DCEEDINGS

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OF THE

## THIRTY-SEVENTH ANNUAL CONVENTION

OF THE

# ONTARIO EDUCATIONAL ASSOCIATION

HELD IN

TORONTO

On the 12th, 13th and 14th APF.L, 1898.

TORONTO : Rowsell & Hutchison, Printers. 1398.

## University of Toronto.

## MEDICAL FACULTY.

### PROFESSORS, LECTURERS AND DEMONSTRATORS :

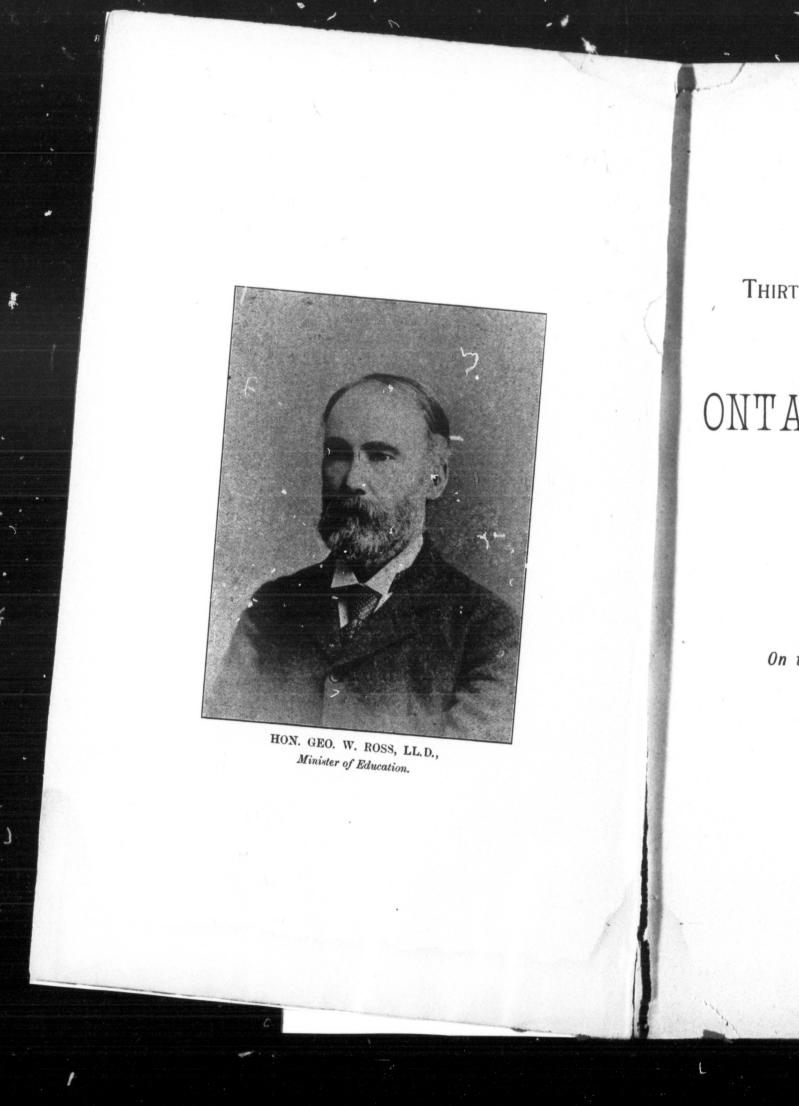
A. PRIMROSE, M.B., C.M., Edin., Professor of Anatomy and Director of the	JAMES M. MACOALLUM, B.A., M.D., Tor., Professor of Pharmacology and Therapeutics.
Anatomical Department.	C. F. HEEPNER, Phm.B., Tor.,
H. WILBERFORCE AIKINN, B.A., M.B., Tor., Associate Professor of Anatomy.	Associate Professor of Pharmacology and Therapeutics.
F. N. G. STABE, M.B.; Tor., Lecturer on Anatomy.	UZZIEL OGDEN, M.D., Tor., Professor of Gynacology.
A. R. GORDON, M.B., Tor.,	A. H. WRIGHT, B.A., M.D., Tor.,
R. D. RUDOLF, M.D., C.M., Edin.,	Professor of Obstetrics.
A. A. SMALL, M.B., Tor.,	J. F. W. ROSS, M.B., Tor.,
OLARENCE L. STARR, M.B., Tor.,	Associate Professor of Gynæcology.
K. C. MCILWRAITH, M.B., Tor.,	R. A. REEVE, B.A., M.D., Tor., Professor of Ophthalmology and Otology.
W. J. McCOLLUM, M.B., Tor.,	G. H. BURNHAM, M.D., Tor.,
Assistant Demonstrators of Anatomy. I. H. CAMERON, M.B., Tor.,	Associate Professor of Ophthalmelogy and Otology.
Professor of Surgery and Clinical Surgery. G. A. PETERS, M.B., Tor	G. R. MCDONAGH, M.D., Tor.,
G. A. PETERS, M.B., Tor Asso late Pt .essor of Surgery and Clinical Surgery.	Associate Professor of Laryngology and Rbinology.
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L. M. SWEETNAM, M.B., Tor.,	W. H. ELLIS, M.A., M.B., Tor.,
B. SPENCER, M.E., Tor.,	Associate Professor in Toxicology.
H. A. BRUCE, M.U., Tor.,	BERTRAM SPENCER, M.D. For.
W. OLORIGHT, M.A., M.D., Tor.,	Associate Professor of Medical Jurispradence.
	HON. DAVID MILLS, LI A, Q.C., Legal Legal Legal v in Medical Jurisprudence.
Associate Professors of Clinical Surgery. JOHN JAVEN, B.A., M.A., Tor., Professor of Pathology.	Legal 1.30 F. Y in Medical Jurisprudence.
J. J. MACKEUZIE, B.A.,	DANIEL CLARK, M.D., A Extra 'ural Prot is it of Medical Psychology.
Lecturer or. Bacteriology.	I DANCAY WOMEN DA DA DA
J. AMYOT, M.B., Tor., Demonstrator of Pathology.	K. RAMSAY WRIGHT, B.S., Sc., Edin., Professor of Biology.
J. E. GRAHAM, M.D., Tor.,	A. B. MACALLUM, B.A., M.B., Jor., Ph.D., Johns Hopkins.
Professor of Medicine and Clinical Medicine.	Professor of hysiology.
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Associate Professor of Medicine and Clinical	Assistant Demonstrator in Biclogy.
Medicine. W. P. CAVEN, M.B., Tor.,	WILLIAM H. PIKE, M.A., Ph.D.,
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Lecturers on Diseases in Children and Clinical	F. J. SMALE, B.A., Lecturer in Chemistry.
Medicine.	JAMES LOUDON, M.A.,
R. J. DWYER, M.B., Tor.,	Professor of Physics.
G. BOYD, M.B., Tor.,	C. A. OHANT, B.A.,
Lecturers in Clinical Med cine.	Lecturer in Physics.
The regular course of instruction will consist of	of Four Sessions of eight months each, commencing
a stand of the sta	a Four Sessions of eight months each, commencing

There will be a distinct and zeparate course for each of the four years. The Lectures and Demonstrations in the subjects of the First and Second years will be given in the Biological Laboratory and the Lecture-rooms of the University.

Lectures and Demonstrations in the subjects of the Third and Fourth years will be given in the building of the Medica, Faculty, corner of Gerrard and Sackville streets.

R. A. REEVE, B.A., M.D., A. PRIMROSE, M.B., C.M., Edin., Dean. Secretary.





## PROCEEDINGS

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OF THE

## THIRTY-SEVENTH ANNUAL CONVENTION

OF THE

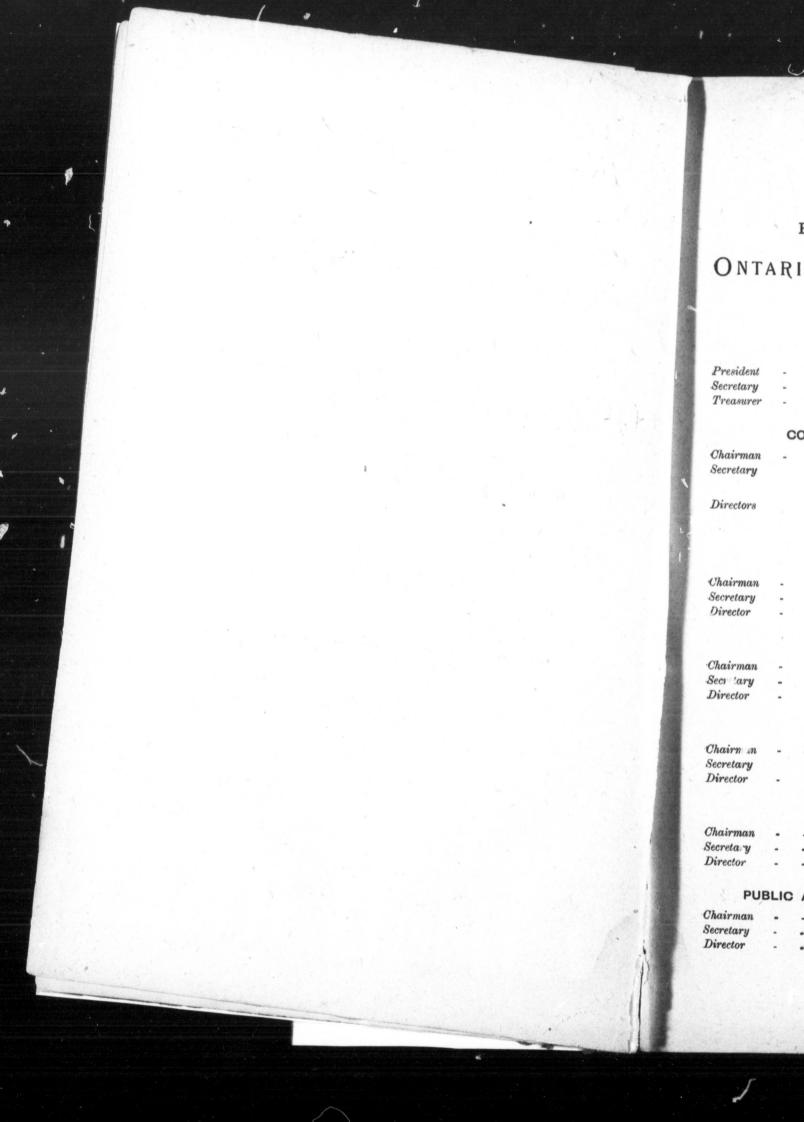
# ONTARIO EDUCATIONAL ASSOCIATION

HELD IN

## TORONTO

On the 12th, 13th and 14th APRIL, 1898.

TORONTO : Rowsell & Hutchison, Printers. 1898.



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1896 ALTRED BAVED DE
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1897, JOHN MUNRO.
A. A. JORDAN.
COMPAN,

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## PROCEEDINGS

OF THE

## THIRTY-SEVENTH ANNUAL CONVENTION

OF THE

#### ONTARIO EDUCATIONAL ASSOCIATION.

MINUTES OF THE GENERAL ASSOCIATION.

FIRST DAY, EVENING SESSION.

TUESDAY, APRIL 12TH, 1898.

The Convention met in the Public Hall of the Education Department, at eight o'clock this evening.

MR. A. A. JORDAN, President, in the chair.

The PRESIDENT called upon Mr. Andrew Hendry, President of the Toronto Teachers' Association, who, on behalf of the latter Association, gave the members a hearty fraternal welcome to Toronto.

MAYOR SHAW, on behalf of the Corporation of Toronto, welcomed the delegates to the city, and invited them to accept a drive around the city at the close of the Convention.

HON. DR. Ross, Minister of Education, extended a cordial welcome to the visitors, and invited them to visit the Art Galleries of the Department, where he hoped they would spend a pleasant hour or two.

SIR OLIVER MOWAT was introduced by the President, and expressed his pleasure in taking part in the Reception. He joined heartily in the words of welcome that had been spoken.

PRESIDENT JORDAN, on behalf of the Ontario Educational Association, replied to the addresses of welcome.

The visitors and members then dispersed to the various rooms of the Education Department buildings, while the orchestra discoursed sweet music in the rotunda.

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## SECOND DAY, EVENING SESSION.

## WEDNESDAY, APRIL 13TH, 1898.

REV. CHANCELLOR BURWASH opened the meeting by reading part of the 8th chapter of Proverbs, and by leading in prayer. Moved by MR. W. J. ROBERTSON, seconded by MR. W. Scott, that

the minutes of last meeting having been printed and distributed to the members be taken as read. Carried.

A communication from the Governor-General's Secretary, stating that the address of welcome from this Association to the Queen was duly laid before Her Majesty, who was pleased to receive it very graciously, and requested that her thanks be conveyed to the Association for the

expressions of loyalty and devotion contained in the address. MR. JOHN BREBNER, of Sarnia, wrote, saying that on account of ill-

ness he would be unable to attend the Convention. MR. JOHN DEARNESS, of London, read the following report from a

Special Committee appointed during the meeting in April, 1897: Your Committee appointed to make a record of the fact that one of

the members of this Association, Mr. N. Wilson, of London, has completed fifty years of continuous teaching in the service of one Board of Education, and to notice the enthusiastic observance of his jubilee by his pupils, ex-pupils, and the community in which he has so long

labored, beg to make the following report :-Mr. Nicholas Wilson, a native of Wicklow, Ireland, immigrated to

this country in 1842. On the 6th of January, 1847, then in his twentieth year, he entered on his first appointment as teacher under the London Board of School Trustees. He taught in a log school-house on Albert street until the opening of the Union School in 1850, to which he was transferred as Head Master. When the High School was established in 1866 he was appointed on its staff, and he yet continues to discharge the duties of Commercial Master in that institution, now

In 1896, his pupils and ex-pupils made plans to celebrate his approach-

ing jubilee; these they executed with success and éclat. On the evening of the 5th January, 1897, the Grand Opera House, London, was crowded with an enthusiastic audience assembled to listen to congratulatory letters from far and wide, numerous short, bright speeches from representative men in various walks and callings of life, and formal addresses to the veteran teacher from the Board of Education, "His Present Pupils," and "The Old Boys," and to witness the presentation

of a gift from beautifully i

The follow Boys," to ind your old boy gratulations You will see of fifty year become youn are boys to y thened their you impresse made them for ....They ki derived from sonal influen you were a c he were frien river, they an

Moved by Peterboro', th minutes, and the Secretary

Moved by KINSON, Bran sent by the S meeting at C MR. W. J. ment.

On motion MAN, Toronto The PRESI REV. WILI addressed the DR. Ross n of thanks to Moved by

DEARNESS, L McDougall, H

#### GENERAL ASSOCIATION.

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hnus 1of a gift from his present and former pupils of \$1,000 in gold in a beautifully inlaid casket of silver.

The following sentences are quoted from the address of "The Old Boys," to indicate some of the causes of his pupils' affection :-- "All your old boys are here to-night .... to tender you the happiest congratulations on the completion of your fiftieth year as a teacher.... You will see they are from many lands, of many callings. The stream of fifty years makes your older scholars old men. They gradually become younger till the boy of the present day is reached. Still, all are boys to you, and you the same to them, except that time has strengthened their attachment . . . . You are remembered with affection because you impressed upon their minds principles of generous manliness, and made them feel there is something in a brave, free-hearted, noble boy .... They know the effect of your individuality. The good they derived from you is not to be found in books, but was due to your personal influence.... We believe that the secret of your success was, that you were a companionable teacher; you understood the boy, you and he were friends; and so from many lands, and from across the silent river, they are here to-night to honor you."

J. DEARNESS, Committee.

Moved by MR. J. H. KNIGHT, Lindsay, seconded by MR. J. C. BROWNE, Peterboro', that the report read by Mr. Dearness be entered upon the minutes, and that a letter of congratulation be sent to Mr. Wilson by the Secretary.

Moved by MR. S. MCALLISTER, Toronto, seconded by MR. WM. WIL-KINSON, Brantford, that a cablegram, containing fraternal greetings, be sent by the Secretary to the National Union of Teachers, England, now meeting at Cheltenham. Carried.

MR. W. J. HENDRY, the Treasurer, read the annual financial statement.

On motion of MR. J. C. BARNES, London, seconded by MR. W. F. CHAP-MAN, Toronto, the report was received and adopted.

The PRESIDENT delivered the annual address.

REV. WILLIAM CLARK, M.A., D.C.L., of Trinity College, Toronto, addressed the Association.

DR. Ross moved, and REV. CHANCELLOR BURWASH seconded, a vote of thanks to Dr. Clark for his address. The motion was carried.

Moved by MR. JOHN R. BROWN, Napanee, seconded by MR. JOHN DEARNESS, London, that Mr. R. H. Cowley, P.S.I., of Carleton, Mr. McDougall, B.A., Ottawa Collegiate Institute, and Mr. Doan, General

Secretary of this Association, be, and is, hereby appointed a Committee to prepare a suitable obituary of our deceased President, the late Mr. John Munro, of Ottawa, the said obituary to be inserted in the minutes, and also to be forwarded to the representatives of his family. The following gentlemen were elected

President	
Secretary	
Treasuren	
	WITT

MR. KNIGHT, of Lindsay, moved, seconded by MR. MCALLISTER, be held in Toronto. Carried.

Toronto, that the next meeting of the Ontario Educational Association

Resolutions were carried expressing the thanks of the Association to the Minister of Education for his kindness and courtesy in allowing the Association the use of the Department buildings, to the Mayor of the city for his hospitality, to the press for the fair and full reports of the meetings, and to the Committee of Management for the work.

done by them in contributing to the success of this meeting. MR. A. MCMURCHY, of Toronto, gave notice that he would, at the

next meeting, introduce a motion authorizing the appointment of a Committee on Resolutions.

Moved by MR. S. B. SINCLAIR, Ottawa, seconded by MR. R. W. DOAN, Toronto, that the General Secretary of this Association be, and he hereby is, empowered to draw annually upon the Treasurer to the maximum amount of twenty dollars, in favor of the Trustees' Department, to defray

extra expenses incurred for printing by the said Department. Carried. The Convention was closed, after all had joined in singing the National Anthem.

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#### COLLEGE AND HIGH SCHOOL DEPARTMENT.

#### MINUTES OF THE COLLEGE AND HIGH SCHOOL DEPARTMENT.

#### TORONTO, APRIL 13TH, 1898.

The Annual Meeting of the Department was held as above, in the Normal School building, St. James' Square, at 10 a.m.

The President, PROFESSOR MAURICE HUTTON, M.A., took the chair.

On motion of MR. HENDERSON, seconded by MR. STEELE, the minutes of the preceding Annual Meeting having been printed in the Proceedings, were taken as read and confirmed.

The President made a few introductory remarks and PROFESSOR GARDNER HALE, of Chicago University, proceeded to deliver his address on "The Value of Humanistic Studies."

At the conclusion a cordial vote of thanks was tendered PROFESSOR HALE, which was suitably acknowledged.

The following report which had been deferred from last year to the present meeting was read by the Chairman of the Committee :---

Your Committee beg to recommend

(1) The division of the High Schools into two distinct classes, the one literary and classical, preparing for University and higher professional courses, the other English and scientific, preparing for agricultural and other industrial pursuits.

(2) The entrance to the first division should be such as to enable pupils to enter not later than twelve years of age, so that they may advantageously begin their language studies, while the entrance to the second division might be placed at a more advanced stage of the Public School programme and thus tend to raise the character of the Public Schools.

(3) In the selection of examiners for entrance to the schools of the first division, representatives of High Schools of this class or of the Universities should have a controlling place, for entrance to those of the second division, representatives of the Public Schools and of the second division of the High Schools, should have prominence. All of which, etc., etc.

#### N. BURWASH, Chairman.

The adoption of the report was moved by PROFESSOR BURWASH, and seconded by MR. MCMURCHY. A discussion then ensued on the report

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when it was moved by MR. WETHERELL, and seconded by MR. MERCHANT, that the report be referred back and the Committee requested to report next year, and that the following names be added to the Committee : Professor Fraser, Lyman-Smith and Wetherell. Carried.

The Secretary then read the names of the full Committee as follows: Messrs. Burwash (Convener), Hutton, Strong, Steele, Henderson, Ellis, MacMurchy, Carscadden, Embree, Merchant, Squair, Fraser,

The meeting then adjourned.

## THURSDAY, APRIL 14TH, 1898.

The Department resumed at 10 a.m., the chair being taken by MR. THOMPSON, Vice-President, in the unavoidable absence of the President. as follows :---

It was decided to proceed with the election of officers, which resulted 

Vice-President.....A. T. DeLury, M.A., Toronto. 

MR. MANLEY then read his paper on "Drill and Physical Training," and was accorded a vote of thanks by the meeting. MR. EMBREE then began the discussion on "The High School Regula-

tions," and moved, seconded by MR. STRANG: "That it is inadvisable to substitute the Public School Leaving for the First Form Examination of High Schools and Collegiate Institutes, or to impose upon this Form any Departmental Examination, except in those subjects that are not required to be taught in the higher Forms for the purpose of com-

pleting the course for Teachers' Certificates." Carried. Moved by MR. EMBREE, and seconded by MR. COLBECK, "That this

Department concurs in the resolution of the Trustees' Department that no one under twenty-one years of age should be granted a certificate which confers authority to teach in any Public or High School in

Moved by MR. CONNOR, seconded by MR. STRANG, "That this Depart-

ment approves of all measures tending to raise the standard of admis-

sion, both professional and non-professional in teaching." Carried. Moved by MR. STEELE, seconded by MR. LYMAN-SMITH, "That in the opinion of this College and High School Department, it would be

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The follow members :---

DEAR SIR :---The accom the members obtain their o French, and ( Be good en respect to the venience.

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#### COLLEGE AND HIGH SCHOOL DEPARTMENT.

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in be inadvisable to abolish the present Entrance Examination and to substitute therefor the Public School Leaving Examination." Carried.

The Secretary read the names of the Committee that had been appointed by the several sections to confer with the representatives on the University Senate in accordance with a resolution passed last year :--

CLASSICAL	H. I. Strang, Goderich. W. M. Logan, Hamilton. W. J. Fenton, Brampton.
MATHEMATICAL AND PHYSICAL	J. Davison, Guelph. I. J. Birchard, Toronto. Fred. F. Manley, Toronto.
Modern Languages	Geo. A. Chase, Toronto. Geo. E. Shaw, Toronto. Miss Balmer, Toronto.
Science	T. R. Hamilton, Brantford. W. H. Jenkins, Owen Sound. J. B. Turner, Hamilton.
HISTORICAL	W. J. Robertson, St. Catharines. Miss Janet Carnochan, Niagara. Miss Nellie Spence, Toronto.
Commercial	R. H. Eldon, Toronto, W. E. Evans, Galt. A. G. Henderson, Whitby.

The following letter was read, and the copies distributed among the members :---

UNIVERSITY OF TORONTO,

REGISTRAR'S OFFICE, APRIL 13TH, 1898.

DEAR SIR :---

The accompanying provisional curriculum for 1901, is submitted to the members of the College and High School Department in order to obtain their opinion as regards suitable authors in Greek, Latin, English, French, and German.

Be good enough to make any suggestions that may occur to you with respect to these subjects and let me have them at your earliest convenience.

Yours truly,

F. F. MANLEY, M.A.,

JAMES BREBNER.

Secretary, College and High School Department, O.E.A. The meeting then adjourned.

The representatives from the six Sections on the Committee of this Department are :---

CLASSICAL.....John Henderson, M.A., St. Catharines.

MATHEMATICAL.....I. J. Birchard, M.A., Ph. D., Toronto.

MODERN LANGUAGE. W. H. Fraser, M.A., Toronto.

NATURAL SCIENCE . . E. L. Hill, B.A., Guelph.

HISTORICAL .......W. J. Robertson, M.A., LL.B., St. Catharines. COMMERCIAL......W. H. Fletcher, Kingston.

The representatives of the College and High School Department on the Board of Directors of the Ontario Educational Association are: Messrs. Thompson (*ex officio*) and Manley (*ex officio*), Squair, Hill, Henderson and Robertson.

> FRED. F. MANLEY, Secretary, College and High School Department.

### MINUTES OF THE MODERN LANGUAGE SECTION.

Twelfth Meeting.

#### TUESDAY, APRIL 12TH, 1898.

The chair was taken at 10 a.m. by MR. J. H. CAMERON, Vice-President of the Section.

After the reading of the minutes of the Annual Meeting of 1897, M. ST. ELME DE CHAMP, read a paper in French on "Recent French Literature."

The report of the Committee appointed in 1897 to consider limits for Form II. French was presented, and, after discussion, was adopted in the following form :—

1. Outlines of French accidence :

(a) Gender and number of Nouns and Adjectives.

(b) Forms and uses of the Article.

(c) Demonstrative, Possessive, Interrogative and Numeral Adjectives.

(d) Personal, Demonstrative, Possessive, Interrogative and Relative Pronouns.

(e) Conjugation of the Regular Verbs, and of avoir, être, faire, aller, venir, pouvoir, vouloir, connaître, savoir, voir, dire, mettre.

2. Vocabulary and idioms of from ten to fifteen specified pages of the selections prescribed for translation. 3. Transla French Read the passages translated by selections.

A joint Historical Se An address w University, o This was fol Language Se ment and the

The Presid MESSRS. A. MR. PELHA MR. GEORO Verb." The On motion SMISSEN, the Councillors o The follow *Presid Vice-I Secret* 

Councillors Fraser, Mr. A M. Balmer, M Mr. R. S. Jen The Audito MR. S. A. Grammar."

Mr. J. Sq Executive of Messrs, A.

#### MODERN LANGUAGE SECTION.

3. Translation to be based on not more than forty pages of the French Reader, the selections being changed from year to year, and the passages set by the Examiners to be such as could readily be translated by pupils who have made a pretty thorough study of the selections.

#### TUESDAY, APRIL 12TH, 2 P.M.

A joint meeting of the Modern Language Section and the Historical Section was held in the University Biological Building. An address was delivered by PROFESSOR MORSE-STEPHENS, of Cornell University, on "The Teaching of History in the Secondary Schools." This was followed by the address of the President of the Modern Language Section, Mr. F. H. SYKES, on "The Pre-Raphaelite Movement and the Poetry of the Rossettis, Morris and Swinburne."

#### WEDNESDAY, APRIL 13TH, 2 P.M.

The President, MR. F. H. SYKES, took the chair.

MESSRS. A. W. WRIGHT and A. H. YOUNG, were appointed Auditors.

MR. PELHAM EDGAR read a paper on "Dowden's French Literature." MR. GEORGE E. SHAW read a paper on "The Teaching of the French Verb." The paper was illustrated by the use of numerous charts.

On motion of MR. W. H. FRASER, seconded by MR. W. H. VANDER-SMISSEN, the Constitution was amended by increasing the number of Councillors on the Executive Committee from eight to twelve.

The following officers were elected for the year 1898-99:----

PresidentMr. J	. H. Cameron.
Vice-PresidentMr. A	. Stevenson.
Secretary-Treasurer Mr. J	. Squair.

Councillors :---Mr. W. J. Alexander, Mr. Geo. A. Chase, Mr. W. H. Fraser, Mr. A. W. Wright, Mr. L. E. Horning, Mr. I. M. Levan, Miss E. M. Balmer, Miss M. E. T. Addison, Mr. A. H. Young, Mr. E. S. Hogarth, Mr. R. S. Jenkins, Mr. J. S. Lane.

The Auditors' report was received and adopted.

MR. S. A. MORGAN read a paper on "The Educational Value of Grammar."

#### THURSDAY, APRIL 14TH, 2 P.M.

Mr. J. Squair was appointed to represent the Section on the Executive of the College and High School Department.

Messrs. A. Stevenson, S. J. Radcliffe and J. E. Wetherell, were added

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to the Committee appointed in 1897 to advise with the High School representatives on the University Senate regarding changes in the curriculum.

It was resolved to recommend to the University Senate that if a limit be fixed for the length of composition required of Matriculation candidates, it should be two pages and not three as at present.

A motion in favor of requiring two papers in English of Honor Matriculation candidates instead of one, as at present, was lost.

The following papers were read: One on "Wildenbruch," by MISS L. L. JONES (read in her absence. by the President); one on "Rudyard Kipling," by MR. A. STEVENSON; one on "William Watson," by MR. W. J. ALEXANDER; and one on "John Davidson," by MR. J. E. WETHERELL.

It was resolved that the Section express to the proper authorities its desire that a new series of selections be placed in the hands of the High School and Collegiate Institute Teachers of Ontario as a basis for English Literature study in the two lower forms of the High Schools and Collegiate Institutes.

The Section then adjourned.

#### MINUTES OF THE NATURAL SCIENCE SECTION.

#### TUESDAY, APRIL 12TH.

The first session was held in Mr. McIntosh's room, Model School, at 2 p.m., PRESIDENT HAMILTON in the chair.

Upon motion the minutes were taken as read.

Upon motion the Secretary was appointed to act as Press Reporter. The President, MR. J. R. HAMILTON, B.A., of Brantford, delivered the annual address. He dealt with various points concerning the importance of the cultivation of science study. He pointed out in an able manner the necessity of a scientific spirit in a country such as Canada, abounding in natural resources.

MR. F. W. MERCHANT, M.A., of London, read a good paper on "Advance made in the teaching of Science during the past ten years, with suggestions for future improvement."

Among other things, it was suggested that our Section might be useful in assisting its members in doing a certain amount of postgraduate work each year. The Universities are organizing postgraduate courses. Arrangements might be made by which members would have of these classes.

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The followi April 14:---H able to enquin Nature studie That in view other countrid would be bes Minister of H classes of sch respectfully as

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#### NATURAL SCIENCE SECTION.

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Growing out of the discussion of Mr. Merchant's paper, the following resolution was passed :—"*Resolved*, That Messrs. Merchant, Stevens and Spotton, be a Committee to draft a resolution expressing to the Minister of Education our views regarding the appointment of a Committee to inquire into the subject of Science in the Public Schools." —Moved by Mr. HILL, seconded by Mr. SPOTTON.

The following is the resolution brought in by the Committee on April 14:-Resolved. That in the opinion of this Section it is desirable to enquire into the feasibility of introducing a systematic course of Nature studies into the work of the Public Schools of the Province. That in view of the action which has been taken upon this matter in other countries, notably the United States, we believe that enquiry would be best promoted by the appointment of a Committee by the Minister of Education, to consist of representatives of the various classes of schools specially interested in the proposal. And that we respectfully ask the Minister of Education to appoint such a Committee.

MR. J. A. GIFFIN, B.A., of St. Catharines, read a paper entitled "Notes on Calcium Carbide." This was a report of original investigation, and showed that the writer had carried on his research in such a fashion as to lead to the discovery of several important points.

DR. PIKE and other members participated in the discussion of the results of Mr. Giffin's work.

MR. GIFFIN also made some remarks upon "The Law of Definite 'Proportions," exhibiting a simple piece of apparatus for proof of the law in case of Magnesium and Oxygen.

#### WEDNESDAY, APRIL 13TH, 1898.

The Section met at 2 p.r. in the Chemical Building, PRESIDENT HAMILTON in the chair.

The election of officers result	ed as follows :
Honorary President	.W. H. Pike, M.A., Ph.D., Toronto.
President	.T. H. Smyth, M.A., B.Sc., Toronto.
Vice-President	. W. H. Stevens, B.A., Lindsay,
Secretary-Treasurer	E. L. Hill, B.A., Guelph.
Councillors	J. S. Copland, M.A., Brockville.
	J. S. Copland, M.A., Brockville. S. Silcox, B.A., B.Pæd., Collingwood.
	G. A. Smith, B.A., Parkdale.
	N. McMurchy, B.A., Elora.
	N. McMurchy, B.A., Elora. J. R. Hamilton, B.A., Brantford.

MR. T. H. SMYTH, the newly-elected President, then took the chair, and DR. PIKE delivered his address as Honorary President. The address was a clear exposition of the proper method of dealing with chemical theory. The atomic theory should be introduced very early in chemical study so as to furnish a scientific basis upon which to build subsequent knowledge.

DR. PIKE also put forward several important suggestions, among others a suggestion that the Dominion Government be requested to permit the importation of all apparatus for educational institutions duty free.

DR. PIKE, MR. MERCHANT and others, gave some ludicrous examples of the interpretation put upon the present law by customs officers.

MR. W. H. JENKINS moved, and MR. W. H. STEVENS seconded the motion that Dr. Pike, the President and Secretary, and Mr. F. W. Merchant, act as a Committee to consider the whole question of the importation of philosophical apparatus for public institutions, to frame a petition to which signatures' should be secured from all parts of the country, and that the Committee be given power to personally present the petition to the Government, and that the Section pay all necessary expenses. Carried unanimously.

Acting upon Dr. Pike's suggestion regarding a system of standard units, it was resolved that the Executive Committee look after the matter of securing a uniformity of units in the schools and universities of the Province.

On account of the unavoidable absence of the writer, DR. SMALE read an original paper by Dr. W. L. T. Addison, of Byng Inlet, on "Atom Forms as Deduced from the Crystalline Modifications of the Elements." This was an outline of a theory regarding the form of the atoms of those elements having definite crystalline form, phosphorus especially being used as an example. By means of models Dr. Addison made it plain that there is remarkable evidence as to the relation of the form of the atom and the crystal form.

The Secretary, MR. E. L. HILL, B.A., of Guelph, read a short paper on "Some Biological Notes." He mentioned a few of the main features of the flora of Guelph and vicinity, based on records made of plant distribution, time of flowering, etc., for some eight years. The chief point of the paper was that greater emphasis should be laid upon the teaching of function in Botany. Form and function should be taught together.

The paper was discussed by Messrs. Jeffrey, Spotton and others.

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#### NATURAL SCIENCE SECTION.

#### THURSDAY, APRIL 14TH.

The meeting was held in Mr. McIntosh's room, at 2 p.m., PRESIDENT SMYTH in the chair.

MR. SPOTTON reported for Committee *re* Science in the Public Schools. (See resolution in Tuesday's minutes.) The report was adopted.

Upon motion Mr. Spotton was appointed to present the resolution to the Minister.

Upon motion the Committee *re* Importation of Philosophical Apparatus were given power to add to their number in order to secure a large number of names for the petition.

The SECRETARY then read a short paper by Mr. D. G. Revell, B.A., on "A Biological Survey." The importance of a more complete survey of the forms of life in Ontario was emphasized. The hope was expressed that the day is not far distant when our Government will, with the approval of all, devote a large sum annually to an object so "commendable as a survey of the teeming life of our forests, fields and streams."

MR. C. C. JAMES, M.A., Deputy Minister of Agriculture, gave an able address on the "Relation of Agriculture to our School System." Much could be done to put the young pupil in possession of facts that would serve as a foundation for further scientific study and further increase of practical knowledge. Agriculture had now come to a critical stage. More knowledge was needed to put the Ontario agriculturist into a position to compete with other sources of farm products.

MESSRS. MACMURCHY, GIFFIN, SMITH and others, took part in discussion.

The matter of the printing of the papers read was referred to the officers.

The Secretary called attention to the practice of setting only one paper in Senior Leaving Biology and to the injustice of allowing but 75 marks for the subject as against 150 for its equivalent in other departments. Upon the assurance of Messrs. Spotton and Merchant, that these matters were likely to be remedied, no further action was taken.

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The meeting adjourned at 4.20.

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#### MINUTES OF THE CLASSICAL SECTION.

#### TUESDAY AND WEDNESDAY, APRIL 12TH AND 13TH, 1898.

The Association met at 10.30 a.m., the President, MR. L. C. SMITH, in the chair. After the minutes of the last session of 1897 had been read and confirmed, Mr. T. G. Bragg was appointed Press Reporter.

The first paper, "Classics in our High Schools," by Mr. F. W. French, was a review, under the headings of vocabulary, inflections, syntax and order of words, of the chief points a teacher should pay attention to in developing in his pupils a real power of reading Latin. The main recommendations of the paper were, that more time should be given to learning cognates and groups of related words, that inflections should be studied by the analytic method, that syntax should be learned inductively, forms and their use being taken up simultaneously, that collections of syntactical usages should be made, that more should be made of reading without translating and that translation should be kept separate from grammar lessons, that a book of easy selections should precede Cæsar, and that poetry should not be taken up so early in our course. A brief discussion followed, chiefly upon the two last points, Messrs. Coombs, Strang and Colbeck speaking.

MR. E. A. COOMBS then read a paper on "School Blunders," in which he pointed out certain dangers arising from lack of knowledge of the pupil's real character and ways of thinking or of their home surroundings, from failure to appreciate the wise superintendence and forethought of the Education Department, from failure to make proper use of teachers' conventions, and from ceasing to read and study after becoming teachers and thus ceasing to grow. The meeting then adjourned.

At the afternoon session, which began at 2 p.m., the PRESIDENT read his address, entitled "Prejudices against Classics," an exhaustive collection of the objections that have been or may be urged against either the study of Classics in general, or against the methods of teaching Classics which prevail in Ontario to-day. The discussion which the paper was intended to provoke had to be postponed till the following day.

MR. W. DALE then read a paper on "The last of the great Roman Historians," Ammianus Marcellinus. After treating of his works and style, the pa A.D., and in sed the deca modern hist The Section

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#### CLASSICAL SECTION.

style, the paper pointed out the main characteristics of the 4th century, A.D., and in particular the importance of the era as one which witnessed the decadence of the empire and the beginning of the transition to modern history.

The Section was then addressed by PROFESSOR W. GARDNER HALE, of Chicago University, on "Certain Points in the Study of Latin." Three topics were touched upon :

(1) The oral reading of Latin. Professor Hale held that by carefully observing the *quantitative* value of syllables in our pronunciation of Latin, the matter of scansion is greatly simplified, while at the same time both the verse ictus and the word accent can be retained in reading verse. In this connection also the question of syllabication was discussed, and evidence given for concluding that the ordinary rules of the grammarians applied to writing and were not observed in speaking. And finally he contended that elision must have obtained as regularly in ordinary speech as in verse.

(2) In dealing with the study of Syntax, Professor Hale showed that the explanation of the Latin subjunctive is impossible from any one category of thought, but must be taken in combination with the origin and force of the Greek subjunctive and optative, to both of which the Latin subjunctive corresponds. The Greek subjunctive expresses, (a) what is willed, (b) what is anticipated (the latter generally with  $a\nu$ ; the optative expresses, (a) what is wished, (b) what is possible, (c) what is mentally certain (the two latter generally with  $\ddot{a}\nu$ ), and not only does the Latin subjunctive combine all these aspects, but, because of a certain encroachment of the "mentally certain" upon the "actual," it includes some ideas represented in Greek by the indicative. The manner in which these various ideas shade into one another, so that exact classification is impossible, was illustrated, and in particular Professor Hale, in answer to a question by Mr. Strang, traced the growth of the circumstantial subjunctive with cum, a usage which he connected with the subjunctive of characteristic with qui.

(3) Professor Hale then outlined his method of teaching students to read Latin without departing from the order of the written or spoken words, illustrating his points by many examples.

After Dr. Bell had referred to Studemund's views on the matter of syllabication as confirmatory of Professor Hale's position, a vote of thanks for this suggestive address was passed on motion of Messrs. Strang and Henderson. The Association then adjourned.

On assembling at 2 p.m., on Wednesday, April 13th, the Association elected the following as its officers for the next year:--

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President	A. J.	Bell, M.A., Ph.D.
Vice-President	O. J.	Jolliffe, M.A.
Secretary-Treasurer	J. C.	Robertson, B.A.

Councillors: — W. S. Milner, M.A.; A. Carruthers, M.A.; W. M. Logan, M.A.; H. J. Crawford, B.A.; W. J. Fenton, B.A.; J. Henderson, M.A.; W. Dale, M.A.; L. C. Smith, B.A.

On motion of MR. W. M. LOGAN and MR. JOLLIFFE, it was decided to endeavor to have Professor Gildersleeve, of Johns Hopkins, or Professor White, of Harvard, address the Association at its next meeting.

After the Treasurer had made his annual statement, MR. C. J. LOGAN'S paper, "Looking Before and After," was, in the writer's absence, read by Mr. W. M. Logan. In this paper, while the general improvement in the examination papers in Classics of recent years was recognized, it was contended that some valuable things were being lost eight of, especially the matter of quantities, of historical allusions and subject matter generally. It was also held that the Roman pronunciation of Latin would tend to obscure the derivation of English words from the Latin, and that the great desideratum, uniformity, could be secured as well by the English method. Further, the regulation was attacked, which makes it necessary to put all the authors, the grammar and the sight translation, on one paper. The greatest obstacle to effective work in Classics was, however, in the writer's opinion, the effect upon school programmes of the Public School Leaving Examination.

A long discussion followed the reading of this paper. In connection with the last point, Mr. Connor agreed with the writer of the paper, while Mr. Wetherell thought the evil was generally minimized by ignoring the claims of those who have passed this examination to enter Form II. In connection with the Roman pronunciation of Latin, Mr. Connor pointed out that there is no such thing as a uniform English method. Mr. Wetherell stated that a few years ago he had been one of the strongest opponents of the change, but that since he had adopted the Roman pronunciation he had found that gradually all difficulty in connection with its adoption had vanished, and that especially in the metrical effects of Latin poetry, it was far more satisfactory than the English method. Mr. Robertson held that in the cases where the English method is a help in derivation, the similarity in spelling is a better and (as in French) a sufficient guide, while the Roman method helps in the case of cognates where the spelling is no guide, and further removes many difficulties in Latin accidence, and in the derivation of Latin words from one another. Mr. Milner thought the main point is to know the quantity of the penult and of inflectional endin one more d whether the emphasized Mr. Henders bringing it a Mexico, whe greatest ass McFayden t being neces tended that ing to him, ence had be and that the

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#### CLASSICAL SECTION.

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tional endings, and that to require anything further was but to throw one more difficulty in the path of the student. He doubted, also, whether the Roman pronunciation is making any headway. Mr. Logan emphasized the importance of uniformity, in connection with which Mr. Henderson suggested that more might be done by the inspectors in bringing it about. Dr. Burwash mentioned his recent experience in Mexico, where his knowledge of the Roman pronunciation was of the greatest assistance in enabling him to understand Spanish. Mr. McFayden thought a difficulty might arise through two pronunciations being necessary in the case of proper names. Mr. L. C. Smith contended that the evidence for the Roman pronunciation was not convincing to him, while Messrs. French and Connor stated that their experience had been that pupils had little difficulty in making the change, and that the chief trouble lay with the teacher himself.

MR. MILNER then addressed the meeting on "The Work and Status of the Classical Association." He held that the status of the Association was not adapted to its work, pointing out the evils that were resulting from over-organization, and the difficulties that were constantly arising through the connection with the general Association, especially in the matter of the printing of papers. He held that the Association was not fulfilling its proper functions, partly through its sessions being so separated that interest was lessened, and partly because too much time and attention were given to the discussion of school regulations. The only remedy suggested by the speaker was to endeavor by a change in the place and time of meeting, and the arrangement of the programme, to bring about more satisfactory meetings.

After some discussion, in which it was recognized that it was much clearer that something should be done than what should be done, it was resolved, on motion of Messrs. Milner and Connor, that Messrs. W. M. Logan, Henderson and Robertson be a Committee to meet the Printing Committee and insist upon their observing the original agreement in regard to the printing of papers, and to consider the question of modifying the connection of the Classical with the General Association.

After a brief discussion on the changes proposed in the text-books for matriculation in 1901, the Association adjourned.

#### MATHEMATICAL AND PHYSICAL SECTION.

#### TUESDAY, APRIL 12TH, 1898.

The Section was opened at 2.20 p.m., the President, W. H. BALLARD, M.A., in the chair, I. J. BIRCHARD, Ph.D., Secretary.

The PRESIDENT read his address on The Modern Teaching of Arithmetic. Discussion followed in which Messrs. Gray, Patterson, Taylor and Manley, took part.

A report of the Committee on Geometry appointed last year was read by MR. McDougalL.

Moved by MR. McDougalL, seconded by MR. DELURY, that the report be considered clause by clause. Carried.

1. That a series of propositions should be named as part of the work in Geometry, principally in Form IV., that would form a connecting link between Euclid and the Modern Pure Geometry.

2. That the work should be so divided among the Forms as to give a uniform course of four years.

Suggested arrangement :---

24

Form I. and Public School Leaving .- Book I., propositions 1 to 34.

Form II.—Book I., propositions 35 to 48, and Book III., propositions 1 to 22.

