipped University, and such a University can be established only by a policy of Consolidation."

—*Short Statement of the Advantages of University Consolidation.*

ONE OF MACGREGOR'S LAST LETTERS.

24 Dalrymple Crescent, Edinburgh, 1-1-'13.

My dear—:

Remember —? Of course I do. I am delighted to do what I can to help him in his work. Thin (James, bookseller, Edin.) is to send you for the Library the last 8 or 9 Nat. Sci. vols. of Trans. of the Roy. Soc. Lond. also the last few vols. of Pro. and a few special reports more or less in his line. The Proc. & Trans. I will send as they come out. When I shuffle off this mortal coil or the postage stamps cease because they have become few, you can apply to the Roy. Soc. Council to have the set continued. They are hard up usually for funds and they do not distribute publications except in a niggardly way. Meantime I have the right to copies and will forward them. Cannot unfortunately spare my Math. & Phys. volumes. Enclosed you will also find a couple of volumes of old Dalhousie Calendars complete from the beginning and a St. Andrews Memorial volume which ought to have been sent long ago.

Life is too full of pure grind nowadays. Even on New Year's day, having got through with my small round of calls I am about to sit down to a batch of deferred Exam papers.

With best wishes for a Happy New Year to both Mrs. — and yourself, I am,

Yours very truly,

J. G. MACGREGOR.



SENATE MINUTE ON MACGREGOR'S ADMISSION TO THE ROYAL SOCIETY.

At a meeting of Senate on Thursday, Sept. 27th, the following resolution was passed unanimously, and a copy thereof was directed to be transmitted to Professor MacGregor.

The Senate of Dalhousie College and University desire to place on record their just sense of the high honour lately conferred on their colleague, Dr. J. Gordon MacGregor, in that he has been elected to Membership of the Royal Society of London, the most eminent and authoritative in the English-speaking world, venerable by its antiquity, and illustrious from the great names in the roll of its members.

Great is this honour; aspired to by many; granted only to the specially distinguished few. Its bestowal is so guarded by the suffrages of the Members of the Society as to give adequate security that the honour it may confer on any one is worthily bestowed. The character of the honour, in the case of Dr. MacGregor may be better apprehended when it is considered that he is the only University Professor now in Canada that has been elected to this distinction.

The Senate are fully sensible of the lustre which this recognition of Dr. MacGregor's scientific standing reflects on this University, and of its help to raise the University in public estimation, altho' of his previous success as a scientific investigator they were not entirely unaware.

For all reasons they offer him their warmest congratulations. They would add that, as he has proved himself, at a comparatively early age, and in the opinion of the best judges, a worthy associate of a Society so distinguished, this, while a testimony to his past, may be taken as a hopeful augury for the future, that in the study of the abstruse and elusive phenomena presented to the enquirer in some of the wide and hitherto untrodden fields of physical science, Dr. MacGregor may prove himself a successful and distinguished pioneer.

NOTE—(Drafted by the late Professor Charles Macdonald. Original in his handwriting affixed to Minutes of Senate.)

A DALHOUSIE COLLEAGUE'S ESTIMATE.

To MacGregor's intimates, the news of his sudden death could hardly come as a great surprise. They knew how heavily he was weighted in the race of life. He was always delicate. When he first crossed the Atlantic as a Gilchrist scholar, in company with Mackenzie, Bayne and Purves, he was hardly expected to survive the voyage. At Edinburgh, his heart action slowed down to an incredibly small number of beats per minute, and he was compelled to rest for a year. After that, his heart was never normal, and with such weakness he worked on with marvellous energy until the end came. All his friends felt that he would die in harness, that he would work until he dropped. Suddenly in his own house in Edinburgh, the end came. On the morning of May 21, he was in his own room dressing after his bath, he felt ill, he called his son, and died almost immediately afterwards. It was the sort of passing he would have himself preferred,—to be called away suddenly, in the plenitude of his powers, with no cold gradations of decay, no lengthened sadness of farewell, no survival of himself.