Form III.—Book II., Book III., propositions 23 to 37 and Book IV. Form IV.—Definitions of Book V., Book VI. and Additional Propositions.

3. That more attention should be paid in the examinations on this subject, to the use of compasses and ruler, as conducive to the better understanding of the Geometrical problems and to neatness and accuracy of the diagrams drawn by the students.

#### WEDNESDAY, APRIL 13TH, 1898.

The Section assembled at 2.25 p.m., the PRESIDENT in the chair.

A paper entitled "The Higher Mathematics—A Plea for their Study," was read by MR. W. J. RUSK, B.A.

Moved by PROFESSOR BAKER, seconded by MR. MANLEY, that the paper be published in full in the Proceedings. Carried.

Messrs. Dickson and Taylor were appointed to report the proceedings of the Section in the daily papers. The subject Text-books? Moved by answers show metic and A Discussion Taylor, Thor A paper of The Section

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C. Snell, M.A. B.A., Carleton B.A., Toronto

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#### MATHEMATICAL AND PHYSICAL SECTION.

The subject, "Shall the answers be removed from the authorized Text-books?" was discussed orally by MR. MANLEY.

Moved by MR. MANLEY, seconded by MR. MCMURCHIE, that the answers should be removed from the authorized text-books on Arithmetic and Algebra.

Discussion followed in which Messrs. Davison, Patterson, Dickson, Taylor, Thompson, Elliott and Gray, took part. Withdrawn.

A paper on "Conductivity and Resistance," was read by MR. GILL. The Section then adjourned.

#### THURSDAY, APRIL 14TH, 1898.

The Section met at 2.20 p.m. In the absence of the President and Vice-President, MR. MCMURCHY was called to the chair.

A paper on "Post-graduate Work in Mathematics," written by MISS CUMMINGS, was read by Mr. DeLury in the absence of the author.

Moved by MR. MCGEARY, seconded by MR. TAYLOR, that the thanks of the Section be sent to Miss Cummings for her paper. Carried. Moved by MR. THOMPSON, seconded by PROFESSOR MCKAY, that the paper be left with Mr. DeLury to secure the printing of it if possible.

#### ELECTION OF OFFICERS.

The election of officers for the ensuing year was next proceeded with and the following are the names of those elected :—

Hon. President	• •	•	. W	. Н	. Ballard, M.A., Hamilton.
$President \dots \dots$			. A.	Η.	McDougall, M.A., Ottawa.
Secretary-Treasurer	۰.		. R.	A.	Gray, B.A., London.

Moved by PROFESSOR MCKAY, seconded by MR. DELURY, that the number of Councillors be increased to eight. Carried.

The Councillors elected were :---

J. T. Crawford, M.A., Hamilton; T. Murray, B.A., Owen Sound; J. C. Snell, M.A., Wiarton; J. E. Little, B.A., Ridgetown; W. J. Patterson, B.A., Carleton Place; L. J. Cornwall, B.A., Strathroy; A. C. McKay, B.A., Toronto; A. T. DeLury, B.A., Toronto.

On behalf of the Natural Science Section, MR. MERCHANT asked that a Committee be appointed to assist in securing from the Government the admission of Scientific Apparatus without payment of duty. His request was granted and a Committee consisting of Messrs. Crassweller, McKay, McGeary and Birchard, were appointed.

A report on Mathematical Text-Books was given by MR. DELURY accompanied by a list recommended as suitable for Teachers' Libraries.

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The new President, MR. McDougall, was then duly installed in office.

A discussion on the teaching of Arithmetic was introduced by MR. HENDERSON.

Moved by MR. CRASSWELLER, seconded by MR. MANLEY, that the President be requested to secure a joint meeting with the Public School Inspectors, the Training Department, and the Public School Teachers, next year, to discuss the place of Arithmetic in the schools. Carried.

The Section then adjourned.

I. J. BIRCHARD, PH.D., Secretary.

#### MINUTES OF THE HISTORICAL SECTION.

#### TUESDAY, APRIL 12TH, 2 P.M.

A joint meeting of the Historical and Modern Language Sections was held in the Biological Building of the Toronto University.

PROFESSOR MORSE-STEPHENS, of Cornell University, New York, delivered an address on "The Teaching of History in Secondary Schools."

PROFESSOR SYKES, of Philadelphia, read a paper on "The Pre-Raphaelite Movement and the Poetry of the Rossettis, Morris and Swinburne."

#### WEDNESDAY, APRIL 13TH, 2 P.M.

The election of officers for the year 1898-99 was held. The following officers were elected :—

Parena dant Prof. Cala Washir Call	
President Prof. Cody, Wycliffe College.	
Vice-PresidentProf. Shortt, Queen's University.	
Secretary-Treasurer Mr. W. C. Michell, B.A., Jarvis Street	
Coll. Inst., Toronto.	
Councillors	
Miss Scott, Toronto.	
Miss Spence, "	١
Mr. Reavley, Thorold.	
Mr. Clark, Toronto.	
Mr. Houston, "	
Representative on College and High School De- partment	
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#### HISTORICAL SECTION.

The President, PROFESSOR WRONG, then read a paper on "The Relative Educational Value of History," and was followed by MISS ELLEN M. KNOX, Principal of Havergal College, who gave an address on "The-Link Between History and Literature."

#### THURSDAY, APRIL 14TH, 2 P.M.

A paper on "The Greek Tyrants," was read by PROFESSOR HUTTON.

A Committee was then elected to consider the question of the status of history, with special reference to the equipment of teachers, and, if advisable, to memorialize the Government on the matter. The Committee to consist of Professor Cody, Messrs. Lavelle, McFayden, Clark, Robertson (W. J.), Reavley, Michell, Robertson (J. C.), Carruthers, Patterson, and Misses Scott and Spence.

An address by MISS NELLIE SPENCE on "The Status of History in Canadian Secondary Schools," followed.

A discussion followed, in which Messrs. Robertson (W. J.), Lavelle, Milner, Rearley, Robertson (J. C.), and McFayden, took part.

#### MINUTES OF THE COMMERCIAL SECTION.

#### TORONTO, APRIL 12TH, 1898.

The Commercial Section met at 11.15 on the morning of the above date, the President, Mr. ELDON, in the chair. The meeting was called to order and opened with prayer by the President.

The minutes of the last meeting were read and approved.

The President appointed Messrs. Evans and Dobbie, Auditors.

On motion MR. WISMER was asked to take the chair, while a paper on. Book-keeping was read by the President.

A lively discussion followed the reading of the paper, in which the following took part:—Messrs. Harrington, Wismer, Evans, O'Brien, Dobbie.

On motion MR. LEVEQUE was permitted to explain to the Association a new system of book-keeping.

The meeting adjourned at 12.30.

#### W. WARD,

#### Secretary pro tem.

The afternoon session was called to order at 2.15, by the President. The minutes of the morning session were read and approved.

Mr. EVANS reported for the Auditors that the books had been examined and found correct.

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MR. EVANS then read his paper on "The High School Course as a Preparation for Business." Discussion followed in which Messrs. Black, Harrington, O'Brien and Dobbie, took part.

It was moved by MR. WISMER, and seconded by MR. O'BRIEN, that the thanks of the Section be tendered to Mr. Evans for his able paper.

A well rendered recitation was given by MR. PATTERSON.

On motion of MESSRS. EVANS and HARRINGTON, the thanks of the Section were tendered to Mr. Patterson.

MR. GEO. EDWARDS, T. C. A., followed, with a paper on "Joint Stock Company's Accounts." The paper was much appreciated. Many questions were asked and explanations given.

Moved by MR. WISMER, seconded by MR. HARRINGTON, that Mr. Edward's permission to have the paper printed in the Proceedings of the O. E. A. be asked, also that the thanks of the Section be tendered Mr. Edwards. Carried.

Meeting adjourned 4.10 p.m.

#### WM. WARD,

#### Secretary pro tem.

The second day's session was called to order at 2.10 p.m., PRESIDENT in the chair.

The minutes of the last session were read and approved.

It was moved by MR. DOBBIE, seconded by MR. EVANS, and carried, that this Section take no action regarding the indexing device explained by Mr. Leveque before this Section at its first session yesterday.

MR. HOLMES was then called upon and demonstrated his method of teaching model drawing, using the chair as an example of straight line figures and a plant as an example of irregular form. Moved by MR. WISMER, seconded by MR. EVANS, that the thanks of the Section be tendered to Mr. Holmes for his able treatment of the subject of model drawing.

This was followed by a well rendered and highly appreciated Guitar Quintette. The thanks of the Section were tendered to the players.

MR. D. E. THOMPSON, Q.C., read a very excellent paper on "Contracts."

Moved by MR. HARRINGTON, seconded by MR. O'BRIEN, that the thanks of the meeting be tendered to Mr. Thompson for his paper, and also that Mr. Thompson's consent to have the paper printed in the Proceedings of the O. E. A. be asked. Carried.

Mr. Thompson's consent was granted.

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#### COMMERCIAL SECTION.

A discussion followed on the subject of paper to be supplied to candidates in book-keeping, whether ruled or unruled.

Moved by MR. HARRINGTON, seconded by MR. BLACK, that the following be a Committee to wait on the Minister of Education to see if anything could be done regarding supplying ruled paper :—The President, Secretary, and Mr. Wismer.

Moved in amendment by W. J. DOBBIE, seconded by MR. BLACK, "That in the opinion of the Commercial Section, it is desirable that ruled paper should be proved for the Book-keeping Examination of Form I., with a view to uniformity, and that suitable drawing paper be provided for the Drawing Examination, and also that a copy of this motion be submitted to the College and High School Department for their endorsement."

The original motion was withdrawn, and this amendment carried. Meeting adjourned at 4.45.

W. WARD,

Secretary pro tem.

#### TORONTO, APRIL 14TH, 1898.

The third day's session met at 10 a.m., on the above date.

The minutes of the last meeting were read and approved.

It was moved by MR. EVANS, seconded by MR. DOBBIE, that a resolution of sympathy be sent to Mr. Grant in his present illness, and that the President and Mr. Wismer be a Committee to draft such a resolution.

MR. E. C. SRIGLEY then read his paper on "Law in Relation to Book-keeping."

Discussion followed in which Messrs. Dobbie, Eldon, Harrington, Wismer, Black.

Moved by MR. DOBBIE, seconded by MR. EVANS, that a Committee composed of the President, the Secretary *pro tem.*, and Mr. Srigley, be appointed to consider the text-books authorized for the Commercial Diploma Course, and report to this Section next year. Carried.

An exhibition of club swinging was given by MR. BERT THOMPSON, and an exhibition of dumb-bell exercises by a class of girls, under the direction of MAJOR THOMPSON.

The thanks of the Section were voted to those taking part in the exhibition.

MR. WISMER reported that the Committee appointed to look into the matter of suitable models for drawing had made no progress.

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On motion of MR. WISMER and EVANS, the election of officers was taken up.

The election resulted as follows :----

President		Mr. W. E. Evans, Galt.
Vice-President		W. J. Dobbie, Guelph.
		Wm. Ward, Kingston.
(	Mr.	W. Grant, Toronto. M. O'Brien, Peterborough.
	"	M. O'Brien, Peterborough.
Councillors	"	J. S. Black, Chatham.
1	"	J. Neilson, Collingwood.
	"	J. T. Harrington, Lindsay.
	"	J. T. Harrington, Lindsay. J. A. Wismer, Toronto.

MR. HENDERSON then gave his paper on "Commercial Work as a Mental Training."

It was moved by MR. WISMER, seconded by MR. EVANS, and carried, that the thanks of the Association be tendered Mr. Henderson for his paper and that his consent to have his paper printed in the Proceedings of the O. E. A. be asked.

Mr. Henderson's consent was given.

Moved by MR. DOBBIE, seconded by MR. BLACK, that all papers not already dealt with be printed in the Proceedings of the O.E.A. Carried. Meeting adjourned at 11.40.

WM. WARD,

Secretary pro tem.

#### MINUTES OF PUBLIC SCHOOL DEPARTMENT.

#### TUESDAY, APRIL 12TH, 1898, FORENOON SESSION.

This Department was called to order at 10 a.m., in the Gymnasium Hall of the Normal School.

The President, MR. A. A. JORDAN, occupied the chair.

The meeting was opened by MR. J. A. HILL, PH.B., of Toronto, who read a portion of Scripture and led in prayer.

On motion of MESSRS. BROWN and MACMILLAN, the minutes of the meetings of the Department of 1897, having been printed in the minutes of the General Association, were accepted as read, and adopted.

MR. JNO. R. BROWN, of Napanee, was appointed Minute Secretary, and Messrs. Rogers, Weidenhammer and McEachern, Press Reporters.

The Secretary read communications from several County Associations regarding the resolutions sent out by this Department.

On motion cations were MR. Roge

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#### PUBLIC SCHOOL DEPARTMENT.

On motion of MESSRS. MACMILLAN and MUSGROVE, the communications were referred to the Executive Committee.

MR. ROGERS, Treasurer, read his report, which showed the Receipts to be \$46.35; Expenditures \$43.00, leaving a balance on hand of \$3.35. The report was received and referred to the Auditors.

MR. GEO. M. RITCHIE, Secretary, presented his report (see at end of minutes), showing that only a few replies were received from the Secretaries of County Associations. After some discussion, during which the President pointed out that the names of the Secretaries of the County Associations could be secured from the Education Department, the report was received and referred to a Committee. (See at end of minutes.)

PROFESSOR HUME, M.A., PH.D., of Toronto, read a paper on "Moral Training in the Public Schools." It was recommended to be printed in the minutes, but the discussion on the paper was postponed till a future session.

The meeting then adjourned until 2 p.m.

### TUESDAY, APRIL 12TH, 1898, AFTERNOON SESSION.

A joint meeting of the Training, Inspectors', Kindergarten and Public School Departments, was held in the Normal School Gymnasium, at 2 p.m., with MR. W. F. CHAPMAN, Toronto, Chairman of the Inspectors' Department, in the chair.

MR. A. EMBURY, Public School Inspector, Peel County, read a paper on "The Unification of Instruction."

On motion of MESSRS. SUDDABY and WILKINSON, a hearty vote of thanks was tendered to Mr. Embury for his admirable paper, and he was asked to allow it to be printed in the Proceedings of the Association.

The President, MR. JORDAN, announced that music would be provided by an orchestra during the evening session. He requested all present to hand their railway certificates to the Secretary of one of the Departments as soon as possible.

MR. F. TRACY, B.A., PH.D., of Toronto, read a paper for the Kindergarten Department, on "Sully's Recent Investigations in Child Study."

On motion of MESSRS. FOTHERINGHAM and DAVIDSON, a hearty vote of thanks was tendered to Dr. Tracy, and he was asked to submit his paper to the Printing Committee.

The President pointed out the advantages of membership, and cordially invited all present to become members.

The meeting adjourned at 3.45 p.m.

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#### WEDNESDAY, APRIL 13TH, 1898, FORENOON SESSION.

PRESIDENT JORDAN called the meeting to order at 10 a.m., and the proceedings were opened by MR. MCKEE, who led in prayer.

The minutes of the previous sessions were read and adopted.

MR. BRUCE addressed the meeting briefly regarding Mr. Leveque's System of Book-keeping. The matter was referred to a Committee consisting of Messrs. Bruce, Groves and McQueen. (See Committee's report at end of minutes.)

The President appointed a Special Committee, consisting of Messrs. McKee, Nairn, Young, Dale and McQueen, to report upon the resolutions received from County Associations. This course was taken owing to the inability of the members of the Executive Committee to deal with the resolutions, their time being otherwise occupied.

MESSRS. D. N. SINCLAIR and R. A. MCCONNELL, were appointed Auditors.

PRESIDENT JORDAN gave an excellent address on "Our Progress and Our Aims."

The President announce 1 that Mayor Shaw extended an invitation to the teachers to enjoy a street-car ride about the city (which took place at the close of the session, and was very much enjoyed and appreciated by a large number).

MR. S. B. SINCLAIR, M.A., of Ottawa, read an able paper on "The Ethics of Tale-bearing." A discussion followed, in which Messrs. Knowles, Professor Hume, Earngey, Ryerson, McQueen and McAllister, took part.

On motion of MESSRS. MCALLISTER and HENDRY, Mr. Sinclair was asked to allow his paper to be published in the Proceedings of the Association, and on motion of MESSRS. MUSGROVE and J. A. HILL, he was tendered a hearty vote of thanks.

MR. C. A. BARNES, P. S. I., read a paper opening up the discussion on resolutions sent out last year.

The discussion on resolutions was continued by Messrs. Musgrove and Fraser.

The President appointed Messrs. McAllister, Groves, McMillan and Ritchie, as a Special Committee to wait upon the Minister of Education in the matter of resolutions to be laid before him.

The President announced a joint meeting of the Inspectors', Public School, Training and Kindergarten Departments, at 2 p.m., in the Educational Hall.

MR. FRASER'S resolution to the effect that First Class Teachers' Cer-

tificates be g carried.

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On motion McMillan, of Toronto, Mr. appointed to properly repr

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# PUBLIC SCHOOL DEPARTMENT.

tificates be granted without attendance at the Normal College, was carried.

The	e election of officers for 1898-99 resulted as follows :
	President
	Vice-PresidentMiss E. Pye, Meaford.
	DirectorMr. E. W. Bruce, Toronto
	Secretary
	Treasurer Mr. J. W. Rogers, Toronto
	Mr. J. R. Brown, Napanee.
	Executive Committee. Mr. J. R. Brown, Napanee. Mr. A. Weidenhammer, Waterloo. Mr. W. E. Groves, Toronto.
	Mr. W. E. Groves, Toronto.
	Auditors
	Mr. Neil S. McEachern, Angus,
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On motion of MESSRS. MCALLISTER and WEIDENHAMMER, Mr. McMillan, of Toronto, Mr. Young, of Guelph, Mr. McMaster, of East Toronto, Mr. Brown, of Napanee, with the mover and seconder, were appointed to consider the best means of having the Local Associations properly represented at the Annual Meeting of this Department.

WEDNESDAY, APRIL 13TH, 1898, AFTERNOON SESSION.

A joint meeting of the Training, Kindergarten, Inspectors' and Public School Departments, was held in the Normal School Theatre, at 2 p.m. MR. J. J. TILLEY, Model School Inspector, occupied the chair.

MR. J. A. MACCABE, M.A., LL.D., Principal of the Ottawa Normal School, delivered an excellent address on "The Personality of the Teacher Reappearing in the Pupil."

On motion of MESSRS. BROWN and ROGERS, a hearty vote of thanks was tendered to Mr. MacCabe, and he was asked to allow his paper to be printed in the Proceedings of this Association.

Professor Clark, M.A., Messrs. McAllister, McQueen and others, took part in the discussion.

Mr. Tilley, having been called away, PRINCIPAL ALEXANDER, of Galt, took the chair.

MR. T. L. LOCHEED, M.A., of Toronto, addressed the meeting on the "Natural Method of Illustrating Phonics."

MR. J. W. ROGERS, of Toronto, read an able paper on "Supplementary Reading."

MRS. W. HOODLESC, of Hamilton, gave an interesting address on "Domestic Science," for which she received a very cordial vote of thanks. Upon request, she consented to prepare an abstract of her address for insertion in the minutes.

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# THURSDAY, APRIL 14TH, 1898, FORENOON SESSION.

The meeting was called to order at 10 o'clock, PRESIDENT JORDAN in the chair.

Opening religious exercises were conducted by MR. SHARP.

MR. A. BAYNTON, of Waterdown, read an able paper on "Bible Knowledge in the Public Schools." A profitable discussion followed, Professor Clark, Miss Meldrum, Messrs. Young, Fraser and McAllister, took part.

In the temporary absence of the President, MR. MUSGROVE occupied the chair.

Announcements were made that return railway tickets could be secured in the building during the noon hour, and the special street cars for the accommodation of teachers would be ready on Church street, at 4 o'clock.

MR. E. W. BRUCE, M.A., Toronto, read an able paper on "Teaching Patriotism."

Messrs. Young, Fraser and Burton, were appointed a Committee to consider the Secretary's report made yesterday.

On motion of MESSRS. BROWN and GROVES, a hearty vote of thanks was tendered to Professor Hume, Public School Inspector Barnes, and Editor Henderson of the "Canadian Teacher," for their kind assistance.

On motion of MESSRS. TAYLOR and GROVES, the Auditors' report showing a balance on hand of \$3.35, was received and adopted.

The Committee appointed to consider Leveque's System of Bookkeeping presented a favorable report. On motion of MESSRS. GROVES and BRUCE, it was received.

MR. LOCHEED continued his address on the "Natural Method of Illustrating Phonics." On motion of MESSRS. ROGERS and JORDAN, his system was approved and the President was authorized to appoint a Committee to thoroughly investigate the details of the method, suggest improvements and embody the whole in a form to be laid before the Association at its next meeting for consideration with the view of its endorsation for use in school readers if deemed advisable.

The Committee appointed consisted of Principal Kirkland, Messrs. Scott, Doan, Evans, Bruce, Groves, Ritchie, Inspector W. F. Chapman, Toronto; Elliott, Young, Ballard, Hamilton; Sinclair, Ottawa; Brown, Napanee; A. A. Jordan, Meaford; Musgrove, Wingham.

A Committee consisting of Messrs. Fraser, Bruce and Harlton, were appointed to select suitable lessons from the Readers for the Senior III. and Junior III. Book classes and they reported as follows:— 1. The

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#### PUBLIC SCHOOL DEPARTMENT.

SENIOR III.

# JUNIOR III. 1. The White Ship.

- 1. The Gray Swan.
- 2. The Village Blacksmith.
- 3. The Golden Deeds.
- 4. Rock Me to Sleep.
- 5. Bingen on the Rhine.
- 6. The Golden Touch.
  - 7. The Road to the Trenches.
  - 8. The Burial of Moses.
  - 9. The May Queen.

- 2. The Poor Little Match Girl.
- 3. The Sands o' Dee.
- 4. After Blenheim.
- 5. Bruce and the Spider.
- 6. The Heroic Serf.
- 7. There's a Good Time Coming.
- 8. The Child's Dream of a Star.
- 9. The Bugle Song.

A motion was carried to devote at least two half days at our next Annual Meeting to the discussion of resolutions, by forming the meeting into a kind of Parliament to bring forward and discuss anything of interest to the Public School work.

# THURSDAY, APRIL 14TH, 1898, AFTERNOON SESSION.

A cablegram was read conveying the greetings of the National Teachers' Association of England.

MR. SHARP reported for the Committee on Resolutions. Discussion on these followed and the thirty resolutions to be found at the end of the minutes (after the reports) were adopted.

Motion for payment of Press Reporters, Minute Secretary, and Secretary of the Department, were passed.

Votes of thanks also to retiring officers were passed and the meeting adjourned.

The newly elected officers met for a few minutes. The Secretary was instructed to have the resolutions as corrected and adopted, printed in pamphlet form and sent to the teachers throughout the Province.

# SECRETARY'S REPORT,

ONTARIO EDUCATIONAL ASSOCIATION,

PUBLIC SCHOOL DEPARTMENT.

Mr President, Ladies and Gentlemen :---

My report will be very short. In accordance with the instructions received I had the resolutions printed, 1,800 copies, which only cost \$2 or \$3.

The printing of the paper "Our Boys" was attended to by the Minute Secretary and sent by mail to all the teachers of the Province, about 3,000 copies.

With regard to sending out copies of the resolutions, I only received

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notice from two or three Secretaries as to the time of their County Institute Meeting. To each of these I sent about 100 copies and received answers from only one or two, which will be read at the time of discussion on these resolutions. It ought to be possible to know by some other means than a complimentary notice in the daily papers after the meeting has been held, when and where each County Institute meets, so that any matter necessary might be sent from the Secretary of this Department. In order, however, that each teacher in the Province might have a copy of these resolutions, I was making arrangements to have them sent out through the "Canadian Teacher," when the editor of that paper offered to print the entire lot gratis in the September number, which he did, and sent out about 3,000 or 4,000 copies throughout the Province. He also gave space in a recent issue of the paper for the complete programme of this Department for these meetings. I think such courtesy should at least be acknowledged by this Department. The first business of the Secretary after the close of the session last Easter was to get the minutes and the papers read before the Department in shape for the printer and in the hands of the General Secretary within the time appointed. This was accomplished with tolerable satisfaction, but some of the papers came in on the last day of grace. ("Days of grace" had to be allowed.) As some serious friction was caused in one Department by the non-publication of a paper, it would be wise for readers of papers to comply with the rules on this point. At the meeting of the General Committee in November, the Secretary is instructed as to papers to be read at the next meeting, subjects to be discussed, etc. This could be facilitated if at the present session or some time through the year, members would write or suggest papers or subjects, with names of persons who at least could give a paper or address on them. This was done advantageously in some instances this year, but still some difficulty was experienced, as it is not too easy to persuade a man (or woman) by letter, to set himself a task that must necessarily take some thought and work.

My advice here may be considered personal or presumptuous, but I think a Secretary should continue in the office for more than one year, as in the first year he only finds out *what* is to be done and *how* it is to be done, after that he ought to be able to do it. If the programme this year is at all up to the mark it is largely due to those named on it coming forward when asked, to help on the work. Several who were asked replied that next year perhaps, etc.

> GEO. M. RITCHIE, Secretary.

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## COMMITTE

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It is expected opinion on the deliberations to presented at the

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## PUBLIC SCHOOL DEPARTMENT.

# COMMITTEE'S REPORT ON THE ABOVE.

The Committee reported that many teachers did not receive a copy of "Our Boys"; that each person who prepares a subject be requested to hand in a short synopsis for the press at the time of presentation; that the Secretary could get a great deal of information from the yearly report of the Hon. the Minister of Education; that the courtesy of the "Canadian Teacher" in placing its columns at our disposal be formally acknowledged; and that the appointment of the Secretary for a second term be not taken as a precedent.

# FRASER, YOUNG AND BURCHELL.

# Committee's Report on Mr. Leveque's Book-keeping Forms.

We, your Committee, appointed to examine the system of Bookkeeping presented by Mr. Leveque, would beg leave to report as follows :---

1. The *principles* laid down do not in any essential way depart from the principles now generally prevailing among the best teachers of the subject.

2. The time-saving, index-saving, and ready-reference inventions, make the system a great advance upon any system now before the public.

3. The system is of especial value not only to the public schools, but to the professional man, general retailer, and artisans, and by a slight modification, for which Mr. Leveque has made provision, the system may be made applicable to the widest wholesale business.

4. We believe that the details of teaching the subject can be accomplished in much less time than by any system now in vogue.

W. E. GROVES, E. W. BRUCE, ALEX. MACQUEEN.

# TORONTO, APRIL 29TH, 1898.

The following resolutions were passed by the Public School Department at the meeting of the O. E. A. during Easter vacation, April 12th, 13th and 14th, 1898.

It is expected that each County Teachers' Association will pass an opinion on them, and send through their Secretary, the result of their deliberations to the Secretary of the Public School Department to be presented at the next meeting of the O.E.A.

GEO. M. RITCHIE,

Secretary P. S. Dept., O.E.A.

ADDRESS: 297 MARKHAM ST., TORONTO.

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1. That no certificate to teach be granted to any person under twenty-one years of age.

2. That it is a matter of regret that the Minister has abolished the granting of Specialists' Certificates (Non-professional) to all but those obtaining the degree of B.A.

3. That the Public School Department of the O. E. Association desires to thank the Minister of Education for the representation of Public School teachers on the Educational Council, but would urge that such representation in justice to Public School interests, should be increased to at least three members.

4. That we would respectfully urge that in future appointments under the control of the Education Department, Public School teachers receive that proportion of representation to which they are in justice entitled.

5. That Entrance Districts should coincide with Inspectoral Districts, with one Board of Examiners for each district, but several writing centres.

6. That the Board of Examiners for the Entrance and Public School Leaving Examinations should consist of the Public School Inspector, a representative from the High School or Schools, appointed by the Minister of Education, and Public or Separate School teachers, as the case may be, actually engaged in Entrance and Public School Leaving work and teaching in the Public or Separate Schools in the Inspectorate, the appointment of these to rest with the Local Teachers' Association.

7. That the teacher's report of the pupils' standing in the various branches for the term be considered by the Board of Examiners in awarding Entrance and Public School Leaving Certificates when necessary.

8. That Reading be not simultaneous with other subjects and that due precautions for secrecy be taken as to the matter to be read.

9. That no literary selections be placed on the Public School Leaving course that are not found in the Primary course for the same year.

10. That the Training Term in the Model School be extended to one year.

11. That no candidate be admitted to the Normal School who has not been trained at a County Model School, and who has not taught one year.

12. That graduates of the School of Pedagogy, who have not been trained at a Model or Normal School, should not be permitted to teach in the Public Schools.

13. That the Hon. the Minister of Education be respectfully request-

ed to reconsid College so as those who ho for five years Certificate (o ination at th College.

14. That the and Junior L each subject a

15. That it made Latin a tificates, and existed heret

16. That the Certificates of Pedagogy from of at least ter Public School

17. That the of the School present to ea Year Book, as for education communicate

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19. That t for both En *definitely* fixe during that y drawing the r teachers und examination.

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#### PUBLIC SCHOOL DEPARTMENT.

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ed to reconsider the regulation regarding the attendance at the Normal College so as to grant Professional First Class Teachers' Certificates to those who hold Second Class Teachers' Certificates, who have taught for five years in the Province of Ontario, who hold a Senior Leaving Certificate (or its equivalent) and who shall pass the final examination at the Ontario Normal College without attendance at said College.

14. That the standard for Entrance, Public School Leaving, Primary and Junior Leaving Certificates should continue to be  $33\frac{1}{3}$  per cent. on each subject and 50 per cent. on the aggregate.

15. That it is a matter of regret that the Minister of Education has made Latin a compulsory subject for Junior and Senior Leaving Certificates, and that he be requested to restore the options as they have existed heretofore.

16. That the qualification for Inspectors' Certificates be First Class Certificates of five years' standing, and the Degree of Bachelor of Pedagogy from Toronto University, with an experience qualification of at least ten years' teaching, five of which shall have been spent in Public School work, so as to cover the teaching of all the grades.

17. That the Ontario Government furnish each school with a copy of the School Act, and that the Dominion and Provincial Governments present to each school the report of the Minister of Education, the Year Book, and any additional reports that may be deemed valuable for educational purposes, and that the Secretary be requested to communicate with the said Government regarding the same.

18. That the present series of Public School Drawing Books be withdrawn, and a new series prepared, consisting largely of blank pages, with a few well executed models for pupils to see, not to copy; said series to be accompanied by a Teacher's Manual, illustrating and explaining the work in detail.

19. That the course of study on which examination is to be based for both Entrance and Public School Leaving Examinations be *definitely* fixed in September of each year, and that no change be made during that year in the course so definitely fixed. For example in drawing the revised regulations now simply state "Drawing" and some teachers understood that certain books were prescribed for each examination.

20. That the basis of apportionment of Legislative Grant be dependent upon the following :---

(a) Buildings and equipments.

(b) Amount of salary paid to teachers.

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21. That the following changes should be made with respect to the Public School Leaving Examinations.

(a) The course in Geography should be reduced, leaving that subject to be continued in Form II. of the High School course.

(b) The course in History should be limited to fixed periods of British History.

22. That the work in Entrance History be all of Canadian History, and a period of British History taken from the beginning of the Tudor period to the present time.

23. That one of the conditions for a Local Association obtaining the Government Grant be, that such Association send a delegate to the Ontario Educational Association.

24. That the Education Department be requested to place upon its mailing list the names of any Public School teachers, other than Model School masters, who desire to receive the circulars, etc., issued by the Department bearing on their work, provided that the names and addresses of said teachers be sent to the Education Department.

25. That the incoming Executive Committee be requested to arrange a joint meeting of the Inspectors, Training and Public School. Departments, as a Committee on Resolutions, such meeting to be not later than the second day of next session.

26. That the Public School Department at the next session be transformed into a Parliament during the forenoon of each day to discuss live educational questions, also that the Secretary be instructed to have the above resolutions printed and distributed in pamphlet form to all Public School teachers, throughout the Province, through the Secretaries of the Local Associations.

27. That a permanent Committee (the Executive Committee) be appointed from this Department to bring clearly before the Local Associations of the Province the importance of a good attendance of the Public School teachers at this Association.

28. That each Local Association be urged to send at least one duly accredited representative each year, and we would further recommend that if two are sent that not both of these delegates be changed in each succeeding year.

29. That it be a request to the County Associations to forward to the Minister of Education, to their representatives in the Legislature, and to the Secretary of this Department, copies of all such resolutions of a general character as may be passed at their meetings.

30. That this Association communicate by circular with County Teachers' Associations to urge upon them to appoint a Committee to interview the for a fair reproto secure from Legislature.

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## KINDERGARTEN DEPARTMENT.

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interview the local member of the Legislature, to represent our claims for a fair representation on the Educational Council, using every effort to secure from him a promise of action at the next meeting of the Legislature.

# MINUTES OF KINDERGARTEN DEPARTMENT.

# TUESDAY, APRIL 12TH, 1898.

Meeting opened at 9.30, MISS CURRIE in the chair, and a good attendance.

After the opening songs and reading and adoption of minutes, Miss Currie spoke of the need for advanced training for Kindergartens. It was agreed that a Post-graduate course was to be desired and that the subject be further discussed.

MISS CODY then gave a paper on "Nature's Work," which was very much enjoyed, and in the discussion that followed, Mrs. Wyllie, Dr. Noble, and Miss Loveck, spoke of the great benefit derived by children from the Nature study in Kindergarten and by having living pets.

Reports from Frœbel Societies were read from Ottawa, Kingston, London, Toronto, Hamilton, and Guelph, showing great progression in the work.

Moved by MRS. WYLLIE, seconded by MISS WESTMAN, that Miss Readman's paper be postponed until Wednesday. Carried.

Meeting adjourned until the afternoon when Professor Tracy spoke on "Child Study" at the joint meeting.

# WEDNESDAY, APRIL 13TH, 1898.

After opening exercises, reading of minutes and their adoption, it was moved by MISS LOVECK, seconded by MRS. WYLLIE, that the new business arising from Miss Currie's opening address should be left over until Thursday. Carried.

MRS. WYLLIE gave notice of motion in regard to joining the I. K. U. MISS READMAN'S paper on "Practical Suggestions for Special Seasons" was then given and greatly enjoyed.

MR. JORDAN, President of the O. E. A., announced that the Mayor had been kind enough to invite the O. E. A.'s to a trip round the city, which invitation was accepted with thanks.

MISS MACINTYRE then gave a paper on "The Place of Gifts in the Kindergarten."

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MISS LAIDLAW followed with a paper on "Spirit and Method of the Games."

President		•	•	•	•	•		•	•	•	•	•		•	•	•	Miss	Macintyre.
Director	•	•	•	•	•		•	•	•	•	•	•	•	•	•	,	Miss	Currie.
Secretary	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	Miss	Laidlaw.

Meeting adjourned at 12 to meet in afternoon and hear Mr. MacCabe on the "Personality of the Teacher Reappearing in the Pupil."

# THURSDAY, APRIL 14TH, 1898.

After reading of minutes, opening exercises, and discussion of topics in Question Box, S. MOWER MARTIN, R.C.A., gave a paper on "Composition and Color," which received a very hearty vote of thanks from the Kindergartners.

MRS. WYLLIE moved, MISS BOWDITCH seconded the resolution, that the Kindergarten Department of the O. E. A. should join the International Kindergarten Union. Carried.

MISS LOVECK moved that a Committee be formed to arrange a Postgraduate course for Kindergarten Directors, and that the Education Department be waited upon to arrange for examination. MRS. WYLLIE seconded the motion. Carried.

Committee appointed were :--Misses Currie, Macintyre, Mackenzie, (London), Savage, Loveck, Bolton, Mackenzie (Brantford), and Mrs. Hughes.

Moved by MISS READMAN, seconded by MISS LOVECK, a hearty vote of thanks be tendered the retiring officers. Carried.

Meeting adjourned.

F. BOWDITCH, Secretary.

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The Trainin met at 10.30 a MR. J. J. Th pied the chair

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MR. L. R. Reporter. Moved by twenty-five ce that W. Wilson MR. T. A. R Study."

On motion,

The Depart The minutes Mr. T. A. R Messrs. Sudda was moved by Mr. Reid's pap Mr. F. Woo Professional T

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## TRAINING DEPARTMENT.

# MINUTES OF THE TRAINING DEPARTMENT.

## TORONTO, APRIL 12TH, 1898.

The Training Department of the Ontario Educational Association met at 10.30 a.m., in Principal Kirkland's room.

MR. J. J. TILLEY, of Toronto, the President of the Department, occupied the chair, and gave a short address of welcome to the members.

The minutes of last year were taken as printed.

MR. WM. SCOTT, B.A., of Toronto Normal School, as Convener of the Committee on "Educational Values of Subjects," reported progress. As Convener of the Committee he was retained, and asked to continue his negotiations with the Minister of Education.

MR. L. K. FALLIS, of Elora Model School, was appointed Press Reporter.

Moved by MR. SCOTT, seconded by MR. CAMPBELL, that a fee of twenty-five cents be collected in this Department for membership, and that W. Wilson, of Toronto Junction, be appointed Treasurer. Carried.

MR. T. A. REID, of Owen Sound Model School, read a paper on "Child Study."

On motion, the meeting then adjourned.

#### WEDNESDAY, APRIL 13TH, 1898.

The Department met at 9.10 a.m.

The minutes of the preceding session were read and confirmed.

Mr. T. A. Reid's paper on "Child Study" was then discussed by Messrs. Suddaby, Elliott, Campbell, Tilley and Rannie, after which it was moved by MR. ELLIOTT, B.A., seconded by MR. T. C. SMITH, that Mr. Reid's paper be printed in the Proceedings. Carried.

MR. F. WOOD, of Port Hope Model School, read a paper on "The Professional Training of Teachers."

Discussion followed by Messrs. Wilkinson, Hogarth, Suddaby, Barber and Reid.

Moved by MR. SUDDABY, seconded by MR. Row, that Messrs. Campbell, Barber, Elliott, Suddaby, Row and Wood, be a Committee to draw up some resolutions relative to the matter contained in Mr. Wood's paper, and report to this meeting at its next session. Carried.

The election of officers for the ensuing year then took place, resulting as follows:---

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Chairman	• •	• •	•••	•								•		•			Mr.	Wm		Scott,	B.A.
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DR. J. A. MCLELLAN, of the Normal College, Hamilton, read a paper on "The Problem of Education."

On motion, the Department adjourned.

# THURSDAY, APRIL 14TH, 1898.

The Department met at 9.10 a.m.

The minutes of the preceding session were read and confirmed.

1. That Junior Leaving Certificates be the minimum qualification for admission to County Model Schools.

2. That certificates be not granted to persons under nineteen years of age.

3. That the Model School term be extended to one year; that on the completion of the course and the successful passing of the final examination Third Class Certificates, valid for five years be granted; and that there be no renewals except in special cases where qualified teachers are not available.

4. That the Regulations of the Education Department be so amended as to permit of the following qualification for Inspector's Certificate viz.:—

That any person holding a First Class Professional Certificate up to 1898, and having taught successfully for five years in a Public School on the same, be granted an Inspector's Certificate on passing the Examination for Bachelor of Pedagogy as prescribed by the University of Toronto.

5. That the Regulations be so amended as to allow those who hold Second Class Certificates and who have taught at least two years on a Second Class Certificate, and who have the non-professional qualifications for a First Class Certificate or who have a degree in Arts from one of our Universities, be allowed to pass the Examination of the Ontario Normal College without attendance at that institution.

Moved by MR. CAMPBELL, seconded by MR. SUDDABY, that the report be adopted. Carried.

MR. CASSELMAN then read a very interesting paper on "The Place of Art in Education," after which it was resolved that the papers of Messrs. Casselman, Wood and McLellan, be printed in the Proceedings. Messrs. Bar a Committee

Moved by of the Trainin extended to t Model School reference to t

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seconded by M Inspector, be a Carried.

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On motion CHAPMAN then conferred on h appreciation of MR. ODELL v

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After a discu Knight, Kelly, seconded by M consisting of M date. Carried.

# INSPECTORS' DEPARTMENT.

Messrs. Barber, Suddaby, Wood, Campbell and Graham, were appointed a Committee to present the above report to the Minister of Education.

Moved by MR. BARBER, seconded by MR. LOUGH, that the thanks of the Training Department of the Ontario Educational Association be extended to the Education Department for its generosity to the various Model Schools throughout the Province, in adding valuable books of reference to their libraries. Carried.

A special session of Model School masters was then held to consider the advisability of preparing a book on "Methods of Instruction."

After considerable discussion it was moved by MR. WILKINSON, seconded by MR. JORDAN, that Mr. J. J. Tilley, Provincial Model School Inspector, be appointed to name a Committee to prepare such a book. Carried.

The thanks of the Department was extended to Mr. Tilley for the able manner in which he performed the duties of Chairman, after which the meeting adjourned.

# MINUTES OF THE INSPECTORS DEPARTMENT.

TUESDAY, APRIL 12TH, 1898.

At 10 a.m., in the Egyptian Room, Education Department, CHAIRMAN CHAPMAN opened the Department by calling on Inspector Platt to lead in devotional exercises.

On motion of MR. PLATT, seconded by MR. J. JOHNSTON, the Department then moved into the Library Room.

Minutes as printed were adopted.

MR. H. D. JOHNSON reported that sickness would prevent Inspector Brebner from being present at this meeting.

On motion the Secretary was appointed Press Reporter. MR. CHAPMAN then thanked his brother Inspectors for the honor they had conferred on him in electing him Chairman and expressed his high appreciation of their sympathy and good-will manifested towards him.

MR. ODELL was then introduced and read a paper on "How to Increase the Efficiency of Teachers' Institutes."

After a discussion of several points in the paper by Messrs. Platt, Knight, Kelly, Dearness and Johnston, it was moved by MR. DEARNESS, seconded by MR. J. C. BROWN, that the paper be referred to a Committee consisting of Messrs. Odell, Platt and Kelly, to report on it at a later date. Carried.

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INSPECTOR DAVIDSON was then introduced and read a paper on "Written Examinations and their Values."

On motion of DR. KELLY, seconded by MR. KNIGHT, the discussion on the paper was postponed till Wednesday morning.

The Department then adjourned.

# TUESDAY, APRIL 12TH, AFTERNOON SESSION.

At 2 p.m., a joint meeting of Inspectors', Public School Teachers', Training and Kindergarten Departments, was held in the Gymnasium. MR. W. F. CHAPMAN, Public School Inspector, Chairman of the Inspectors' Department, took the chair.

INSPECTOR EMBURY was then introduced and read a paper on "The Unification of Instruction."

After the reading of the paper, it was moved by MR. SUDDABY, seconded by MR. WILKINSON, that Mr. Embury be tendered a hearty vote of thanks for his able paper and that he be requested to allow it to be printed in the minutes. Carried.

DR. F. TRACY was then introduced and read a paper on "Sully's Recent Investigations of Child Study."

On motion of INSPECTOR FOTHERINGHAM, seconded by INSPECTOR DAVIDSON, a hearty vote of thanks was tendered Dr. Tracy for his excellent paper and he was requested to allow it to be printed in the minutes.

The Chairman requested Miss Currie, Chairman of the Kindergarten Department, to look after the publication of the paper, which was agreed to by Miss Currie.

On motion the joint meeting then adjourned.

# WEDNESDAY, APRIL 13TH, 1898.

Opened at 9 a.m., by INSPECTOR J. C. BROWN leading in devotional exercises.

The minutes of the first day were read and adopted. MR. DEARNESS moved, seconded by MR. J. JOHNSTON, that the Departmental Regulations re Third Class Professional Certificates, be amended by requiring that there be a distinct minimum test applied to each part of the Professional Examination. Carried.

On motion of MR. KNIGHT, seconded by MR. GORDON, the Chairman appointed Messrs. A. Brown, Prendergast and Summerby, a Committee on Resolutions.

Moved by MR. A. BROWN, seconded by MR. KNIGHT, that the matter

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# INSPECTORS' DEPARTMENT.

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of returning school registers to the Inspector at the end of the year be referred to the Committee on Resolutions. Carried.

INSPECTOR DEARNESS was then introduced and read a paper on "Science in the Public Schools."

After discussion by Messrs. Knight, Dearness, Platt, Carlyle, Smith and A. Brown, on motion of MR. WM. JOHNSTON, seconded by MR. J. JOHNSTON, a vote of thanks was tendered Mr. Dearness for his able paper, and it was referred to the Committee on Resolutions with Mr. Dearness' name added.

1. That representations be made to the Minister of Education on the unsatisfactory character of the Regulation defining the days of the week upon which the Annual Meeting of the County Institute is to be held and respectfully request that two teaching days be taken instead.

2. That Township Conventions be held for one day in each year with the two-fold object of securing the attendance of Trustees thereat, and promoting the more general observance of the regulations providing for a Teachers' Reading Course.

3. That when the sessions of the Normal Schools shall be extended to one year provision be made for the attendance of the masters during the months of May and June at the County Institutes.

> (Signed), G. D. PLATT, A. ODELL, M. J. KELLY.

On motion of MR. KNIGHT, seconded by MR. PLATT, the report was received and considered clause by clause. After discussion by Messrs. Knight, Tom, Johnston, Fotheringham, Robb, J. J. Craig and Deacon, all the clauses were voted on and lost.

Moved by MR. KNIGHT, seconded by MR. JOHNSTON, that the offer of the Mayor to take the members of the Convention around the city in the street cars be accepted with thanks. Carried.

INSPECTOR WM. JOHNSTON was then introduced and read a paper on "The Inspector's Work in Educating Trustees and People and How it may be Performed."

On motion of MR. DEACON, seconded by MR. FOTHERINGHAM, a vote of thanks was tendered Mr. Johnston for his able paper.

MRS. J. ROSE HOLDEN, of Hamilton, was then heard for a few minutes on the "Importance of Hygienic Foods for Children."

On motion of MR. KNIGHT, seconded by MR. J. JOHNSTON, she was

allowed half an hour on Thursday, at 2 p.m., to address the Department again on the same subject.

DR. TILLEY presented verbally the report of the Committee re Preparation of Forms, and reported progress.

The election of officers for the ensuing year resulted as follows :--- *Chairman*......Mr. H. D. Johnson, Strathroy. *Secretary*.....Dr. W. E. Tilley, Bowmanville. *Director*.....Mr. J. C. Brown, Peterborough.

INSPECTOR DEACON was then introduced and read a paper on "Methods of Securing Compliance with Departmental Regulations."

The paper was discussed by Dr. Tilley, Messrs. Tom, J. J. Craig, Dearness, Knight, Deacon, Robb, and others.

Moved by DR. TILLEY, seconded by MR. DEACON, that the Public School Inspectors of Ontario in Convention assembled, hereby extend to J. H. Smith, Esq., Inspector of Wentworth County, their warmest sympathy in his recent loss by death of his beloved wife, and express the hope that the same Divine grace which supported the wife and mother in her hour of trial may be the support and comfort of himself and family in this their sad bereavement. Carried.

Moved by MR. J. JOHNSTON, seconded by MR. KNIGHT, that all the papers read or addresses delivered before this Department be published in the minutes so far as the Secretary is furnished with a copy of the same. Carried.

The Department then adjourned.

# WEDNESDAY, APRIL 13TH, AFTERNOON SESSION.

At 2 p.m., a joint meeting of Inspectors, Public School Teachers', Training and Kindergarten Departments, was held in the Public Hall on the Education Department. MR. J. J. TILLEY, Chairman of the Training Department took the chair and introduced MR. JOHN MACCABE, LL.D., who read a paper on "The Personality of the Teacher Reappearing in the Pupil."

After discussion by Professor Clark and others, on motion a vote of thanks was tendered Mr. MacCabe for his able paper and he was requested to allow it to be published in the minutes.

As MR. TILLEY had, to leave he asked Mr. Alexander to take the chair. MR. LOCKHEED, B.A., was then introduced and he read a paper on "Natural Method, of Illustrating Phonics."

MR. J. W. ROGERS was then introduced and read a paper on "Supplemental Reading."

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# INSPECTORS' DEPARTMENT.

MRS. HOODLESS, of Hamilton, then addressed the meeting on "Domestic Economy in our Schools."

The meeting then adjourned.

# THURSDAY, APRIL 14TH, 1898.

The Inspectors' Department opened at 9 a.m., by INSPECTOR KNIGHT leading in devotional exercises.

The minutes of the second day were read and adopted.

MR. COLLES, being introduced, read a paper on "How Recent Departmental Regulations Affect Public School Inspectors."

After discussion by Messrs. Tilley, Dearness, Knight, Tom, A. Brown, Robb, Michell, J. C. Brown and Carlyle, it was moved by MR. COLLES, seconded by MR. KNIGHT, that Dr. Tilley, Mr. Reazin, and the mover, be a Committee to report on the pap<sup>o</sup>r at a later stage to-day. Carried.

The Hon. DR. Ross, Minister of Education, was then introduced, and addressed the meeting on various topics pertaining to the welfare of the Public Schools, and asked the Department to consider the following suggestions:—

1. That the Inspectors meet the Trustees, at least once a year, at the time of their semi-annual visits to the schools, and confer with them re improvements of the school premises.

2. That Inspectors give a public address in each school, at the close of one of their semi-annual visits.

3. That Trustees be paid one dollar each for meeting and conferring with the Inspector.

He further stated that it was his intention to ask the Legislature to make a grant sufficient to establish a library in each school section.

After discussion by a majority of the Inspectors present, it was moved by DR. TILLEY, seconded by INSPECTOR PLATT, that the officers of this Department, together with Inspectors Dearness and Carlyle, be a Committee to consider the Minister's suggestions, and confer with him on the same. Carried.

Moved by MR. DEARNESS, seconded by MR. PLATT, that the Model School Examination papers be sent out by the Education Department in some other way than in bags as in the past. Carried.

Meeting then adjourned.

# THURSDAY, APRIL 14TH, AFTERNOON SESSION.

The meeting opened at 2 p.m. by the Chairman calling upon the Secretary to read the minutes of the forenoon session. The minutes were then read and adopted.

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MRS. HOLDEN was then introduced, and read a paper on the "Importance of Hygienic Foods for Children."

On motion of MR. TOM, seconded by MR. J. JOHNSTON, a vote of thanks was tendered Mrs. Holden for her interesting paper.

INSPECTOR CARLYLE was then introduced, and read a paper on "The Character of the Work Done by Public School Teachers Graduating from our Training Schools."

Moved by MR. T. A. CRAIG, seconded by MR F. L. MICHELL, that we, the members of the Inspectors' Section of the Ontario Educational Association in Convention assembled, hereby express our sincere regret for the loss the educational interests of this Province has sustained through the death of our esteemed co-laborer, Inspector Smirle, and that the sympathy of this Section of the Convention be extended to the bereaved family. Carried.

MR. COLLES then presented the following report of the Committee on "How Recent Departmental Regulations Affect Public School Inspectors" :---

1. That the muneration of Inspectors, acting as presiding examiners at the Entrance and Public School Leaving Examinations, shall be \$4 a day and travelling expenses, and that he shall be paid at the same rate for the issuing of certificates and diplomas, and any other necessary work n connection with this examination.

2. That he rates of remuneration of Inspector fixed for acting as arbitrator or for deciding disputes as to Trustee elections, should be extended to cover the settlement of all disputes and difficulties which the Inspector is called upon to decide.

3. That all accounts connected with the conducting of the July examinations be paid by the Education Department, all fees being remitted to the Department instead of to the High School Board.

4. That the regulations governing the payment of the Public School Inspector, or other presiding examiner at the July Examinations, shall be made to provide reasonable remuneration for all necessary duties in connection with these examinations, and at the same rate per diem. This resolution has in view the making of the lists of candidates, the preparation of room and papers for the examinations, and providing botanical specimens for candidates, together with the actual expense connected with this latter.

(Signed) V

W. E. TILLEY. W. H. G. Colles. H. Reazin. The report first and thir The report, a on motion ac The Comm

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# INSPECTORS' DEPARTMENT.

The report was then considered clause by clause, and voted on. The first and third clauses were declared lost, the second and fourth carried. The report, as amended by striking out the first and third clauses, was on motion adopted.

The Committee, re The Minister of Education's Suggestions, asked for instructions from the Department, and the matter was then taken up.

Moved by MR. COLLES, seconded by MR. CARLYLE, that it is the sentiment of this Inspectors' Department that if any change be made in the School Law regarding the delivering of lectures in the several school sections, that it be to make recommendatory instead of compulsory the clause which requires the Inspector to deliver lectures. Carried.

Moved by DR. TILLEY, seconded by MR. WM. JOHNSTON, that in the opinion of the Inspectors' Department of the Ontario Educational Association, the efficiency and well-being of our rural schools would be materially promoted were the Government grants to them distributed in part, at least, as they are to High Schools, rather on the condition of the school premises than on the basis of average attendance. The Public School Inspectors desire to respectfully urge this on the attention of the Honorable the Minister of Education, and would suggest that the grants be distributed to rural schools under, at least, three headings: (1) Grounds, (2) Building, (3) Supplies. Lost.

Moved by MR. PLATT, seconded by MR. A. BROWN, that discretionary powers be given Inspectors to confer with trustees and people of such sections as are most in need of improvements of their school premises. Carried.

Moved by MR. PLATT, seconded by MR. J. JOHNSTON, that the proposal to pay trustees one dollar each for each visit, when conferring with the Inspector *re* improvements of school premises, etc., be not favored. Carried.

On motion of MR. JNO. DEARNESS, seconded by MR. H. D. JOHNSON, a hearty vote of thanks was tendered Chairman Mr. W. F. Chapman for the able, kind and dignified manner in which he presided over the meetings.

The Convention of 1898 was then declared closed.

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# MINUTES OF THE TRUSTEES' DEPARTMENT.

Visitor-The Hon. G. W. Ross, LL.D., etc., Minister of Education, Ontario.

#### DELEGATES.

Public School Boards—Aurora, J. R. Rutherford, M.D.; Brantford,
John A. Leitch and Charles H. Hartman; Galt, Alexander Lindsay;
Georgetown, C. C. Roe; Milton, Dr. D. Robertson; Mount Forest,
M. O. MacGregor; Neumarket, H. Pretty; Ottawa, George S. May and
James Gibson; Picton, Frank Terwilligar; Port Hope, James Evans;
St. Catharines, Carl E. Klotz, L.D.S.; Thorold, Rev. W. A. Cook, B.A.;
Toronto, S. W. Burns, H. A. E. Kent, C. C. Norris, J. Noble, M.D.,
R. S. Baird, Joseph C. Clark; Woodstock, A. McLay, M.D.

Boards of Education—Guelph, Hugh McMillan and R. L. Torrance; Hamilton, A. McPherson and Algernon Wolverton, M.D.; Kingston, S. W. Dyde, M.A., Sc.D., and George Y. Chown, B.A.; Lindsay, Col. James Deacon and Thomas Stewart; Newburgh, George Anson Aylesworth; Oshawa, L. K. Murton, B.A., and E. Mundy; Owen Sound, (Judge) John Creasor and R. McKnight; Paris, John Allen and John Penman; Pembroke, James H. Burritt, B.A.; Perth, Charles Meighen; Peterborough, Louis M. Hayes; Trenton, Rev. W. T. Wilkins, B.A., and A. W. Hawley; Whitby, J. E. Farewell, LL.B., and John Ball Dow, B.A.

High School and Collegiate Institute Boards—Arthur, John Anderson; Aurora, Rev. Walter Amos; Barrie, (Judge) John A. Ardagh, B.A.; Berlin, A. Werner (Elmira); Bowmanville, J. B. Fairbairne; Brampton, Rev. Wm. Walsh; Chatham, (Judge) A. Bell; Cobourg, Rev. John Hay, B.D.; Dunnville, John Parry, and S. W. Brown, L.D.S.; Georgetown, Chas. McKinlay, L.D.S.; Mount Forest, M. O. MacGregor; Orangeville, Rev. G. G. McRobbie, Sc.D. (Shelburne); Thorold, Rev. W. A. Cook, B.A.; Waterford, A. M. Little.

County Councils (for Rural Public Schools)—Ontario County, Peter Christie, Manchester; Lennox and Addington County, Bowen E. Aylesworth, M.PP., Bath; York County, W. H. Johnston, Pefferlaw, and R. J. Gibson, B.A., Deer Park.

Honorary Member-Rev. Alexander Jackson, M.A., Ph.D., Cleveland, Ohio.

The Twel Trustees of ( ment, at 1.30 After the called upon prayer.

Mr. Leitch appointed to

The minute April, 1897, motion of M McKINLAY, o first part of the motion, made McGillivray's Fees," be not Mr. Roberts of Arthur, we

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# TRUSTEES' DEPARTMENT.

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## FIRST SESSION.

# TUESDAY, 12TH APRIL, 1898.

The Twelfth Annual Convention of the Public and High School Trustees of Ontario, began in the Examiners' Room, Education Department, at 1.30 p.m.

After the registration of Delegates, the President, COL. JAS. DEACON, called upon the Rev. W. T. Wilkins, B.A., to open the meeting with prayer.

Mr. Leitch, of Brantford, and Rev. Mr. Wilkins, of Trenton, were appointed to report to the press the daily proceedings.

The minutes of the proceedings of this Department, 21st and 22nd April, 1897, as printed in pamphlets, were taken as read, and upon motion of MR. JOHN ANDERSON, of Arthur, seconded by MR. CHAS. McKINLAY, of Georgetown, were adopted, after the insertion in the first part of the minutes of the afternoon session of 22nd April, of the motion, made by MR. ANDERSON, seconded by JUDGE BELL, that Dr. McGillivray's paper on "Too many Examinations, Costing too Much in Fees," be not received. Carried.

Mr. Robertson McKnight, of Owen Sound, and Mr. John Anderson, of Arthur, were appointed Auditors.

The following report of the Treasurer was read :--

"The bills and accounts properly pertaining to this Trustees' Department, are all paid, leaving in the Treasury a balance of \$35.08,"

GEO. ANSON AYLESWORTH,

NEWBURGH, 9th April, 1898. Treasurer Trustees' Association.

On motion the Treasurer's report was received and referred to the Auditors.

The Secretary read a report detailing the affairs of this Association during the past twelvemonth, especially as to the printing and distribution of pamphlet copies of proceedings of this Department. On motion the Secretary's report was received and referred to a Committee composed of Messrs. Farewell, Anderson and McKinlay, with instructions to report to-morrow.

The President, COL. JAS. DEACON, of Lindsay, delivered an informal address, congratulating this Association upon the fact, evidenced by the large attendance, that the Boards of School Trustees throughout the Province have not lost interest in this Trustees' Department. He claimed for the Trustees that their work is disinterested; that they have no axes to grind. He deprecated the feeling of jealousy toward

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High Schools manifested in some quarters : our High Schools are not the creations of the Government, but the outcome of the people's will. They deserve to be fostered, for they are the poor boy's university. He made an affecting reference to the late Col. Cubitt, of Bowmanville, who was with us at our last Convention, and with whom he himself had been intimately associated ever since the Fenian raid in 1866. For upwards of forty-three years the late Colonel had been a School Trustee; in his death this Association—the Province itself—sustained a serious loss. The President concluded his address by thanking the Association for conferring upon him the honor of electing him to the chair.

MR. JOHN A. LEITCH, Chairman of the Public School Board, Brantford, read a paper entitled :---

# SUBJECT—" That this Department Memorialize the Minister of Education to the Effect, that no Teacher, who is Under Twentyone Years of Age, be Granted a Professional Certificate."

At the conclusion of Mr. Leitch's paper it was moved by MR. LEITCH, seconded by MR. TERWILLIGAR, of Picton, "That in the opinion of this Association of Trustees, no teacher under twenty-one years of age should hereafter receive a Professional Certificate." The following are some of the remarks made during the discussion of the motion:

MR. J. H. BURRITT, Pembroke, hoped the passing of this resolution would tend to lessen the number of those eager to teach; the experience of his Board was that at every vacancy applicants were literally tumbling over one another.

MR. ANDERSON, Arthur, pointed out that age is not all: He said, "I know people matured at fifteen years of age better than some of us were at sixty."

MR. KLOTZ, St. Catharines, thought it wise to raise the age-standard in the hope of securing to the profession those that will remain teachers. Young ladies now, just when they have become most fit teachers,—get married.

MR. MCKNIGHT, Owen Sound, argued that without any change in the present law, the evils complained of might be remedied by a discreet Board of Trustees.

JUDGE ARDAGH, Barrie, said that the law undoes and annuls contracts entered into previous to twenty-one years of age; but what the unripe teacher does, cannot be undone.

DR. ROBERTSON, Milton, had closely watched teachers in training at Model School; those between eighteen and twenty-one years of age were the best lacking of te if fit; if not

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# TRUSTEES' DEPARTMENT.

were the best teachers; those over twenty-two or twenty-three seemed lacking of teaching ambition, they were going into other walks of life, if fit; if not fit, they would remain teachers.

MR. FAIRBAIRNE, Bowmanville, saw the necessity of educating the rural Public School Trustee. The P.S. Inspector ought to be consulted, and his advice sought in choosing a teacher. He asked if anybody would be likely to choose \$275 a year, if he could get more in some other occupation? It was a great credit to a boy to fit himself at an early age to be a teacher. It would be a hardship to the poor to debar their children from teaching till they were twenty-one.

JUDGE BELL, Chatham, called attention to the fact that this question is only one of degree, since *age* is now one of the legal qualifications of a teacher. Salaries are poor because *teachers* are crowded out by infants. If a person is a good teacher before twenty-one, it stands to reason that he would be a better one after that age.

REV. MR. WILKINS, Trenton: "Young women are as mature at eighteen, as men at twenty-one."

MR. CHAS. MEIGHEN, Perth, Boards are apt to accept youths because they come cheaper; the youths may get experience at the pupils' expense. As there are very many more pupils than teachers, the interests of the pupils should be most considered.

MR. ALEX. LINDSAY, Galt. This motion would tend to make teachers scarcer, and therefore able to command better salaries. Age is not the proper criterion, the standard of literary requirements should be raised. If the age limit is raised, the children of the rich can afford to wait; the children of the poor will be shut out whatever their ability.

REV. WM. WALSH, Brampton. "The Trustees say, 'Give us teachers, -not boys and girls,-and we'll pay them.'"

MR. HAWLEY, Trenton, very young teachers not only tend to reduce salaries, but to fill the schools with teachers that are worthy only of " small salaries.

MR. FARWELL, Whitby, at sixteen years of age was given charge of a school of ninety-five pupils; has often wondered since that he didn't shipwreck the whole institution. We ought to look after the interests of the schools and of the pupils.

MR. BAIRD, Toronto, feared that if the age-limit were raised to twenty-one years, it would shut out from teaching, too many of the very brightest youths.

MR. LEITCH closed the debate. He remarked that probably it would be his last opportunity of attending the Conventions of this Association;

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since "it is a custom in our town, that when a man has been once Chairman of the School Board, he goes into oblivion forever after."

The resolution was carried by a majority of four votes.

On motion Mr. Leitch's paper was received with thanks, and ordered to be printed in the proceedings.

Moved by MR. J. E. FAREWELL, seconded by MR. J. B. FAIRBAIRN,

Whereas since the last meeting of this Association Lieut.-Col. F. Cubitt, of Bowmanville, one of its oldest and most respected members, has departed this life, the members of this Association desire to place on record the esteem in which that gentleman was held by us, and the great loss the cause of education has sustained by his lamented death. Col. Cubitt was a gentleman of much ability, he had received a liberal education and his life was spent for the benefit of his fellow-citizens. From the time of the Trent affair in 1863 he was connected with the Volunteer Force, and for thirty-three years ably commanded the 45th Battalion of Volunteers. He was an enthusiastic and generous patron of the manly athletic sports which have done so much to improve the physique and character of the British people.

In municipal matters he took an active part, and was honored by his fellow townsmen with the highest offices in their gift. Col. Cubitt for the last forty-three years of his life served as a Public or High School Trustee for the town of Bowmanville, a record of valuable public service which has seldom or ever been equalled in this Province.

Therefore be it resolved,

First,—that this meeting hereby extends to Mrs. Cubitt their sincere sympathy with her in her bereavement.

Second,—that a copy of this resolution be engrossed and presented by Col. Deacon and the mover and seconder.

The foregoing resolution was carried unanimously: the delegates standing, and in silence.

At 5.40 p.m., the Convention adjourned.

#### SECOND SESSION.

# WEDNESDAY, 13TH APRIL, 1898.

At 9.30 a.m. the President, COL. DEACON, called the Convention to order; and REV. MR. WALSH led in prayer.

Moved by S. W. BROWN, L.D.S., Dunnville, seconded by MR. THOS. STEWART, Lindsay,

Whereas it is provided by sections 30 and 31 of the High School Act that the Municipal Council of every County shall contribute towards the n in villages an therein set for the said towns maintenance of amount contrishall be necess

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Be it therefo said High Scho towns, villages

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The following President—H First Vice-Pr Second Vice-J Secretary-Tre ton County.

# TRUSTEES' DEPARTMENT.

towards the maintenance of High Schools in unseparated towns and in villages and townships within such County in the proportions therein set forth. And whereas, under the provisions of the said Act the said towns, villages and townships are obliged to provide for the maintenance of such High Schools such an amount in excess of the amount contributed by the Municipal Councils of the Counties as shall be necessary to maintain such schools.

And whereas such towns, villages and townships are also required to provide the buildings required for the purposes of such High Schools. And whereas by the Municipal Act it is provided that such towns, villages and townships shall be assessed by the Municipal Councils of the Counties within which they lie, amongst other things, for the maintenance of the High Schools within their limits, thereby contributing towards the amount which they, the said Municipal Councils of such Counties, are required by law to contribute towards the maintenance of High Schools for the purpose of educating pupils outside the limits of such towns, villages and townships.

Be it therefore and it is hereby resolved that the provisions of the said High School Act and Municipal Act work an injustice to the said towns, villages and townships.

And it is further resolved that the Local Legislature of Ontario be memorialized to so amend the said Statutes that the cause of such injustice may be removed, and that High School districts be exempt from paying any part of the amount of the county appropriation over and above the amount equal the amount of the Government grant.

After Dr. Brown's motion had been discussed briefly by a number of delegates, the time appointed for the election of officers having arrived, it was moved by MR. LEITCH, seconded by REV. MR. WILKINS, and resolved, that it be referred to a Committee consisting of Messrs. Burritt, Stewart, Judge Creasor and Dr. Brown, to consider Dr. Brown's motion, and submit a report thereon at the next meeting of this Association.

The Auditors, Messrs. John Anderson and Robt. McKnight, reported that they had examined the Treasurer's receipts and disbursements, and the vouchers therefor, for the year 1897-8, and had found the same correct. On motion the Auditor's report was received and adopted.

The following were elected officers for 1898-9 :--President-His Honor, Judge John Creasor, Owen Sound. First Vice-President-George Y. Chown, B.A., Kingston. Second Vice-President-John A. Leitch, Brantford. Secretary-Treasurer-Geo. Anson Aylesworth, Newburgh, Addington County.

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After the above-named officers had been elected by ballot, a Committee consisting of Messrs. Burritt, Dow and Stewart, was appointed to nominate the Executive Committee. The Committee made the following nominations, which were confirmed by the Association.

Executive Committee—His Honor Judge John A. Ardagh, B.A., Barrie; Mr. John Allen, Paris; Mr. John Anderson, Arthur; Rev. J. Hay, B.D., Cobourg; Mr. Herbert A. E. Kent, Toronto; Mr. Karl E. Klotz, L.D.S., St. Catharines; Mr. George S. May, Ottawa; Mr. F. Terwilligar, Picton; Mr. Thomas Stewart, Lindsay; Mr. A. Werner, Elmira; Rev. W. T. Wilkins, B.A., Trenton.

In addition to the above-named officers and elected members, the Executive Committee includes *ex officio*, ex-Presidents, Farewell, Bell, Somerville, MacCraken, McRobbie, Lazier, Dow, Jackson, Burritt and Col. Deacon.

In the absence of Mr. N. McNamara, Walkerton, the topic suggested by him,—"That it is desirable to institute in our High Schools a course of instruction on Good Manners," was introduced by the Secretary. The Rev. Mr. Walsh pointed out that the teachers are already overcrowded with work. His Honor Judge Ardagh suggested a doubt whether all High School teachers are prepared to give instruction on this subject, text-books being out of the question. He concluded that unconscious imitation, and good examples at home, were the best means by which the pupils might acquire good manners. Mr. J. E. Farewell, LL.B., Q.C., said that the Japs impart to their young people systematic instruction in manners; but one result is that they are a people so exceedingly polite that it is difficult to transact business with them.

At noon the meeting adjourned.

#### THIRD SESSION.

# WEDNESDAY, APRIL 13TH, 1898.

The Trustees' Department reassembled, the PRESIDENT in the chair. MRS. HOODLESS, of Hamilton, addressed the Convention on the subject of "Domestic Science," advocating education along the lines of home life; young girls ought to be instructed how to cook, erroneous habits of eating, and ill-cooked food causing greater mischief and wretchedness than alcoholic excess. Girls should be instructed at school, also how to use the needle.

At the conclusion of the lady's address, it was moved by MR. JOHN A. LEITCH, seconded by REV. W. T. WILKINS, that a very hearty vote of thanks be given Mrs. Hoodless for the interesting address delivered by her; and t great importan promise to tak

The PRESID Mr. J. E. Fare this Departme Association; a allowance of \$ the Secretary

On motion t adopted.

The Hon. G Convention, an Mr. Farew

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## TRUSTEES' DEPARTMENT.

by her; and that the members of this Department recognizing the great importance of the subject to which she has called their attention, promise to take it into consideration. The motion was carried.

The PRESIDENT reported that the Executive Committee nominated Mr. J. E. Farewell, LL.B., Q.C., as Director for the year 1898-9, from this Department to the Board of Directors, Ontario Educational Association; and that the Executive Committee recommend that an allowance of \$40 from the funds of this Department be tendered to the Secretary for services during the year 1897-8.

On motion the report of the Executive Committee was received and adopted.

The HON. G. W. Ross, Minister of Education, Ontario, entered the Convention, and was invited to a seat beside the President.

MR. FAREWELL read a paper entitled :

Should Teachers be Engaged upon the Understanding that all Engagements to Teach will Terminate Annually; and that Boards will Annually make new Appointments, for which Explicit Applications shall be Made.

It was moved by MR. FAREWELL, seconded by MR. MCPHERSON, "that in the opinion of this Association it is expedient that all engagements of teachers should terminate annually, and that application for reappointment should be made annually."

In amendment, it was moved by REV. MR. WILKINS, and seconded by JUDGE CREASOR, That the word "expedient" and all the words that follow it be struck out; and the following substituted, "not advisable that any further action be taken by this Association in this matter, as the law at present allows sufficient latitude to Boards of Trustees."

In amendment to the amendment, it was moved by MR. J. NOBLE, M.D., seconded by MR. JOHN ANDERSON, that in the original motion all the words after "Association" be struck out, and these words inserted, "teachers should be engaged in June of each year."

The following are a few of the points brought out in the discussion of this question :

Yearly termination of engagements would force all the Boards to take into consideration at least once a year, the qualifications of the teachers.

To advertise for applicants when there are no *real* vacancies, would be unfair to the profession.

Some Boards name a Standing Committee, who with the Chairman, and the Principal, every year in strict confidence, consult as to the

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work done by each teacher; if satisfactory, the teacher receives a graded increase of salary; if not *quite* satisfactory, the teacher is reengaged at the same salary; if unsatisfactory, the teacher receives a hint,—and goes.

To pass a resolution of dismissal of a teacher, is a cruel thing, and often very difficult; this plan would do away with the necessity of affirmative action by the Board: unsatisfactory connections could be severed quietly by a merely negative act.

The original motion was lost by a narrow majority; so also was the amendment; the amendment to the amendment was withdrawn.

The Hon. GEORGE W. Ross, LL.D., etc., Minister of Education, Ontario, was by resolution requested to address the Convention. The following is a summary of what the Hon. gentleman said: He referred to the resolution adopted yesterday by this Department as to raising the agelimit of teachers' certificates; as soon as public opinion is ready for it, there will be the desired legislation; and the proceedings of this Association were among the means of educating public opinion.

He asked this Association of Trustees to advise him how to make School Inspectors' official visits more useful. High School Inspectors had been in the habit of arriving unannounced; would it be better to notify the Trustee Boards of their coming, so that at the time of their visits the Boards could be called together, and face to face with the Inspector discuss the welfare of their schools? The Trustees could derive great advantage from the counsels of the expert Inspectors; and were the Inspectors better acquainted with the limits of the means at the disposal of the Boards in the various localities, they could better determine how far with safety and benefit to apply official pressure in the matter of required improvements.

And it is regrettable that Public School Inspectors officially form the acquaintance of so few but the teachers and pupils. They ought to be in close touch with the Trustees to whom they could be of material assistance. In Massachusetts they have a Visiting Committee in every School Board whose duty it is to visit the school regularly, and to ascertain, and report to the Board the requirements of the school. The members of the Visiting Committee are paid a fee for every official visit. But the Massachusetts method costs; and Trustees are apt to ask "can we get the money?" Would it be well to try some such plan in our schools? To accompany the Inspector on his official visits to their school, would be very helpful to the Trustees. At present the sanitation of closets of rural public schools is most unsatisfactory,—in winter especially; the school-rooms themselves are too generally not well enough cle throughout the Can Trustees b it to pay Truste

Dr. Ryerson I and the Departu officials, the Ins once a year? Public Schools, nence were gala somewhat abou with benefit. " secret. The rat I am thankful to you have afforded

A hearty vote moved by JUDO BAIRD, of Toron animously rising especial promine questions sugges

MR. FAREWEL "Should any ste situations, t engagement stances be au

It was moved that in the opini application by commence before be condemned, an not be accepted.

MR. MCKNIGH for other situatio other schools."

MR. Dow,—"I of teachers in the MR. MEIGHEN,wise to try to kee REV. MR. WILL Boards to fill vac

## TRUSTEES' DEPARTMENT.

well enough cleaned. The Inspectors have been visiting and reporting throughout these twenty years, yet these evils remain unremedied. Can Trustees be induced to visit the school? Will the people stand it to pay Trustees for visiting?

Dr. Ryerson had means of direct communication between ratepayers and the Department. Can we not afford to require the Department's officials, the Inspectors, to lecture to the ratepayers publicly at least once a year? The old time public examinations, or expositions, of the Public Schools, when addresses were delivered by local men of eminence were gala-da's; they had a stimulating effect, even though vanity somewhat abounded. As an institution might they not be revived with benefit. "We have examinations enough now, but they are all secret. The ratepayers hold the purse; will you arouse the ratepayers? I am thankful to you as an Association of Trustees for the great help you have afforded me in many difficulties. Can you aid me in these?"

A hearty vote of thanks to the Hon. the Minister of Education was moved by JUDGE CREASOR, of Owen Sound, seconded by MR. R. S. BAIRD, of Toronto, and adopted by the Association, the Delegates unanimously rising to their feet; and the Secretary was directed to give especial prominence in the programme for our next Convention, to the questions suggested in the Hon. gentleman's address.

MR. FAREWELL read a paper entitled :

"Should any steps be taken to prevent teachers from applying for other situations, the duties of which commence before those of the current engagement cease; and should resignations under such circumstances be accepted ?

It was moved by MR. FAREWELL, seconded by MR. TERWILLIGAR, that in the opinion of the members of this Association, the making of application by teachers for situations, the duties of which are to commence before the termination of their current engagements, should be condemned, and that resignations under such circumstances should not be accepted.

MR. MCKNIGHT,--" If the teacher has no right to make application for other situations, the Trustee Boards have none to take teachers from other schools."

MR. Dow,—" It is in the interest of the pupils not to allow a change of teachers in the middle of a term."

MR. MEIGHEN,—" Trustees ought not to make cast-iron rules. Is it wise to try to keep a teacher who wants to go?"

REV. MR. WILKINS,—"In case of the death of a teacher,—how are Boards to fill vacancies?"

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MR. LEITCH,—" It would be cruel to a teacher to prevent him from bettering himself."

MR. BURRITT,—" Let every case be dealt with on its own merits."

JUDGE BELL,—" I am in sympathy with the motion if it means only to condemn the practice. Boards should refrain from robbing one another."

With the consent of the Association the resolution was at this stage withdrawn from further discussion.

Moved by MR. BURRITT, seconded by DR. RUTHERFORD, that both the papers read by Mr. Farewell be received with thanks, and incorporated in the Proceedings. Carried.

Moved by MR. THOS. STEWART, of Lindsay, seconded by MR. S. W. BROWN, L.D.S., of Dunnville, that the Public and High School Trustees' Department of the Ontario Educational Association be separated from the said Association; and that henceforth this said Department form an independent Association as formerly, to be known as "The Provincial Association of Public and High School Trustees of Ontario," and that all the steps necessary and proper to the accomplishment of this end, be taken.

This motion led to a very animated discussion, in the course of which the relations of this Department to the Ontario Educational Association were reviewed. Some proposed that without secession, this Department should meet as it did previous to affiliation, in November, which might obviate some of the difficulties now being labored under. Others voiced the opinion that the differences between this Trustees' Department and the others composing the Ontario Educational Association, were more radical, they being nearly all theoretic, and scientific, and mass meetings, while the Trustees' Department is a delegated body whose aims are altogether practical. Delegates that had been members of the Trustees' Association, since its inception, in 1887, expressed their conviction that the meetings previous to affiliation were better attended; and having the advantage of an evening session, kept busy men away from their avocations a less number of days. The influence and power of usefulness then exerted, seemed to exceed that wielded since affilia-The chronic difficulty with regard to the printing of the pamphtion. let copies of this Department's Proceedings, was also discussed. It was finally agreed that the motion should go upon the programme for 1899, as a notice of motion for further discussion at the Annual Meeting of that year.

After the President, in a brief historical review, had demonstrated that there had never yet been manifested any lack of patriotism on the part of the people of Canada, the session adjourned.

# At 9.30 a.m. HIS HONOR

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#### TRUSTEES' DEPARTMENT.

## FOURTH SESSION.

# THURSDAY, APRIL 14TH, 1898.

At 9.30 a.m. the Convention reassembled, the PRESIDENT in the chair.

HIS HONOR JUDGE ARDAGH, of Barrie, introduced the subject, "Has the Public School Leaving Examination Practical Value?" He pointed out the difficulty of admitting to Form II. of the High School those who have simply taken the Public School Leaving Examination, and yet wish to pursue their studies further in the High School; for they lack instruction in some parts of the First Form of the High School—and so are handicapped. He asked "What is the remedy?" and suggested, (1) abolish the Entrance Examination; (2) instructs Principals of High Schools to provide no elementary instruction in Form II.; (3) re-cast the programme of studies for Form II. to constitute programme for Form I.

In the discussion that followed, MR. L. K. MURTON, B.A., of Oshawa, said better work could be done and is done in the First Form of the High School, than in the Fifth Form of the Public School. But no fees ought to be charged for the First Form of the High School.

JUDGE BELL, of Chatham, said every child is entitled to Fifth Form education *free*, whether it is imparted in the Public School or in the First Form of the High School. People err in thinking High Schools cost too much compared with Public Schools. High Schools in their First Forms are really doing a large amount of Public School work.

JUDGE CREASOR, Owen Sound, said although the pupils in Form I. of the High School are not to be charged fees, yet their tuition increases the total cost of the High School. The expense of the High School Form I. ought to be charged against the Public School.

MR. WERNER, Elmira, said the child's future avocation ought to determine whether it should remain in the Fifth Form of the Public School, or go into the High School, where it could begin the languages at an earlier age.

DR. BROWN, Dunnville, said parents are often willing to pay fees in order to have their children in the High School.

REV. MR. WILKINS, Trenton, observed that County Councils might impose fees on County pupils of the High School, Form I, although the said pupils by another law are entitled to that extent of education free of charge.

MR. STEWART, Lindsay, said the man who could contrive a school law which would perfectly fit every case, would be greater than the man who could contrive a perfect scheme of taxation.

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MR. Dow, Whitby, said the interests of rural schools demand the Fifth Form in the Public School. All over the country pupils are leaving school too soon, without either having sufficient education, or ever entering a High School. Inspectors nearly all say that the Leaving Examination is having a good effect.

REV. MR. WALSH, Brampton, "The going of a pupil to a High School often leads him into an occupation for which he is not fitted."

MR. LEITCH, Brantford, said the overlapping of the High and the Public School work causes the difficulty. He would let no child enter a High School till after it had passed the Public School Leaving Examination.

JUDGE ARDAGH, Barrie, said that as things now are those that mean to go to the University ought to go to the High School immediately after the Entrance Examination. If they wait to pass the Leaving Examination, and then enter the High School Form II., they lose one year's instruction in languages. He gave notice of motion for the next convention, "That in the opinion of this Trustees' Association, the present High School Entrance Examination should be done away with ; and that it should be necessary for all pupils, hereafter, to pass the Public School Leaving Examination before entering a High School."

Owing to the near approach of the time for adjournment, the question, "Does the Public School course comprise too many subjects? If so, what subjects should be omitted?" was left to form part of next year's programme.

After a brief discussion of the next topic, it was moved by MR. FAREWELL, LL.B., etc., seconded by JUDGE CREASOR, That in the opinion of this Association, more attention should be given in the Public Schools to the study of Mensuration. The motion was declared carried.

MR. FRANK TERWILLIGAR, representing Picton Public School Board, read a paper on the topic, "The Public School as a Social Factor."

On motion of MR. MAY, Ottawa, seconded by DR. KLOTZ, St. Catharines, Mr. Terwilligar's paper was received with the thanks of this Association.

Moved by MR. L. K. MURTON, B.A., Oshawa, and seconded by MR. JOHN ANDERSON, Arthur, That the cordial and appreciative thanks of this Department be tendered to Col. Deacon, our retiring President, for the able, impartial, and courteous manner in which he has throughout the term of his tenure of office discharged its important duties.

JUDGE CREASOR put the motion, whereupon the delegates rose to their feet and carried it with unanimous enthusiasm.

The PRESIDENT responded briefly ; he said the Trustees' Association

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The discussi Jas. C. Rogers, the next meeti

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# TRUSFEES' DEPARTMENT.

was to be valued not merely for its good influence upon educational affairs, but also because it brought people together from all parts of the country, and gave opportunity for the foundation of enduring friend-ships.

After heartily singing, "For he's a jolly good fellow," the delegates resumed their seats.

Moved by MR. Dow, of Whitby, seconded by HIS HONOR JUDGE BELL, of Chatham, and resolved, that the intended action of the Minister of Education in discontinuing the granting of Primary Teachers' Certificates meets with the approval of this Department.

The discussion of the various educational changes proposed by Mr. Jas. C. Rogers, Principal High School, Bradford, was postponed until the next meeting.

Moved by MR. Dow, seconded by MR. ANDERSON, and resolved, that the Executive Committee of this Department be hereby authorized and requested to ask from the General Association the sum of One Hundred Dollars, or such less sum as in the opinion of the said Executive, will enable the Secretary to publish and circulate the Proceedings of this Department.

The REV. MR. WALSH, Brampton, leading in prayer, the Convention brought its deliberations to a close.

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#### FINANCIAL STATEMENT.

# FINANCIAL STATEMENT

# ONTARIO EDUCATIONAL ASSOCIATION

# 18**97-8**.

Balance from last Statement	\$139	03
Members' Fees		00
Advertisements in Proceedings		00
Sale of Proceedings	126	76
Ontario Government Annual Grant	600	00
	\$1,116	79

#### FXPENDITURE :---

RECEIPTS :-

Printing Circulars, Programmes, etc.	\$ 44	40
Printing, Binding and Publishing Proceedings		06
Expenses of Convention		75
Secretaries of Departments	36	00
Board of Directors, Railway Fare attending the November Meeting	28	50
Postage, Mailing, Express, etc	39	96
Reporting Evening Meetings	18	75
Salary General Secretary		00
Salary Treasurer	20	00
Lecturer (Dr. Hinsdale)	50	00
Balance on hand		37
	\$1,116	70

Respectfully submitted,

R. W. DOAN, Secretary. W. J. HENDRY, Treasurer.

# AD

# ONTARIO

ADDRESSES

MR. A. HEN MR. CHAIRM indeed a pleas ers' Associatio Toronto Publi tion was of ve with the grow somewhat sim The staff of H 600. I trust devoted to the Inspectors and School Board, good work. ( Ontario Associ very interestin teachers it mig what we do. teachers of th observe the tea afternoon this done as well as hold grade con teresting gath where some se These discussion upon your pro discussions we

# ADDRESSES AND PAPERS.

# ONTARIO ASSOCIATION AND DOMINION ASSOCIATION.

ADDRESSES DELIVERED AT THE OPENING OF THE CONVENTION.

MR. A. HENDRY said :---

MR. CHAIRMAN, LADIES AND GENTLEMEN :- It is my privilege, and indeed a pleasure, to extend to you the greetings of the Toronto Teachers' Association. The Toronto Teachers' Association is composed of Toronto Public School teachers. A number of years ago this Association was of very small dimensions, but you will readily understand that with the growth of the city, the growth of the Association would be somewhat similar, so that it has now reached very large proportions. The staff of Public School teachers now amounts to something over 600. I trust they are a noble 600. I know that they are greatly devoted to their work, and under the guidance of able and enthusiastic Inspectors and with the co-operation and assistance of a very liberal School Board, they are enabled to do what I consider to be very fairly good work. Our Association, which probably equals or exceeds the Ontario Association in numbers, holds regular meetings, which are of a very interesting kind, and perhaps to you who are Public School teachers it might not be out of place just to describe in a few words what we do. We meet twice a year. In the fall term of the year teachers of the same grade visit selected classes, where they may observe the teaching during the fore part of the day, and then in the afternoon this is followed by discussions upon the work which has been done as well as upon other topics. During the first half of the year we hold grade conventions. In the month of March last we had very interesting gatherings held in separate rooms of one school building, where some seventy or eighty of our teachers led in the discussions. These discussions were upon subjects very similar to those which are upon your programme here, and I am sure that in carrying on these discussions we are helped, built up in our work, and enabled to do

ON

#### GENERAL ASSOCIATION.

what we are doing and what we will do, much more efficiently than in the past. I was very much pleased in listening to a discussion which took place this afternoon in the Public and High School Trustees' Department. Although a Public School teacher, I thought it would be perhaps interesting to go in there and see what they do. The Public School Department had been hearing papers which pertained more specifically to the welfare of the young. The Trustees of the High and Public Schools were looking after the welfare of education generally by dealing with the status of teachers. A motion had been introduced which proposed, or recommended rather, to raise the age limit to twenty-one years. I suppose that was in the interest of education generally, and the majority of those present favored the motion as well as the raising of the standard; so that they seemed to take, to my mind, a very proper and intelligent view of the whole situation. If we were to go back about thirty years ago and were to look into some of the newspapers that were published at that time, say in the month of October or November or December, we would see advertisements something like this, "Wanted, a teacher, second or third class, state salary." I am sure there is not one here, who has a remembrance of that time or any period subsequent to that time, say twenty or fifteen years ago, who has not seen a similar advertisement, and would also perhaps during this last year have seen one of the same kind. Now, while the professional training of the teacher has been carried on and carefully improved from year to year with the establishment of Model Schools and increase in the number of Normal Schools and the efficiency also of the training there given increased, and also the establishment of a School of Pedagogy to crown the whole, we have no adequate or no corresponding advance made in the salary of the teacher. The resolution introduced in the Trustees' Department, if carried into effect, would, I think, make an improvement in this regard.

I am sure that the Minister of Education himself would like to improve salaries so as to make the position of the teacher more permanent, in order that the efficiency of the teacher and the experience of the teacher might be retained for the benefit of the young.

Mr. Chairman, I will not detain you with any additional remarks, but will repeat what I have already said, viz., that I extend to you the very cordial greetings of the Toronto Teachers' Association, and trust that the meetings which you have held to-day and the meetings which you will hold to-morrow and next day, will be productive of the highest good to all concerned.