Work was the element MacGregor lived in. He was absolutely untiring. In session and in vacation, in his class-room and laboratory, year in and year out, he worked, almost literally without cessation. He could not be idle. He could not take a real holiday. The college, his students, his scientific researches—these were his main interests and for them he labored with all his intense and fiery energy.

The results are evident. He modernized the curriculum of Dalhousie; he broadened and extended it by introducing the elective principle. All through his twenty-two years of office, his influence was felt in every department of Dalhousie's activities. And he made

his *alma mater* known among the physicists of the world. Except for the fact that MacGregor held the Chair of Physics here, the 1851 Exhibition scholarship would not have been granted at the time. The benefits of that single scholarship in opening up to capable Dalhousians opportunities for study and advancement can hardly be estimated. He trained investigators. President Mackenzie, to name only one, is proud to call himself MacGregor's pupil.

MacGregor was a born investigator. As one of his admirers says, "he had a singularly alert mind." He could see quickly all round a question, a gift which makes a dangerous controversialist. But the situation he confronted when he became professor at Dalhousie was most discouraging. After his experience of well-equipped laboratories in the old world, he came to one which was practically empty. An American college of about the same number of students as Dalhousie has a physical laboratory costing one hundred thousand dollars. But out of his empty laboratory and improvised apparatus, MacGregor produced work which admitted him to the Royal Society, the most distinguished scientific body in the world. During his twenty-two years at Dalhousie, he produced some fifty papers and memoirs of varying length and importance, a truly astonishing record. All this he did without slighting either his students or his administrative duties. Besides training not a few to follow his own footsteps as scientific investigators, he inspired the rank and file of Dalhousie graduates in scientific methods of thought and opened their eyes to the wonders of the universe. MacGregor's energy, vivacity, sympathy, knowledge and vivid powers of exposition made his lectures interesting even to the non-scientific minds. All Dalhousians of his time will gladly testify to his power as a teacher.

It might have been thought that a professor from a small Canadian college, in being promoted to a famous chair in such an institution as Edinburgh would meet all expectations if he simply fulfilled the duties of his professorship with credit. But that was not MacGregor's idea. He believed in the principle of laboratory work for the ordinary student of physics—a principle not accepted in Scotland, although axiomatic with us, and he set to work with his wonted energy and determination to have this principle accepted in Edinburgh. He had many difficulties to overcome. The four Scottish universities are under one act of Parliament. Changes of any sort are not to be lightly undertaken. Change in any one involves the consent of the others. Then money had to be collected. Finally, the laboratory was opened. It would accommodate forty workers. There were two hundred and fifty applicants. This means that MacGregor has set a lasting mark on two institutions, his *alma mater* and the university on which it was modelled, Edinburgh. To few men is it given to achieve so much, with such a life-long disadvantage as MacGregor labored under.

The history of Dalhousie has curious relationships. It was founded by a Scottish nobleman on the model of Edinburgh. In due time, our most distinguished graduate studied at Edinburgh, and finally returned to that historic university to occupy one of the most famous chairs in it; he left his mark upon its constitution and he died in its service. Dalhousie has certainly repaid its debt to the elder university.

A. M. M.



MACGREGOR: PERSONALIA.

One of the ornaments of the mantel-piece of his study in the Tower Road house, formerly occupied by Professor Johnson was an ancient *skean dhu*. It had a flat blade and a peculiarly small hilt formed of rings of bone. The legend was that it had been used by one of the clan at Culloden. The relic in its setting was not without significance. MacGregor knew well the *gaudium proelii*.

There was a scene in the old professors' room. A celebrated book-robber (he was afterwards jailed for his thefts from a great American university) gained entrance to Dalhousie and was proceeding to denude some of the most ancient volumes of their rare *ex-libris* when MacGregor discovered him in the act. And there were . . . words. The Amateur was in one corner of the room and MacGregor in the other.