## MAYOR SHA

MR. CHAIR been so busy for this assen privilege, as ( the Ontario an article on newspaper w although I adu occurred to m The Athenian Greece. Athe the school mis thousand year duct of those immortal crea and of her sc people had m Toronto, but from all parts and the best le the children of the world, and resources; and they fail to ren of the resourc independent o about followin on the land, a on the farm, b for the less lab beautiful girls, ing out of our : they leave the an anxious tho to do with their given almost al new wants and satisfy the wan something shou deal of deference

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MR. CHAIRMAN, YOUR HONOR, LADIES AND GENTLEMEN :--- I have been so busy that I have not had time to prepare an address suitable for this assemblage, but I will say this, that I esteem it a very great privilege, as Chief Magistrate of the city, to be permitted to welcome the Ontario Association of Teachers to Toronto. I was reading an article on patriotism in one of our newspapers this evening-a newspaper with which while I do not exactly agree politically, although I admire and agree with it in many other ways-and a thought occurred to me to which, with your permission, I will give utterance : The Athenian people boasted that Athens was the school mistress of Greece. Athens was more than the school mistress of Greece; she was the school mistress of the world. Her teachers for more than two thousand years have been the teachers of the world, and the best product of those teachers, the greatest works of Athenian genius, the immortal creations of her poets, of her dramatists, of her orators, and of her sculptors, were inspired by the sacrifices the Athenian people had made for their country. Ontario, I was going to say, Toronto, but I will not because I am here among an assemblage from all parts of Ontario-Ontario is the school mistress of Canada; and the best lesson her school teachers can teach the people of Canada, the children of Canada, is that we have one of the greatest countries in the world, and that it is the duty of Canadians to develop its great resources; and they cannot repeat that lesson too often; nor should they fail to remember that the products of the farm are a large part of the resources of Canada, and that farming is an honorable and independent occupation. Young people, to my mind, do not care about following agricultural pursuits. They do not care about going on the land, about tilling the soil, or in fact about doing anything on the farm, because the tendency of education is to create a desire for the less laborious city life. I often wonder as I see the bright, beautiful girls, and the active, intelligent young boys that come trooping out of our schools, I often wonder what they are going to do when they leave the hands of the teachers. I am sure it must cause many an anxious thought to father and mother to know what they are going to do with their children. The State has extended the franchise and given almost absolutely free education, and in that way has created new wants and aspirations; but the State has yet to do something to satisfy the wants and aspirations it has created. I think myself that something should be done by the State, and I venture this with a great deal of deference, because I know I am in the presence of one of the

greatest masters of statecraft in this country. I may say I venture this with a great deal of deference, but at the same time with a strong conviction that the State should do something to help the children who are being educated at the public expense to get something to do after they have been educated. Now, ladies and gentlemen, that is all I have to say. I fear my thoughts have been somewhat crude and but imperfectly expressed. My reference to the classics I hope is not out of place in this building and on this occasion. I love classics, although it is many years since I left their study; and I hope my allusion to the great works of Athenian genius is not unpardonable—(" not at all ") when I say I welcome you to this city of ours, this city of which we are all so proud, and that if it will afford you any pleasure to be entertained after your deliberations are over, I am sure the city council will endorse my action in extending to you a drive through our beautiful streets and avenues one of these bright afternoons. I thank you, Mr. President and Chairman, for affording me the privilege of saying a few words and allowing me to welcome the teachers.

#### HON. DR. Ross said :-

MR. CHAIRMAN, LADIES AND GENTLEMEN :- I am delighted as Minister of Education to extend to the teachers of Ontario a very cordial welcome to this their thirty-seventh annual meeting as an Association. I have had the pleasure myself in the olden days of meeting as a member of the Association in this room, and of having taken part in discussions with my fellow-teachers and fellow-inspectors-discussions which I remember with a great deal of pleasure-discussions to which the same responsibility is not attached as some of the discussions in which I engage in more recent years. Of course the the care and the responsibility were much less than under existing circumstances. Nevertheless, I welcome you because of my old associations; and none the less because of the changed conditions. We have here represented every department of the teaching profession in this Province. We have the Public School teachers, the High School masters, certain sections of University work, and last, and not least, we have represented the Trustees, a very important part of our school machinery, the part that can make the teacher a very happy man or woman, or make him exceedingly miserable and impose upon him the possible risk of falling into the bailiff's hands. I am glad that all sections of teacher's work in this Province are represented here. The profession is a unit, or ought to be. There are, or should be, no jealousies. The

High School 1 ter does, nor Kindergarten work as it is when we mee with each oth one school sy provement of know that ou that it is so a is neither lab Trustee, and circumstances exceedingly f once. I deser say to the Pu tages in many always too th advantages th in urban distr to say from t teachers of Or and I believe simply to im shape and mo citizens as his gressive and r the front of a not do this I not this zeal a from out of th evolution will High Schools another plane hand from the High Schools and we are pr become effect Schools, and t which the pu the High Sche

High School master cannot do the work which the Public School master does, nor could the Public School master do the work which the Kindergarten teacher does, nor could either or any do perhaps the work as it is done by the sections representing the University. So when we meet here in the common republic of letters to take counsel with each other we forget that we are working as different sections of one school system, and remember only that we are here for the improvement of the school system as a whole. We rejoice in Ontario to know that our school system is an organized unit in that respect, and that it is so articulated that each part fits into the other, so that there is neither labor lost on the part of the teacher and the pupil nor of the Trustee, and the course of study if properly pursued will, under such circumstances, give the best results. We have in Ontario an army of exceedingly faithful Public School teachers. I belonged to that army once. I deserted, as some of you will one day perhaps. But let me say to the Public School teacher who works under peculiar disadvantages in many respects, who sometimes serves a community that is not always too thankful or too sympathetic, and who has not the social advantages that some other members of the profession, particularly those in urban districts, that notwithstanding all these disadvantages are able to say from the Education Department here that the Public School teachers of Ontario are faithful, energetic, persevering and industrious, and I believe now more than ever they feel that it is not their business simply to impart so many percentages of knowledge, but rather to shape and mold and form character in order to build up such a class of citizens as his worship the Mayor referred to-a class intelligent, progressive and patriotic. That will keep this great Province of ours in the front of all the Provinces of the Dominion. If our teachers will not do this I don't think it can be done at all. If our teachers have not this zeal and enthusiasm for the evolution of the best of character from out of the young citizens in their hands, then I don't think that evolution will ever effectually take place. Then when we come to our High Schools we have another class of teacher who is engaged on another plane, fashioning after his way the material that comes to his hand from the Public School teacher; and let me say this, that if our High Schools are to be effective as they ought to be and as they areand we are proud of them as we are of our Public Schools-they have become effective very largely through the efficiency of the Public Schools, and through the advanced training and the careful instruction which the pupils receive in the Public Schools before they ever enter the High Schools. For the things important to an elementary educa-

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tion are rudimentary, and unless the rudiments of English Grammar and Reading and Arithmetic and other studies are well rubbed in-I don't say flogged in-I say rubbed in in the Public School, scientifically imparted, the High School teachers' work is greatly impeded. So, then, when we come to the University we find our Universities filled with eager and enthusiastic undergraduates, men and women looking forward to a career or profession, or whatever it may be, taking a high stand in their own University, and taking a high stand wherever they go to compete with their fellows in any University of this continent or any other continent. You cannot get results in the higher department of learning-the products of the great schools of England would never have been as they have been, nor would they have given to England so many statesmen were it not that they got the English boys young, in the early stage of their existence and education, and polished and tinished and developed them all the way through until they completed their University career. I am glad, then, to meet the nation builders; I am glad to meet those who are laying their hands upon the character of our future citizens and who are preparing them for discharging, some perhaps in a more distinguished position, for discharging whatever duty comes to them or others in a humbler position, but each discharging that duty as becomes a God-fearing, intelligent and law-abiding community. Now, some of you will say that the Education Department is largely responsible for the status of our school system. I am not going to argue that question. I am not in a mood to argue anything particularly here to-night. But allow me to say that while there is great responsibility upon the Education Department and upon the Legislature and upon all who administer our school system, particularly upon Inspectors and School Boards-and I would not leave out that of the ratepayers-I am speaking now of the administrative or executive side-allow me to say that there still remains back of all this responsibility that public opinion which the teacher himself has a good deal to do in cultivating; and if each teacher in his own department makes it his business to polarize the atmosphere around him, to clarify it, to tone up the ancient notions of some of those with whom he comes in contact, to vitalize the public opinion of his section, I am confident that it would be a much easier matter for the Education Department to support advanced legislation and to do for this country in many regards what it finds difficult to do, that which will be helpful to our schools and helpful to our teachers. I am glad that you are discussing practical questions. The trustees have discussed to-day, and very intelligently I am told, as all would have ex-

pected, the que very important tional side the should teach a When we consi which the teach was not made h

The time is o raised. I do no to be governed ourselves, and y so that legislati I am now very actually raise th I think we ha when we can af held or was held near that now. examination of under the Educ be admitted to junior leaving advance. I thin also increase the of education, a schools. Don't primary certifica believe he or sl higher standard so I shall be de certificate as the unorganized dist continuation class leaving certificat very near the tin as having come t very near the ti should teach in the University. advancing, I am all round. Then 10

pected, the question of raising the age limit of the teacher. That is a very important question, and if we look at it purely from the educational side the wonder is that years ago we did not say that no person should teach a school who was not at least twenty-one years of age. When we consider the reponsibility which it involves and the influence which the teacher has upon character, the wonder is that this change was not made long ago.

The time is certainly near when the age limit will very properly be raised. I do not say how near. We who have to shape legislation have to be governed by that public opinion which we may assist in forming ourselves, and which you also can do a great deal to assist in forming, so that legislation when given will be effective. Let me say, however, I am now very seriously considering a proposition, which, if it does not actually raise the age limit, will relatively accomplish the ame end. I think we have pretty near now reached the time, Mr. Chairman, when we can afford to say that the last primary examination has been held or was held in the Province of Ontario. I think we are pretty near that now. I shall be delighted if I can say that the primary examination of 1898 is the last primary examination that will be held under the Education Department, and that thereafter no person shall be admitted to the county Model School who is not the holder of a junior leaving certificate. I think that would be a great step in advance. I think that would raise the standard of the teacher; would also increase the age limit on the proper ground, namely, on the ground of education, and would materially improve the efficiency of our schools. Don't let me be understood as saying that the holder of a primary certificate is not a fairly well educated man or woman. I believe he or she is, but a higher grade I think is now possible, a higher standard is possible, and if we can reach that within a year or so I shall be delighted. Then our gradation will be junior leaving certificate as the lowest certificate in any Public School outside the unorganized districts; and the next and proper step would be that for continuation classes, the only eligible certificate would be the senior leaving certificate. And I am advised by a great many that we are very near the time, too, when we might say-I am not speaking now as having come to conclusions on all of these points-but that we are very near the time when we might very well say that no person should teach in the High School who did not hold a degree from the University. So that on these three lines, if we are to keep advancing, I am satisfied the result will be in the interest of education all round. Then we hear, as the Mayor has said and as we hear else-

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where, an indication that public opinion is prepared for some form of instruction especially adapted for our rural districts with an analagous form of instruction specially adapted for our urban districts. No country under the sun that I know of has yet successfully solved the problem of teaching agriculture in rural schools. They have tried it in Germany, and where it is at all successful it is tried in conjunction with a small experimental farm in connection with each Public School. Without the experimental farm the German specialists or experts say that agriculture has not been successfully taught. There is a smattering of agriculture as an optional subject taught in some of the schools of Great Britain. It is attempted in Manitoba. One of the subjects germane to an agricultural course, namely, botany, is taught very successfully in the Province of Nova Scotia; but the concrete application, or rather the embodiment of concrete agriculture in the course of study, is a problem that has not yet been effectually solved. We are wrestling with that problem now. Our only feasible solution, as it appears to me at this moment, is to train our teachers to teach the pupils in our schools something of the botany, etc., that relates to agriculture, such as how plants grow and how plant life is sustained. Entomology also is a cognate subject; also a little geology indicative of the composition of soils, and perhaps a little zoology. These three or four sciences are indissolubly connected with the study of agriculture. Now the problem is, can we introduce these in such an elementary way or in any way at all without making them the subject of an examination? Examinations are the bete noir of our school system. Teachers tell me that unless a subject is tested by an examination it will not be taught. Inspectors tell me the same thing. I don't like that condition of things. I don't like it as an educa-I would like to be able to say to the teachers of tionist. this country, ladies and gentlemen, we must examine on some specific subjects, on some fundamental subjects, but outside of those there is a variety of subjects, that you ought to teach incidentally, either in the shape of conversations or lectures, practically, concretely, topically, or in some other form, and so interest the children in them that the instruction would be effective and useful. Let examinations take care of themselves. Some subjects, like the study of art, are too refined to admit of examination, but if taught to the child they would be a great inspiration. If I could get assistance professionally of that kind, I think I could usefully associate with the work of the school room in rural districts, the practical study of elementary agriculture. At all events such a love for plants and the

glorious beaut and such an in as would lead wearisome, mo that there was Help me with side. There is impressed on working classe which is calle that study is t trade but to su and useful in a year to take st School, and we York and Bost those cities; m a view to their made a regula cooking, also in for all Normal to the subject Guelph and the ally in the stud from whom we valuable. We domestic science School, receives in plain sewing public opinion broaden the s say here, howe must never lose is to teach the application to place of honest the substantial introduced thos than benefit to whatever is dor am glad then, la

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glorious beauties of the landscape as decorated by the hand of nature, and such an insight into the other sciences connected with agriculture, as would lead the child at least to see that farming was not dull, wearisome, monotonous drudgery, that it is held to be by many, but that there was a beautiful and the scientific and instructive side to it. Help me with that and I think I can help the country a little on that side. There is still another line. In our urban districts it has been impressed on me, particularly in large cities and towns where the working classes are most numerous, that there is a need for something which is called domestic science, domestic economy. The object of that study is to teach little girls particularly the art of sewing, not as a trade but to such an extent at all events as would make them careful and useful in a domestic sense. I got authority from Parliament last year to take steps for the introduction of that study into our Normal School, and we secured the services of a lady whom we sent to New York and Boston to study the best methods taught in the schools of those cities; methods that I had studied myself there a year ago with a view to their introduction to the Normal Schools here; and we have made a regulation that in domestic science, including sewing and cooking, also in agriculture, there should be a special course of lectures for all Normal School students. I am glad to be able to say, referring to the subject of agriculture, that the Agriculture Department at Guelph and the Agriculture Department at Ottawa aided very materially in the study of agriculture, and gave us the services of their staff from whom we had several lectures during the term that were very valuable. We are, however, helping ourselves in the matter of domestic science, and now every student who graduates at the Normal School, receives a course of instruction in agriculture, and the ladies, in plain sewing and in cooking. In that way we hope to create a public opinion in our avour, and also to broaden the profession, and broaden the scope of our school system. You will allow me to say here, however, that while these incidental subjects are useful, we must never lose sight of the fact that the essential part of education is to teach the child to think, is to teach the solid habit of trained application to hard work. There is nothing else that can take the place of honest hard study, and if in these side issues we should forget the substantial parts of our school system, then the Minister who introduced those subjects would have done irreparable injury rather than benefit to the school system that he was upholding. I hope whatever is done in these subjects will only be done incidentally. I am glad then, ladies and gentlemen, to see you here to-night, to say to

you in the sincerest manner that I can utter that I shall heartily co-operate with the profession in raising the standard of our schools first. My first duty is to the school population of this country. That is your first duty as teachers, as inspectors or as trustees. We sometimes feel -I do myself-that our first duty is perhaps to the ratepayers, and a public man is very apt to feel that his first duty is to the electors, and so on. I think if we go back to the foundation, if we investigate the responsibility of the teacher or the educator, we will find that in the last analysis he is primarily responsible to the pupils under his care, and after that the ratepayers or Trustees or the Minister of Education. If we can feel that to be our primary responsibility the work will be easy. The teacher will work better. The Trustee will take upon him greater responsibilities. He will not allow the school-houses to get out of repair or to remain in an unsanitary condition twenty-four hours if he feels that he is responsible for the health of every child in that school-room. The teacher will not be dilatory in his habits if he feels that by so doing he may injure the moral character of the child. The Inspector will be most diligent in season and out of season. All will take a wider view of education. The Minister will become a broader and more progressive man if he feels that his responsibility focuses where I have placed it.

That is the view that I take of it myself. He may go slow, far too slow to suit some of you, but still I believe that our school system is progressing. I have seen it now for a great many years. It is not what it ought to be. It is not what greater men would have made of it, and what has been made of it, but it has progressed in all its departments. Our teachers are more intelligent and better educated. Our Trustees realize more than ever their responsibility. I believe our Inspectors are very faithful, and in every department, Kindergarten, Public School, High School and University, there is an advance movement which enables us to assure ourselves that whether we have done our whole duty or not we are at least advancing towards a higher degree of progress and of efficiency. I hope every moment spent here will be a pleasant one. I hope you will discuss public questions, educational questions, with perfect freedom. You heard what the Scotchman said as to the reason why he succeeded in life. He attributed it entirely, he said, to his audacity. If you choose to discuss public questions with audacity, with boldness, with fearlessness, all the better. Nobody is afraid of public opinion in this day, of a free press, of a free platform, of a free tariff, or of a free anything, but of the free mischief maker. We are not afraid of free thought if properly regulated by

common sense. ing is over, I sh some little india to say—which ] I am very glad with us at the f his responsible Province. I set with comfort, w worth, his calm prudence, his un his sincerity as all so proud. know that I ne for the improve profession that distinguished an have never had will ever have a to His Honor for refrain from doi the pleasure I fe equally delighted

SIR OLIVER M

MR. CHAIRMAN here to-night. I tion of this even purpose of asking I have done a go one or two of yo addressing learne have had a good thought sometim advice that would addressing the per have the pleasure of things as I di pretty often the Senate of the D

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common sense. It will be so regulated here, and when our little meeting is over, I shall be glad that you visit the galleries up-stairs and see some little indications of progress there. Before I sit down allow me to say-which I hope I may be permitted to say with propriety-that I am very glad that His Honor the Lieutenant-Governor is present with us at the first meeting of this Association since he entered upon his responsible and honorable duties as Lieutenant-Governor of this Province. I served under His Honor for many years with pleasure, with comfort, with profit; learned much of him, learned to know his worth, his calmness of judgment, his prescience, his fore-thought, his prudence, his unfeigned desire to be of service to the land of his birth, his sincerity as a Canadian, his loyalty to this land of which we are all so proud. And to teachers particularly it will be pleasant to know that I never propounded a measure or suggested a regulation for the improvement of our schools or for the advancement of the profession that was not ably and zealously supported by my then distinguished and beloved chieftain. He is with us to-night. We have never had a better friend in Parliament. I don't know that you will ever have a better friend out of it. I should apologize perhaps to His Honor for this speaking so freely in his presence. I could not refrain from doing so because of our long association, and because of the pleasure I feel at his presence here to-night. I am sure you are equally delighted as I am that he has paid us this visit.

# SIR OLIVER MOWAT said :---

MR. CHAIRMAN, LADIES AND GENTLEMEN :—I am very glad to be here to-night. It is with great pleasure that I take part in the reception of this evening, but when a Committee waited upon me for the purpose of asking me to make a speech I was somewhat terror-stricken. I have done a good deal of public speaking in my day, as possibly one or two of you may know. I have had a good deal of practice in addressing learned Judges both in this country and in the old land. I have had a good deal of practice in addressing the electors, too, and I thought sometimes I could give them some information and some advice that would be useful to them. I have had some experience in addressing the people's representatives in the Ontario Assembly ; and I have the pleasure of knowing that they generally took the same view of things as I did. Then, last of all, I had the honor of addressing pretty often the most august body that exists in this country, the Senate of the Dominion. I cannot say that they always took my

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advice. And I dare say there would have been more occasions of their not doing so if I had remained in the position I then occupied. But whilst I felt no nervousness in addressing all these bodies and all these learned persons, I felt nervousness at the idea of addressing the representatives of the teaching profession of my Province. I told the Committee who waited upon me, "Why, there is not one of them that does not know ten thousand times as much about educational subjects as I do." I could say something, I used to think, in the way of informing the electors, something in the way of informing the Legislative Assembly, something in the way of informing the Senate, but I have nothing to say, I am afraid, that will give any instruction or will be useful for me to say to you. I take great interest in the profession. It is because I do, perhaps, that I am so nervous about speaking to you here.

I knew something of teachers at a very early date. I knew something of them many years before the oldest of you that are here to-night were in the world; and I have a very distinct recollection of some of the school masters of those days. Reference has been made to-night to the inadequacy of the salaries which the Public School teachers of this country receive. No doubt these salaries are entirely inadequate if there are taken into account the qualifications required and necessary in our Public School teachers, and the qualifications which they now actually possess. But the matter is a difficult one to deal with. It is the public who fix and pay the salaries; and while the people of Ontario have a high appreciation of the value of education, yet they want it at as little cost as possible. They want to pay as little as possible for teaching, as they do for everything else that they have to pay for. That is a natural feeling; and perhaps in other matters you all might sympathize with it, though you and I do not in the matter of teachers' salaries. In the early days to which I can look back, salaries were very much lower than they are nov, and the qualifications of the teachers were very much lower too. Some time ago I had occasion to look up a report of a Royal Commission of the year 1839 with reference to the school masters of that time, and I found the universal testimony of the witnesses examined concurred as to the deplorable condition of the common school teachers of that day as to the qualifications needed for performing their duty. One witness said that not one in ten of the teachers was fit to teach even the lowest branches of education in a common school. Their salaries were lower than the wages paid to a common unskilled laborer, and part of their inefficiency was reasonably and justly ascribed by the Commissioners

to that cause. the purpose o how salaries co They reported receive \$200 a allowance. I school-house in year in money salary now is But, while sal qualifications of there has been the salaries. A women is entir to procure so n considering how being so low is whom it is a pi the same cause

Whilst the o also has there education shou what the best the Grammar received some s the voluntary Schools; and to was about seve considered then Latin; and not purpose of lean were given in grammar rules grammar. It w sufficient Englis mar. All that for the profession far. But I am life of the boy period was com The importan

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The Commissioners considered what was to be done for to that cause. the purpose of removing this difficulty; and, amongst other things, how salaries could be advanced, and what salaries should be aimed at. They reported that they thought the average school master should receive \$200 a year. That was the idea of that day as to a liberal allowance. I believe the school master was also to have rooms in the school-house in which he might live, in addition to receiving \$200 a year in money. You are better off now than that. The average salary now is, at all events, \$400, I believe, or some such sum. But, while salaries have increased to twice the then amount, the qualifications of the teacher have increased to ten times, and thus there has been a very inadequate and disproportionate increase in the salaries. A salary of \$400 a year for educated men and educated women is entirely out of the question; and I wonder that we are able to procure so many first-rate teachers, both men and women, as we do, considering how low the salaries are. One of the consequences of their being so low is, that a great many teachers drop out of the profession whom it is a pity the profession should lose; and other evils arise from the same cause.

Whilst the qualifications of teachers have increased very much, so also has there been advancement in the ideas entertained as to what education should embrace, what is most important in education, and what the best means are of instructing children. In my early days the Grammar Schools-both the District Grammar Schools which received some support from the Government and Grammar Schools of the voluntary kind-were considerably better than the other Public Schools; and to one of these I was sent at a very early age; I think I was about seven years old when first sent to a classical school. It was considered then that the most important thing for children to learn was Latin; and not only so, but the first book put into our hands for the purpose of learning Latin was a Latin grammar, in which the rules were given in Latin; and we poor little boys had to learn Latin grammar rules in the Latin tongue. We were not taught English grammar. It was said that that was quite useless; that we would learn sufficient English grammar through the medium of the Latin grammar. All that is now changed. The question now is whether, except for the professions, Latin ought to be taught at all. That is going too far. But I am quite sure that a very large proportion of the school life of the boys who attended the Grammar Schools of that early period was completely lost.

The importance of oral teaching has been referred to by the Minis-

ter to-night. In those old days there was no such thing as oral teaching in the schools I attended. Geography again was taught without even the use of maps. Occasionally there was a reference to a map, but such was no essential part, no important part, of the teaching of geography in those days. The first geography put into my hands was Goldsmith's, and afterwards Stewart's geography; and what I had first to learn was the names of the principal places in each English county. I remember learning those of Northumberland and Cumberland; I do not know how many more, or whether I got round all the counties of England. All that I did learn, when I had the good fortune to know my lesson, was that there were places so named in the particular county specified. Geography taught in this way did not amount to a great deal.

I might mention some other things in which the method of teaching was, according to present notions, equally absurd. Take the case of spelling. I have told you how young a boy I was when I went to that first Grammar School; the spelling that was given me to learn there was five words daily from Walker's Pronouncing Dictionary, with the meanings. At that rate I don't know how long it would take to get through; I am not sure that I had got through all the A's before I left that school for another. To make sure that we little fellows would always know our lessons from Walker's Dictionary, the rule was one blow with a raw-hide upon the bare hand for every word of the five not learned correctly. I don't think that I was the slowest boy in that school. I never imagined myself the slowest boy perhaps anywhere, but I regularly received every day of my life for a considerable period, five blows on my bare hand for my dictionary failures. I have a distinct recollection of those five blows. There is nothing in my whole education that I recollect more distinctly; and I was extremely anxious in after life tomeet the teacher who had inflicted them, but it was not my good fortune ever to meet him again. He had moved to another Province, and before I had an opportunity of meeting him he had passed away to another world.

The Minister [has told you that I have always taken a great interest in educational matters; that while Premier I was always ready to help him in regard to any proposal for the improvement of educational methods, and so on. Now, though I feel so much alarm in addressing a body of teachers such as I am addressing now, and feel like making all manner of apologies for venturing to do so, still I call to mind that I held for a time a pretty high position in

reference to charge its d own Premier ernment in Minister hav importance of but it was the not occupy n as an adjunct the Premier of duties were as Mr. Crooks w time for them and Attorney-Education and appointed I fo pressing upon introduced int other matters been unable t always a great tance. Other our attention an interest. I sweeps clean; bestowed a g with the Chi educationists e in two bills wh on my motion of the House, to be of service We had a great discussion. Th Superintendent of other person were made in were struck ou bills which had Superintendent expressed his t

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reference to education and to teachers, and I did my best to discharge its duties. For many years, and until some time in my own Premiership, the legislative and administrative duties of Government in connection with education used to be assigned to a Minister having some other Department in the Government. The importance of education and of educational questions was recognized, but it was thought the duties of Government in relation to them should not occupy much time; and they were always assigned to a Minister as an adjunct to his Department. When I had the honor of becoming the Premier of Ontario and Attorney-General, it happened that those duties were assigned to me, and I held them for some time and until Mr. Crooks was appointed to them, as he was supposed to have more time for them, being the Treasurer of the Province, than the Premier and Attorney-General could have. He was afterwards made Minister of Education and relieved from any other departmental duty. When first appointed I found that the Chief Superintendent had for years been pressing upon the Government a number of reforms which he wanted introduced into the law with reference to the Public Schools, and to other matters connected with education, but he said to me that he had been unable to get the attention of Ministers to them. Ministers had always a great many other things to attend to, and things of importance. Other persons interested in education were also pressing upon our attention various reforms or supposed reforms in which they felt an interest. I was new to my Premiership ; a new broom, you know, sweeps clean; and I thought it my duty to take the subject up. I bestowed a good deal of time in interviews and correspondence with the Chief Superintendent, the Deputy Superintendent, and educationists elsewhere, and in other ways. The result was embodied in two bills which I introduced into the Legislature. Both bills were on my motion referred to a special committee selected from both sides of the House, and including all members who were thought likely to be of service on such a committee. The committee sat several days. We had a great deal of discussion, very friendly discussion, very earnest discussion. The committee had the valuable assistance of the Chief Superintendent himself, and the Deputy, Dr. Hodgins, and of a number of other persons who were not members of the House. Some changes were made in the bills, some additions were inserted, some clauses were struck out, others were modified; and at length we agreed upon bills which had the unanimous approval of the committee. The Chief Superintendent, in addressing the committee after the work was-done, expressed his thanks to them for the care and attention which they

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had given to the matter; and he said that if the two bills passed the House in their then form the reforms accomplished by them would be greater than had taken place in educational matters since (I think he said) the first education bills passed under his advice. He made also some personal remarks about myself, which I don't choose to repeat here—they were flattering enough.

You see it is not an entirely new thing for me to give active attention to educational matters; but I have no such knowledge as one should have in speaking here, and I have to apologize for saying so much as I have. But I shall not sit down without saying further that I join heartily, on behalf of all those I am supposed to be representing here, in the words of welcome which you have heard already. I trust your visit to Toronto on this occasion may be an agreeable one; that your attendance at the meetings of the Association may be agreeable, instructive and useful; and that the occasion may be remembered by you all amongst your pleasantest memories.

# The President, MR. A. A. JORDAN, said :---

LADIES AND GENTLEMEN, FELLOW-TEACHERS :--- I am exceedingly sorry that my turn has come at last. But as I am a young man scarcely out of my teens, I know that I will have your sincerest sympathy in this place in which I am to-night located. I feel rather peculiar and rather peculiarly situated. I am sorry that I shall not be able to make an eloquent speech, an eloquent address, as I am only a plain Public School master, one of the great mass of the Public School profession. However, notwithstanding that, I have to say something, be it wise or otherwise. Now it is a great pleasure and a great honor to us to be welcomed by the distinguished persons who have addressed us to-night, and in that fact I believe lies this fact, that the attendance of distinguished men, who come here to welcome us, has been the means, and is the means, of raising us to the place that we deserve to occupy. There was a time not very long since when if you told a member of some professions that you were a teacher, you would see the muscles in their lips work, you would see a peculiar light in their eye, and you would notice between them an appearance, a mixture of mild contempt and pity because you were a teacher. But that day has passed away, and we are now standing shoulder to shoulder with the other professions, and sometimes we almost imagine we are above the other professions, and I believe we are, and we sometimes almost grow vain and think, "Well, we are the people." We are the nation builders, and so we are. And we would think

that we wer question con always there our neighbors wheel worth : risk his mone that he is con the ward whe salary, and it that keeps us and the salar pleased to re from the six h splendid men Public School kindly to me. better looking he may happe of Toronto for have also had His Worship 1 Mayor Shaw v I had the imp it was that a g the head. Bu this report was noble man. A Ontario is the this Province. capital. And is very proud, may brush off around. But 1 deal from the c operation. We us away more bring here ide that they never would never 1 rustic, the field may be born,

that we were more than common flesh and blood, but the salary question comes in and keeps us humble. That salary question is always there, and when we sometimes feel that we are a little above our neighbors, and if perchance some of us should buy a beautiful wheel worth \$100, or perchance some person should be so foolish as to risk his money in a fine house or a carriage he will soon be reminded that he is common flesh and blood, and at the end of next year when the ward wheel is screwed he finds himself docked less than 50 on his salary, and it is a good thing that we have. There is another thing that keeps us humble, and that is the nobility of our profession-that and the salary question keep us in our proper sphere. Now, we are pleased to receive the welcome that we have through Mr. Hendry, from the six hundred noble teachers of the city of Toronto. They are splendid men and women. I have met a great many of them in the Public School Department, especially the men. The ladies don't take kindly to me. I suppose they heard I was married. Because I am a better looking man than the average man, no matter what profession he may happen to be placed in. And we sincerely thank the teachers of Toronto for the hearty welcome that they have given us. Now, we have also had an eloquent address from the Mayor of this great city, His Worship Mayor Shaw. I had the impression six months ago that Mayor Shaw was a bad man. I must have read the wrong newspapers. I had the impression that he was a very bad man, and I wondered how it was that a good city-Toronto the Good-could have a bad man at the head. But I have learned from reading in the last six months that this report was incorrect-that Mayor Shaw is actually a good man, a noble man. And in his tribute to the Province to-night he said true, Ontario is the Athens of this Dominion, and Toronto is the Mecca of this Province. When Easter comes we all tend to the great centre, the capital. And it is right that it should be so, and consequently Toronto is very proud, because they feel that we come here in order that we may brush off the dust and brush off the roughness of the rustic land around. But not so. We do come for that object; we do get a great deal from the city of Toronto. We see the very latest inventions in operation. We see a great many things that do brush us up and send us away more refined and cultured; but they learn from us. We bring here ideas for their members to disseminate. We bring ideas that they never could have thought of in the rush of a great city. It would never have dawned upon their minds because it takes the rustic, the fields of nature for these thoughts, in which these thoughts may be born, and that could not happen in the city of Toronto.

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So on your behalf I thank heartily Mayor Shaw for his kindly greeting to us, and also for this that he is going to give us the drive-if we will agree to it-on Thursday afternoon before six o'clock. And now what shall I say about the Hon. Dr. Ross. I think that I had better not say anything. You all know him so well. You know his virtues -that he is all virtue without any vice. He is a man that has done so much for the teachers of the Province of Ontario, and I believe that he has done a great deal for us. I read a summary of what he has done that reached down about half a column on a newspaper, and if I would not tire you I would recite them, but I will not. One thing, though, that we should not forget, and it is this, that he has given all the money that is spent in the way of examinations, he has turned it into our pockets, and the teachers of the Province of Ontario receive all those moneys instead of lawyers and doctors and ministers and those outside the profession. He has made a good promise to-night, and that is to cut off the primary certificate as having a professional value. I am glad to hear that. I do not see any reason why he could not fall in with the excellent judgment of the Trustees' Department and put the other strand on the fence, namely, raise the age limit to twenty-one years of age, and then we would be able to say with some pride, we are a profession of men and women, and we are old enough to vote, and if it won't do any good it won't do any harm, and why not place it there? We hope, as the Trustees hope, that this may be incorporated in the law. We believe it will. Dr. Ross is swinging around this way. That is wherein he shows his statesmanship. He always listens to this great advisory board that he has before him, this great unpaid advisory board, we come down here and charge him nothing for advising him. Now, I am specially pleased on your behalf to receive the welcome that we have received from His Honor the Lieutenant-Governor. To hear words of welcome from him who is the head of this Province, and it is specially pleasing that the distinguished head of this Province should address and welcome the greatest body in the Province of Ontario. It seems to me it could be summed up thus: that it is the welcome of the head of the Province to the Province of Ontario. The teachers of Ontario, the nation builders, the part of Ontario which if it were subtracted the thing would all go to smash.

Now I must not weary you. I must not be like the Irishman. I read of an Irishman who went into a pastry establishment and who stayed there a long time. He was a very tall Irishman—over six feet high. He said after he had finished, "I have been rather long." Some wag,

who was sta don't want to thought too ] your behalf, by Dr. Ross, troller of ov number he sl undone the th those were pl in length and head of the E he should be t in this room, the emblems them which which is as de profession of words of welc chief seat in t of the Domini

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MR. CHAIRM course of this regard to the greatness of reminded of h would be lost indeed the w this has been that one some the Apostle w I doubt not, especially tho teachers, have feeling of our and of such etc all this, people enter the army consequence w warnings that

who was standing by, said, "You are too long anywhere." Now, I don't want to be thought too long anywhere, and I don't want to be thought too long here. So that I will conclude by saying that, on your behalf, we heartily appreciate the welcome given by Mr. Hendry, by Dr. Ross, who is the head and the educational head and the controller of over half a million of people, and if in controlling that number he should make some mistakes, and should sometimes leave undone the things that should be done, we cannot wonder when, if all those were placed four abreast, they would make an array sixty miles in length and longer; and we are pleased to receive his welcome as the head of the Education Department. And there is one other thing that he should be thanked for, and that is for the splendid decorations we see in this room, inculcating a broader spirit than a local spirit. We have the emblems of all the Provinces before us. We have flags above them which inculcate that patriotism, which is dear to us here and which is as dear or dearer to our hearts, the hearts of the teaching profession of this Province. And we are pleased also to have these words of welcome from the great and distinguished man who holds the chief seat in the banner Province which forms the great confederacy of the Dominion of Canada.

# REV. PROF. CLARK said :---

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MR. CHAIRMAN AND FELLOW-TEACHERS :- Much has been said in the course of this Convention, and very well and very properly said, with regard to the dignity of the teacher and his responsibility and the greatness of the work which he has to perform. We have been reminded of how much depends on the work of a teacher, how much would be lost to the community if his work were withdrawn, how indeed the whole fabric of society would almost fall to pieces. All this has been well and earnestly set forth, indeed to such an extent that one sometimes feels coming over him the sentiment expressed by the Apostle when he says, "Who is sufficient for these things?" And I doubt not, sir, that most of us in the course of our experience, especially those of us who have had long and varied experience as teachers, have been profoundly impressed sometimes even with a feeling of our own audacity at undertaking work so great, so serious, and of such eternal influence and duration. Well sir, notwithstanding all this, people will undertake arduous and perilous tasks. Men will enter the army even in the presence of war when they know what the consequence will be. Men will enter matrimony in spite of all the warnings that have been given in the past, and it is impossible to say

what men will not take in hand to do; so that we cannot wonder that sometimes perhaps the work of the teacher is undertaken a little too lightly. However that may be, I think it is of great importance that teachers should come together and have communion one with another as we have in this Convention. I am perfectly certain that we can get not merely refreshed and invigorated, but that we go forth from these meetings with a clearer outlook, not merely with a deeper sense of our duty, but with a clearer understanding of the best way to discharge it; and sir, if I venture to add any small observations of my own to those important ones which we have already listened to, I think I shall best serve the purposes of this Convention if I supplement in some respects those utterances which we have already heard. It would have been better perhaps if I had written an elaborate paper, more satisfactory to myself, perhaps more satisfactory to the learned persons whom I have the honor of addressing; but I felt that it was far better to attend and listen to what was going on and then to add my own little quota after I had heard what had already been brought forward, which if it be not so elaborate, so perfect in form, may perhaps be actually more serviceable to my fellow-teachers than any formal and written elaborate address would have been. There are several points we have to consider at a Convention of this kind, we have to consider the teacher. We have spoken a good deal about the teacher here, a good deal about his under payment. We are all under paid; that of course is obvious, and no doubt when the world is more enlightened-and it is our business to enlighten the world-we shall be paid better. I long for that time; I long for that time on behalf of others. I don't see much prospect on behalf of myself; but I am not so absolutely selfish and self-centred as to have no interest in those that lie beyond my own sphere or those that are going to follow me in the race. We have to think of the teacher and his work, and the system we are called to administer, and of which we form a part. We are continually hearing of that, and very properly. We heard of it last night. We who are teachers, it is not merely our business to educate and cultivate and perfect ourselves as instruments to do our work thoroughly well, but to consider how the system of which we form a portion may be improved. Now, if I venture to say just a few words on these points I know you will bear with me, and I shall easily ascertain—we public speakers have certain indications by which we can tell whether we are lulling our auditors to sleep or interesting them, and when I find that I leave off. First, with regard to the teacher himself, and in this matter I am very glad to say that we had a paper this afternoon which

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hardly leaves anything to be desired as far as it went, and I am thankful to know, that that paper will be published-the paper of Dr. McKay which I listened to with a great deal of satisfaction from beginning to end with regard to the character of the teacher, his veracity, his gentleness, his punctuality, his courtesy and so forth. All these things were set forth with great ability and persuasiveness, and I have no doubt will be remembered by my brother teachers. I would rather myself this evening, therefore, deal not so much with the teacher's character but more with his other qualifications, and I would mention among them one or two which I myself regard as very important. We were told just now, and with great truth, that the teacher should be given to his own work, that all his study should bear upon that work. I entirely agree with this. "This one thing I do," said the Apostle. "This one thing I do," the teacher should say, but he ought to say that in no narrow way, in no narrow spirit, in other words the teacher ought to know a great deal more than he has to teach. We soon discover when a man stands up to address us whether he is telling us all he knows or not, whether he has a reserve behind or not; and I don't think there is anything which would be so profitable to the pupil and so helpful to him in receiving lessons which are actually communicated to him, which it is necessary for him to learn, as the sense that the teacher is not giving out all that he possesses but has a large reserve of knowledge, we will say, and thought and wisdom behind his actual teaching. Therefore, the teacher should always be a student. I tremble when I hear some young parson say that he has so much parochial work to do that he has no time to read his Greek Testament or Theology or Church History or anything of that kind. I am sure that he is preparing for himself a sterile ministry in the future -perfectly certain of it. I do know some of that kind. I am sorry to say there are people of that kind in every profession, people who don't realize the greatness of their profession, who do not realize the difficulty of doing the work of their profession; and if there is any work in God's earth well worth doing it is work that would be hard work to do, not work that is easy. We remember the old saying-it is in Plato, I think he quotes it from Hesiod or somebody—" The gods have put sweat before virtue," and they have put sweat before virtue in every department. No man can really do any work that is worth doing well unless he has toiled at it. Then to make this one application I say the teacher ought to be a student, and unless he is a student he will be a failure as a teacher. That is one thing that I think is indisputable and does not need to be insisted upon, especially

when one is speaking to persons with cultivated minds who can catch the thought at once. There is another thing which I should like to mention, which I always make a point of mentioning when I am speaking on the subject of books or literature or reading, all of which of course fall under the same head. I think it is most desirable that every teacher-in fact I may say every educated person-should know one language beside his own. I look around these walls and I see mottoes from various languages, the two perhaps most familiar to us of all the tongues in the world except one-I mean the Latin and the French languages. Now I am not going to say that either of those languages is an absolute necessity to anyone much less to everybody, but I do say that it is an enormous help to any person, after the understanding of his own language, and for the getting of a firm grasp of literature, that he should know one language besides his own. Indeed I don't think that it is quite possible for anyone to get a thorough knowledge of the structure of his own language unless he has had an opportunity of comparing it with the structure of some other language. Sir Oliver Mowat, I think it was, told us last night that when he was a boy of eight he was put to learn Latin. I believe it was taught to me in the manner that was familiar to those who are as old as he is and as old as myself, and a manner that is nearly obsolete now. We had in Scotland an instrument called the tawse, an instrument of leather which was applied to the palm of the hand when the so-called candidate for honors had not quite prepared his work sufficiently, and Sir Oliver said that then they learned Latin Grammar but they hardly ever learned English Grammar. Well sir, so it was; I believe I began Latin Grammar when I was six, a little too early, but not so bad as beginning at fourteen or sixteen, let me observe in passing; and although I don't think we did study English Grammar, I have studied a good deal of English Grammar since, and I say it without the slightest contradiction, that the men my contemporaries who learned Latin Grammar and no English Grammar generally speak and write a great deal better English than those who learned English Grammar and not Latin Grammar. It is quite natural that old-fashioned people should highly esteem those studies, and perhaps we in Scotland thought more of Latin than was justifiable because almost every Scotchman was brought up to read Latin and to write it. In point of fact I think I may say this, that among my schoolfellows, a good many, some at any rate, wrote better Latin prose than they could English prose, for they could not write English prose without Scotticisms, and they did write Latin prose without any

solecisms. learning of a for these par in our Eng constitution. origin are v moment you you are pass absolutely c gentleman d it—I remen women coul was a measu from Latin from Germa with that I t it was the that particu often done, a to the study two more es am no Angle let him yaw, speak their possibly be a the worst d imagined, th Aberdeen ar the best elen

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an catch the to mention, king on the course fall teacher-in e language ottoes from of all the the French e languages ly, but I do derstanding literature, eed I don't knowledge opportunity Sir Oliver as a boy of me in the and as old We had in of leather d candidate y, and Sir hey hardly eve I began out not so in passing; nar, I have vithout the ho learned and write Grammar l-fashioned e in Scotuse almost o write it. my schoolatin prose glish prose thout any

solecisms. Then I should of course, if I were myself asked to advise the learning of a languagé, I should say Latin would be the best of all, and for these particular reasons, that Latin supplies that particular element in our English language which is not so congenial to its natural constitution. For example, all the words which are of Germanic origin are very simple words-father, mother, and so forth; but the moment you pass over into words of Latin or Norman-French origin you are passing over into words more remote and less familiar, that is absolutely certain. I remember-it was a rude thing to say, and the gentleman did not say it in the presence of ladies as I am going to say it-I remember one of my tutors at Oxford saying the reason why women could not spell was they had not learned Latin. Well, there was a measure of truth in it, because the spelling of words derived from Latin does not come as naturally as the spelling of words derived from German or Anglo-Saxon. Then of course in close connection with that I think we ought to know our own language better. I think it was the Minister of Education who last night drew attention to that particular point, and also to the study of literature as he has often done, and I think it is most important to be done. With regard to the study of our own language I would like just to say one word or two more especially with regard to the pronunciation of it. Now, I am no Anglomaniac; I am no defender of "He that hath yaws to yaw let him yaw," and all that sort of thing. There are Englishmen who speak their own language in a very absurd manner. I could not possibly be an Anglomaniac, seeing that I myself as a boy spoke perhaps the worst dialect of the English or Scotch language that can be imagined, the dialect of Aberdeenshire, although I believe the men of Aberdeen are the cleverest men in the world, at any rate they have the best elementary education.