There was another scene. In 1897, the Royal Society of Canada met at Halifax, in the Province Building. The Legislative Council Chamber was full of Canadian scientists at the opening mostly on their feet, when MacGregor moved, naturally enough, that the minutes of the preceding meeting be read. The secretary, an authority on parliamentary procedure, had, as a matter of fact, no minutes. MacGregor insisted and a storm of opposition broke forth. He stood firm, very white but determined by the door. He was in the right and he did not mind standing alone in a shouting crowd.

In the fight for university consolidation, he was one of the most potent forces, as also in the work of ending the old paper Halifax University. His last address in Halifax was in favor of consolidation. He was a keen controversialist. His grandfather, the missionary of Pictou county once wrote a letter to a lawyer, beginning:

"Sir:—I have received a letter from you but it is so badly written that I am unable to read it. But what I have been able to decipher contains so little sense that I would decidedly advise you, for the future, to mind your own business and leave the affairs of the church alone."

In debate, MacGregor could be caustic. Many a former colleague will remember the smiling advice, "Read your calendar" when blundering about some regulation.

His Scottish blood showed itself in his clannishness. There used to be great family gatherings at Christmas in the house in Tower Road. Scores of children and a present for every one. Then the song of the Gregarach "the clan that is nameless by day" would be raised, with its unforgettable burden, "We're landless, landless, landless." MacGregor sang well. His house at Edinburgh was open to all travelling Haligonians. He carried on the tradition of Highland hospitality.

His interest in Dalhousie was manifested in a hundred ways. The bust of Locke in the Library, the portrait of Lord Dalhousie, the two fine reproductions of Duerer in the English classroom are his gifts. The complete set of Goethe and his *Commersbuch*, used at Leipzig no doubt, as related by Sperthias, also testify to his good-will to *alma mater*.

In person he was one of those small, elegant, well-proportioned men whose size never strikes the observer. His hair and beard were dark auburn and his eyes were dark brown, very bright and active. His best portrait is that represents him astride a chair with his arms on the back. He looks ready for anything. His nose was aquiline, a sign of energy. In walking his stride was markedly long for his inches, and always rapid. In spite of his constitutional weakness, he was, to the very last, a good marcher. Walking was almost his only form of exercise or recreation. During one vacation he climbed Mount Washington with Professor Alexander, then his colleague, now of Toronto University. The climate of Edinburgh interfered greatly with this one form of exercise. He was a regular attendant of Fort Massey Church, though his personal philosophy took shape in the time of the great Tyndall and Huxley wars with accepted beliefs.

He was an indefatigable worker, devising new courses of lectures during the vacations and carrying on his researches without rest. He had always something on the anvil.

He limited himself in his reading. The great reviews and works on his own specialty formed the staple. He read the local newspapers and was in politics a keen Liberal, not to say, radical. He once advocated closing Government House now occupied by his kinsman, the Lieutenant-Governor. Free trade was a favorite doctrine.

One summer, he took Boswell's *Johnson* with him on his vacation to glance into, when he was tired of tables and calculations and curves. He found, to his surprise, that he could not leave it out of his hand.

Sometimes his laboratory was so cold that he went about in his overcoat. He also lectured in this costume. Sometimes late in the winter afternoons, he would come down to the professors' room to rest, completely fagged out. He would sit down for a few minutes too tired to talk and then go back again. He never spared himself.