Aberdeen was better provided with education, and I will tell you why: Because the schoolmasters in Aberdeenshire were the best paid of any in Scotland; that is one reason; and then it is quite well-known that Aberdeenshire men have on the average larger heads than other men. I do not mean to say there have not been a number of Aberdeenshire men with very small heads; but other things being equal, I believe a large head is generally an accompaniment of a good understanding; and I remember a friend of mine telling me there was a consignment of hats sent down to Aberdeen a long time ago, and they all had to be sent back to London because they were too small to fit the people of that Shire. Well, I see now you perceive I have a good opinion of my own county. We all know of

their ability in finance; we all know that the Jews cannot live in Aberdeen. That being so, no one will think that I am going to speak disparagingly of my own county, more especially as we have the Earl of Aberdeen for our admirable Governor-General at this moment; but at the same time, in my humble judgment, the dialect of Aberdeenshire is the most awful language that could possibly be spoken. I can speak it still; I could give you a specimen of it if it were necessary, but I am perfectly certain it would give you no pleasure; at the same time what I want to point out is this, that I considered it my duty to learn to speak a language that should be recognized as classical English in any part of the world--a language that should be called English in London, in Victoria, in New York, in Toronto, in Melbourne. Some of my friends of this Province asked me, "Why should not we speak our own language?" Very good ; if you undertake to speak the language of the Province of Ontario and call it that, I have no objection; the language of the Province of Ontario is not nearly so bad as the languages of some Frovinces; still as such it is not classical English, it is provincial language, and it has a strong infusion of the Yankee element in it. I am not at all inclined to speak disparagingly of the Yankee element. It is a very admirable element in many respects, and I rather think that great people are now going to engage in a struggle in which probably they will have the sympathy of all their fellow-men who love liberty and who love the English language. I am not speaking disparagingly of them, but I prefer the language of London-I won't say to the language of New York, because New York has no language, it is neither Yankee nor Knickerbocker, nor anything else, it is cosmopolitan-but I prefer it to the American of Virginia and other parts that I could name; and I think there ought to be a distinct endeavour to keep our English into line substantially with the English of Great Britain in such a way that when the educated inhabitant of Toronto or Ontario should stand on the platform, people should see that he speaks the English language and speaks it with purity.

Another point is this: That those who teach others should themselves be to some extent, at least, not merely acquainted with those books that they have to know in order to teach, and so on, but that they should be—well, perhaps it is a large demand, but I should like it lovers of literature, lovers of books, lovers of converse with the great minds of the past, lovers of the purest and best utterances which men have given forth; men who will turn to their Shakespeare, to their Milton, to their Tennyson, not from dire necessity, not because

they want learned and books. Tha do not thin cultivate tha familiarized believe that discipline ar everything, submit then necessary, an will be draw will not be a glorious proc Shakespeare and vigorous put up with literature, su our literatur of literature which is four of a large nu

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they want to be able to quote a passage and seem to be able and learned and literary, and so on, but from pure delight in those That is what I should like every teacher to be. And I books. do not think it is impossible after all. I do think if we were to cultivate that faculty in ourselves, that fellowship with books, becoming familiarized with the great writers and the best, I do in my conscience believe that there are very few men who, if they will undergo selfdiscipline and self-denial-of course that is needed, it is needed for everything, it is needed for riding a bicycle, but I say if men will submit themselves to that discipline, to that self-denial which is necessary, and familiarize themselves with the greatest writers, they will be drawn towards them as by a kind of gravitation which they will not be able to resist. Why, sir, if a man nourishes himself on the glorious productions of the greatest literary man of the world, William Shakespeare, if a man continually feeds his mind on the pure, strong and vigorous English of Tennyson, it would be impossible for him to put up with the low kind of literature, or with the debasing kind of literature, such as, thank God, is not very common in these days, for our literature is of a very high class, take it all over. Still it is a kind of literature which exists, and unfortunately it is a kind of literature which is found to be the natural food of a certain class of mind, I fear of a large number of people.

In addition to this love of literature, of course there is the study of history, and in one sense the study of history, as we all know, embraces everything. I will not dwell upon that at any length, except to say this, I don't believe there is any profession or any kind of study which is not helped and benefited by having the study of history associated with it. If I were a medical man I should know the history of medicine as well as I could. If I were a lawyer I should study law from its beginnings, and I would go back and study it in the ancient records of Rome, which is the great fountain of law, onward through all the ages, and I should know that in every exigency, even when I was arguing a case before a very ordinary Judge, even there I should be helped by my knowledge of the whole history of the science of which I was the exponent. So with regard to theology. I don't care a single farthing for a man's mere argument about theology. Anybody can quote texts. What I like, when I come across a man who is going to teach me, is that he should know the history of theology from beginning to end. He should know his Bible; he should know the history of the early Church and be able to trace it down, and show where the divergencies came from the pure fountain of truth, if there were such divergencies

—at any rate some of us have diverged, some of us have gone wrong, and the way to understand where the error has been committed is to trace the history. As a certain German critic has said, "Die wahre Kritik eines Dogmas ist seine Geschichte." "The true criticism of a dogma is its history."

Now, perhaps I have dealt too long on this part of my subject; may I be allowed a few minutes just on the other ones? Now, I pass from the teacher to his work; and we were reminded this afternoon that one great impediment of the teacher's work was the badly brought up children that were submitted to his care; in other words, the parents do very little of their duty, and then they blame the teacher for not doing what they ought to have done themselves. They send children to school and they are surprised that the children should be so illmannered after they have brought them up in that fashion, and it is hardly possible to untwist them from the evil influences to which they are accustomed. It has been complained sometimes I think that so many of our young lady teachers enter the profession and then straightway get married. Well, whether they are wise in getting married or not I will not determine, that is a matter of experience-some of them probably are very much better and some of them not so well; but sometimes I could wish that all our married women could have been school teachers first, because then they would have known something of the way of training-for a great many of them certainly know nothing of it now. Then just on this point only one or two remarks. I think we ought to remember in regard to the instruction, especially of very young children, that we can teach them practically before we can teach them theoretically. I don't think that we ought to begin preaching at very young children all at once. It is a terrible pity to see some excellent lady-it is generally ladies who do it with the most admirable characters and sublime intentions, admirable in all respects -thinking that she is going to produce a great impression on a little child by delivering an address to it. I remember perfectly well once going into my own churchyard in England and there were two little wretched boys who had been doing something very wrong in the churchyard, and I addressed a very solemn admonition to one of them, who looked very stolidly at me, but that was all, and I turned round and the other little chap who thought I was not seeing him was just grinning from ear to ear while I was giving this address to number one. I incortinently boxed number two's ears. If you had seen the look of penitence on the face of number one, you would have seen how much more efficacious slapping one boy's ears was than addressing

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a sermon to the other. I am not here counselling corporal punishment; I do not very much believe in it; I think we can do almost anything without it, I think there is only one thing that I myself could feel inclined to put down summarily with any kind of instrument, corporal or otherwise-that is rebellion. There are certain forms of rebellion that ought to be dealt with sternly and strictly without any forbearance or tolerance whatsoever-but in a general way I am perfectly certain that corporal punishment is undesirable and unnecessary. But what I was specially thinking of-and I hope I have already to a certain extent conveyed my meaning-was this, that we can teach habits long before we teach principles; we can get the children into good ways, and thus they will by degrees discern the principle within the habit. Get them to form honest habits and bye and bye they will discover that those habits are not mere outside names of things, that they are living organisms which grow out of the interior life of principle which they represent. Now of course by degrees this will become more and more manifest. Not only so, but I believe this will happen if there are two things always kept in mind by those who require obedience of children without giving them the reason, namely, an attitude and a tone of lovingness, and on the other hand by reasonableness, because a very young child soon finds out whether a thing is reasonable and discerns the connection between cause and effect, seeing whether the teacher or parent is acting arbitrarily, selfishly, or in bad temper-soon it sees that, so that there is implicit education in those principles without anything being said about them. The child knows whether what the parent or the teacher does is done because the parent or the teacher is a reasonable being and loves the child, or whether the one or the other is acting simply from passion, impatience or stupidity. These things reveal themselves in the life of the child long before there is any actual inculcation of principles on the part of the teacher. I am perfectly agreed with those who have told us over and over again that the great thing is to teach the children to think. I am perfectly certain it is far more important to give the children the means of acquiring knowledge than to give them knowledge itself. I think it was Sir William Hamilton who said if he were asked to get truth without having sought for it, or a half truth after having struggled for it, he would have a half truth and not the whole truth ; and I think he was right, because that which we acquire by our own efforts is after all of more value, and truth which is not sought is of no value whatever, while that which is sought out by toil of the mind and intelligence, that is of real and permanent value. I am not in the least

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degree forgetting all this; but what I am insisting upon is this, that we must begin by teaching habits rather than principles, and so build up character which involves principles, and we ought to address ourselves to that task and I think we ought to do it a little earlier than we were told by the eminent lecturer a few weeks ago to whom some of us listened with great pleasure. He asked, "When was a parent to leave off thrashing a child when it was disobedient?" That was the question you remember which he raised. "Well," he said, "He ought to leave off when the child is strong enough to thrash him." Well, I should leave off a long time before that. I should leave off thrashing a child at a very early period indeed; and I should leave off at a very early period giving a child commands. I should begin to teach a child the reason for my commands as soon as I thought the child was capable of understanding my arguments.

Then there is another point. It may be said that we teachers have nothing to do with the improvement of the system under which we live and of which we form a part. The Minister of Education has told us already-and I think he is the best person to give us information on that subject-that he looks for counsel from the teachers, such counsel as will be the result of their own experience and as will be doubtless considered not only by him when he has been convinced of its wisdom, but also when these opinions have passed into the common judgment of the people, when they begin to form what you call public opinion. Now, sir, obviously it is the duty of us all to help in this matter. It is the duty of us all to give the benefit of our experience for the improvement of our own system, because no system is perfect and even if it were perfect at this particular moment it cannot be perfect ten years hence, because the world is changing, society is changing, the things of the world are changing, and I doubt not that some methods which we now think admirable will be abandoned, others will be adopted which we don't yet understand, not because ours are not best for our own time, but because the circumstances of the people and the times are changing. We ought to be critical. The beginning of all thought, aye, and of all faith, is doubt; and the beginning of all improvement is criticism. I don't wish that we should be critical in the sense of Iago, who said, "I am nothing if not critical." Criticism ought to take a very subordinate place, but it must be here otherwise there will be no improvement. In order that our criticism may be of any value it must be criticism which comes out of thankful and sympathetic natures. I don't care a straw for the criticism of a sour-minded critic who can see nothing good in the system to which he belongs or

in the age thank God -and I am that man i A man who not fit to cou what is he g is only tellin which he liv worthy of a were not blin there may be progress, and not so conspi " God has ful upward and word and by criticism whi other hand w every one is is bound to h ual opinion h the communi vote on the r them; but ev the right sid porters; he k knows that 1 voters but or can live. W personal conv vancing. At personal conv Sometimes w our time, espe who writes s would be real he is in the e his views in t it; and not o readily puts f

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in the age in which he lives. A man who cannot look back and thank God for what he has done for himself and for his country -and I am speaking of Canada-for the education of his country, that man is not fit to have an opinion on educational subjects. A man who does not have a profound sympathy with his own age is not fit to counsel the age. A man who is always praising the past, what is he good for ? Why he is only exhibiting his own conceit; he is only telling his neighbors that he is a person superior to the age in which he lives, superior to the people by whom he is surrounded, worthy of a better time which unfortunately has gone away. If he were not blinded by his own conceit he would see that whatever faults there may be in the age to which we belong, we have made tremendous progress, and whatever faults may emerge here and there which were not so conspicuous in past days, on the whole it must be evident that "God has fulfilled himself in many ways," and that He is leading us upward and forward and making us more like Himself by His own word and by His own grace. I say that is a necessity in order to any criticism which is of any value; but at the same time of course on the other hand we are bound to be critical, and as we were told last night, every one is bound to express his own individual opinion; every one is bound to have free thought. Why, sir, if a man had not an individual opinion he would have no opinion which would be of any value to the community. I believe that politicians like persons who will always vote on the right side, that is on their side, that they may be sure of them; but even politicians like a man to be convinced that his side is the right side. He does not like to have a mere horde of supporters; he knows how uncertain that would be in the long run; he knows that his party and his principles rest not on the number of voters but on the intelligence of the people in the long run. No lie can live. We can only keep truth alive; therefore I say it is by personal conviction that there is advance, and every good thing is advancing. At the same time we are not to be so "in love" with our personal convictions as to refuse to take counsel with those about us. Sometimes when I read letters in newspapers on the manifold evils of our time, especially on the school system, I wonder if the gentleman who writes some of these letters were brought forward whether he would be really as important a person in the eyes of his neighbors as he is in the eyes of himself, or as he seems to be when he flourishes his views in the columns of a newspaper. I have grave doubts about it; and not only so, but I have grave doubts whether a man who readily puts forward his own private and personal opinion, without

consultation with others, can be in any respect the friend of education or the friend of his own profession. We are apt to think when a man takes up the cause, we will say of the schoolmasters and the teachers, that he is doing good. But while I am inclined to thank him, yet, when I come to understand all the origins from which these manifestations have proceeded, I am forced to think that he is neither the friend of education nor the friend of the teacher. Sir, I am a working man, and a poor man, and always have been; but as I sometimes think that among the worst enemies of the "poor working man"-whom I venerate because he toils with burning brow and with hard hand for my sustenance-is the labor demagogue who stirs him up to anger and resentment against his employers, so I sometimes think that those who are the worst friends of the teacher are those who try to persuade him that he is very badly treated. However, I am not going to dilate upon that. I will only conclude by saying that whether we think of ourselves, whether we think of our work, whether we think of the system to which we belong, if we will only do this work with that single eye with which we ought to do all work, if we will only care for the good of our country and the advancement of the interests of our country, her intelligence, her richness, her blessedness in all the true sense of that word, then not only shall we do that which is best for ourselves-a motive which of course ought not to be altogether absent from us, but which the less it is present the more efficacious will be the principle—I say we shall not only do that which is best for ourselves but we shall do that which is best for our fellowmen, best for our country, best for that glorious future which, we believe, remains for that country.

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# THE STATE AND THE TEACHER.

# A. A. JORDAN, MEAFORD.

This paper I place under the title, The State and the Teacher. Some of the thoughts apply in a general way to any community, while a number of them are intended to set forth what I consider would tend to relate more perfectly our own Province and its teachers. It is the duty of all, who have their country's welfare at heart, to do their utmost along this line.

Now, at the outset, it may be properly asked, what constitutes a state ?

> "Not high-raised battlement, or laboured mound, Thick wall or mounted gate ; Not cities proud with spires and turrets crowned; Not bays and broad-armed ports, Where, laughing at the storm, rich navies ride; Not starred and spangled courts,

Where low-browed baseness wafts perfume to pride. No ;-men, high-minded men, These constitute a state."

In plain prose, a state may be defined as a political community, organized and conformed to by the people as supreme. Its chief aim is to widen man's sphere of social effort, and to secure freedom and security in that sphere. There are many ways by which the state endeavors to secure this chief aim or purpose, one of which is education. And of all the means employed, this is one of the most important. Gascoigne once said, that a boy was better unborn than untaught.

Ignorance is one of the great curses of any community. It is so, because it does not understand or care to understand how to conform and recognize the government as supreme; hence results a long train of evils, demoralizing and weakening to the state, and menacing the freedom and security of good citizens.

The poet sums it up thus :----

"Ignorance is the curse of God, Knowledge the wing wherewith we fly to heaven."

Education comes in, then, as an antidote to this great evil; and here it is that the state and the teacher stand together.

Education in this country implies the state and the teacher, the latter appearing in the relation of servant to the former. Now, in these relations to each other, each has weighty responsibilities and important

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duties to perform. And if one of these fail, then the whole progress of the cause of education will be seriously retarded.

It follows, then, that to attain the best results the state and the teacher must be so related that each is giving its best to the other. Hence, in their relation of master and servant, each has certain conditions to fulfil.

The teacher, having assumed the dignity and responsibility of his office, the question arises, what does he owe to the state? He owes himself, his time, his talents, his aspirations, his thoughts and his heart.

As regards his time. If a teacher spends most of his non-official time in reading which has no bearing, or but little, upon his life-work, can he make the progress in character building, in nation building, which the state demands of him and has a right to expect? By no means. Professionally, he should have one main idea, and only one, namely, his school. When that ceases to be his school he should step down and out. He has missed his calling. He, like some members of another profession, has misunderstood the call. Pestalozzi was a splendid failure at theology, law and farming, but as a teacher he has earned undying fame. Many who are teachers would earn success if they would do as Pestalozzi did, change. The teacher's time should be steadily centred upon his work, never giving signs of weariness. Had Columbus grown weary of his life idea, he would have been no longer fitted to say to his men, when they were weary and anxious to return to their dear old Spain, "Sail on, sail on."

The teacher who secures the best results in his school is the teacher who devotes time to it, who patiently endeavors to make progress, and not to mark time, who ever feeds his mind, and thus avoids dull monotony.

The teacher who realizes by his increased power at the end of each year, that he is growing to be a more efficient teacher, a more potent factor for good in his community, is the kind the state requires, is the one who is furthering the end of the state.

Then as to his money. He owes a fair proportion of it. It may be said that the average teacher is so poorly paid that he has but little to spend upon his profession, but I am assuming that the state is paying him a respectable salary. How should he spend it in order to further the interests of education? First, upon books. Every teacher should have a well-stocked library of educational books, and others of a more general nature. If not, how can he *grow*, and how can his pupils who depend so largely upon him for their intellectual life and nourishment, grow? In such a case it is vain to expect the best results. Then h in his own more than The answ some of t afford to b

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It may be but little to te is paying r to further cher should s of a more pupils who ourishment, Then he should be a subscriber to the best educational thought, first, in his own country, and then from foreign sources. How many of our more than 8,000 teachers are n t subscribers to any educational journal? The answer would be a surprise. Then he should be in possession of some of the best magazines to be had. These cost money, but can he afford to be without them ?

Again, he owes not only his time and his money, but also his heart. If the teacher's heart is in his work, and it finds joy and satisfaction there, of necessity his head will be there also, for the head follows the heart. The strength of this force will be measured by his elevating influence upon the hearts of those with whom he is associated from day to day, and of necessity the stronger his heart power the more he will impress himself upon those around him, and so the great need of the teacher "to keep his heart with all diligence," knowing "that out of it are the issues of life." The heart of the teacher should manifest itself in his manner towards all with whom he is associated. It should be kind, simple and unaffected, not over independent, dogmatic and imperious. There was truth in the lines of Goldsmith :—

"That independence, Britons prize so high,

Keeps man from man, and breaks the social tie."

On the other hand, the teacher should not be a sycophant in manner. He should be a manly man; a man with principles and opinions his own.

His manner should always be the result of genuineness of soul. He should have a deep sympathy for children, and his manner should indicate this, so that he may be able to win the love, respect and esteem of his pupils. Nothing he does will then be looked upon with suspicion. These lines express what I mean: "One man may steal a horse, while another may not look over a hedge."

I do not wish my friends to be thieves, but to do the best work they must somehow secure the pupils' respect, esteem and confidence. Manner, to the teacher, is a powerful force. IIear what Bishop Middleton says: "Manner is something with everybody, and everything with some."

Tact, which has been defined as fineness of touch, is a quality depending, at least to a considerable extent, upon the heart, and hence the teacher should so train and restrain his feelings that his desired ends for good may be attained with the least possible friction and trouble. He should, so long as no principle of right and justice is violated, adopt the "sunny ways of conciliation." The idea is well summed up in these words of the great poet :—

"What thou wilt, thou rather shalt enforce it with thy smile, Than hew to it with thy sword."

These, then, are a few of the considerations in regard to the relation of the teacher to his master—the state. On the other hand, we now ask, what are the duties and responsibilities incumbent upon the state in its bearing towards the teacher ?

It owes to him its protection, encouragement and sympathy. These it owes not merely for the sake of the teacher, but mainly for its own interest, in order to the attaining of its chief aim. First, then, the state should protect him from those who are inefficient. Education is of such vast and far-reaching importance that only the fittest should be employed.

"Deliver not the things of might to weakness." Inefficiency is deplorable in any office, political, social or otherwise, but it is especially so in connection with the training of those upon whose shoulders a responsibility, weighter than that borne by the men of the present or those of past ages, will rest. Men and women who only keep school should not be tolerated.

Secondly, the state should aim at making its teachers, who are its officials in the department of education, permanent, and those who enter more efficient before entering. In other departments of official life, the state always aims at retaining tried servants, and why not in this? Yet the very opposite condition obtains in this Province. There is a lamentable lack of permanency. Now, why is this the case?

There are various reasons. One is, that a large number of young persons, whose aim is not the elevation of the race by devoting their life to the youth of the country, but who are looking forward to something higher—as they view it—enter the teaching profession (?) in order to earn sufficient money wherewith to get out of it and into those other and more lucrative professions.

These teachers may not be inefficient, but on account of the frequent changes, and the brevity of their tenure of office, their influence will not be deep and enduring. When teachers are constantly changing, they do not remain sufficiently long to impress their personality upon the *life* and *thought* of any community.

Suppose Dr. Arnold had remained in Rugby for one or two years, another short term in Harrow, and so on to the end of his career, would his services to the state have been as great as they were? Would his name have become historical? No; time is required to discover and draw out and mould the genius of the child.

Another reason is the deplorably low salaries paid to teachers, especially in the rural parts of the country. In some places it pays better to be the janitor. From this results a constant changing of teachers. Ten dollar The increa These cha of a kind once seen under our us now wi

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ers, especays better ' teachers. Ten dollars is frequently sufficient reason for moving to another section. The increase is so vast as to be like a perfect El Dorado to the teacher. These changes are so constant as to give the profession the appearance of a kind of realistic cinematograph. A large proportion of the faces once seen at our Conventions are not seen again, and while they are under our eye, we have come to reflect that many of the forms before us now will be seen by us no more for ever.

A third reason is the employment of so large a proportion of teachers holding third-class certificates, obtained upon primary non-professional certificates. Between fifteen and sixteen hundred third-class teachers are passed into the ranks of the teaching profession yearly, and consequently there is a Klondike rush for claims. The rush is so great that experienced teachers may well exclaim with alarm and consternation:—

"See the mighty host advancing."

The fact is, that teachers who are of standing and experience are being driven to the wall, and others with no experience, and in age but infants, govern—

> "with new-fangled rules, Such as were *ne'er before* enforced in schools."

The question then arises, how can the Government aid in securing permanency, and in rendering more efficient those who are admitted to the profession of teaching ?

1. By abolishing primary non-professional certificates as a means of admission to the county model schools, and by raising the age of entrance to the profession to twenty-one years. The first being done, will make the non-professional knowledge more thorough, accurate and comprehensive. The second will ensure an experience of the world absolutely necessary to balance the mind and temper the judgment, and they will enter upon their work with a development of mind and judgment not possessed by boys and girls.

France recognized, after 1871, that the schools of Germany had won Sedan, and perceiving that she must reorganize her schools upon a new basis, if she would gain her lost prestige, proceeded to do so, and one point worthy of note in connection with that reorganization is, that a Frenchman who is legally qualified, and who is twenty-one years of age, may teach. We earnestly hope that our Government will seriously consider the advisability of raising the age limit.

If the age limit were raised it would materially reduce the number of those who enter the profession not with the purpose of making teaching their life work, but with the object of using it as a steppingstone to higher things—as they regard it. Then only those whose

hearts and sympathies are strongly inclined towards teaching will enter this profession. The state will then have more ideal teachers for in that direction their ideals are set.

2. Differentiate teachers' examinations from the university matriculation examinations and from the examinations of the other learned professions, and place the teachers' examinations exclusively under the control of the Education Department. This will deter those desirous of entering some profession from first entering the teaching profession as an aid to the one to which they aspire.

This very uniformity and continuity of which so much is said and has been said is the very reason why so large a number of ambitious young people float into the teaching profession—and I do not blame them—as a means of providing themselves with the means by which they may pursue the course at the end of which lies the goal of their ambition.

3. Increase the percentage required at the various examinations, professional and non-professional. Has the time for this change not come? I have every sympathy with those who have to pass examinations but in view of the great number of qualified teachers out of employment, is it not time for a change? If it is fair and just to increase the requirements of candidates at County Model Schools by  $6\frac{2}{3}$  per cent. and 10 per cent.—as has been done—would it not also be just and fair to make corresponding increase on the other professional examinations and also on the non-professional examinations? If this were done students would know their work more thoroughly and the supply and demand would be more evenly balanced.

A large number of students at our present standard of  $33\frac{1}{3}$  per cent. and 50 per cent. just squeeze through, as was the case with Du-Maurier when he wrote these lines to his father: Dear Governor,

> "It's no less strange than true, That by a lucky fluke I'm through ! I'm through ! And yet it was unless I'm much mistaken, A close shave of the plough, Just saved my bacon."

With a percentage of 40 per cent. and 60 per cent., a "close shave of the plough" would be no disgrace. I believe this point is worthy of consideration in connection with this question of permanency and efficiency.

4. Aid in establishing teachers' residences throughout the county. The Government could make a grant to the various municipalities as an aid towards the building of these on condition that the sums so granted s opinion, a crease the

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the county. cipalities as the sums so granted should be used for that purpose only. This would in my opinion, aid in securing a permanent staff of teachers and hence increase the efficiency of the schools.

5. Increase the grants to Public Schools. I do not say nor do I believe that the secondary schools are receiving too much, but I submit that the Public Schools are not receiving sufficient. The amount received reduces the direct tax burden by too little and consequently *it* is no inducement to trustees to engage experienced teachers at a good reasonable salary, and so I say let the grants to the primary schools be increased and let these be based upon attendance, efficiency of work done, equipment, or upon any basis which will ensure permanency and efficiency.

If these things are done I believe the question of remuneration as well as permanency and efficiency will be solved and the teachers of our profession will not be under the stigma of being compared with the poor Russian teachers, who, it is said, are very poorly paid.

In Russia at a scholastic meeting some well-disposed person proposed the health of the teachers in the following toast: "Long live our teachers." A seedy, cadaverous-looking individual who was a teacher, rose and laconically asked: "What on?" Now, no matter in what way the Government may accomplish it, one thing appears to be evident, that it is their duty to make provision for a permanent and efficient service.

Lastly, the state owes to the teacher its sympathy and encouragement. This it can give without the sale of timber limits and mines. I believe that our Governments in the past and the Ministers of Education connected therewith have felt a deep sympathy for the people and the teachers in their struggles in the matter of the advancement of education. Our present Minister of Education has always manifested a lively interest and sympathy for teachers, having arisen from the ranks himself, but there are very many poor toilers and strugglers who can never hear his words of encouragement and sympathy and so I believe an occasional address of appreciation and encouragement sent out to all the teachers in the Province would be a stimulus. For the encouragement of primary teachers in their unappreciated labors, Guizot, Minister of Public Instruction, addressed them the following beautiful words: "I know full well that the care of the law will never succeed in rendering the simple profession of district teacher as attractive as it is useful. Society cannot make a sufficient return to him who is devoted to this work. There is no fortune to be won, there is scarcely a reputation to be acquired in the discharge of his onerous

duties. Destined to see his life pass away in monotonous toil, sometimes even to encounter the injustice and ingratitude of ignorance, he would become disheartened, and perhaps succumb, if he did not draw his strength and courage elsewhere than in the prospect of an immediate and purely personal interest. It is necessary that he be sustained and animated by a profound sense of the moral importance of his labors; that the austere pleasure of having served men and contributed secretly to the public weal become the worthy reward which his conscience alone gives him. It is his glory to pretend to nothing beyond his obscure and laborious condition; to exhaust his strength in sacrifices scarcely noticed by those who profit by them; in a word, to labor for men and expect his reward from God alone."

To conclude, it is hoped that the high-minded and progressive men upon whose shoulders the greatest responsibilities of this great Province rest will earnestly consider—as I believe they will—this important problem so frequently placed before them in various ways by this Association and that a setisfactory solution, even if not along the lines indicated, will be speedily found so that in every respect we may be proud of our noble system of education and that the character of the education given may be greatly perfected.

On the other hand, we, as teachers, must not forget *our* duties, responsibilities and obligations. Knowing as we do that the reward and glory, in a system however perfect, can never be that of the statesman or the soldier or even that of the public man in municipal life, we must nevertheless do our work just as perfectly as if it were to command the admiration of senates and as if we were to receive the recognition of the popular hero.

These lines express my thought and with them I conclude:

"We cannot all be heroes And thrill a hemisphere, With some, great, daring venture Some deed that mocks at fear, But we can fill a lifetime With kindly acts and *true*, There's always noble service For noble souls to do."

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## DRILL AND PHYSICAL TRAINING.

## FRED. F. MANLEY, M.A.

The first soldier of whom I have any recollection was the Drill Sergeant of Her Majesty's 30th Regiment of the Line.

It was one of his duties to drill the boys in the Victoria Street Public School, where I had the honor of receiving my early education, and although I was not a member of his class, this did not prevent my silent admiration of this fine specimen of the British soldier.

I would, with other admiring little fellows, stand at the school gate and watch for him as he turned the street corner just as the bell rang us into school and if our punctual sergeant did not appear, we always said the master's bell was wrong. I admired his beautiful, bright, red coat and his silver (as I thought) buttons. How smart he looked, I thought, compared to our schoolmaster! How well he walked across the school yard with his chest thrown out! How white his belt and how black and shining his boots! I used to wonder if I would ever be as smart and well dressed as he was and whether I would ever be able to walk along the street as well as he did, and no one will deny that it was a good desire on the part of a boy to look neat and clean and to walk in such a way!

I have seen and have known several great soldiers since then, but my old sergeant of the 30th Foot will always be the greatest to me.

Thus do early impressions leave their indelible mark on the boy or girl and in nothing more than in habits of dress and carriage.

No better model can be found in this respect than the regimental drill instructor at any of our infantry schools of instruction, and, generally speaking, the boy who has been properly taught his drill will always show it in his subsequent dress and manner.

The inspection to which the young recruit is submitted instils the habit of brushing his clothes when he uses them and necessarily brings to his notice the need of that "stitch in time that saves the other eight."

Surely these are useful traits in a boy's character and assist him in his progress through life in having the good opinion of his fellows, as much as the multiplication table or the *pons asinorum*, and it is no

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doubt that, with this laudable object in view, the authorities have doled out a small portion of the school time to the physical development of the pupils, so that their poor minds, which are over-worked and tormented enough at the present day, may at least have a healthy dwelling-place.

While this is of great importance to pupils in the elementary classes of our schools, it becomes more necessary as the pupils become so engrossed in their mental labors that they are likely to forget the claims of their bodies, notwithstanding the fact that the judgment gained by their years might be expected to warn them of their danger.

There is also an impression abroad that the play-ground and the long walk to school provide sufficient exercise for the pupil. There may be some but not a great deal of truth in this. In the first place many of those who are the hardest students make a point of living as near the school as possible, and are never found joining in the games when there.

It must always be borne in mind that it is the large minds that are in danger of ruin for want of good bodies and that it is the duty of the authorities to pay particular attention to *them*. The lazy boy and girl will not hurt themselves and require little attention in this respect, but studious pupils who walk a distance to school are for most of the distance thinking over the work that is before them.

The only remedy for this is compulsory drill and physical training. As before mentioned, this is attempted on a small scale in the schools of this Province—attempted, I say, because it is not sufficiently enforced, and therefore, to a large extent worthless.

Here again we find that the able student is the sufferer. The unintentionally selfish teacher who has a bright pupil on whose success a reputation may be made, is inclined naturally to allow mental rather than physical development to hold sway and the hour that should be devoted to exercise is spent, unchecked, at the desk, and when after a brilliant university course, completed with the highest honors and amid the plaudits of comrades and friends, there comes the break down with which we are all so familiar, the teacher seldom thinks that the seeds of this destruction were sown in the preparatory school.

It is well-known that any subject must be made interesting before it can become instructive and no doubt this is one of the reasons why drill and physical training are not carried out thoroughly in all the schools. I tell my pupils and I make the statement here without fear of successful contradiction, that the time spent by them in the open air at drill and physical training can be made the most interesting and instructive h about the bo the boy's ad

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esting before reasons why y in all the without fear in the open teresting and instructive hours of their school life. Let me explain, and what I say about the boy applies equally well to the girl, with the exception of the boy's advantage in clothing that is more suitable for the exercise.

I need not dilate on the advantage of the fresh air over the atmosphere that is found in the majority of our schools, although, thanks to science and common sense, they are rapidly improving. On the parade ground the mind of the pupil is constantly active when the work is going on, and is continually suiting the action to the word—the response must be rapid. Indoors the pupil may sit and think,—outside the action must be immediate. More than this, the pupil in properly arranged drill instruction can see a move or two ahead, and thus acquires a valuable habit of anticipating events.

So much for drill when properly taught. A few words as to the result when improperly taught. Nothing, in my opinion, can do more harm than drill and physical training conducted in any other than an able manner. The smartness of movement and the discipline involved are some of its best features, and if these are not rigidly insisted upon, more harm than good is done.

I have looked over a fence not many miles from this spot and have been staggered at the methods adopted in teaching drill and calisthenics. When it is remembered that I was looking at the training of those who were soon to go to the country and operate in the same way on their own pupils, is it any wonder that I was astonished ?

My hearers may have noticed that so far I have kept the military and patriotic view of the subject in the back-ground. This was not accidental but for a purpose—I wish to show that the future strength of the country depends largely on the manner in which it trains its boys and girls in their schools. I wish to point out to those who object to the fighting side of the question, that physical drill is the best means that can be adopted to keep the people strong and healthy, even if they are never called upon to use that strength to defend their homes and families, but spend it all on the acquisition of wealth and position.

I know there are a few in this Canada of ours who have no patriotism themselves and are afraid it may be instilled into the rising generation, but surely they will not close their eyes to the necessity of providing their children with sound bodies, and if it the process of arriving at this much to be desired end, the country is providing itself with a nucleus of defence not defiance, who can complain ? Do these people think that every time a class is formed on parade for drill and physical training, that bloodshed and pillage are the only subjects of discussion ?

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If the military element is allowed to become too prominent in the school instruction, it is a mistake.

Patriotism and a strong defence are good things, let "Jingoism" and boasting be foreign to our soil.

"In pace paratus" is the motto of the Queen's Own Rifles of our city and might well be the motto of the country, and the military authorities cannot spend their militia appropriations better than in giving elementary drill instruction to the boys of schools—those to whom it must look for defence if ever the occasion should arise.

No matter what changes are made in the form of military evolutions, the boy never forgets the first principles and can rapidly be taught the rest and all this can and should be brought about without turning a lad into a drill sergeant or a swaggering fire-eater.

The great drawback—in the past—to thorough instruction in these branches has been the lack of competent instructors. Men and women have always been available as first-class teachers in the classics and mathematics of the school-room. They have acquired their skill by experience and training in the institutions set apart and maintained at the public expense for that purpose. It is not to be wondered at that these subjects have become popular and are interesting to some. More, they must be studied carefully or candidates could not pass the examinations required.

We have discussed here the question of allowing drill and physical training to become optional with the head masters—the next thing will be leaving it optional with the pupil. Imagine leaving the subject of arithmetic optional with headmasters in the case of some of their pupils, even when the subject is taught in the most satisfactory manner in their school. Now, unless drill and physical training be made as interesting to pupils as arithmetic or algebra can be made, especially to those that have a bent for them, and unless drill and physical training be made compulsory as these subjects are, by submitting pupils to some test, the subject will never receive the attention its importance demands.

Schools that were in a position to avail themselves of the services of first-class military instructors in some cases have done so and some have not, but have continued with teachers who were unfitted to impart the instruction, and who, in consequence, only made it repugnant to the pupils.

But even with one of the regular teachers on the ground, this method is not as satisfactory as when the teacher himself is competent to take the class in an able manner.

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At one time there were more and better drill instructors among the High School teachers than at present. This was when the University Company of the Queen's Own Rifles was alive in all its glory. Then many of our High School masters came from its ranks, well qualified by experience gained there, to handle their classes in drill and physical training, and possessed of a knowledge of discipline that assisted them materially in their school work. Alas, all this has passed away ! For some reason that has never been satisfactorily explained, the University Rifles were permitted to die a natural death. Many of those I am now addressing can look back with pleasure to happy days spent under the command of Croft, Cherriman, Delamere, vanderSmissen, Ellis and Baker in the ranks of that historic company, and I am satisfied that they never begrudged an hour devoted to its objects any more than those devoted to the regular work of the college. Nay, they will freely admit that they owed as much of their success in the management of their schools to its valuable training as they did to the more sedentary part of their university labors.

May I here be permitted to express my regrets that the authorities of our Previncial University were so dead to its interests as to permit this important factor in its existence to be eliminated.

There are always plenty of students willing to take up the matter, but there is a lack of zeal among those who must fill the commissions in order to make the corps a success.

The officers must of necessity be found among the professors or tutors of the college or its affiliated institutions, and I am satisfied that if these were forthcoming at present there would be very little trouble in reviving the old spirit and putting the University Rifles once more in the leading position they formerly occupied.

As many of you are no doubt aware, an agitation is just now on foot with this object in view, and I am sure every old member of the corps wishes it every success.

The members of this department will perhaps recall that I was expected to give these views at last year's meeting, but, owing to pressure of business, it was deferred to this meeting.

The remarks I have already made were applicable last year and would be at any time, but whether by accident or by anticipation the education authorities of the Province in conjunction with the Militia Department at Ottawa have brought down a bill which cuts the ground, I am glad to say, from under the stand I should have taken last year if I had addressed you at that time.

I need scarcely inform you, I refer to the regulation concerning High

### COLLEGE AND HIGH SCHOOL DEPARTMENT.

School Cadet Corps and classes in military instruction, by which any High School is authorized to form a cadet company and to receive a grant if a proper inspection be passed before a properly constituted military officer.

It is well-known that the Militia Department, by the regulations and orders of 1887, had already made provision for the formation of such corps and that the services of regular military instructors would be placed at the disposal of each school for one month in each year, and several of the schools of this Province, as well as of those of the other Provinces, have availed themselves of this opportunity.

The drawback previously referred to, however, has always been experienced in that there could not be found on the school staff instructors qualified for the work, and although benefit was obtained from the government instructor while he was in attendance, in order to make the corps efficient, the instruction must be continuous throughout the year.

This drawback the authorities have now undertaken to remove by providing means for High School teachers to qualify themselves to act as instructors of these cadet companies.

As a compensation no doubt for the month's instruction formerly received without cost from the government instructor, the Education Department promises that on the report of the Minister of Militia to the Minister of Education for Ontario that the inspection and examination of the corps have been satisfactory, the sum of \$50 for the current year shall be paid over to the Board of Trustees concerned.

Special courses of instruction for High School teachers will be provided in Toronto next July and August, the course lasting about a month.

It is not known whether the authorities can be prevailed upon to lend any financial assistance to those who are willing to give their time for such an object, but it is to be hoped that no efforts will be spared to bring this about.

Formerly, young men who were willing and able to spend a certain time at the military schools were granted a good round sum on passing the necessary examination. No doubt some I am now addressing took advantage of it.

The same should be done to-day. As I before stated, the authorities can well afford to spend in this direction some of the Militia Grant that is now largely wasted. These teachers on returning to their schools will be of as much service to the Militia in their districts as any officer of the neighboring battalion, and should be recompensed accordingly.

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### DRILL AND PHYSICAL TRAINING.

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he authorities Militia Grant hing to their r districts as recompensed The latter receive one dollar per day for a course of three months, as well as transport to and from the school. The grant of \$50 from the Province is not as large as might be expected, but it is a step in the right direction.

With these opportunities every High School in the Province of Ontario should be the home of a cadet corps, to become a member of which will be the incentive for its pupils to take a greater interest in their physical drill and training.

If these corps are carried on as they ought to be, the tone of the school will be improved as well as the physique of its pupils, and the educational and military authorities will be amply repaid for their efforts in bringing about this much needed reform.

# MODERN LANGUAGE SECTION.

### RUDYARD KIPLING.

# A. STEVENSON, B.A., WOODSTOCK.

The old question as to what constitutes poetry, and what is the function and mission of the poet—this question, though as old as Aristotle, and much older, is still under discussion, and apparently no nearer settlement than ever. An English critic recently raised the question in regard to Rudyard Kipling, by the remark that though he is to be counted as a skilful ballad writer, he is not a poet at all. On the other hand, Mr. W. D. Howells, in the United States, and Mr. Stead, in England, hail Mr. Kipling as the laureate of the British Empire in contradistinction from Mr. Alfred Austin, the laureate of Lord Salisbury and the Queen. These two estimates are, of course, not necessary contradictory; for there have been a good many laureates that were not poets. But Mr. Howells and Mr. Stead, no doubt, intended to express a view entirely opposite to that of the other critic, and to declare that they considered Mr. Kipling a poet of very great merit.

The truth of the matter probably lies somewhere between these two opposite views. A considerable number of Mr. Kipling's productions in verse have certainly very little, if any value, as poetry in any high sense of the term, for they express no serious thought or fine emotion. On the other hand, it can scarcely be denied that there is genuine poetical merit, and that of a high order, in several of his pieces.

In his first volumes, at least, Mr. Kipling made no pretensions. He very modestly entitled them "Departmental Ditties," "Barrack Room Ballads and Other Verses." And yet there is poetry too in these books, and not mere verse only, poetry that stirs the heart and fires the brain.

What Mr. Kipling claimed for his first volumes was the merit of sincerity. He declared that he had seen the sights and lived the life that he described, that he had shared its toil and its ease, its joys and its woes, and that, in short, his verses were the expression of real experience and real feeling. He probably anticipated that his work would be objected to on this very ground, the ground of its excellence as he himself conceived, that it was realistic, that it lacked imagination and depth, and breadth and the rest. It was to meet such a criticism, doubtless, t as the first stanza of th

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### RUDYARD KIPLING.

doubtless, that Mr. Kipling wrote the verses describing Satan himself as the first art critic, and as still practising that profession. The first stanza of these verses reads:—

"When the flush of a new-born sun fell first on Eden's green and gold,

Our father Adam sat under the Tree and scratched with a stick in the mould; And the first rude sketch that the world had seen was joy to his mighty heart, Till the devil whispered behind the leaves: 'It's *pretty*, but is it *art*?'"

In the "Seven Seas," Kipling describes the ideal condition of an artist in Paradise as in absolute freedom to exercise his art, drawing "the Thing as he sees It for the God of Things as They Are!" The poet seems to remember, however, that things as they are now on the earth are very different from things as they will be in Paradise. So, while he declares in favor of unlimited freedom for the eternal future, he keeps himself pretty well in restraint for the present. He sees that while it is well to draw as it is, what he does draw, it does not follow that he should draw everything indiscriminately, and apart altogether from any consideration of its fitness to be drawn. He recognizes clearly that one function, at least, of the poet is to give pleasure, and also that from the very nature of some things as they now are, it is impossible that they should give pleasure if they were drawn faithfully. So he leaves them alone for the most part. Where he does not his error is evident. It is no defence for these passages to say that they are true to nature. For there are many things in nature that are not pleasing to us, and never can be so long as we are what we are. The natural is not necessarily the beautiful. Given the conditions, and disease is as natural as health, the hectic flush of consumption as natural as the ruddy glow of youth. Even the most malignant cancer is a natural growth in the circumstances under which it develops. But no one will contend that a cancer could be described as it is, in all its hideous foulness, and yet give pleasure. Neither then are moral cancers fit subjects for poetic treatment, except incidentally and in passing allusion.

The title, "laureate of the British Empire," is a somewhat lofty one, and if it is intended to represent surpassing excellence it is doubtful if Mr. Kipling has fully earned it yet, whatever he may do in the future. For he is still a young man, only thirty-two years of age, and his work is growing better. In the application to Mr. Kipling of the phrase "laureate of the Empire" there seems to be implied that the title is a suitable one for him because he has treated more fully than any other poet the various lands and peoples which go to make up the British Empire, and because, as Stead says, he has "expressed in articulate speech and

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vigorous verse the mighty impulses of our Imperial race." Mr. Kipling's talent is indeed versatile, and he has written many poems of imperial interest. But his themes are mainly material, and the regions he describes are mainly in the East. Yet the life of Greater Britain is not all military or commercial in its interests, nor are England and India all of the Empire. There are nobler things to be done than fighting merely to extend the political and commercial glory of Britain. Nor will Canadians hardly agree to crown as their poetic interpreter the bard whose songs of Canada are limited chiefly to "Our Lady of the Snows," and the story of that unfortunate, the

That is, he had the advantage of great opportunities in the qualities of his character and in the circumstances of his environment. He was born and reared in India, a country abounding in the freshest and most striking of literary material. He was endowed by nature not only with the desire to write, but with intense human emotion and the rare faculty of ability to see things, and rarest of all, the good judgment to recognize that his field lay among the things with which he was thoroughly familiar. He had the advantage, too, of the inspiration arising from the encouragement of a considerable public ready to receive him. Thirty years had elapsed since the British Government superseded the East India Company in the management of Indian affairs. During all this time there had been a continuous and vast development of British political and commercial interests in India, until there had come to be not only a large number of British people in India, but a still larger number in Britain itself, who were much interested in the East, either from having formerly lived there, or from having relatives and friends, or important business interests there at the present time. Then, too, from a variety of causes, the general British public have of late had their interest aroused and quickened in all the colonies and dependencies of the Empire. And so it was, that when this strong young minstrel arose to sing the glories of trade and empire, he was received on all sides with loud acclaim.