MacGregor was generous in money matters. The sum of his gifts will never be known. Few men have ever lived with a higher, keener sense of personal honor. How any matter was to affect his honor was MacGregor's test of its rightness. Anything like deceit, humbug, and sham was utterly foreign to his nature and found in him an uncompromising foe. He always fought in the open and he fought fair. His final crushing denunciation was 'absurd,' or 'very absurd.' In college affairs he was generally on the side of the students. If they had broken rules, they must pay for their fun and recognize the penalty as a rule of the game. He was opposed to minute regulation and schoolmasterly restriction, holding that students should be free to make mistakes ('play the fool' was his phrase), and the Senate free to pull them up. In his view, students at college should be treated as grown men, not as schoolboys, but if a whole class (as has happened) skipped a lecture, MacGregor also omitted to deliver it, and went on to

the next in the series. He did not however forget to set a question on the omitted lecture in the next examination paper.

He detested 'cramming' and any tendency that seemed to encourage it. He held that the 'Honour' courses of Dalhousie were her chief educational glory; and that a graduate 'With Honours' from Dalhousie should rank with an 'Honours' man of Oxford or Edinburgh. His educational standard was high.

"Life is too full of pure grind nowadays." he wrote last New Year's Day in one of his last letters, when, after making a small round of calls, he sat down to write a letter to an old colleague and to help his old college. In Halifax, New Year's Day saw MacGregor looking up all his old friends, an operation which occupied all the hours of daylight.

"Too full of grind." Old Halifax friends who saw him in the last months of his life were shocked at the change. He had become an old man, his movements were stiff and his hair was turning white. "He looked like his father," said one who saw him just a month before his death.

Nowhere was he more thoroughly appreciated than here in his old college. It is unfortunately true that he suffered from the notorious manners of Edinburgh students.



ALUMNI NOTES.

"John E. Read, Dal. '09 has done credit to Dalhousie at Oxford and to himself at both institutions. It would seem that Dalhousie's selection of a Rhodes Scholar to represent her at Oxford often fails to satisfy the student body as a whole. After Read's election, there was a good deal of criticism, which unfortunately caused him much anxiety, though that same criticism may have been fortunate in that it stimulated his ambition and spurred him on to vindicate the choice of his *alma mater*. At any rate his name is enrolled in the Oxford calendar among the most honoured names of the most brilliant Rhodes Scholars.

Read graduated in 1909 with "Great Distinction" from Dalhousie, and spent the following year at Columbia. In the autumn of 1910, he went to Oxford, and, in June, 1912, obtained his B. A. with First-class Honours in the School of Jurisprudence. During the past year, he continued his studies in jurisprudence and secured a First-Class in the final examination for a B.C.L. Though there were several distinguished candidates for this degree at the same examination, only two first-classes were secured, and, of the two, Read's was the better. Of such an achievement, not only Read himself, and every patriotic Dalhousian, but all Rhodes Scholars have reason to be proud.

But Read was not merely a student of Law. He was one of a few pioneers who organized a Moot Court at Oxford and guided it to success. The society has grown so rapidly that it has had to form a branch society. Read was also an active member of the Oxford University Colonial Club and rowed in his college torpedo. At the same time he was a most enthusiastic member of King Edward's Horse and ultimately learned to sit his mount. Few Dalhousians have a more inviting career."

Of course the college should have been illuminated and a *commers* given in his honor. They arrange these matters better in Germany.

The vacation is a homing time. In the pleasant summer season when nearly all the staff and nine-tenths of the students* are absent from the city, old graduates appear from the ends of the earth to re-visit their *alma mater*. The following list of those who spent some part of the summer in Halifax is probably not complete.

Professor J. W. Tupper, Ph. D. of Lafayette College, Easton, Pa., was in the city for a few days, on account of the illness of a near relative. He has changed very little since graduation in 1891, and is engaged in the production of a new work on the English drama.

Dr. Allan and Mrs. Currie (Miss Gladys Sircom) spent two months here. He has just passed the very difficult 'preliminary' examination for the degree of F. R. C. S. He will come up for his 'final' next year, after which he hopes to return to practise medicine in Canada.

NOTICE

Did you ever notice the fellow next to you in class how nice his clothes are pressed? You can have yours just the same if you let LEARY do them by joining his Pressing Club, 4 suits a month (one suit a week) for \$1.25. Cleaning, Pressing and Repairing at short notice. Phone 1660W and the team will call.

R. J. LEARY
38 SACKVILLE STREET.

Dr. Ross Faulkner, F. R. C. S. has completely recovered his health after an enforced rest of a year. His many friends were glad to see him looking so well. He expects to resume practice in New York.

E. W. Nichols completed his graduate course at Yale this year and was awarded the degree of Ph. D. He has been appointed to the staff of Yale in the department of classics, and will spend part of the winter in the elaboration of his thesis.

Another new Dalhousie Doctor of Philosophy is G. G. Sedgewick. He specialized in English at Harvard and has been appointed to the English department of Washington University. He will have another Dalhousian, Dr. Roy Mackenzie for colleague in the same department.

FRANK COLWELL,

MENS'

LIMITED.

WEAR

All lines of Gent's Furnishings to suit the "Student"

HATS, CAPS, GLOVES AND RAINCOATS

Are our special lines at special Prices.

STUDENT'S DISCOUNT GIVEN

45 BARRINGTON ST.,

::

HALIFAX, N. S.

Next to graduating the most important thing is to be well dressed:

Consult

"WINTERS"

for fashionable furnishings. Quality brings our customers back.

WINTERS

BARRINGTON STREET.

D. C. Harvey obtained a good Second-class in the school of Modern History at Oxford. Unfortunately he was obliged to return to work last year too soon after an operation, and again this spring he was in the doctor's hands. He took his vacation in the Island and has been appointed lecturer in Modern History at McGill, in the position left vacant by the transfer of Professor Todd to Dalhousie.

G. S. Stairs and K. F. MacKenzie spent the month of August in Halifax, recuperating (chiefly on the links) after their labors in the lawless science of the law. Mrs. Stairs and Mrs. Mackenzie and their families accompanied them and occupied the house of Mrs. J. F. Stairs, 170 South St.

WE COULD GUARANTEE

our UNDERWOOD typewriters for 10 years—but—what's the use; You don't want to buy a guarantee. That won't typewrite. UNDERWOOD typewriters typewrite. That's all they do. That's all you need. They have proven good enough for nearly a million of the shrewdest and busiest business men. I assure you they are good enough for you.

United Typewriter Co. of Nova Scotia, Ltd.

W. R. ECKERSLEY, Mgr.

145 HOLLIS ST.

HALIFAX, N. S.

MR. GRADUATE:

What next? You have a liberal education. So far as training goes, you are qualified to select and prosecute with success any profession. Business, Manufacturing and Financial Corporations are looking for such as you if you have the technical training which we supply.

The salaries given are in excess of many other vocations for which you are now qualified.

MARITIME BUSINESS COLLEGE

HALIFAX

and

NEW GLASGOW

E. KAULBACH, C. A.

L. E. Brownell, '12 is in Winnipeg engaged as Assistant Editor of the "Statesman," the official organ of the Moral and Social Reform League of Manitoba.

Amy Kingland Pennington is also in journalism, in New York. Her name appears as assistant editor of "The Magazine Writer," a small journal which offers assistance and advice to authors.

Professor Everett and Mrs. Fraser (Miss Lois Mackay) and their son visited the Superintendent of Education at Dartmouth.

Alexander R. Bain obtained his M. A. degree from McGill at the last convocation. He has been teaching in the Montreal High School for several years.

D. A. Macrae has left Princeton and is studying Law in Toronto. His place has been taken by another Dalhousian, Dr. Allan Chester Johnston.

Ramsay Armitage has obtained the M. A. of Toronto. He will be ordained this autumn and attached to the Church of the Messiah (Toronto). He will study for a higher degree. He spent his vacation at home in Halifax.

Miss K. Webber, Miss L. B. W. Browne, Miss Goudge were in the city for different periods. Miss Goudge has returned to Cornell to complete her work for the doctorate in the department of Philosophy.