Mr. Kipling's first volume deals chiefly with life and affairs in Indiaofficial, military and civilian. The Departmental Ditties, as he announces in a versif are not co the high li tical and r ing, a life

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tirs in India she announces in a versified introduction, expose some forms of official sinning which are not confined to India. Mr. Kipling gives us more than a hint of the high living and loose morals of many of the official class—both political and military—a life of dining and wining, of gambling and sporting, a life of idleness and luxury, tainted with licentiousness.

He describes, too, the frequent and scandalous sacrifice of public interest to private advantage, and the corrupt use that is made of the influences of society, especially feminine society, in securing highly salaried public appointments for incompetent men.

Mr. Kipling shows, also, how the public service suffers from the blind and unreasoning prejudices of the governing class. The office of Superintendent of State Railways was to be filled; a thoroughly competent man was available—competent from knowledge gained by long experience—but he was passed over for another, because the latter had gone through college, and—

"Because that, in all matters that deal not with railways, his knowledge is great."

Very well done too is the description given in "The Masque of Plenty" of the ineffectiveness of ordinary government committees of investigation in India, and the utter untrustworthiness of their reports.

This display of mendacity and inefficiency on the part of native subordinate officials leads up very well to the description of the difficulties of governing India, which are noted cynically and despairingly in Lord Dufferin's advice to his successor Lord Lansdowne as given in the poem "One Viceroy Resigns." So great is the inertia, so dense the superstition and prejudice of the common people, and so corrupt the morals of the upper classes, that the departing viceroy is represented as having lost faith, not only in man but in God, commending Lord Lansdowne only to Fate, and declaring—

> "Here, at the top, one loses sight of God, .....God help you, if there be a God."

In bright contrast with this gloomy official view of native character and possibilities in India we have the pictures of unwearied faithful service on the part of humble native employees, such as the mail courier and the regimental water carrier—faithful even unto death—for so was Gunga Din, who

> "....didn't seem to know the use of fear; An' for all 'is dirty 'ide 'E was white, clear white, inside."

There is no doubt that Mr. Kipling thinks more of the military class, especially the common soldiers and non-commissioned officers, than he does of the government officials. He does not seek to hide the

soldier's faults, but he dwells appreciatively and sympathetically on all the incidents of the soldier's life. There is first the embarkation of the men in the troop ship in old England, with the pathetic good-byes and the dismal foreboding—carried off by a cheer and a laugh—that they will never return, but are doomed to fall victims—not to the sword or the gun, for that death seems natural to a soldier, but victims to the torrid climate and the fevers and plagues of the East.

We have, too, a clever description of the daily drill and discipline to which the soldier is subjected, and its good effects, especially upon the native recruit. But Kipling's best work in this line is "Pharaoh and the Serjeant," a ballad he wrote only last year, dealing with the training of the Anglo-Egyptian army—a ballad which has especial value just now, in view of the great victory gained only last Friday (April 8th, 1898), by that very army over the Dervish forces above Berber, on the Atbara River. The writer's expressed purpose in this ballad is to do honor to the drill serjeants, a class of men whose merits are too often overlooked, but who "drilled a black man white," and "made a mummy fight," and had "a charm for making riflemen from mud."

The poem entitled "Fuzzy-Wuzzy" is of equal interest just now, both on account of its application to the events of to-day in Africa, and as showing Mr. Kipling's broad sympathies and admiration for courage even in a most barbarous enemy.

> "We've fought with many men acrost the seas An some of them was brave and some was not; The Paythan an' the Zulu an' Burmese; But the Fuzzy was the finest of the lot; An' 'ere's to you, Fuzzy-Wuzzy, with your 'ayrick 'ead of 'air—

Yon big black boundin' beggar-for you bruk a British square !"

"The Hymn before Action" is among the best of Kipling's poems. It is reverential and devout as becoming the subject, and is severely simple with that grand simplicity which distinguishes the author's later great poem "Recessional." Other striking poems in the "Seven Seas" are "McAndrew's Hymn," "Mulholland's Contract," "The Mary Gloster," and "Mary, Pity Women."

Mr. Kipling has been complimented on his intense patriotism. But prior to the "Recessional" his poems showed a patriotism based on extent of empire, on military and naval supremacy, and commercial prosperity. This, of course, is as high as most so-called patriotic poems reach, and so Kipling is not to be specially singled out for blame in this regard. But he also shows the other characteristic vice of the patriotic poet, even in the "Recessional," for he speaks as if we, and our particular empire were under the special and sole care of the Almighty, and as if in all her side we care. That that thoug as being so The gen places, by a obscurity. barisms, or navy. Tal of Plenty"

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#### RUDYARD KIPLING.

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The general reader of Kipling's verses is more or less annoyed, in places, by a lack of clearness, which sometimes amounts to the densest obscurity. This is generally due to the excessive use of Hindoo barbarisms, or of technical or slang terms peculiar to the army and the navy. Take as a case in point the following stanza from "The Masque of Plenty":—

"Oh, the dom and the mag and the thakur and the thag And the nat and the bringaree, And the bunnia and the ryot are as happy and as quiet, And as plump as they can be."

Now what does that mean? These are not nonsense verses, like Lewis Carroll's, with nonsense words, for thanks to recent famine articles in the magazines, most of us doubtless know that a bunnia is a merchant, and a ryot a peasant; but who are the rest? What makes it more provoking is that there is no foot-note or glossary to explain these terms. Doubtless it was advisable in places to use un-English terms to secure the local coloring, but most readers will agree that Kipling has overdone the matter, and that the result is not color at all but the blackness of darkness. Yet there is one striking passage in "McAndrew's Hymn" which shows that where imitative harmony is brought into play, that itself throws a bright light on obscure terms. The poem, as a whole, is a remarkable disproof of the doleful prophecy that science kills poetry, and that as science advances poetry must decline. Kipling shows what a grand subject for poetry a modern marine engine is, though it represents some of the latest and highest results of science.

Apart from the lack of clearness already noted, Mr. Kipling's style is in general exceedingly fresh and interesting. It is distinguished chiefly by a certain vigor, energy, incisiveness, lightened by the liveliest humor, or deepened by a peculiar pathos which is often bluff in its way, but is always heartfelt and sincere. There is no sign of straining for effect, no maudlin sentiment. It is all hearty, outspoken, natural. His versification is his own, spontaneous, organic, varied, but always simple as becomes the simplicity of his themes. As a poet he deserves well of his day and generation, for he has shown us beauty where we saw none before, he has broadened and deepened our sympathies and quickened our interests in nature and men.

## LA POÉSIE CONTEMPORAINE EN FRANCE.

### MONȘIEUR DE CHAMP, TORONTO.

MESSIEURS :---En considération du court espace de temps qui m'est imparti, je dois me borner à mettre sous vos yeux une modeste esquisse de la poésie contemporaine c'est-à-dire sur les tendances de nos poètes depuis 1884, soit environ quinze ans.

Le but et le résultat du romantisme ont été de briser complétement avec toutes les théories des classiques. À tous les points de vue ils ont pris la contre partie des règles fixées par Boileau et son école; aussi bien par la nouveauté des sujets, des sentiments et des caractères que par la nouvelle métrique qu'ils ont apportée dans leurs vers.

Un des traits du romantisme consiste dans la continuelle présence, tant soit peu fatigante du Moi du poète. Le principal caractère de l'école Parnassienne a été précisément d'écarter de ses œuvres cette obsédante personnalité. Théophile Gautier dans ses Emaux et Camées en 1852 avait déjà indiqué la voie aux Parnassiens à cet égard.

Leconte de Lisle a définitivement rompu avec toutes les formules du romantisme, il a orienté la poésie vers un autre idéal, il l'a faite réaliste et positiviste. MM. François Coppée, Sully Prudhomme, J. M. de Hérédia, l'ont suivi, quoiqu'en adoptant chacun un genre différent. Mais, ce qui demeure surtout commun à ces quatre écrivains, c'est la merveilleuse perfection de la forme qu'ils ont apportée dans leurs vers et qui en a fait avant tout d'admirables artistes.

C'est précisément contre, cette perfection, en même temps que contre, une prétendue sécheresse de sentiments que se sont insurgés la plupart des poètes contemporains.

Paul Verlaine s'il ne peut être considéré comme le chef de la nouvelle école doit du moins être reconnu commre le précurseur du Symbolisme. Ses premiers poèmes sont d'un parfait Parnassien, mais pendant la dernière partie de sa triste existence il s'écarta de ses premiers principes en apportant dans ses vers une certaine liberté de facture, dont s'enthousiasmèrent quelques jeunes gens qui pour le plus grand nombre sans avoir encore rien écrit jetèrent les bases d'une nouvelle poétique. Le Symbolisme était né.

M. Brunetière fait remonter les origines du Symbolisme jusqu'à Beaudelaire et par un ingénieux rapprochement essaye de démontrer que le nouvel état d'esprit de nos jeunes poëtes est dû aux théories des préraphaelistes Anglais, à l'influence du roman russe et de la les très su qu'il n'ait hauteurs o mais si m éthérée, je fut Verlain haélites, s' il connaiss coupes sur

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### LA POESIE CONTEMPORAINE EN FRANCE.

et de la musique de Wagner. J'ai suivi avec un certain intérêt les très subtiles déductions de l'éminent critique mais je crains bien qu'il n'ait pas réussi à me convaincre. Si je reste avec lui sur les hauteurs où il nous entraîne je suis bien forcé de penser comme lui; mais si me faisant réaliste je reprends pied dans une région moins éthérée, je suis obligé de me demander si ce pauvre grand poète que fut Verlaine se faisait une idée bien exacte des intentions des préraphaélites, s'il avait jamais lu les romans russes et si en fait de musique il connaissait autre chose que celle de ses vers ou ..... celle des soucoupes sur les tables de cabarets.

Si je ne craignais pas de vous faire sourire, je vous dirais bien que je trouve les origines du Symbolisme, dans le désire et le besoin que les jeunes poëtes ont de se faire connaître. Pour arriver à ce résultat il fallait faire quelquechose de nouveau, d'original, le contraire de ce qui avait été fait jusque là et ainsi attirer l'attention. C'est un peu le jeu des commercants d'Amérique qui pour faire connaître leurs produits impriment leurs annonces sens dessus dessous. Si elles étaient placées correctement le lecteur passerait sans s'y arrêter; mises à l'envers, tout le monde les lit. Les poètes marchent avec leur siècle un jeune peut écrire de très beaux vers à la manière d'Hugo ou de Coppée, la critique lui jettera un coup d'œil dédaigneux, mais si un autre aligne des idioties dans une forme inconnue jusque là, on sera bien forcé de s'en occuper.

Si mon opinion vous paraît un peu fantaisaiste, Remontons si vous le voulez bien sur les sommets où nous avait transportés M. Brunetière. Seulement tenons nous bien, de peur que dans la suite de cette étude nous ne soyons pris de vertige.

Quelles sont les tendances des Symbolistes?

Quelles modifications prétendent-ils apporter aux règles jusque là suivies ?

Il est assez difficile de répondre succinctment à ces deux questions car si nos jeunes poètes révolutionnaires sont nombreux, leurs théories sont loin d'être semblables, le fameux groupe, que l'on désigne communément sous le nom de Symboliste ou décadent se subdivise lui même en une infinité de coteries où tous les genres se coudoient. Mais, comme, si j'entrais dans le détail de ces différents procédés, nous serions entrainés trop loin, je me bornerai simplement à exposer aussi clairement que possible les "nouvelletés" (pour parler comme eux) que les principaux chefs du mouvement ont introduites dans l'art de faire des vers. Ces changements sont nombreux et le plus souvent très radicaux.

Si nous examinons tout d'abord l'étiquette du groupe, nous voici

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amenés à nous demander : Qu'est ce qu'un Symbole ? Le premier dictionnaire venu me fournit ma réponse. "C'est une figure ou image employée pour désigner d'une manière sensible une chose purement morale." Dès ce premier pas ne sommes nous pas contraints de nous arrêter étonnés ? Cette façon de représenter les figures morales n'a-telle pas toujours été l'attribut de la poésie ? et dès la plus haute antiquitié tous les poètes ne se sont ils pas servis de symboles ? Et alors comment prétendre que Victor Hugo, Le Dante, voire même Ronsard ou bien Homère n'aient pas été des Symbolistes.

Mais nous ne sommes pas à bout de nos surprises et l'étude des différents points qui me restent à examiner, nous démontrera je l'espère que le titre de décadents est celui qui convient le mieux aux adeptes de la jeune école.

Les Parnassiens avaient apporté dans leur style une clarté et une perfection trop grandes pour qu'elles puissent être dépassées. Nos poètes de la dernière heure ont décidé qu'un vers limpide était du plus mauvais goût et dénotait l'absence de toute espèce de génie. En considération de cela ils ont créé le vers obscur. Labruyère, ami de la clarté a dit : "On n'écrit que pour être entendu." Les décadents ne disent pas qu'ils écrivent pour ne pas être compris ; mais ils exigent que le lecteur fasse de laborieux efforts pour sais peur pensée.

Avec les Parnassiens ou les Romantiques vous étiez habitué, O bénin lecteur ! à saisir promptement le sens d'un quatrain. Aujourd'hui on a changé tout cela. Le poète a trouvé qu'il était profondément injuste que lui seul travaillât ; il lui parait équitable que le lecteur sorte de sa quiétude et ait sa part dans le labeur. "Je m'efforce d'être obscur, faites de votre côté votre possible pour deviner mon énigme et démêler dans l'inextricable écheveau que je vous soumets le pur symbole." Tel est le charmant petit jeu de cache-cache auquel les décadents convient leurs lecteurs.

Non contents d'avoir découvert la pensée obscure, ils ont songé à rénover la langue, c'est à dire à remettre en usage quantité de mots, d'expressions et de tournures de phrases tombés en désuétude depuis trois siècles. Et, il serait peut être bon de le dire ici, le but que se proposent ces *bouleverseurs* n'est ni plus ni moins que de nous ramener aux procédés chers à la Pléiade.

Un des *leuders* du mouvement, Jean Moréas, nous explique du reste les intentions de son groupe, dans une langue que n'eût pas désavouée l'auteur de Gargantua. "Quant au style," dit-il, "il y aurait à ratiociner ; et j'estime, avec Fénelon, que depuis le seizième siècle finissant, on a appauyri, dessèché et gèné notre langue." "Pour qu recèle. Ce se rehaussées o ront, — par digne de vê "Dans ce

d'aucunes m abolies, par de Malherbe

"Conséqu indubitable, et le style, le sance Franç semble pas o moderne."

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### LA POESIE CONTEMPORAINE EN FRANCE.

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nt songé à ité de mots, ude depuis but que se e de nous

e du reste désavouée ait à ratioe finissant, "Pour qui sait, dans notre littérature médiéval un riche héritage se recèle. Ce sont les grâces et mignardises de cet âge verdissant, lesquelles, rehaussées de la vigueur syntaxique du seizième siècle, nous constitueront, — par l'ordre et la liaison inéluctables des choses — une langue digne de vêtir les plus nobles chimères de la pensée créatrice.".....

" Dans ces poëmes-ci, lecteur, tu trouveras (en même temps que d'aucunes miennes nouvelletés) instaurées les coutumes de versifications abolies, par la réforme, tempestive à son heure, peut-être, mais insolite de Malherbe, duquel je sais priser les hauts dons."

"Conséquemment j'y poursuis, — selon une évolution logique et indubitable, — dans les idées et les sentiments comme dans la prosodie et le style, la communion du Moyen — Age Français et de la Renaissance Française, fondus et transfigurés en le principe (lequel ne me semble pas où le Naturalisme déja caduc, le voulut abaisser) de l'âme moderne."

Partis de ce principe et lancés — dans une telle voie, il n'y avait pas de raison pour que les Symbolistes ne fissent subir à la technique du vers les modifications les plus extraordinaires. Ils se sont bien acquittés de cette tâche en créant le *vers libre*.

Le vers libre, comme son nom l'indique, est construit uniquement suivant le bon plaisir de son auteur qui fait fi de toutes les règles établies.

Le vers libre peut avoir une longueur indéfinie, et si l'on rencontre chez les symbolistes des vers de deux syllabes on peut en voir tout à côté qui ont quinze, dix-sept pieds et plus.

De plus ce vers pourra être impair, ceux de 7, 9, 11 on 13 syllabes sont fréquents.

L'enjambement atteint fréquemment les proportions d'une gymnastique effrénée et très souvent pour retrouver la rime d'un vers on est obligé de sauter à quatre ou cinq lignes plus bas.

Du reste la rime elle même est devenue une quantité négligeable et négligée ; presque toujours elle est très pauvre, puis le cas échéant on la remplace par une simple assonance et même par rien du tout.

Si dans les langues sonores que sont l'Italien et l'Espagnol, l'usage incessant des rimes aux finales tonjours semblables peut fatiguer à la longue, il n'en est pas de même en Français.

La rime est précisément la caractéristique de notre vers, si on la supprime on dénationalise la poésie. D'autres ont déjà tenté cette modification avant les décadents sans y avoir réussi.

Et précisément cette allure étrangère que prend la poésie, donne lieu à cette curieuse constatation, qu'un grand nombre des membres de la

nouvelle école sont d'origine rien moins que française : Huysmans est Hollandais ; Jean Moréas, Grec ; Vielé-Griffin, Américain ; Stuart Merill, Anglais ; d'autres sont Belges, Suisses, etc. Comment dès lors ne pas se demander si ces étrangers n'ont pas apporté dans leurs poésies quelques procédés usités dans leurs langues maternelles.

Quelle que soit l'influence de ces derniers, un fait subsiste, c'est que le plus beau désordre préside à la disposition du vers.

Vous vous demandez, avec bien d'autres, à quoi bon tant — d'incohérence. C'est que, nous expliquent les symbolistes, le poète ne doit être astreint à aucunes règles et sa pensée ne saurait prendre tout son essor dans le cadre restreint des anciennes formules.

Les Parnassiens avaient assimilé la poésie à la peinture et transformé leur lyre en palette. Les Symbolistes eux prétendent avoir conservé, ou plutôt, retrouvé la bonne, la seule lyre, égarée depuis Ronsard et avoir créé la poésie musicale.

Le Poète subit, en écrivant, les effets d'une musique intérieure qu'il entend faire passer dans son vers.

Je me suis ingénié à saisir toute l'harmonie contenue dans quelques œuvres symboliques et j'avoue à ma grande honte n'y être point parvenu. N'ai je pas le feu sacré. La muse m'-a-t-elle trouvé trop bourgeois, trop *philistin*, pour m'admettre à partager les délices de l'Inspiration Créatrice? Je l'ignore. Mais de ces vers trop longs ou trop courts, sans césure, sans rime et où abondent les hiatus, j'ai vainement essayé de dégager le Rythme et la musique.

Voici, Messieurs, très succinctement exposées, les tendances des Symbolistes. Cependant je dois reconnaître que parmi eux se trouvent de vrais poètes qui, s'ils ne s'astreignaient pas à suivre des règles extraordinaries seraient capables de nous donner de vraies poésies.

Quelques uns d'entr'eux nous ont fourni le moyen de vérifier cette assertion, dans quelques unes de leurs œuvres et nous avons été agréablement surpris de constater qu'ils peuvent, lorsqu'ils veulent bien songer à leur art et non à leur école, écrire de beaux vers.

C'est ainsi que M. de Régnier a fait de bien jolis alexandrins, M. Viélé Griffin écrit de belles strophes. Et je lisais l'an passé dans une revue ces vers de M. Jean Moréas qui ne rappellent que de très loin les poésies qu'il a publiées sons le titre de "Le Pélerin Passionné."

> Heureux celui qui retenu, Dans la pudeur et la mesure, En aimant n'a jamais connu Qu'un bonheur qui paisible dure

Est-il poss temps un sty Si les Syn années par l intestines; il contemporai

Il exist restés fidèles être, mais o charme, qui Sans parle

il existe une Maurice

> "Blasphèmes Vicaire, qui et enfin par d'avenir aprè exactement qui s'appelle et devant le d'enthousias un très gran la voie à la continuateur

Je n'entrep point. D'ail lis l'œuvre d que bien pl' *attaches* avec Je viens d

ces vers mer et si spiritue

Et je n'ai si Français ! C'est tout

bien plus tar

### LA POESIE CONTEMPORAINE EN FRANCE.

Huysmans est Stuart Merill, ès lors ne pas s poésies quel-

siste, c'est que

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exandrins, M. assé dans une e très loin les onné." Eros au visage charmant De son arc deux traits jumeaux tire ; Le premier blesse doucement L'autre cause un affreux délire.

Est-il possible de trouver dans des vers plus de simplicité et en même temps un style plus ferme ?

Si les Symbolistes ont attiré surtout l'attention durant ces dernières années par leurs allures révolutionnaires et le bruit de leurs querelles intestines; il n'en faut pas conclure que toutes les productions poétiques contemporaines soient empreintes de cet esprit de réforme.

Il existe encore en France (et j'en remercie le Ciel), des poètes restés fidèles aux anciennes formules, des poètes moins *musicaux* peutêtre, mais des œuvres desquels se dégage une harmonie pleine de charme, qui me ravit.

Sans parler des Parnassiens qui pour la plupart sont en pleine maturité il existe une légion de bons poëtes dont les plus célèbres sont.

Maurice Bouchor, Fernand Cregh, Jean Richepin, l'auteur des "Blasphèmes" de "Par le glaive," et du "Chemineau"; Gabriel Vicaire, qui a écrit de bien jolies choses dans ses Emaux Bressans : et enfin parmi les tout jeunes, Edmond Rostand qui reconnu poète d'avenir après la première représentation de sa "Samaritaine" il y a exactement un an, a confirmé ce jugement en écrivant le chef d'œuvre qui s'appelle "Cyrano de Bergerac" représenté il y a 3 mois à peine ; et devant lequel public, confrères et critiques n'ont eu qu'un même cri d'enthousiaste admiration. On salue en Edmond Rostand un grand, un très grand poète. Les uns y voient un novateur qui vient indiquer la voie à la jeunesse littéraire hésitante, d'autres découvrent en lui le continuateur de tels ou tels procédés.

Je n'entreprendrai pas de vous donner aujourd'hui mon avis sur ce point. D'ailleurs j'ai toujours été ennemi des étiquettes et quand je lis l'œuvre d'un poète j'en savoure les beautés tout d'abord et ce n'est que bien plus tard que je me livre à l'ingrate tâche de lui trouver des *attaches* avec cette école ou bien l'autre.

Je viens de lire Cyrano de Bergerac je suis encore sous le charme de ces vers merveilleux, sonores, limpides; de cette poésie tantôt fine, gaie et si spirituellement ironique, tantôt douce, tendre, mélancolique, .....

Et je n'ai qu'un mot c'est vraiment beau, beau, et pardessus tout si Français !

C'est tout ce que je veux en savoir pour le moment, plus tard Oh ! bien plus tard, s'il vous plait, j'essayerai peut être de vous dire si le

nouveau génie qui nous est né est allé s'inspirer chez les Romantiques ou ailleurs,

Au reste chacun écrit suivant son tempérament, mal, avec talent, avec génie, mais sauf chez de vagues copistes, l'œuvre garde sa marque personnelle. J'estime qu'il est parfaitement puéril que des écrivains se groupent avec l'intention arrêtée de suivre des *règles tracées à l'avance*; Hugo, Lamartine, Musset ne se sont pas consultés pour écrire leurs chefs d'œuvre et chez ceux-même que la critique a joints tels des frères Siamois (je veux parler des Parnassiens) des différences frappantes n'existent-elles pas? Quel rapport y a-t-il entre les sonnets de Hérédia et la prose rimée de Coppée, où est la ressemblance des vers de Leconte de Lisle avec ceux de Catulle Mendès ?

Comme conclusion je vous dirai Messieurs, que personnellement je n'ai aucun parti pris contre une révolution littéraire pourvu qu'elle soit logique. Mais je voudrais pouvoir dire aux Symbolistes : vous prétendez que les Parnassiens ne sont pas des poètes et n'entendent rien à leur métier, faites mieux et je suis tout disposé à accueillir les nouvelles productions enfantées par votre génie; mais faites mieux, je vous en prie, créez à vous tous au moins un chef d'œuvre qui puisse faire consacrer votre école. Et j'ajouterai : Dépêchez vous, car comme vous le disait amèrement un de vos anciens amis, à force de vous dire jeunes vous devenez vieux et quinze années n'ont pas passé impunément sur vos têtes, un grand nombre d'entre vous frisent la quarantaine ; quelques uns l'ont dépassée, et votre bagage littéraire est encore bien léger. Quelques sonnets même sans défauts, ne peuvent consacrer un grande poète, à plus forte raison si ces sonnets sont loin d'être parfaits et veulent être considérés comme les premiers jalons d'une poétique nouvelle. Si vos rangs renferment un Hugo qu'il se hâte de se faire connaître par une pièce plus importante, il y gagnera et votre école aussi.

Ernst von Syria, where and spent his places his fat family return gium in Hal entered the C officer of the during a time ful we can ju of a young o therefore, tool ing himself to Magdeburg. gave up his st of the campaig his "Abiturier Scarcely had declaration of He was soon settled (1871) Since 1877, he 1884, he was h the title of L on him.

Such then h ening enoughhighly praised here hailed as novice in the now madly app consciousness, r "Hohenzollern

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## ERNST VON WILDENBRUCH.

### Romantiques

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onnellement je ourvu qu'elle bolistes: vous t n'entendent é à accueillir ; mais faites chef d'œuvre ai : Dépêchez anciens amis, uinze années ombre d'entre et votre bags même sans e raison si ces és comme les enferment un s importante,

## ERNST VON WILDENBRUCH.

## MISS L. L. JONES, B.A.

Ernst von Wildenbruch was born on February 3rd, 1845, in Beirut, Syria, where his father was at the time Prussian Consul-General, and spent his early boyhood in Athens and Constantinople, to which places his father was afterwards removed in the same capacity. The family returned to Germany in 1857. He attended first the Pädagogium in Halle, and later the French Gymnasium, but in 1859 he entered the Cadettencorps at Potsdam, and four years later became an officer of the I Garderegiment in Potsdam. But the life of an officer during a time of peace became very distasteful to him-how distasteful we can judge from the fierce arraignment of it put into the mouth of a young officer in his last volume of stories (Tiefe Wasser). He, therefore, took his discharge in 1865, and with the intention of devoting himself to scientific pursuits, entered the Gymnasium of Burg bei Magdeburg. But at the outbreak of the Prussian-Austrian war he gave up his studies and served as Lieutenant of Militia. At the end of the campaign, although twenty-two years old, he courageously took his "Abiturienten-examen," and entered on the study of law in Berlin. Scarcely had he finished his three-year law-course when Napoleon's declaration of war against Germany again called him into the field. He was soon able, however, to return to his chosen profession, and settled (1871) in Frankfurt am Oder as Referendar (junior barrister). Since 1877, he has held a position in the Foreign Office in Berlin. In 1884, he was honored by receiving the great Schiller-prize, and in 1889, the title of Legationsrat (Counsellor to the Embassy), was conferred on him.

Such then have been the outward circumstances—stirring and broadening enough—of the life of the man who has been at once the most highly praised and most sharply criticised of living German writers: here hailed as the German Shakespeare, there derided as the merest novice in the construction of plot, and the delineation of character; now madly applauded as the herald of the newly awakened national consciousness, now hissed at as the most servile truckler to the blindest "Hohenzollernism."

Up to the year 1881, when his drama *Die Karolinger* was greeted with such tumultuous applause in the Meiningen Court Theatre, Ernst von Wildenbruch was a comparatively unknown man. He had pub-

lished a satirical drama (*Die Philologen am Parnass, oder die Vivisek*toren, 1868); a symbolical poem (*Die Söhne der Sybillen und der* Nornen, 1873); a couple of "Heldengesänge," as he calls them (*Vion*ville, 1874, and Sedan, 1875); as well as a volume of poems and a novel. But it was *Die Karolinger* that lifted him into fame. As we are led to expect from the motto prefixed to the drama—" Der Historiker liest im Buch der Geschichte die Zeilen, zwischen den Zeilen den Sinn liest und erklärt der Poet"—this is an historical play. It is the story of the two partitions of the kingdom of Charlemange under his weak successor, Ludwig the Pious. Judith, the mother of the young Karl, who has been excluded by the first division, tries to persuade the Emperor by a fresh division to right the wrong he has done his youngest son. Judith seeks the assistance of a powerful noble, Bernhardt, Graf von Barcelona.

Aside from its historical interest, the play has really very little to recommend it. The blank verse is monotonous in the extreme; the characters are mere puppets, there is no Motivirung of action, only Motivirung of emotion, which never can be explained; the catastrophe or rather catastrophes of the play arise not from any defect in the character of the hero or heroes—for there are at least three, Bernhardt, Judith and Karl—but from their stupidity, or worse still, from chance, which is entirely inadmissible as a dramatic element, and which nevertheless plays so large a part in the development of Wildenbruch's plots.

In the same year that *Die Karolinger* appeared, another drama of Wildenbruch's was very successfully put on the stage in Breslau, *Väter und Söhne.* "Es ist das Recht der Söhne zu lieben wo die Väter einst gehasst" (V. u. S. IV. 4). A village school master, robbed of his elder son by the terrible compulsory-service system, becomes a spy in the French pay, waiting for twenty years for an opportunity to deal a fatal blow at once at his Fatherland and at Tugersleben, the Kommandant of Küstrin, who pronounced his son's death sentence. But his own younger son saves Tugersleben from the disgraceful deathtrap, which chance has enabled him to set for him, and the old traitor dies with Berlin's shouts of joy over the victory of Gross-Beeren (1813), ringing in his ears, and conscious that the Vaterland has been victorious over the invader.

The characterization in this play is not strong, the old commandant Tugersleben is the only *living man*, but here, as in so many of his plays, Wildenbruch makes us forget this lack by the skill with which he arranges dramatic situations. We have, for example, the striking scene where Heinrich, having learned from his father that the money that has ed father betra self up as a author make ation by the This gives a lect in all i German kir

Wildenbr that of the himself, and member of offered by a roused by I expel the F ches Schaus question of nights in th days of the Gregory V between his head the I strong dran But while necessity of for him by high favor dramatic he With Di

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#### ERNST VON WILDENBRUCH.

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y very little to e extreme; the of action, only he catastrophe defect in the ree, Bernhardt, l, from chance, d which neverenbruch's plots. other drama of ge in Breslau, lieben wo die master, robbed tem, becomes a an opportunity ugersleben, the leath sentence. graceful deaththe old traitor -Beeren (1813), s been victori-

d commandant o many of his kill with which le, the striking hat the money that has educated him is French "spy-money," declares that if his father betrays Ferdinand von Tugersleben, his friend, he will give himself up as a spy. Here, too, as in several of his later dramas, the author makes use of the Shakespearean device of relieving a tragic situation by the introduction of a comic or semi-comic scene from low life. This gives an opportunity for a plentiful admixture of the Berlin dialect in all its beauty, and much local coloring of the most genuine German kind.

Wildenbruch's next drama, Der Menonit, deals with the same period. that of the French occupation. It shows the frightful struggles with himself, and with his religious superiors, through which a patriotic member of this peaceful community passed when stung by the insult offered by a French officer to the woman he loves, and when finally roused by Ferdinand von Schill's burning call to Germany to arise and expel the French. Das Neue Gebot (1886), excluded from the Königliches Schauspielhaus on account of its treatment in the sub-plot of the question of the celibacy of the clergy, had a run of over one hundred nights in the Ostend-theatre. It presents to us a picture of the stormy days of the struggle between the Emperor, Henry IV., and the Pope Gregory VII., and the sufferings of a faithful, humble pastor, torn between his allegiance to his Emperor and his obedience to his spiritual head the Pope, who has excommunicated the Emperor. Here is a strong dramatic problem, which should be solved in a dramatic fashion. But while Weimar Recht is a good man, he is no hero, and avoids the necessity of deciding by falling in a faint, or accepts the decisions made for him by a providential turn of affairs—a method of settlement in high favor alike with philosophers and cowards, but hardly suited to dramatic heroes.

With Die Quitzows, Wildenbruch opened up that vein which has yielded him such rich returns in the shape of crowded theatres, popular applause and imperial favor: it is his first drama devoted to the eulogy of the House of Hohenzollern. His intention with regard to these plays, he announces in his preface to Die Quitzows, "Ich empfinde es wie ein Geschenk, das ich meinem Volk zu machen habe.... Wenn Gott mir Kraft verleiht, gedenke ich an dieses erste Hohenzollernstück noch eine Reihe anderer zu fügen, in denen ich dies mächtige Geschlecht zum Mittelpunkt setze. Es sollen keine Werke für die Litteratur sondern für das lebendige Volk werden." We cannot but rejoice that Wildenbruch recognizes that these plays are not literature. For example, however effective the theatre-goer may find the scene in which Friedrich von Hohenzollern apostrophises his new possession, the desolate and infer-

tile Mark, and falling on his knees presses a handful of its sand to his heart, the calm reader cannot but find the "lines" and the "business" alike ridiculous, and the same charge of rant can be brought against many of the scenes. The author had before him, as the earliest example of the Prussian patriotic drama, Lessing's Minna von Barnhelm, and as one of the first Hohenzollern-pieces, von Kleist's Prinz von Homburg, both of them works of literary value, as well as of patriotic and imperialistic tendencies. Moreover, he had here a really magnificent subject for a drama—the coming (1415) of Friedrich von Hohenzollern into the Mark of Brandenburg, "um mit Gottes Hilfe die Mark aus ihrer jammervollen Lage zu erretten," and his subjection of the robberknights who had been preying upon the miserable country. In the Quitzows, Dietrich and Konrad (historically Hans), we have the representatives of this robber chivalry opposing itself so obstinately to the new law and order as embodied in the first Hohenzollern and necessarily going down before it in ignominious defeat and death. We are not at all disturbed by the deviation from historical fact. But what we do regret is, that the strength and unity of the impression produced by the play should have been detracted from by the introduction of a very ordinary sub-plot, in which the brothers are made rivals for the affections of a woman unworthy of either.

In Die Quitzows, Wildenbruch had a really great subject and a hero ready to his hand, but in his next Hohenzollern drama he had neither. The central figure of Der Generalfeldoberst (1889), Johann Georg is historically both colorless in character and incapable as a commander, but here he is represented as a strong and courageous man in contrast with his weak and cowardly leader Friedrich V. von der Pfalz, husband of the ambitious and high-spirited Elizabeth, daughter of James I. of England. The play is interesting only as a picture of the desolate and divided condition of the country at the time of the Thirty Years' War, and as an introduction to Der Neue Herr (1891).

In spite of its unwieldy form, *Der Neue Herr* is to me the most pleasing of Wildenbruch's dramas. This new master, the twenty-year cld Kurfürst, who became later "der Grosze Kurfürst," and raised his country from the depths into which it had fallen during the Thirty Years' War, is a very striking and admirable character—a German Prince Hal, and later a German Henry V. Here, too, we have tragedy and comedy from the life of the common soldiers and of the populace of Berlin, and not least life-like in the drama is the figure of Nickel Wollkopp, his apprentice, with his ability of doubling scores, and for hitting hard, when the correctness of the reckoning is called in question.

Taken a serious one whether it Court, or tl the hands of In the 1 (1896), Wil Frankish e two evenin evening con titled "Kön Heinrich." This play, prose, is ful is as single contributin in the stir always the

Aside fro the last few benlerche (1

"Seine D lungen, No used concer Wildenbruc usually the clearer view forget that spielhaus," w best places a their orders

But in th Wildenbruch more democr or chisel, wh despise, then love which h This, then, is nature which milde in ihre ist," must ev

#### ERNST VON WILDENBRUCH.

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t and a hero had neither. an Georg is commander, in contrast alz, husband James I. of desolate and Years' War,

the the most wenty-year ad raised his the Thirty -a German ave tragedy he populace e of Nickel res, and for in question.

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Taken altogether we can forget the play's faults—and it has several serious ones—in favor of the real life that pulsates through every scene, whether it represents the Kurfürst's happy early life at the Swedish Court, or the pitiful humiliation and final overthrow of the tyrant at the hands of the determined new master.

In the latest of his dramas, *Heinrich und Heinrich's Geschlecht* (1896), Wildenbruch gives us the history of the last but one of the Frankish emperors, the unhappy Heinrich IV. This is a tragedy in two evenings, as the author calls it, a really colossal work. The first evening consisting of a prelude, "Kind Heinrich," and four acts, is entitled "König Heinrich," and the second evening in five acts, "Kaiser Heinrich." In this work Wildenbruch has kept very closely to history. This play, which is the only one of Wildenbruch's dramas written in prose, is full of dramatic effect and contains many fine scenes. True, it is as single scenes, almost as tableaux, that they are effective, not as contributing to the development of any central idea, but we forget this in the stir and emotional force of these scenes, and there is at least always the connecting thread of historical sequence.

Aside from his historical dramas, Wildenbruch has produced within the last few years some works of lesser importance, such as *Die Haubenlerche* (1890), *Meister Balzer*, both so-called social dramas.

"Seine Dramen waren ihm demnach die Hauptsache und die Erzählungen, Novellen, Romane, alles nur so nebenbei." In these words, used concerning Schottenbauer, we believe we have a revelation of Wildenbruch's own attitude toward his productions. But, as is usually the case, from these very "Nebensachen" we gain a much fuller, clearer view of the author's mind. In his dramas he seems seldom to forget that they will probably be produced in the "Königliches Schauspielhaus," where the royal box is exactly opposite the stage, and the best places are always filled with officers in faultless uniform with their orders glittering on their breasts.

But in the novels, the printing press has done its levelling work, Wildenbruch is speaking to a larger audience, and the tone is much more democratic. The heroes are very often knights of the pen, or brush, or chisel, whom the heroines, young ladies from the "best society," first despise, then hate, then finally love, with that unreasoning passionate love which brings so much suffering and often even death in its train. This, then, is the favorite tragic motive in these stories—the artist nature which, recognizing the severity of the demands of art, "die so milde in ihren Zielen und so grausam in der Verfolgung ihrer Ziele ist," must ever exercise, "diese Unerbittlichkeit gegen sich selbst und

andere" sweeps away in its tide of ardent love some heretofore white, cold nature that has stood probably isolated from the interests and emotions of the surrounding "kleinstädtische" world. And then comes the catastrophe. In Der Astronom the student returns to his engrossing investigations and entirely neglects his wife, leaving her in her loneliness with awakened heart and mind, soon to find herself in the grip of an overwhelming love to the younger brother, "when half-gods go, the gods arrive "-a love that can of course lead only to despair and death for her-leaving the reunited brothers to pursue their studies in deep peace. In Eifernde Liebe the eccentric painter-genius by his total lack of understanding and sympathy for the proud Dorothea, and by his final positive cruelty to her in his pursuit of his artistic aims, drives her to suicide. In Francesca von Rimini, a story of great power and beauty without the taint of sensualism, which at times renders most of Wildenbruch's novels unpleasant reading, deals with a scarcely less tragic variant of the same theme, only that it is the hero, not the heroine, that dies as the result of his unhappy passion. In all of these stories, then, we have this view of love as a gigantic, destructive force pouring forth like a stream of lava from the volcanic heart of man, and leaving in its track only desolation and death, where there was before the beauty and fragrance of flowers and the song of birds. But, fortunately, Wildenbruch has written other love stories, in which the heroine, as in Schwester-Seele, by the force of her character and the power of her intellect, or by her crystalline purity, averts the catastrophe from herself and the man whom she loves.

But masterly as these novels are in some respects when they are forgotten, certain of Wildenbruch's shorter stories will be remembered and loved through many generations, especially by the youth of Germany. A totally different side of the author's nature and genius is here revealed. What a wonderful understanding he shows of the child-heart, in its joys and sorrows, and especially of its terrible despair that can conceive of nothing beyond the present moment of suffering or of disgrace. In that masterpiece of the story-tellers' art, Das Edle Blut, a story of the old Kadettenhaus in Berlin, of two brothers, and the terrible suffering brought on the younger by the elder, who has not a fine sense of honor, he shows himself in all these stories a master of pathetic description in a simple natural style with no touch of the maudlin about it. The author of Kinderthränen must be acknowledged to have humor, genuine sunny-hearted humor, but his strength lies, as we see, in his Humoresken, rather in humorous situations and tion of cha

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#### ERNST VON WILDENBRUCH.

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The limits of time forbid any discussion of Wildenbruch's style, beyond saying that his novels and stories will repay reading by a student of German as examples of clear, straightforward conversational German of the most modern type, though without the wretched admixture of English and French it is now considered "smart" to use in conversation.

[The paper then discussed Wildenbruch's poetry, and concluded as follows:-]

To sum up very briefly, then, we may say that while Wildenbruch doubtless has rendered, and is rendering, valuable service to his countrymen by his presentation in poetical, and above all in dramatic form of striking and important events from German history, the worldliterature will probably forget his poems altogether, retain his plays and possibly his longer stories as side-lights on German history and German life and manners, but will place his shorter tales, and particularly "Das Edle Blut," "Claudia's Garten," and "Kinderthränen," on the same shelf with "Paul and Virginia," certain of Dickens' Christmas stories and the early part of "Le Petit Chose."

### JOHN DAVIDSON.

## J. E. WETHERELL, STRATHROY.

One year older than Watson and eight years older than Kipling is John Davidson, journalist and poet. He was born at Barrhead, Renfrewshire, Scotland, a few miles from Glasgow, and only a few miles from the Ayrshire district that begat Robert Burns. His natal day was the 11th of April, 1857; so he is now in his forty-second year. He was educated at the Highlander's Academy, Greenock, and at Edinburgh University.

The career of John Davidson should possess a unique interest for this Association, for after leaving college he began life as a teacher in a remote hamlet of Perthshire. How long he endured the restraints and petty worries of his vocation, I have not been able to discover. The pedagogue and the poet are usually supposed to be made of different clay, and as the history of literature supplies no example of a great poet thriving—I had almost said flourishirg—in the atmosphere of a school-room, we may safely conjecture that John Davidson, at the earliest possible moment, laid down the rod of authority, and followed the phantom with the beckoning hand.

Mr. Davidson's earliest work was in prose. Of his early stories, written in the Perthshire days, "The Schoolboy's Tragedy" is superlatively good, though cruelly pathetic. While still a very young man Mr. Davidson shook the dust of school-crayons from his coat, and made for London and literature. Disappointing and gloomy days and months and years brought him, on more than one occasion, to the verge of starvation in the great metropolis. His high thinking was accompanied by exceedingly plain living, and another sleepless soul came near perishing in his pride.

Mr. Davidson's earliest verse was dramatic in form. In 1886 he published "Bruce," a very strong drama, skilfully dealing with a fine historical subject. In 1888 followed "Smith," a tragedy. In 1889 "Scaramouch in Naxos," and other plays in a lighter vein.

"A Random Itinerary," published about 1890, is a book of delightful prose sketches. The author takes us on happy jaunts through the squares and parks of London, and to the commons and forests a few miles from the town. The book is especially valuable to the student as indicating the bent of Davidson's genius. His intense love of nature, rui manifest o

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#### JOHN DAVIDSON.

nature, running wild in the country or domesticated in the town, is manifest on every page.

In 1891 Mr. Davidson, after much tentative effort, found his proper field. In that year he published "In a Music Hall and other Poems," which at once attracted the favorable notice of the critics and of his brother authors. Mr. Le Gallienne, himself no mean poet, declared of Davidson in "The Nineteenth Century," "He is easily head of all our choir."

Public recognition came somewhat late to our poet, for he had now reached the age of thirty-six, an age at which his fellow-countryman, Burns, had finished his literary career. From this time onward, however, John Davidson prospered.

Within the last five years Mr. Davidson has given the world three volumes of verse, each heightening and widening the fame he had already obtained. His "Fleet Street Eclogues," perhaps his most remarkable book, was published in 1893. His "Ballads and Songs" was one of the literary sensations of 1894. His "New Ballads" belong to 1896.

And what position are we to give John Davidson among living poets? I have quoted Mr. Le Gallienne's opinion. Listen to Mr. Zangwill's (you all know Zangwill, the author of "The Master," one of the finest novels in our literature). This glowing estimate of Zangwill's in "The Cosmopolitan" for July, 1894, gave me my first knowledge of John Davidson : "John Davidson is a prodigal of every divine gift, pouring out untold treasure from his celestial cornucopia. Fancy and imagination, wit and humor, fun and epigram, characterization and creation and observation, insight and philosophy, passion and emotion and sincerity, all are his. Nothing is lacking from that long catalogue by which Imlac convinced Rasselas that it was impossible to be a poet. He will turn you a metaphor as deftly as any Elizabethan dramatist, and wields as rich a vocabulary. Nature he loves, and next to nature, man. And all these gloriou gifts have found vent in the most diverse artistic or inartistic shapes,-novels, dramas, eclogues, ballads, some written for the market, but the bulk in defiance of it. Of these products of a somewhat riotous "genius, only a few have the hall-mark of perfection, but they are already quite enough to go down to posterity with. Let all who wish to see how the poet's eye in a fine frenzy rolling, may body forth, not the shapes of things unknown, but, what is much more taxing, the shapes of things known and disesteemed, betake themselves in haste to 'A Random Itinerary,' 'In a Music Hall,' 'Fleet Street Eclogues,' and the rest of Mr. Davidson's books, and acknowledge the sovereignty of the Laureate of London."

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Beyond this eulogy praise cannot much farther go. It is true Israel Zangwill is prone to be an intense lover or an intense hater, still this criticism, although highly colored in the oriental style, is at bottom sane and trustworthy.

Let us now for a few minutes browse through the wide fields of Mr. Davidson's work, and take a taste of some of his sweet and bitter fancies—yes, bitter as well as sweet, for many of his most notable pieces are of unpalatable fibre. My comments and illustrations will deal almost entirely with the three volumes of verse published since 1893. Indeed, some of his earlier books I have not been able to find, although I have made extensive search. I wish, however, here to quote one short extract to illustrate Mr. Davidson's early command of the resources of his art. [Extract omitted in condensation of paper.]

Mr. Davidson's first real success was achieved in 1893, when he published "Fleet Street Eclogues." That remarkable book owed its origin to Spenser's "Shepherd's Calendar," which you will remember was written by Spenser at the age of twenty-six, as his first venture in literature. At about the same age Mr. Davidson began to plan his calendar, but it was soon laid aside, not to be taken up again for many years. He himself gives us this account of the inception of the book : "When I was a teacher in Scotland I had an idea of writing a kind of teachers' calendar on the plan of the old "Shepherd's Calendar," but this idea was never carried out. When my father died, however, among the books that came into my possession was a copy of Gibbon's " Decline and Fall." As I read it the old idea revived, but I was in London now, and the journalists of Fleet Street seemed closer friends than the teachers of my younger days. So I wrote a journalists' calendar, under the title of "Fleet Street Eclogues."

In this volume of eclogues Mr. Davidson has followed closely the plan of Spenser. The "Shepherd's Calendar" is a pastoral poem in twelve eclogues, one for each month. The "Fleet Street Eclogues" are also twelve in number, but instead of being distributed evenly over the months, they are distributed over twelve festal or memorable days of the year, viz. —New Year's Day, St. Valentine's Day, Good Friday, St. George's Day, May Day, Midsummer Day, St. Swithin's Day, Lammas, Michaelmas, All Hallow's Eve, Queen Elizabeth's Day, Christmas Day. Of course Spenser's model was "Virgil's Eclogues," and Virgil's model was the idyls of Theocritus, but Mr. Davidson does not appear to have been under the influence of either of the ancient masters of this form of verse. The "Fleet Street Eclogues" are more pretentious than Spenser's, or even Virgil's, and it is safe to say that they contain more genuine po survived t "Æneid." say that th one can ha bucolic ve course, nor common w

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closely the ral poem in clogues " are ally over the able days of l Friday, St. ay, Lammas, istmas Day. irgil's model bear to have of this form antious than pontain more genuine poetry. Neither Spenser's nor Virgil's Eclogues would have survived the ravages of time but for "The Faerie Queene" and the "Æneid." As to the idyls of Theocritus, I shall not be so bold as to say that the "Fleet Street Eclogues" are superior to them. Indeed, one can hardly institute a comparison between the earliest prototype of bucolic verse and these so-called eclogues of John Davidson's. Of course, none of Davidson's interlocutors are shepherds; all they have in common with shepherds is their love for nature.

The plan of construction adopted in "Fleet Street Eclogues" has its weaknesses, as indeed any artificial scheme of this kind must have. On twelve different occasions during the year several journalists, usually four or five, meet together to express their sentiments about the day in question, to recall memories of green fields and heather-clad slopes, to pine for country sights and sounds, and to tell their views of men and things as they exist in London. This scheme is almost a fantastic one. There are in these twelve eclogues seven different characters,all enthusiastic lovers of nature, and all familiar, too, with the varied aspects and objects of nature. Such a group of journalists as this never existed, and never will exist. I venture to say that if the jounalists of this city could be brought together to-day, not one out of twenty could tell you the names of our common song-birds, or could give any other signs of familiarity with rural nature. Journalists, as a rule, are not made that way. A poet-journalist may be so constructed, but he is a rara avis. However, Mr. Davidson's ideal for a journalists' club is an excellent one, though it may be unattainable in this work-a-day world.

The persons of the dialogue are seven in number,—one Irishman, two Scotchmen, and four presumably Englishmen. Basil from Essex is the optimist of the company—

"The Present is a dungeon dark of social problems. Break the gaol ! Get out into the splendid Past, or bid the splendid Future hail."

He is also the patriot—

"The Sphinx, that watches by the Nile, Has seen great empires pass away : The mightiest lasted but awhile ; Yet ours shall not decay.
Because, although red blood may flow, And ocean shake with shot,
Not England's sword, but England's Word Undoes the Gordian knot."

Sandy is a Scotchman from Glasgow, with much practical wisdom and speech often smacking of the kail-yard.

Brian is an Irishman with a character hard to comprehend. In the first eclogue he is a cynic, and in the last a humanitarian.

Menzies, the Highlander, is the most heroic figure in the book, but he is far from being the most agreeable. Although still young, he is discontented with life—

> "I cursed this flesh, Which must be daily served with meat and drink, Which will not let me think, But holds me prisoner in the sexual mesh."

He is always oppressed with the nightmare of "the heavy and the weary weight of all this unintelligible world." He is always listening to the "sad music of humanity," but to him it is not "still "—

"I hear the idle workman sigh;

I hear his hungry children cry. \* \* \* \* \* \* \* \* I cannot see the stars and flowers, Nor hear the lark's soprano ring, Because a ruddy darkness lowers

For ever, and the tempests sing. I see the strong coerce the weak,

And labor overwrought rebel;

I hear the useless treadmill creak,

The prisoner cursing in his cell."

Another character is Percy, an old Stoic, whose only redeeming quality is his love of nature.

Herbert, from Devon, is a minor character in the dialogue, another nature worshipper.

Beyond question the best poem in the volume is that entitled "Lammas," in which the chief speaker is Ninian. His wonderful description of Edinburgh from the elevation of Arthur's Seat is too long to quote in this brief paper. Fine, also, are his description of the Kentish hoppickers, his description of the sea from the beach, his record of his own career. He is a mental sufferer, who is almost driven mad by the weight of personal problems. His only comfort is the solace of nature, whose ministering angels sweetly haunt him everywhere—

"I am besieged by things that I have seen; Followed and watched by rivers; snared and held In labyrinthine woods and tangled meads; Hemmed in by mountains; waylaid by the sun; Environed and beset by moon and stars; Whispered by winds, and summoned by the sea."

As one lays down the "Fleet Street Eclogues," he feels that he has been in the thrall of a virile individual soul. Davidson, in his later work, scarcely ever reminds you of any literary predecessor. His thoughts an acteristics o London life, page. His The most s which Swin splendid and lence of since a ruthless gr

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hat he has n his later sor. His thoughts and his style are all his own. The two most striking characteristics of his message are his passionate criticism of life, especially of London life, and the pleasing rural note which is struck on almost every page. His knowledge of nature is at first-hand, and most thorough. The most striking features of his poetic manner are exactly those which Swinburne, and after him Matthew Arnold, declared to be the splendid and imperishable excellence of Lord Byron's work,—"the excellence of sincerity and strength." Indeed, Davidson's vigor has at times a ruthless grip which is almost painful.

I have now come to the consideration of Davidson's two recent volumes,—"Ballads and Songs" and "New Ballads," which will be treated together. These volumes contain many remarkable poems, some of them so startlingly original in subject and in treatment that they almost take one's breath away. Some of the titles are, "To my Enemy," "To the New Woman," "A Ballad of Hell." But it is not the ballads with the startling titles that are the most amazing. All through these volumes he preaches his evangel. Everywhere nature is all in all. Everywhere sexual love is treated as a divine thing. Everywhere his voice rings with protest against the false and the shallow in human life and thought.

Davidson has been called "The Laureate of London." There is no one to dispute his title. The ballad of the Exodus from Houndsditch is an awfully grim performance. It is a vision of all the trooping ghosts that have passed from that wretched district of East London to heaven or to hell during all the centuries—

> "And still the motley pageant thundering poured Along the Heaven-roofed and Hell drained street— Priest, trooper, harlot, lawyer, lady, lord, And all with noiseless feet."

Another London poem is the only one of its kind, and if it were not in Davidson's volume you would swear Kipling wrote it—

"I didn't mean your pocket, Mr., no: I mean that having children and a wife. With thirty bob on which to come and go, Isn't dancing to the tabor and the fife; When it doesn't make you drink, by Heaven ! it makes you think, And notice curious items about life. \* \* \* \* 'Thy will be done '-they say it in the land As easy as you take a drink, it's true : But the difficultest go to understand, And the difficultest job a man can do. Is to come it brave and meek with thirty bob a week, And feel that that's the proper thing for you.

It's a naked child against a hungry wolf;
It's playing bowls upon a splitting wreck;
It's walking on a string across a gulf
With millstones fore-and-aft about your neck;
But the thing is daily done by many and many a one;
And we fall, face forward, fighting, on the deck."

For bold originality-some would say wanton daring-the most remarkable poems in these volumes are the "Ballad of a Nun," the "Ballad of Heaven," and the "Ballad of Hell." My time is too limited to quote from them, and to summarize the stories would be unkind to those who have not yet had the pleasure of reading them. Perhaps I should not say "pleasure," for these three ballads shock some readers. Do not misunderstand me. There is nothing indelicate or coarse in these ballads, nor in any of Davidson's poems. The poet simply rips up many of the conventions and beliefs of twenty centuries without a scruple, nay, indeed, with a joyous satisfaction. In his latest book he is not even satisfied when his quite unconventional song has been sung. He enforces his gospel in a prose addendum. The last piece in his new volume is "A New Ballad of Tännhauser." The doctrine there preached is as plain as a pike-staff, but that no one may fail to catch the drift thereof the poet adds a note :--- "I have endeavored to bear a hand in laying the ghost of an unwholesome idea that still haunts the worldthe idea of the inherent impurity of nature."

I now conclude with two very brief extracts bearing on the poet's own art. From the "Ballad of the Making of a Poet," I take these lines, which may be supposed to contain Davidson's poetic philosophy—

"No creed for me ! I am a man apart : A mouthpiece for the creeds of all the world; \* \* \* \* \* \* \* \* I am a man set by to overhear The inner harmony, the very tune Of nature's heart; to be a thoroughfare For all the pageantry of Time; to catch The mutterings of the spirit of the hour And make them known."

From "A Ballad of a Poet Born," these fine lines give the reader in brief the whole wide range of John Davidson's poetic work—

"And lo, as searching—sweet as musk The words were and the tune, The while he sang of dawn and dusk, Of midnight and of noon;

Of heaven and hell, of times and tides ; Of wintry winds that blow, Of spring that haunts the world and hides

Her flowers among the snow ;

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#### JOHN DAVIDSON.

Of summer, rustling green and glad, With blossoms purfled fair; Of autumn's wine-stained mouth and sad,

Wan eyes, and golden hair ;

Of Love, of Love, the wild sweet scent Of flowers, and words, and lives, And loyal Nature's urgent bent Whereby the world survives.

Of magic Love that opes the ports Of sense and soul, that saith The moonlight's meaning, and extorts The fealty of death.

He sang of peace and work that bless The simple and the sage ; He sang of hope and happiness, He sang the Golden Age."

NATURAL SCIENCE SECTION.

## NATURAL SCIENCE SECTION.

## PRESIDENT'S ADDRESS.

# J. R. HAMILTON, B.A., BRANTFORD.

While thinking of something to say to you on this occasion, I was almost tempted to follow the course which precedent seems to have established, viz., that of making this address historical; a brief history, perhaps, of what has transpired in the world of science, which would be of interest to science teachers, since this section met about one year ago. Yet even this task assumed momentous proportions when considered in all its bearings, and, in attempting such a review in the time allotted me for this address, I am sure some would say that I was displaying more courage than discretion, and perhaps more presumption than either. But were the time allotted much longer, and I possessed of the requisite amount of knowledge, a more formidable difficulty would present itself; for, trying to catch science in its rapid, onward progress during so brief an interval of time, would be like, as an eminent scientific writer has said, "trying to photograph a flying bullet without the necessary appliances. The result could only be a blurred and delusive image."

Having, therefore, abandoned the sciences in this wide sphere, I shall confine my attention and remarks to the past and present work of this Section, and may, perhaps, say something of the future, if I may be permitted to venture at all in the rather dangerous realm of prophecy.

Since its inception, some ten years ago, this Section has held yearly meetings, at which many excellent papers have been given, examination papers have been discussed, criticised, and suggestions have been given to the department. And let me say here, that I think no one is better able to give profitable suggestions than those who are actually engaged in teaching the sciences. Our endeavors in this direction have not been in vain. As an instance, I may mention the examination in botany. The mode of conducting this examination has not been satisfactory, as all who have had anything to do with examining the papers are well aware. These examinations are not yet as satisfactory as they might be, but they are a great improvement on former years, and had the suggestions made by this Section been followed, ma been avoide

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## PRESIDENT'S ADDRESS.

followed, many of the gross blunders of the examination might have been avoided.

It was suggested by this Section, and the suggestion in the shape of a motion was forwarded to the department, that none but those actually engaged in teaching botany, or those who had shown that they possessed the requisite amount of knowledge to enable them to make a proper selection, be appointed to collect botanical specimens for the departmental examinations.

It was also suggested that the examination for the primary examination be made more uniform than it is at present, and the following scheme was proposed — That the Province be divided into districts, and from each of these districts plants be sent out in properly enclosed boxes to the different schools in the district. This scheme, although not insuring absolute uniformity, would at least be an approach to it. As it is at present the examination is not difficult enough at one place and too severe at another. It is left for the presiding examiner in July to even this up, which is, to say the least, a rather uncertain way of gaining the desired end.

Without going further into detail, let me say that the idea I wish to convey is this, that this Section should be the medium through which the science men throughout the Province may make their wants known to the department. This Section has guarded the interests of the science men in the past, and particularly so in the recent changes which the curriculum underwent, perhaps in this case not with the best possible results, but this was no fault of the Section.

In these things, and also with regard to other work of the Section, tion, which I shall point out further on, the united aid of the science men is required, and each member of the Section should endeavor to make this clear to those who have not given us their assistance. The prime object of the Section is to meet and discuss topics which are of interest to science men, and perhaps a benefit to all; yet, despite this fact, it has not received the hearty support and co-operation of the majority of the science men. This, I believe, is not so much owing to lack of sympathy, as to indifference and neglect. And I feel that a different state of affairs may be brought about by a little activity on the part of the present members in representing to his fellow science men the importance of giving their support to the Section.

These remarks have not been prompted by the feeling that the meetings have not had a good attendance, such is not the case, we have had good meetings in the past; yet, I feel that with a greater representation of the science men, we can do much more in the future.

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During the past year, an event of more than usual importance to Canadian scientists was the meeting of the British Association for the Advancement of Science in Toronto. That this time-honored institution should select Toronto as the place for its meetings was certainly a tribute to our advancement in science, a tribute to the thoroughly equipped science department of Toronto University, and the Canadian scientists who so successfully carried out these meetings honored themselves, the University, and the city of Toronto.

The British Association for the Advancement of Science is certainly a time-honored and famous institution. Formed in the year 1831, principally through the energy of Sir David Brewster, supported by Sir Humphrey Davy, Sir John Herschel, and Messrs. Forbes, Johnson and Robinson, of Edinburgh, and Mr. Murchison, of London.

The main feature which distinguishes it is, an annual gathering of its members, at which each one, who has made a real advance in science, reads his paper for the criticism of laborers in the same department of science. The Section also procures reports on the state of each particular science, its progress, and its needs as a guide to enquiry.

The effect of the formation of this society upon the state of science in England has been very marked.

At its meetings now may be found the foremost men in all the departments, and the immense strides of progress which science has made during the Victorian era are in no small measure directly traceable to the influence of this Section.

I need not stop here to enlarge upon the marvellous progress of science in the last half century. That, as I said at the beginning, would require more time and space than can be given on this occasion, however, suffice it to say that we are astounded when we think of the telegraph and railway lines that now form a network in all civilized lands. Even the broad Atlantic forms no barrier, for away beneath its turbulent waters thoughts are communicated from shore to shore with the velocity of a sunbeam's flash; while o'er its surface mighty vessels are propelled from land to land with a velocity and ease that were altogether undreamt of fifty years ago.

But this is not all. What was chemistry before John Dalton? What was physiology before Helmholtz and Huxley and Foster? What were any of the sciences before men of the past half-century? Men who have been members of this very Section which met in Toronto last summer.

These meetings held in Toronto afforded an opportunity of hearing many of the most eminent scientists in the world to-day, and all science men in Ontario should have eagerly grasped the opportunity. A great d accrue from

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## PRESIDENT'S ADDRESS.

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John Dalton? and Foster? half-century? which met in

ty of hearing and all science nity. A great deal might be said regarding the lasting results that might accrue from the holding of these important meetings in Toronto.

At this time when Canada is coming forth as a country possessed of natural resources, perhaps exceeding those of any country in the world, it is important that men of science, men of high social standing, men whose opinions will be respected, and men who are in touch with the wealth of England, should be attracted here, and remain to investigate for themselves.

They could visit Sudbury and see the most extensive deposits of nickel-bearing ore in the world, I say "see," here advisedly, for it is reported that if the ore in sight could be raised and shipped, it would give more than three times as much freight as all the railways, not of Ontario alone, but of the whole of Canada have carried since the first locomotive began to run.

They could visit British Columbia and the Rossland gold mining camp, and there learn that the stories of its fabulous wealth were not mere fiction.

Canada wants capital to develop her mines, and, in my opinion, no greater impetus could have been given to the influx of English capital than the favorable reports which these hundreds of scientists, who spent the summer months here, carried back with them.

To hear such men as Lord Kelvin, Lord Lister, Moissau, Meslaus, and many others, whose names have become almost household words in their particular branches of science, should be an inspiration to Canadian scientists to greater efforts.

No doubt many will say that these men have had great opportunities to aid in the advancement of science, being men of means, and that scientific research belongs to studious ease and learned leisure, and that you, in your busy and engrossing occupations, toiling at your daily task, are without their opportunities. But a little reflection will show you that it is not from such quarters that the most brilliant contributions to human advancement have been always made. It was not from these classes that Brindley, or Watt, or Fulton, or John Dalton came.

John Dalton, a self-trained, back-country youth, constructed a simple and rather crude rain-guage, with which to test the amount of waterfall. This simple experiment led to no fewer than two hundred thousand recorded observations regarding the weather, which formed the basis for some of the most epochal discoveries in meteorology. This simple experiment pointed the way to, perhaps, the most important generalization of our century in the field of science. I have reference

to the wonderful theory of atoms on which the whole gigantic structure of modern chemistry is founded. Truly small beginnings sometimes have great endings.

Let us hope, then, that no one will feel that he lacks opportunity, or that he is prevented from doing work which may be of value to this Section, and for the progress af science in Ontario.

We are to hear this year from a member of this Section, regarding a biological survey of the Province. And I have no doubt he will point out the necessity for the whole-hearted support of every science man, and especially every science teacher, in the Province.

The natural science section should, in my opinion, be the most important one of the Association.

Let then every science man throughout the Province be enthusiastic and zealous in lending a helping hand, and I venture to prophecy that, within the next decade, the annual meetings of this section will be events not of importance to science men alone, but to the whole community.

### ADDRESS

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## THE TEACHING OF CHEMISTRY.

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# THE TEACHING OF CHEMISTRY.

# ADDRESS BY PROF. W. H. PIKE, M.A., PH.D., TORONTO, HON. PRES. OF NATURAL SCIENCE SECTION. (ABRIDGED.)

\* \* It is in my capacity as teacher that I should like, with your permission, to address you this afternoon.

I have been much struck by the absence of any uniformity of method between the schools and university, seeing how closely they are connected in this Province, and I think, therefore, that I shall most directly assist in the objects of this Association if I take this opportunity of explaining the method of teaching elementary chemistry which is used in the University course.

\* \* I think it is safe to assume that the reasons for making science in general, and chemistry in particular, a part of the school curriculum, are identical with those which apply to the University general course.

The first and most important reason is to offer to the student a greater variety of methods of observation and inference, and thus to supply him with wider and more varied illustrations of reasoning than was afforded by the older curriculum of schools and universities which originally included only classics and mathematics.

The second reason is that in these days an educated person cannot be said to be fully educated unless he can take an intelligent interest in the advancement of knowledge of his time—that is, unless he has some acquaintance with the objects and aims of the principal departments of knowledge, and unless he has some general ideas upon the nature and properties of the every-day materials he uses and lives upon. One cannot suppose that the citizen, called upon to regulate his own life and that of his children, and to decide by his vote and influence matters affecting the health and prosperity of the community he lives in, can perform these functions wisely unless he be provided with the requisite training to enable him to utilize at least the specialized knowledge of others. \* \*

Both in the schools and university we have then the same problem. How can we present to our pupils the subject of chemistry so as best to fulfil the requirement that the first and most important reason for teaching chemistry is to enlarge their minds by the methods of reasoning and observation peculiar to this science, and only in a subordinate degree to provide a working knowledge of the subject ?

I am familiar with two methods of arranging elementary chemical teaching. The first and older and more generally adopted method is to present to the beginner a large number of elements and compounds, the ones usually selected being the metalloids, to describe their methods of preparation in more or less detail, and then to give an account of their compound with one another, and then, based upon this material, to give a very short account of the atomic theory, and an equally short description of the classification followed in the case of the remaining elements.

The student is expected, no doubt, to review all the first descriptive work by the light of the atomic theory, and to apply it to the various reactions which have been given. To illustrate this method of teaching I quote two authors as exponents of it, "Fownes" and "Roscoe." "Fownes," 1868, edited by Henry Watts, devotes 384 pages to inorganic chemistry. He introduces the atomic theory at the 115th page after giving a description, of the elements O, H, N, C, Cl, Br, I, F, S, Se, Te, Br, Si, P, in the order named. In the edition of 1877 (the last edition upon my shelves), the same order is retained, and the atomic theory is given at the 115th page out of a total of 385.

Roscoe—" Lessons in Elementary Chemistry," 1867—devotes 227 pages to inorganic chemistry, 2 pages of which are devoted to the atomic theory at the 53rd page, after giving a description of O, H, water, N, atmosphere, and compounds of N. He has 8 pages on the composition of the atmosphere,  $3\frac{1}{2}$  on structure of flame, and  $4\frac{1}{2}$  on sulphuric acid. In the edition of 1893 he adds 10 pages on atomic theory after his description of the non-metallic elements.

The impression which the student receives from this method of teaching chemistry is that the atomic theory is a small and insignificant part of chemistry—that the subject is composed of a large number of disconnected facts concerning matter of which the facts as to the atmosphere are the most important.

It is not in student nature to review the earlier portion of his textbook by the light of the two pages of atomic theory, nor indeed is he capable of such review. It is, moreover, impossible for him to understand the meaning of symbols and of equations which are used throughout his text-book. He is taught in Roscoe that the atomic theory was invented by Dalton to explain the composition of nitrogen oxides, and the account given reads as if this theory had little other foundation or use.

All his training in other branches of learning has taught him to expect the subject to be so developed that each part is dependent upon what has requires of to start of explain their expl

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## THE TEACHING OF CHEMISTRY.

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ight him to endent upon what has gone before; in no case has he met with a subject which requires one-third of a text-book full of facts to be absorbed, and then to start over again with a connecting theory which may or may not explain them, but which the author clearly thinks is not necessary to their explanation.

So reluctant indeed is Roscoe to introduce any theory into his elementary teaching that he gives the following extraordinary account of chemical symbols, p. 14 of the edition of 1893. He says: "In order to express the composition of substances more conveniently than can be done by writing the names of the elementary constituents at full length, chemists use a kind of shorthand or symbolic language, some of the principles of which must now be shortly explained. Instead of writing the whole name the first letter or the first two letters of the name are employed to designate the element. Thus Cl stands for Chlorine, O for Oxygen, etc. These letters, however, signify more than this; they stand not only for the elements in question, but they have certain numbers belonging to them, which indicate the proportions by weight in which the elements are found by experiment to combine with each other. Thus Cl does not merely express the name of the substance chlorine, nor does it stand for any indefinite quantity of it. Nor again does Cl mean any absolute weight of chlorine expressed in lbs., oz., or grains. It does, however, denote that the smallest quantity by weight of chlorine which can enter into chemical combination is exactly 35.37 times as great as the smallest quantity of hydrogen (H) which also enters into combination."

There is appended to this a note: "These combining weights are usually called atomic weights. The meaning of this term is explained on p. 58."

Now apart from the circumstance that all this is quite incorrect, and that the student must learn the whole of it differently later, what kind of instruction has the thoughtful student received from the last extraordinary definition? How, in the name of science, does Sir Henry Roscoe propose to ascertain what is "the smallest quantity of hydrogen which enters into combination?" The sentence is absolute nonsense as it stands. Again, he teaches that the symbol "Cl" is not an absolute weight, yet is 35.37 times an absolute weight—that of the smallest weight of hydrogen which can enter into combination.

It seems to me that this method of dealing with chemistry is in no way able to satisfy the requirement that the first and most important reason for teaching chemistry is to enlarge the mind of the pupil by the methods of reasoning and observation of this science. This unique

method of studying the student will pronounce a waste of time; and of reasoning there is none.

I will give one other illustration which seems to me to justify this last statement. Roscoe, p. 5, defines the elements as follows: "Those substances which the chemist has not been able to split up into two or more essentially different materials, and out of which nothing essentially different from the original substances has been obtained."

Now, this of course is no definition at all; it is merely a paraphrase of the word element, and if the *thought-full* student at the end of his course is asked, "Why do you think oxygen is an element"? he is unable to answer otherwise than by repeating Roscoe, who says we cannot decompose it. If you ask him how do you know this, what test can be applied to oxygen in order to decide whether it can be decomposed or not, he will usually answer—"Well, it cannot be separated into two substances," and if you then remind him that he has seen ozone produced from oxygen in his lectures, he will say, "Oh, but ozone is oxygen !" In short he has never grasped the real reason for believing in the theory of the elementary composition of matter. Nor is Roscoe the only sinner in this respect. I have never seen in any elementary text-book a satisfactory account of this theory.

Surely it is better to tell the beginner at the outset that chemistry is the science of the transmutation of matter, and if we compare transmutation by the only practical measure of matter, namely, weight, that all the transmutations of any form of matter may be divided into those which give other forms respectively lighter and heavier than the original; that if we go on transmuting substances into lighter forms we come at last in all cases to matter which can be no further transmuted into lighter forms, and so on.

The attention of the student is at once directed to the means of deciding whether any "element" can be decomposed or not. He recognizes that this is a practical scheme for experiment. We have only to take a weight of the supposed element, and to weigh all the products we can make from it, and we shall have the proof of its elementary characters. Of course I am speaking of the beginner. Later on he can be told of all the additional evidence of the elementary characters of the spectrum, of the constancy of the atomic weight by different methods, and so on.

Now, this may be taken as an example of the distinction of the two methods of teaching chemistry of which I spoke.

The second method reverses the order of Roscoe and Fownes. It gives the theory first and the facts to illustrate it afterwards. It presents the a of all mati giving the of all com presents the that the st haps, that the study in fact, an

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## THE TEACHING OF CHEMISTRY.

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fownes. It ds. It presents the atomic theory as a quasi abstract proposition, which is true of all matter, and gives a short account of the reasons for its adoption, giving the facts of definite, multiple and reciprocal proportion as true of all compounds, individual cases being selected for illustration. It presents the theory not as it was first stated, but as it is to-day. So that the student starts his study of the science with the impression, perhaps, that the chemistry he is going to learn should be really called the study of the atomic theory—an impression which is not far astray in fact, and which it is easy to modify later.

Of course I mean here the whole atomic theory, including the methods of arriving at the molecular weights of substances from the properties of gases, and the methods of using such molecular weights in deducing atomic weights, including also the arguments which lead to the belief in the doctrine of elements, and a brief outline of the classification of compounds.

I find it difficult to quote a text-book which exactly embodies my ideas of this method, but one of the earliest of such may serve, namely, "Naquet's Principles of Chemistry," 1868. He gives 339 pages to inorganic chemistry, the first 75 pages being an introduction of the kind indicated, mainly the atomic theory. As soon as the facts of each element and compound are presented to the pupil he can perceive the essential features of such at once. He is told at the outset that chemistry is the science of the transmutation of matter, then only those facts which are concerned in the transmutation are to be considered as chemical facts. That hydrogen may be produced from nearly all its simple compounds by the use of certain metals, is at once seen to be an instance of transmutation common to many forms of matter; whereas, if he be told that hydrogen may be prepared by the action of water upon sodium, and also of hydrogen chloride upon sodium, he can see no connecting link between these statements, and in consequence he has difficulty in remembering them. That atoms always replace one another in small numbers is told at the outset, and he learns it as an axiom of Euclid is learnt, and with this datum it becomes easy to remember that the weight of hydrogen set free by sodium in all cases is one unit of weight for each 23 units of weight of sodium used. The full meaning and use of the equation expressing the transmutation becomes evident from the outset.

Fownes, on the other hand, in his description of the preparation of hydrogen, is compelled to write the names of the reacting substances side by side, and merely state that they form certain products on the other side.

The student can be, from the outset, taught to reason by analogy. He can be shown that the stability of the hydrogen compounds decreases in any series of elements as the atomic weight of the elements increases. So it seems improbable if a new element be discovered belonging to the group F, Cl, Br, I, that it will form a hydrogen compound; and the same may be taught him of the oxygen series. And I have found that such predictions of the properties of elements not yet discovered always excite unusual interest in the class.

The difference existing between the two methods of introducing chemistry, which I have described, continues in the further treatment of the subject. The text-books of my school-days were filled with very inferior receipts for the manufacture of a few chemicals, with drawings of the furnaces, etc., used in certain works, and even with details of the total production in this or that country. They were, in fact, much more like cooking books or, say, pharmacopœias than scientific works. A large portion of the book was devoted to descriptions of the method of manufacture of sulphuric acid and of carbonate of soda far more indeed than to any discussion of say the methods of oxidation and reduction, applicable to hundreds of reactions.

The effect of such teaching upon students is certainly to train (perhaps one might say strain) their memories, but in what way it helps to develop their reasoning faculties I entirely fail to perceive. I would much rather see the preparation of a salt such as carbonate of sodium described as an instance of the preparation of all salts from a soluble acid and a soluble base—from solutions of carbonic acid and sodium hydrate—and if a second method be given, then from sodium oxide and carbon dioxide. And the same applies to sulphuric acid. Better describe it as prepared from sulphuric anhydride and water than burden the memory of the pupil with long details of the lead chambers, etc., unless, indeed, it is introduced as an instance of oxidation and reduction which it serves very well to illustrate.

If chemistry is to be taught merely to exercise the memory (and I have heard of students being compelled to learn the atomic weights by heart), then let the first method be continued, or better still, let us combine to get a more suitable subject introduced into the curriculum. But if the main object is to develop the reasoning and thinking faculties of our pupils, then I say emphatically the second method is the better. The attention is at once directed to a universal theory of matter, and to its application to and explanation of the varied properties of matter. The pupil is thus presented from the outset with one of the most advanced forms of deduction and induction of modern times. This se land a ske he can alv method is ness of had to ma

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A friend of mine who is an important official of the Education Department, tells me that I am all wrong in my views of what the schools of Ontario want. The chemistry, he says, must be chemistry as applied to the every day life of the pupils, and not abstract principles of science. Unfortunately, the chemistry of every day life is, with one or two exceptions, so complicated that even a trained chemist can only follow the details by divesting them of their every day character, and even then only very incompletely. The same idea was probably the cause which filled all the earlier text-books with long chapters on the structure of flame. It is an every day phenomenon familiar to all beginners. Roscoe, for example, devotes no less than three and a-half pages – nearly twice as much as to the atomic theory—to a description of flames, the Davy lamp and burners. And yet, up to the present, no satisfactory theory or explanation has been given of the phenomena of flames-not even of the cause of the luminous appearance of certain flames, and certainly not of the alteration produced in the case of the Bunsen burner by the admission of air. A question on this last phenomenon sometimes finds its way into the school examination papers, I think unfortunately.

Another question I have also seen in these examination papers, which I think is equally unfortunate—introduced no doubt on account of its every day character. It relates to the solution of salt in water, and asks how the pupil could show that the salt dissolved is salt still. But this opens up a very burning question of our own times. Is the salt dissolved salt unaltered; or is it dissociated into the ions sodium and chlorine, more or less, according to its concentration; or has the salt combined with the water molecules to form a hydrate? These questions are not as yet answered to-day. How then can such an unsolved problem be suitable for beginners? The only correct answer he could give would be "I don't know," and I doubt if that would bring him full marks.

## NOTES ON CALCIUM CARBIDE.

## J. A. GIFFIN, B.A., ST. CATHARINES.

It was not without some hesitation on my part that I decided to read a paper on this subject. In the first place the name scarcely covers the ground investigated, and secondly, I was very doubtful whether the members of the science section would care to follow my efforts in an entirely new field of work.

The recent discovery by Mr. Wilson of a new and cheap method of producing calcium carbide, and the part it promises to play in the industrial world, would be enough to command attention at any time, but the fact that it is extensively manufactured in my own city is perhaps a greater reason why I have spent a little time in the study of its properties.

I shall not refer to the method of manufacturing further than to say that it is manufactured from lime and coke, and not lime and coal, as stated in the High School Chemistry.

One of the first things that struck me as peculiar when I began the study of its properties was its great affinity for water. I have studied its effect upon a great many different substances, and have been surprised to find that whenever moisture is present in however small a quantity, acetylene gas is sure to be produced. Further, there is but one gas formed when CaC<sub>2</sub> is thrown into water, and in this respect it differs from the action of many other substances upon one another, and its action upon other substances. It seems to absort all the moisture from surrounding bodies, and form acetylene before it will combine with anything else. This is the case even with liquids so far as I have tested them. I suppose the reason of this is that moisture combines with calcium carbide at ordinary temperatures, while heat is necessary in nearly every other case to bring about a chemical change. We have a good illustration of this when it is mixed with potassium hydrate. Pure caustic potash absorbs moisture from the atmosphere very rapidly, and if left for a few minutes in air becomes saturated with water. I took a small piece of potash which had become very damp with vapor, and mixed it with some powdered carbide. Almost immediately acetylene began to come off, and in a very short space of time I found the mixture quite dry to the hand. The calcium carbide had apparently absorbed nearly all of the moisture from the potash. On warming

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## NOTES ON CALCIUM CARBIDE.

gently more acetylene came off before other reactions took place. I have observed the same thing when it is mixed with other substances.

When small pieces are left in the atmosphere for a short time they soon become reduced to calcium hydrate, but in spite of this fact its commercial value is not likely to be impaired. I kept a few small pieces in a tin box with an ordinary lid for several months, and opened the box quite frequently during the interval. At the end of the time the substance had not deteriorated to any appreciable extent. If in large pieces it is not nearly so likely to be affected by moisture in the air as substances like caustic potash or calcium chloride, and my experience has been that it can be kept in vessels in which these substances would be affected. Ordinary care in not allowing it to be exposed too long to the atmosphere is all that is necessary.

About the first experience I had of its action on other substances was with the compounds of ammonia. When mixed with  $NH_4$  Cl and heated, a mixture of gases come off which burn with a light blue or slightly rose-colored flame, and might be mistaken for CO,  $CH_4$ ,  $H_2$ , or two or three other gases which burn with a light-colored flame. Even the odor does not indicate its composition, and rarely is there any trace of carbon which deposits so thickly upon a vessel in which acetylene burns. When washed with an ammoniacal solution of silver nitrate the great bulk of the gas disappeared. The remainder of the gas was soluble in  $H_2SO_4$ . This showed that the mixture was nothing more than  $C_2H_2$  and  $NH_3$ . What remained in the test tube after heating proved to be a chloride.

It occurred to me that it should be possible to get a different reaction with ammonium nitrite. That substance when heated breaks up into nitrogen and water, and I thought that since nitrogen came off in the nascent state it might be possible to get something different. On trial it was found that the same gases  $NH_3$  and  $C_2H_2$  were produced. What remained in the test tube proved to be calcium nitrite, so that the molecule broke up as in the previous experiment. The same mixture of gases was produced when  $CaC_2$  was mixed with some other compounds of ammonia.

When ammonium chloride and potassium nitrite are mixed and heated, nitrogen is formed. If these substances are mixed with calcium carbide, however, the same gases are produced as in the preceding case. The only noticeable point in this experiment was that the gases came off at a very low temperature, in fact almost as soon as heat was applied. This was noteworthy, as when ammonium chloride and CaC, were mixed it was necessary to apply considerable heat. It might be inter-

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esting to determine what part was played by the potassium nitrite in this experiment. Is it an example of catalytic action, or is the nitrite decomposed? From experiments which I will describe later, I think it is the latter. I have never had time to determine the point.

It occurred to me that I should get a similar result if KOH were mixed with  $KNO_2$  and  $CaC_2$ . On trial I got the same mixture of gases. When the substances were mixed in certain proportions other gases are also formed. The caustic potash had evidently been decomposed. Part of the nascent hydrogen united with oxygen to form water which in turn acted upon the  $CaC_2$ , and the nitrogen of the nitrite united with hydrogen to form ammonia. All the  $CaC_2$  had disappeared. An experiment performed since reading the paper showed the presence of a carbonate and calcic oxide in the test tube.

It had been suggested to me that I should determine what took place when  $CaC_2$  was mixed with KOH and  $KNO_2$  separately. Not having any pure caustic potash<sup>4</sup> I tried its effect upon commercial potassium hydrate and found that the gas produced burned somewhat similar to the mixture already described. After washing it with ammoniacal solution of  $AgNO_3$ , I was surprised to find some ammonia present. That looked rather suspicious. Then it occurred to me that it must be due to some impurity in the hydrate which I thought must be a nitrite. In this I was wrong, and was not long in detecting the traces of a nitrate in the caustic potash. It was with some difficulty that I was able to detect its presence by other tests.

This little discovery led to what I consider a most important result. Here it was clear to me was a sure method of determining the presence of a nitrate or a nitrite in caustic potash or caustic soda when other tests did not readily indicate their presence. I placed a very small quantity of sodium nitrite in the mixture and on heating got the same result. Then I tried very small quantities of  $Pb(NO_3)_2$ ,  $Ba(NO_3)_3$ ,  $NaNO_3$ , and  $Hg(NO_3)_2$  with pure KOH and  $CaC_2$ , and in every case I got ammonia gas. I further noticed that it was possible to detect the slightest trace of a nitrite or nitrate when either KOH or NaOH was used, and also that the greater the quantity of nitrate used the greater the volume of ammonia gas produced.

This led me to think that not only was it possible to detect the presence of these substances, but also to determine the percentage of nitrate present. Then I weighed out a small quantity of nitrate and mixed it as described. I found enough of the gas was soluble in  $H_2SO_4$  to account for nearly all of the nitrogen present. I do not want you to think that I have established this point beyond the possibility of doubt, as account.

Since finds methods of d which is known nitrogen in p ing the ammonitrogen is easily exists in orga Wells' methon not complete Dumas' methons substance with collecting over

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#### NOTES ON CALCIUM CARBIDE.

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letect the prepercentage of of nitrate and vas soluble in I do not want the possibility of doubt, as precautions are necessary which I have not taken into account.

Since finding this to be the case I have been examining the different methods of determining nitrogen in nitrogen compounds. The process which is known as Varrentrap and Wills' method is used to determine nitrogen in pot. ferro cyanide by conversion into ammonia. By collecting the ammonia by absorption in acid of known strength the amount of nitrogen is easily calculated. It is further stated that when nitrogen exists in organic substances in the form of an oxide Varrentrap and Wells' method cannot be employed, because the oxides of nitrogen are not completely converted into ammonia on heating with soda lime. Dumas' method is then usually followed, which consists in heating the substance with oxide of Cu and measuring the nitrogen evolved by collecting over Hg.

In the experiments I have just described I used commercial calcium carbide, and just when I reached this stage in my work I had a conversation with Mr. Wilson of the carbide works. He told me that when CaC<sub>2</sub> was being formed in the furnace it was always possible to detect the odor of ammonia, and he felt sure there was some ammonia present in commercial calcium carbide. He further stated that they manufactured a grade of carbide which contained 98 per cent. of  $CaC_2$ , and which gave very nearly the theoretical volume of acetylene gas. I have carefully heated commercial calcium carbide with pure KOH to test the truth of this statement. After washing the gas to free it from acetylene I have never been able to detect the odor of ammonia which is always perceptible when caustic potash is mixed with even the slightest trace of nitrate or nitrite. I further washed three different samples of the gas with  $H_{a}SO_{4}$ . Once I got a slight diminution in volume which might be accounted for in some other way. I do not think myself there is any NH<sub>3</sub> or nitrogen which might be converted into ammonia in the commercial article, but if there is, even the best grade of CaC<sub>2</sub> could not be used to determine the percentage of nitrite or nitrate.

1 have further found that when a nitrate, KOH and  $CaC_2$  are heated, a carbonate is formed in the retort. I have not tried its effect upon other compounds of nitrogen.

The action of  $CaC_2$  on  $KNO_2$  is very peculiar. It is necessary to thoroughly dry the substances to get rid of all moisture. I washed the gas which came off with KOH, FeSO<sub>4</sub>, H<sub>2</sub>SO<sub>4</sub>, ammoniacal solution of cuprous chloride and water. Lastly, I tested for oxygen with phosphorus by placing in the sunlight. In only one case was there a dimi-

nution in volume, namely, when it was washed with FeSO<sub>4</sub>. The remainder of the gas was nitrogen. This showed that the only gases which were formed were NO and N. When the substances are mixed in the proportion of about 5.93 to 1 by weight the nitrite melts, and then it is necessary to heat very hard to get the gases to come off. What remained in the retort proved to be potassic carbonate and calcic oxide. When there is a larger percentage of CaC<sub>2</sub> the mixture usually glows in the test tube with the same result; but by having the CaC<sub>2</sub> largely in excess and heating gently I have got the gases to come off without having the substances glow in the retort. When this took place my experiments seemed to indicate that the CaC<sub>2</sub> did not take any part in the reaction, and that a very large part of the gas was nitrogen. It appeared to be a case of catalytic action; but further experiments may prove this incorrect, as a carbonate is formed in all other cases.

When KOH is mixed with  $CaC_2$  and heated it is possible to get several different results. If  $CaC_2$  is very largely in excess the gas is nearly all  $C_2H_2$ ; but when mixed in proportions of 4 to 1, the potash being in excess, little or no acetylene is formed. The result is a mixture of gases which burned with a light blue flame. About one-sixth of the volume was CO, and the remainder was not  $CH_4$ , but appeared from exploding to be  $CH_4$  and  $H_2$ . There is no doubt a hydrocarbon present, and I feel quite sure hydrogen is formed; but the experiment is so long and tedious that I never had time to clear up the point.