Miss Lena Sibley has completed her course at Wellesley.

Climo

ART PHOTOGRAPHER

147 BARRINGTON STREET.

Examine our Student work before going elsewhere.

Now is the time to have your Xmas Photographs made.

PHONE 1395.

W. Kent Power and his sister, Miss Nora Power, were in the city for some time. The West evidently agrees with them.

Dr. Fraser Harris attended the Medical Congress in London and read two papers before it, one on his researches into ferments and the other on the relative claims of Harvey and Caesalpinus to the honor of discovering the circulation of the blood. His book on "Nerves" has just been published in the well-known Home University series.

Professor Mackintosh was Dalhousie's representative at the Eighth International Geological Congress held at Toronto, and he accompanied that learned body on its various excursions as far as to the Coast.

Did you ever
Ask yourself if your
Last coat
Held its shape
On all occasions,—
Ugly, rainy weather or
Sunny, bright day?
In donning a Giffen made coat you
Envelope yourself in a garment guaranteed
to retain its original shape.

Rah! Rah! Rah! Root! Root! Root! Root!
Buy yourself a Giffen suit!
Prices \$16.00 to \$32.00.

GIFFEN'S

9 GOTTINGEN ST. — — HALIFAX

DE MORTUIS

Dr. Frank Henry Reid.

Dr. F. H. Reid, youngest son of Dr. A. P. Reid, Provincial Health Officer, died at Para, Brazil, from pneumonia on the 13th of July, 1913, aged 27 years. He was medical officer on the S. S. "Ispin" (Booth and Co.) and visited his parents only two or three weeks before his death, being well and hearty.

His career was short but varied. He was educated at public schools in Halifax; at St. Anne's College, Church Point, Digby County; the Halifax Medical College and graduated at Dalhousie College and University in the year 1908. He passed the examination of the Provincial Medical Board and got their license. He competed for the position of house surgeon at the Victoria General Hospital, Halifax, and won it, serving two years as house physician and surgeon.

He went to Ottawa and Montreal in public competition examination for service in the Canadian Navy and came within one of it. Shortly after he was notified that the position was at his service, but on receiving this advice, he was in South Africa and did not accept it.

He went to England as he was desirous of sea travelling and obtained the British registration, and then entered on service with the Elder Dempster Company in their West African lines, visiting numerous places. He next went via Suez Canal to Borneo and Sumatra and places adjacent.

He next joined the Booth Co.'s line and sailed to Buenos Ayres, Rio Janeiro and ascended the Amazon river for 1,000 miles, calling at Brazilian ports and at Monte Video.

He had the faculty of never making an enemy; he was never dependent on any one for assistance in his various efforts; and he was successful in all he undertook.

John Wood, B. A., Ll. B.

The sudden death of John Wood at Boston, in the latter part of last month deprives Dalhousie of a most promising *alumnus*. He was only at the outset of a flourishing career, engaged in large and important enterprises which would undoubtedly have led to greater things, when the end came.

Wood was a man of marked and individual character and of great energy. These qualities were manifested in his college career. He combined Law and Arts, obtaining both degrees in these faculties in 1906. He had inverted his course by taking Law first, entering the Law School in 1903. His course was broken by several years absence, but eventually it was completed, as noted above. In 1906 he won the *Gazette's* first prize for the best prose article, "The Rolled Nugget." His name appears in the list of subscribers to the Forward Movement Fund for \$250, and he would undoubtedly have given further support, for he was in the way of becoming a wealthy man and was well-disposed toward his *alma mater*.

It is **Good** to be sure
Better to be insured
Best to be insured in The

MUTUAL LIFE OF CANADA

Permit us to show you some of the leading features of our contracts,

J. L. McDUFF, Prov. Mgr.
HALIFAX.

R. J. ZWICKER, Agent.
HALIFAX.