These experiments with  $CaC_2$  led me to try some other experiments which may be of some interest to you.

In the High School text-book you will remember it states that if  $KNO_s$  is mixed with Fe in certain proportions it is possible to get nitrogen. I have carefully repeated that experiment a number of times, mixing the substances in the proportions stated in the text-book. In every case I found the gas produced soluble in water and FeSO<sub>4</sub>. What was left after washing the gas in this way proved to be a mixture of N and O. I asked my class to repeat the experiment, and in only one case did I find the gas was not soluble in water. In this particular experiment the iron filings were largely in excess. I do not say that nitrogen cannot be prepared in this way, but it is certain that in nineteen cases out of twenty the student is likely to get something entirely different. I am very certain N cannot be got when the substances are mixed in the proportions stated in the text-book, and that the equation in the text-book does not represent what always takes place.

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## NOTES ON CALCIUM CARBIDE.

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states that if possible to get a number of the text-book. er and  $FeSO_4$ . to be a mixriment, and in ater. In this sess. I do not is certain that get something when the subpook, and that always takes When iron filings are mixed with  $\text{KNO}_{3}$  and KOH, it is asserted that we should get ammonia and hydrogen. I could never get my students to say that they detected the odor of  $\text{NH}_{3}$ . I found, however, that when the gas was washed with warm water the odor of ammonia was quite perceptible; but I further found that everything which came off was soluble in  $\text{H}_{2}\text{SO}_{4}$ . Since this is the case it is clear that hydrogen is not formed. Large quantities of steam are present with the ammonia; that is very certain, so that the equation in the text-book does not represent the most common reaction. If hydrogen is ever formed I did not detect its presence. It may be formed sometimes however.

We have a number of experiments given in our text-book where it is possible for the student to get different results. In my opinion such experiments should not be there. Experiments of that kind may be all right for advanced students, but certainly not for junior students. We have plenty of experiments where definite reactions take place without filling our text-books with those which are not definite. For junior students the experiments should be simple and reactions such as they can determine for themselves. The least we might expect is that the statements are accurate. I have long held the opinion that before a text-book is authorized by the department it should be submitted to a competent committee, to be revised if necessary.

In closing my paper, I must acknowledge my indebtedness to Miss Curzon and Dr. Ellis for suggestions they gave me, and which enabledme to present this paper this afternoon.

## SOME BIOLOGICAL NOTES.

## E. L. HILL, B.A., GUELPH.

#### I. NOTES ON MORPHOLOGY AND FUNCTION.

I am persuaded that one of the greatest defects in the teaching of botany arises from the divorcing of *function* and *structure*. In other words our ordinary teaching of botany is lamentably deficient in the "why" element.

Every plant is a record written by an unerring hand. It is a collection of facts—but vastly more than that—it is a collection of correlated facts.

The would-be botanist, who sees only the *facts* misses the scientific value of his study. Science, we all agree, is not simply a collection of facts. It is something vastly different. It is "organized" facts.

The organization is the most important part of the science.

The generalizations of science constitute its most valuable part, from the teaching and training standpoints.

I know it is claimed that the power of observation can be trained by the process of accumulating facts—unrelated facts. If power of observation means merely eyesight and the like, I agree. But I can never hope to attain the keenness of physical sense possessed by some uncivilized races—and even by many of the lower animals.

Power of observation must mean more than the mechanical process —else my boasted training of the observation ranks very low in the intellectual scale. In fact, it ceases to be an intellectual process.

As an intellectual process the training of the observing power must be inseparably linked with the exercise of the reasoning faculty.

And this is the *practical* method, for it is the process called for every day in the living of an intelligent life.

If I am to teach botany—(or any other science for that matter) successfully, my pupil must have a guiding principle in his research. It is not enough to set him gathering facts—important and unimportant all mixed, and gathered regardless of any use to which they are to be put. My pupil ought to have some thread upon which to string his facts.

It is then possible for him to be animated by the scientific spirit. And a scientific temper is almost infinitely more important than any botanical fa memory of

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#### SOME BIOLOGICAL NOTES.

-botanical facts of plant structure that I may be able to lodge in the memory of my pupil.

To the scientific spirit the acquisition of facts becomes a pleasure. The boy sees that he is building—not simply piling bricks or gathering a heap of stones. The joy of the architect is his—instead of the servile spirit of the hireling. The power of observation is cultivated in a rational manner. Observation becomes what it should be—a means to an end. That end is the serving of the highest reasoning powers.

So the filling in of a schedule is not botany. Flower analysis is not botany. The "why" element is lacking.

Fortunately, curiosity, the desire to know "why" and "how" is implanted pretty strongly in the human mind. So strongly, indeed, that with all our bad teaching some of our students still possess a trace of it after we get through with them.

That is defective teaching that does not continually provoke "how" and "why."

The plant is a machine. It is surely just as rational a piece of mechanism as the machine constructed by the average mechanic.

Such being the case its parts are related by adaptation.

Because I cannot read off-hand the record written in the plant—and because I cannot at a glance see the function of every part of the plant machine, is no reason why I should not continually ask myself "why."

In nature, as elsewhere, love is the key of revelation. To him who loves her nature will reveal herself. There may not be forthcoming an answer to every question. But greater devotion will bring greater revelation.

To illustrate the idea of "a thread upon which to string facts" referred to above, allow me to use the common toad-flax or butter-andeggs. Let us use as our "thread" the idea involved in the question :

"What are the features of this plant that tend to give it an advantage in the struggle for existence?" Or, more briefly, "Why is it a weed?"

It has an unpleasant odor and taste—tending to preserve it from destruction by grazing animals—and to prevent the destruction of its underground stems by burrowing creatures.

Its leaves are small—a characteristic adaptation of plants growing in the shade. This plant is usually more or less shaded by the grass among which it grows.

Like most weeds it has enormous reproductive power. In addition to the seed method, it has numerous perennial underground stems, each capable of sending up many shoots.

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Its seeds are very numerous. It has mechanical arrangements for dissemination of seed. The capsules are hygroscopic. If the dry capsules are moistened they will tightly close up, and open again upon drying. Thus the seeds are scattered when the weather is most favorable for their distribution.

The inflorescence is indefinite, leading to multiplication of flowers. The bright colored flowers are massed in a crowded raceme—making them conspicuous for cross-fertilization.

Each flower faces outward for the convenience of flying insects.

Each flower is provided with a platform for the flying insect to alight upon. In the act of alighting the insect causes the mouth of the corolla to open for his entrance.

The orange colored palate that ordinary closes the mouth to unfriendly insects, serves as a signal to flying insects. Its color and its smooth median grove direct the insect to the nectar contained in the spur.

The anthers and stigma are so arranged as to come into contact with the head and back of the insect as it inserts its long proboscis into the spur.

The nectar is protected from small insects, not only by the palate, but also by the length of the spur.

The arrangement of the foliage leaves is also unfavorable to robberinsects that might attempt to crawl up to the flower.

It may be added that the stem contains comparatively little soft tissue—hence its resistance to frost and the resulting hardiness of the weed. Its time of flowering is thus prolonged until winter.

The foregoing is not put forward as an exhaustive answer to the question. I have simply tried to indicate some of the more important features corresponding to the "weed" idea.

Other threads upon which to string facts are :

What are the features of this plant—(say, marsh marigold)—that fit it for growing in wet places?

What are the features that adapt this plant—(say, Thalictrum)—for life in the shade ?

What evidence have we in this plant to show how pollination is effected ?

As an example of the application of the same principle to a subject commonly considered unattractive, allow me to call attention to the veining of leaves, viewed from the mechanical standpoint.

In the so-called parallel-veined leaves, the veins are united at one point near the apex of the leaf. In the so-called net-veined leaves, the veins are not thus bound together. The two

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## SOME BIOLOGICAL NOTES.

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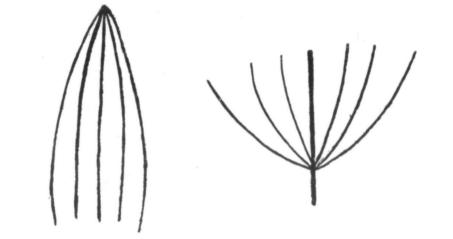
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For the former the term synneural has been suggested, and for the latter the term eleutheroneural (free-veined).

From the mechanical arrangement of the strands, certain results follow. It becomes easy to answer the question "Why are parallelveined (synneural) leaves not lobed or compound?"

It is easily seen that increase of leaf-surface must be obtained by increase in the *number* of leaves rather than by a large number of leaflets as we find to be the case in many net-veined (eleutheroneural) leaves.

The indentation or lobing of net-veined leaves follows as almost a mechanical necessity from the fact of the spaces between the ends of the veins. To prevent tearing the sinus is often strengthened, as is well-known, by a special nerve.

The veining of Trillium is interesting when looked at from this standpoint.

## II. NOTES ON FLORA OF GUELPH AND VICINITY.

For the past seven or eight years I have kept a record of plants collected by myself and pupils for class use. The record shows date, name, exact locality, etc., etc., including remarks upon any noteworthy points regarding habitat, quality, etc.

I have thus come to have a pretty thorough knowledge as to what plants are to be found in Guelph and surrounding country. I have been forced to the conclusion that my parish is, in some respects, a peculiar one. To give some illustrations:

Ranunculus acris, so abundant in most places as to be chosen as 21

the type of flower by the author of the High School Botany, hardly appears on our list. So far as I can recollect no undoubted specimen has been brought in during the past five years. Some six other species of Crowfoot are common, but not *Ranunculus acris*.

Again, Lychnis Githago occurs sparingly, but Lychnis vespertina is extremely abundant. Gray speaks of this "Evening Cockle" as "scarce." We have found it somewhat variable, diœcious, styles 5 or 6, flowers white, very rarely pinkish. It is usually, of course, found in cultivated fields.

*Ribes prostratum*, the Fetid Currant, occurs along the River Speed, just east of Guelph. This shrub is probably rare in Southern Ontario.

Corallorhiza Macraei (C. striata, Lindley) is characterized in Gray as "very local and very rare." Last May I found it above the escarpment near Campbellville. In June, one of my pupils brought me in a bunch of some forty specimens, stating that plenty more could be obtained in the same locality, about seven miles south of Guelph This pupil had followed my instructions in such cases, and had gathered no more than was required for actual use.

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# ON ATOM FORMS AS DEDUCED FROM THE CRYSTALLINE MODIFICATIONS OF THE ELEMENTS (AN ABSTRACT).

## WILLIAM L. T. ADDISON, B A., M.B.

MR. CHAIRMAN, LADIES AND GENTLEMEN :—The question to which I draw your attention to-day, is one too large to be fully discussed in the time allotted. That such a difficulty may be somewhat met, it was thought advisable to treat the greater portion of the subject in outline merely, stating such theories as may be demonstrated by observation or geometric proof, and to afterwards more fully discuss the simplest of allotropic elements, phosphorus.

In the study of crystallography, one's attention reverts to those substances which are most common and most crystalline in character. Of such substances calcite has been selected by observer after observer from the time of Nicholas Steno down to the present. Among the investigators Mitscherlich was the first to observe that similar chemical compounds had the same form, and could intercrystallize in the same crystal. Thus calcium, magnesium, manganese, ferrous, and zinc carbonates may crystallize and intercrystallize in rhomhohedra of approximately the same proportions. Thus form may be considered to be dependent on the chemical grouping, and is a function in this case of that carbonate group of atoms.

There is, in the carbonate group, a central atom carbon about which the other atoms are grouped, and these outer atoms are the outer portions of the molecule, or those of easiest and first contact.

The grouping is at four attractive places, and the form of the crystal being constant, the form of the molecule, and the position of these areas of chemical attraction must also be constant.

Concerning carbon we have considerable data. It occurs in crystalline form as the diamond, Sp. Gr. 3.6, and in graphite Sp. Gr. 1.8 when pure, or one-half the Sp. Gr. of the diamond.

The cleavage of the diamond is in regular octahedra, that is the line of union of the carbon atoms lie in octahedral planes. This form may be given either by octahedra being placed edge to edge, or by tetrahedra similarly placed, or by an arrangement of the two together, in which case they would fill space. It could not be an arrangement of both forms, and so must be of one of the forms. The tetrahedron has the same number of solid angles or prominences, and the same number of faces, as the carbon atom has areas of valence. In the octahedron the

differentiated portions are six solid angles, and eight faces. Thus thend, second, with differentiated portions of the tetrahedron are coincident in number with the in pairs. the chemical attractions of the carbon atom. Since, in the arrange In the first arra ment described, the solid angles are the differentiated portions in con- muous arrangem tact, they may be regarded as the areas of attraction.

If a series be taken, in a diagonal axis of symmetry of the octahedra grouping, it is composed of two hexagonal series of regular tetrahedra pose of the octah with their apices pointing in opposite directions. If one series taken away, the atoms of the remaining will be left with their solid as all its six fac angles only, in contact, the specific gravity will be one-half that of the opportion in nun diamond or octahedral grouping, and the arrangement will account for m in contact w a rhombohedral, a hexagonal, and a gross form simulating a monoclini one, the basal plane of which is at approximately  $70^{\circ}$  + to the oblique base area 4 squ axis; it will also account for the intermolecular inability of graphic mula "the solid and the triangular markings on the basal plane of that mineral.

Silicon, germanium, lead and thorium occur in regular octahedra does carbon.

Tin, titanium, and zirconium dioxides, are isomorphous, and tin known to occur in quadratic octahedra, and may be accounted for as grouping of quadratic tetrahedra.

Zirconium has been observed in tin white, microscopic, monoclini leaflets. Such leaflets would result in series parallel to P faces of the octahedra, described for tin.

If the prominences or the solid angles of the outline forms of a atoms, be their areas of valence, as in carbon, phosphorus requires a outline form of five solid angles. Such a form is found in the bipy amidal hexahedron. Phosphorous occurs in two crystalline forms regular octahedra and rhombic dodecahedra of specific gravity 1.8.1 to 2.089, and as rhombohedra of specific gravity 2.34. That there is regular form is a significant fact, which leads one to expect some reg lar characteristics in the primal form.

If the solid angles of the bipyramidal hexahedron (and we will future refer to the outline form of the atom as a solid one) be arrange with three equidistant solid angles in a zone, and two apiceal angle equidistant upon either side of the plane of the zone, and at the same distances from the zonal angles as the zonal angles are apart inters then a form is given, composed of two regular tetrahedra base to bas and of regular characteristics.

Such a form may be arranged with its edges together in two ways gles meet about a first, with two apiceal solid angles opposite, and symmetrically the solid angles of zonal angles about the point of contact to give a rhombohedral form cube are twice

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ince, in the arrange In the first arrangement, the angle R is  $82^{\circ} 18' + \ldots$  In the conted portions in continuous arrangement, columnar interatomic spaces are observed. These re as of regular octahedra placed face to face. Thus the upper and try of the octahedra wer faces, of these hypothetical octahedra, are in apposition with f regular tetrahedmose of the octahedra above and below. The remaining six faces are s. If one series is apposition with the faces of the hexahedra, and each hexadedron left with their solid as all its six faces in apposition with those of octahedra; hence the one-half that of the reportion in number of octahedra to hexahedra is as the faces of each rm in contact with the other, or as 1 to 1.

ulating a monoclini A regular octahedron of two inch edge, is composed of two pyramids, base area 4 square inches, and of  $\sqrt{2}$  inches height, so that by the nability of graphic mula "the solid contents of a pyramid

 $=\frac{\text{area of base} \times \text{height}}{3}$ ,"

solid contents are

$$\left(\frac{4}{3} \times \frac{\sqrt{2}}{1}\right) 2 = \frac{8\sqrt{2}}{3}$$

bic inches.

An octahedron of 4 inches edge has an area

$$\left(\frac{16}{3} \times \frac{2\sqrt{2}}{1}\right) 2 = \frac{64\sqrt{2}}{3}$$

bic inches. Such an octahedron is composed of six octahedra and sphorus requires a ght tetrahedra, of two inch edge. The six smaller octahedra have an rea of  $\frac{48\sqrt{2}}{3}$  cubic inches, therefore the eight tetrahedra have the maining area  $\frac{16\sqrt{2}}{3}$  cubic inches, and each tetrahedron has an area o expect some regular  $\sqrt{\frac{2}{2}}$  cubic inches. The hexahedron has an area of two tetrahedra,

 $\frac{4\sqrt{2}}{2}$  cubic inches; and the area occupied per hexahedron in the ombohedral arrangement is its own area + that of an octahedron 19.10 8

$$=\frac{12\sqrt{2}}{3}=5.656$$

In the second or regular arrangement, in which eight apiceal solid ether in two ways ligles meet about a point, the remaining apiceal solid angles form the symmetrically threight solid angles of an outline cube, and the two opposite angles of hombohedral form e cube are twice the distance between the apices of the hexahedron.

If x = the edge of the cube, then the diagonal of its face  $= x\sqrt{2}$ , and the line from the two opposite solid angles

 $= \sqrt{\text{edge}^2 + (\text{diagonal of face})^2} = x\sqrt{3},$ therefore  $x\sqrt{3} = 2$  (length of the hexahedron).

The length of the hexahedron may be found as follows. The zone of the hexahedron is an equilateral triangle of two inch side. Bisect each side, and join the points of bisection to the opposite angles, thus bisecting the angles 60°. We then have six triangles each one-half an equilateral triangle of sides x'. x' = hypotenuse or the line from the centre of the zone to the zonal angle. The other sides of the triangle are

1 and 
$$\frac{1}{2}x'$$
 so  $x'^2 = \frac{1}{4}x'^2 = 1$  so  $\frac{3}{4}x'^2 = 1x' = \frac{2}{\sqrt{3}}$ 

In the triangle, of the line x', the line from the centre of the zone to the apex of the hexadedron, and the edge of the hexahedron joining these lines, let us substitute y for the line dropped from the apex of the hexahedron to the centre of the zone, then

$$x'^2 + y \, 2 = 4, \quad \frac{4}{3} + y^2 = 4, \quad y = \frac{2\sqrt{2}}{\sqrt{3}},$$

and the length of the hexahedron  $=\frac{4\sqrt{2}}{\sqrt{3}}$ .

In the cube the edge

and 8 hexahedra

and 1 hexahedron

$$x\sqrt{3} = \frac{8\sqrt{2}}{\sqrt{3}} \quad x = \frac{8\sqrt{2}}{3},$$
  
=  $x^3 = \left(\frac{8\sqrt{2}}{3}\right)^3,$   
=  $8^2 \times \frac{2\sqrt{2}}{(3)^3} = 6.6987$ 

cubic inches.

The specific gravities of these allotropic modifications should be inversely according to their space occupation. Thus the regular form should have a specific gravity

$$\frac{2.34}{1} \times \frac{5.6568}{6.6987} = 1.976.$$

The mean of the observed specific gravities is

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$$\frac{6+2089}{2} = 1.957.$$

The difference between the estimated and mean results being less than the variation of observation.

Phosphorus also occurs in a very stable amorphous form, and as such might be accounted for by hexahedra face to face, so that two zonal and two apic continuous for to 2.293 at or

The rhomb solid angles a chemically w chemical acti most significa

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Thus, there three of a sort arrangement is a sort in form which the thr form together form are the to of a sort of for zonal angles a that the angle distant ?

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Sulphur has six solid angle with their sim solid angles, di selves in gross gravity 2.05, a atomic form to said to be mo occurs at high gravity 1.96, a heat to the rh

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form, and as such that two zonal and two apiceal solid angles are in apposition. In such a grouping continuous form is impossible. Its specific gravity varies from 1.964 to 2.293 at ordinary temperatures.

The rhombohedral form, or that form in which the different sort of solid angles are in contact, is the most stable form, and one acted on chemically with difficulty. The regular form very easily enters into chemical action. That the rhombohedral form is the most stable is a most significant fact.

The valence of phosphorus toward oxygen, sulphur, and chlorine, is five, toward hydrogen three. All the angles are available to oxygen, and but three to hydrogen. Hydrogen is an electro-positive element, and the element attracting it, is electro-negative to hydrogen. There are three areas of valence which select hydrogen, and these would be electro-negative in sort. The two remaining angles or areas of valence are of a sort which do not attract hydrogen, and so are of similar electro-condition.

Thus, there are angles three of a sort and two of a sort in form, and three of a sort and two of a sort in valence or electro-condition, and an arrangement in which the three of a sort were in junction with two of a sort in form, is more stable of equilibrium, than an arrangement in which the three of a sort are grouped together, and the two of a sort in form together. Is it not a fair inference that the three of a sort in form are the three of a sort of electric function, and similarly the two of a sort of form, the two of a sort in electro-condition, and that the zonal angles are electro-negative, and the apiceal electro-positive, and that the angle nearer the centre is electro-negative to the one more distant?

Arsenic, antimony, and bismuth, occur in rhombohedra with an increasing angle R. Arsenic and antimony occur rarely in the regular form.

Sulphur has a valence of six, and would thus have an atom form of six solid angles. Of such a form are octahedra. If octahedra be placed with their similar edges together, so that, if there be any difference of solid angles, different sorts are in apposition, they will reproduce themselves in gross form. Sulphur occurs in rhombic octahedra of specific gravity 2.05, and axes 1, 1.23, and 2.344, and so we may assume the atomic form to be of these proportions. Sulphur also occurs in a form, said to be monoclinic, but really a diclinic form. This modification occurs at higher temperatures than the rhombic form, is of specific gravity 1.96, and at ordinary temperatures reverts with evolution of heat to the rhombic form. It occurs in brilliant yellow transparent

columnar crystals of oblique basal cleavage. Thus the diclinic form of sulphur is at ordinary temperatures in a condition of strain, has a slight lowering of specific gravity, has interatomic spaces through which the atoms rotate to assume the rhombic arrangement, and the primal form must account for these properties in such a way, that the specific gravities are inversely to the space occupied per form. These primal forms may be placed face to face with different zonal angles in apposition, as in the rhombic arrangement. In this case the apiceal solid angles diverge, and make continued form impossible. If these become convergent, the zonal angles are slightly displaced, and so in strain; the zonal edge of the atom form becomes less oblique to the lines of fission into series, thus thickening the series  $\frac{1}{29.3}$ , approximately the observed proportionate decrease of specific gravity. In each

tionate decrease of specific gravity. In such an arrangement, there are spaces permitting the forms to diverge until their long axes become parallel, to assume the rhombic arrangement. The arrangement face to face as described, gives a diclinic columnar form of oblique basal cleavage. Selenium has modifications similar to those of sulphur. Tellurium occurs in rhombohedra, and might be accounted for by regular octahedra placed face to face. This view is supported by its isomorphism with the regular elements gold and silver. The hydrides of these elements will be discussed in conjunction with that of chlorine. In sulphur the number of atoms necessary to give complete rhombic and diclinic groups, are those found in the gaseous molecules, the rhombic form occurring at lower temperatures than the two-atom or diclinic group.

Iodine occurs in needles, in rhombic octahedra, and in rohmbic plates of the angles  $72^{\circ}$  and  $108^{\circ}$ . Its valence is seven, and it should have an atom form of seven solid angles. Such a form is given by two apiceal and five zonal solid angles. If the zonal solid angles be equidistant, and a zonal edge of each of two forms attached, a group of rhombic outline is formed. These groups may be rearranged to give a rhombic plate of angles  $72^{\circ}$  and  $108^{\circ}$  or the angles actually observed. From solutions of iodine in ether, or in chloroform, or both combined, may be seen under the microscope crystals forming.

Among the platelet crystals is seen a marked attraction of the obtuse angles for the acute ones, and between the needle-formed crystals is seen an attraction of the point of one crystal for the centre of another, thus showing a polarity, in which the more distant portion of a crystal is attracted to the more central portion. The hyd of the form of group I. areas of van nearest the areas of van in sulphur, sulphur dif

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the obtuse crystals is of another, of a crystal The hydrides of this group are monohydrides. There are compounds of the formulæ  $Ag_2$  Cl and  $K_2$  Cl, showing a bivalence toward elements of group I. of Mendelejeff's table, and two particularly electro-negative areas of valence, or the series which may be shown in iodine to be nearest the centre of the atom. The neutralization of one of these areas of valence neutralizes the opposite one. If such a condition hold in sulphur, then the hydride of sulphur, would be the observed one, sulphur dihydride.

The elements of group VIII. have a valence of four, and so would, if the primal form be a regular tetrahedron, give rise to regular forms. Such crystal forms as are observed, are of regular form.

The remaining groups III., II. and I., would have as primal forms a triangle of thickness, a rod form, and a spherical form, respectively.

The triangular form in aluminium, may be shown to be equilateral, in that two atoms are attached by three of oxygen, and these outlying points, formed by the oxygen atoms, when grouped, give a hexagonal form, which must be dependent on an equilateral sub-form, the grouping of which is again dependent on a central atom, which dictates the arrangement. The triangles lie in the planes of the faces of the tetrahedra as arranged in the diamond.

The atoms of the elements of group II., add themselves up to give first equilateral triangles, which again are capable of a regular, or hexagonal form. Both forms are found in zinc, and the hexagonal in beryllium.

The atoms of group I. may unite first, in rods of two atoms; second, in two rods of the first sort; third, three rods to give an equilateral triangle; and fourth, these triangles together to give a regular form.

These four steps are curiously coincident in number, with the four allotrophic modifications of silver; the first group being smallest and tending towards easier solution; the second, more difficult of solution; the third, more stable in form, and the fourth, the most stable of all in arrangement.

Malleability has a coincidence with atomic forms permitting of interatomic mobility in their arrangements. Thus the atoms of carbon are of regular tetrahedral form, and any loose solid angle is, as an apex to a tripod of equal limbs. Hence the stability of form and the rigidity of the diamond.

If one angle of an aluminium atom become free, it may, unless checked by some other atom, rotate circularly about a line joining the remaining angles. Thus aluminium shows a marked interatomic mobility, by its malleability, and a tendency to variable crystal form.

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If in an atom of an element of group II. of Mendelejeff's table, one of its two areas of attraction be free, it may, unless checked by some other atom, rotate spherically about its stationary area of attraction. The interatomic mobility of such elements, is shown by their increase of malleability over the elements of group III.

The interatomic mobility and malleability of the elements of group I. are increased over those of group II. by a joint in their rod form.

There is another factor in interatomic mobility, the intensity of attraction. If chemical and crystal attraction be different manifestations of the same attraction, then with the decrease of chemical activity, there will be a decrease of rigidity and stability of form, with an increase of interatomic mobility and malleability.

The preceding relations are well shown in the following comparisons:

The diamond.—Very crystalline, brittle, and hard.

Tin-Malleable, breaking with crystalline structure.

Lead—Soft and malleable.

Iron, nickel, cobalt.—Brittle as compared with platinum.

Copper, silver, gold, increasing in malleability with increasing atomic weight, and decreasing chemical activity.

Magnesium, zinc, cadmium, and mercury, increasing in softness, with increase of atomic weight and decrease of chemical action.

Thus is given a set of relations evidencing the unity of chemical and crystal attractions.

It is probable that we will at no distant day, be able to determine the causes of different physical properties of different sorts of matter, and that in the determination of these causes form will bear no insignificant part.

In closing I wish to add that I hope within a short time to supplement this very incomplete sketch by a publication of the entire original paper.

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## THE RELATION OF AGRICULTURE TO OUR SCHOOL SYSTEM,

# C. C. JAMES, M.A., DEPUTY MINISTER OF AGRICULTURE.

"Perfect agriculture is the true foundation of trade and industry it is the foundation of the riches of states."

These are the words of the great Liebig, one of the founders of the modern science of agriculture. They were uttered half a century ago, but they are more pregnant with truth at the end of the nineteenth century than they were in the middle of the century when Liebig was carrying on his agricultural investigations, or than at the beginning of the century when Sir Humphrey Davy was unfolding for the first time his memorable proposal for agricultural investigation before the learned societies of England. They are applicable to all civilized, to all semicivilized countries, but they have a special significance when applied to Canada; for while our fisheries add annually to our wealth to the amount of about \$20,000,000, and our mines nearly \$30,000,000, and our forests about \$80,000,000—agriculture adds no less than \$600,000,000, or nearly five times as much as the other three sources of wealth combined.

The perfect agriculture of Liebig implies, of course, a class of agriculturists well equipped, thoroughly trained, and rationally educated.

At the present time the subject of general instruction in Public Schools is being carefully worked out in France, Germany, Italy, and even in darkest Russia. Many of the most progressive of the States to the south of us are also discussing the question, and in some cases at least a promising start has been made.

In the Province of Manitoba a course of agricultural instruction has been laid down, and a text-book prepared adapted to the conditions of that Province.

In Quebec more has been done in the way of editing and publishing text-books in various departments of agriculture than in any other Province, and a continued effort has been made to make the instruction as general as possible.

In Ontario, however, we shall have to work out our system on the lines that are best adapted to this Province, and it will not do to try to copy very closely the system of any other country or of any other Province. We can have our own system if we desire it, and we can have a

system adapted to our own conditions of agriculture and suited to the mental capacity of our pupils.

So much for what may be called the introduction to my paper. Let me now briefly state my views under three heads:

1. Should agriculture be taught in our schools ?

2. When and where should it be taught in our school programme?

3. What can be taught, and how can it be taught?

1. Should agriculture be taught ?

If agriculture can be taught in our schools, that is, if there is time and place for it, and if it can be presented in a form adapted to school pupils, the more reasonable form for this question, it seems to me, is, "Should agriculture not be taught?"

The agriculture of this Province is in a critical condition. We certainly have not yet reached the most acute condition, that has come to the farmers of Great Britain and France, and Germany, but we have reached a point which, compared with the conditions of the newer farming communities of Manitoba, the N.W.T., and other sections similarly situated, can be expressed by no better term than the one I have used, viz., critical.

The building up of the purebred live stock interests of this Province and the development of our dairy industry have been the two main factors in saving us from a condition that could be described only by the term "desperate."

Just at the present time the conditions are more favorable than they have been for some time. Prices have improved for us, mainly because of the temporary misfortunes of agriculturists in other parts of the world. One consequence of this is seen in the great rush at present in progress for the cheap productive lands of Manitoba and the N.W.T. If nothing be done to give a decided upward movement to our Ontario agriculture, however, we may soon find ourselves approaching the conditions now prevalent in the older farming lands of Europe.

Two things especially are, in my opinion, of prime importance now to save the agriculture of this Province and the agriculture of Canada from being reduced to the level of cheap lands, cheap labor, and cheap mental calibre. The first is the rapid development of our deep waterways system, so that the advantage may be maintained of the very lowest transportation rates on all farm products for export to Europe, and the completion of a perfect system of transportation, so that our fruits, including peaches and grapes, butter, eggs, poultry and other perishable products may be safely and cheaply transported to the consuming markets of Europe.

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The second requirement is that our agriculturists shall receive some grounding in the scientific principles underlying their work, so that farm practice may be more intelligently directed, and that some of the great waste of time and labor may be saved to this important industry.

One of the distinguishing features of the agriculture of to-day is the rise of co-operative associations. In Ontario we have had agricultural societies ever since the Province was organized, and for nearly seventy years legislative grants have been made for their encouragement. But the societies for discussion of agricultural topics, for interchange of ideas, and for teaching or instruction by experts are of recent origin. We have associations of the owners and breeders of all the leading breeds of live stock. We have a Fruit Growers' Association, associations also of the poultry keepers and of the bee keepers, an association of experimenters, two associations of the dairymen, and an Entomological Society. All these, through their many meetings, and the hundreds of meetings of Farmers' Institutes, have quickened the minds of the workers. Supplementing these meetings, reports and bulletins have been distributed by the hundreds of thousands in the past ten years But the point that I wish to make here is that the persons principally benefited by this work are the men and women of mature years. This is all very well in its way. These men appreciate thoroughly what is being done; they recognize the importance and the necessity of this instruction-but is it not beginning at the wrong end? Why should the farming class of this country have to wait until they become men before they learn that there is a science underlying their practice ? If it is a good thing to educate a grown man or a grown woman in the principles of agricultural work, it is still more important, as far as practicable, to give the boy and the girl some training in these principles early in life, at the time when these principles are most easily acquired, and when they will be of most permanent benefit. I, therefore, have no hesitation in answering my first question by saying that agriculture in some form should be taught to the pupils of our schools.

2. When and where should it be taught?

Most persons, I think, are of the opinion that some instruction in agriculture should be given to pupils in rural schools, since they assume that these pupils are to be the future farmers. They are not, in general, of the opinion that the teaching should be given in town and city schools, because the pupils of such schools are likely to move outinto professional pursuits, become school teachers, enter mercantile life, or follow some one of the many manufacturing lines of life. They are not quite sure that all pupils in rural schools even should be taught-

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agriculture, as so many are yearly coming from the country to the town to reinforce the struggling city classes with new blood and new physique. Right here I would present a debatable statement. If agriculture can be taught in our schools in a manner such as I will suggest in my next division I am of the opinion that it should be on the course of study for town and city pupils as well as on the course for rural pupils. Perhaps in city and town schools it might be made optional but in rural schools it should be obligatory. The present situation is that with very few exceptions all town and city pupils will remain in city and town pursuits, and the country schools are also being annually drained of the majority of the brightest and most promising.

But this, I contend, is not a very promising feature of our country's growth. It may be due in some part to the very nature of our present system. That I shall not here discuss. If we can, by altering or rearranging our system, keep more of the best rural pupils in touch and work with agriculture, and if we can at the same time arouse in some of the town and city pupils a sympathy for agricultural methods and agricultural life, we shall be looking to the best interests of the pupils and of the country as a whole. I am of the opinion that a course of agriculture can be given in town and city schools that will be interesting and beneficial and will be in harmony with the best educational methods or system. I would put a course in the science of agriculture within the reach of every pupil in all of our schools, and I would therefore begin the work in the Public Schools, rural and urban alike. In the schools of France, where agricultural education has been most fully taught, instruction in this work begins in the primary schools in the elementary course, with pupils from seven to nine years old, and is followed out through the middle course, nine to eleven years, and the superior course, with pupils from eleven to thirteen years old. It might be best to begin the work here by making agriculture a compulsory subject in the Fourth Form of our Public Schools, and from this as a starting point work out in time a system of instruction adapted to our conditions, prefacing it first by a simpler course in the Third Form, and adding an advanced course to our High School work.

I believe that agriculture can be taught just as well to the Public School pupils as are some of the subjects at present on the course, and I believe that the pupils themselves will come to the subject with as much eagerness. I do not care to particularize or to make comparisons, but perhaps you will permit one remark, viz., if Public School pupils can master the subject of physiology, hygiene, and temperance, they are

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well able to take hold of the subject of agriculture, and I think it can be made more intelligible to them.

3. What can be taught and how should it be taught?

This is the most important of the three questions; it is that upon which the whole argument turns. I think that delay in introducing agriculture into our schools has occurred principally because of the difficulty, in fact, the present impossibility, of introducing into our schools instruction as to how to farm. Our schools could not be equipped for training in the practice of agriculture except at an enormous cost, and our Public School teachers could not be expected to teach the young idea how to farm even in the crudest manner. Here is the point-any instruction now given in our schools should deal simply with the science of agriculture; the practical application of the scientific principles may be left to the home training and to such specially equipped institutions as our Agricultural College. It is quite possible that in time something may be done for our rural schools as has been done in France and other European countries in the way of adding small gardens and plots wherein some of the lessons of the school-room may be applied, and where illustrations may be found in the growing trees and shrubs and the development of seeds sown by the hands of the pupils themselves.

This mistake of confusing the science and the practice of agriculture is quite general, and some of the text-books placed in the hands of young pupils have no little responsibility for continuing the mistake.

I consider the science of agriculture eminently adapted for school instruction, and a future student of natural science could not lay a better foundation for his future work than by first mastering the general principles of the various sciences which together form what we call the science of agriculture. Let us note briefly what it includes.

Agriculture consists mainly in the growth of plants, the feeding of these plants to animals, and the working over of the animal products resulting.

First of all we have the air and the soil. A study of these gives us an introduction to chemistry, geology, and meteorology.

The growth of plants brings in the study of botany, and is closely followed by an introduction to entomology.

The study of the animals at once calls for some of the simplest principles of zoology, anatomy, and physiology.

Even bacteriology comes in when we study the diseases of plants and animals and the making of cheese and butter.

And so we might sum up by saying that a study of the science of agri-

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culture implies a beginning in the study of all the natural sciences that are afterwards found in our High Schools and colleges. The study of the science of agriculture is to a large extent a course in "nature study," and since the illustrations are taken from plants, soils, insects, and animals with which all boys and girls are more or less familiar, the subject may be made to appeal to the everyday observation of the pupils. What should be done, then, is to give the pupils an insight into the first principles of the various sciences, laying stress upon those laws and principles that have an application to the work of agriculture.

What I am trying to lay before you as my idea of how agriculture might and should be taught in our schools has been more clearly and forcibly put by that master teacher Huxley, who in addressing a farmers' club in England on this subject spoke as follows:

"There are some general principles which apply to all technical training. The first of these, I think, is that practice is to be learned only by practice. The farmer must be made by thorough farm work. I think I might be able to give you a fair account of a bean plant, and of the manner and condition of its growth; but if I were to try to raise a crop of beans your club would probably laugh consumedly at the result. Nevertheless, I believe that practical people would be all the better for the scientific knowledge which does not enable me to grow beans. It would keep you from attempting hopeless experiments, and would enable you to take advantage of the innumerable hints which Dame Nature gives to the people who live in direct contact with things.

"And this leads me to the general principle which I think applies to all technical training of all school boys and school girls, and that is that they should be led from the observation of the commonest facts to general scientific truths. If I were called upon to frame a course of elementary instruction preparatory to agriculture, I am not sure that I would attempt chemistry, or botany, or physiology, or geology as such. It is a method fraught with the danger of spending too much time and attention on abstraction and theories, on words and notions, instead of things. The history of a bean, of a grain of wheat, of a turnip, of a sheep, of a pig, or of a cow, properly treated-with the introduction of the elements of chemistry, physiology and so on as they come inwould give all the elementary science which is needed for the comprehension of the processes of agriculture, in a form easily assimilated by the youthful mind, which loathes anything in the shape of long words and abstract notions, and small blame to it."

I have already mentioned one misconception that has retarded the introduction of agriculture as a permanent part of our school system viz., the id of agricul principles agriculture

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viz., the idea that it was intended to give some instruction in the practice of agriculture, whereas nothing should be attempted but the first principles of the various sciences that are connected with or underlie agriculture, taking up the application of these sciences to agriculture.

Another fault is the attempt on the part of some persons to agriculture. too much. We must not crowd too much on the young mind, or mental dyspepsia will result, followed by a loathing of all forms of mental food. The work when first begun in the Public Schools should be very simple, very restricted, and should call into activity the open eyes and open ears of the pupils.

Every rain that falls, every tiny stream by the roadside, the shooting of the green blade in the spring, the nodding buttercups, the golden rod, the tall bull thistle, the early dropping apple with its worm hole, the ball of black knot upon the cherry, the jumping grasshopper, and the hundred of nature's children, should attract the attention of our children out of doors, and arouse in them a love that is not born of ignorance but of true knowledge. Nature in the country, in the village, in the town, and, to a limited sense, even in the city, lies before our children as a great unnoticed, unmeaning book. Our children, by their natural sympathy with nature, and by their God-given faculties, appeal through us to the great Creator of nature. "Open Thou mine eyes that I may behold wondrous things out of Thy Law."

CLASSICAL SECTION.

### CLASSICAL SECTION.

## THE STARS OF HORACE.

### J. E. WETHERELL, B.A., STRATHROY.

One needs almost to apologize for seriously proposing to take up a little of your time to-day with so unusual a theme as "The Stars of Horace," but the need of an apology is significant of another need to which this paper is intended to call attention, that is, the need of a knowledge of things sidereal if one would appreciate numerous passages in Horace which without some acquaintance with the stars mean but little. Horace the moralist, the satirist, the poetic artist, knew human nature well, but he also knew the physical universe in all its round and scope, and in looking about him he did not forget to look above him. The beauty and glory of the stars is a part of nature's panorama that did not escape the wide and keen vision of the little Venusian. Yes, and I will go so far as to say that the constellations of Horace far from being the least important among the pictures of nature seen by Horace's eye are in truth just that part of nature's fascinating field which should interest the classical scholar most. All other objects that attracted the attention of the Latin poet nineteen centuries ago have departed from us or are alien to us. His Pyrrhas, and Lydias, and Chloes, sweet girls, have doubtless their counterparts in these modern days, but they are vastly different from the sirens who meshed the impressionable poet. Picus and Turdus and Philomela, have their Canadian congeners in our woodpecker, our thrush, our swallow, but our birds are not the birds whose ancestors haunted the Sabine farm. Endives and mallows, the thorns and the brambles, even the violets and the roses of Horace are not those that flourish under our American skies. But these stars that wheel above us every night are the very stars of Italy and the very stars of the century of Horace. Our latitude is that of Italy-the latitude of Toronto is the same as that of Florence-and the stars that we shall see to-night at nine o'clock will have been seen at nine o'clock in Italy six hours before they roll around to us, or if you like, six hours before we roll eastward to them. Venus and Jupiter and Mars; Orion, Taurus, and Gemini; Sirius, Capella, Arcturus; will all be out in our Canadian skies

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at nine o'clock to-night. At this very hour, while I am reading this paper, it is nine p.m. in Rome and Pope Leo may be gazing from the casements of his palace on the same great stars and constellations that we shall see six hours hence. Indeed, then, the stars of Horace, neglected by nearly every student of the classics, or known only as empty names, are the only aspects of nature which we to-day may see as Horace saw them.

Let us now proceed to examine the poetry of Horace to see what use he makes of the glories of the night sky. At the outset we are struck by the fact that the poet's imagination has been stirred by the stars more deeply than the imagination of any poet of modern days. The pages of Horace—and just here it may be said the pages of Virgil, his contemporary and friend—are studded with references to the stars. Among English poets, even the greatest, astral allusions are rare indeed. Byron can in a transient rapture exclaim

"Ye stars, which are the poetry of heaven ! Ye are a beauty and a mystery." Shakespeare gives us a very few pictures and fancies: "The floor of heaven is thick inlaid with patines of bright gold." "These blessed candles of the night." "The skies are painted with unnumbered sparks."

English literature, if we except a few of the elder American poets, has neglected a field that had a strange witchery in times antique. I was surprised the other day on looking into Professor Shairp's "On the Poetic Interpretation of Nature," to find that the modern critic as well as the modern poet seldom looks at the heavens above. Although that excellent volume on the interpretation of nature covers the poetry of all ages, that of Lucretius and Virgil included, there is not a single reference to the stars, strange to say !

But to come back to Horace—there were very special reasons that put his imagination in thrall to the stars. In the first place, he was born and brought up on a farm and always liked an out-of-door life. His life on his Sabine farm and at his cottage near Tibur gave him abundant leisure for opening wide his eyes, and his eyes looked everywhere. In the second place, a great impetus had recently been given to astronomical observation. The *Phænomina* of Aratus, written by a Greek of Soli two centuries before, had been translated, in parts, into Latin by Cicero in 44 B.C. In *De Natura Deorum* Cicero enumerates thirty-six different constellations, and he describes them in such a way as to indicate that he knew them in the heavens as well as in the poem of Aratus. At the time of the publication of *De Natura* 

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Deorum, Horace was twenty-one years old, and twenty years elapsed before his Odes were published. Further, Virgil's First Georgic was written ten years before the earliest odes, and we know that Virgil's personal influence over Horace was very great. It is quite evident that the two poets were on the most intimate terms at the time of their famous journey to Brundisium described in the Fifth Satire of the First Book. You remember this passage:

"Night was now preparing to draw a shade over the earth, and to scatter the stars over the sky "...." Mæcenas goes to play at tennis, I and Virgil go to rest."

I have now come to the technical part of my paper, a survey of the most important astronomical references in the works of Horace. I shall first take up the planets, then the principal fixed stars, then the signs of the zodiac, then the constellations outside the belt of the zodiac.

First, the planets. Horace mentions all but one of the planets known in his day, that is, all the planets visible to the naked eye.

Venus, the most glorious of the evening stars, is probably the *Vesper* of C. II., 9:

"Nec tibi Vespero Surgente decedunt amores."

Also, in C. III., 19, Telephus, the beauteous, is compared to the beauty of Vesper.

The red planet Mars is mentioned with a touch of superstition in C. II., 14:

" Frustra cruento Marte carebimus."

Horace's references to astrology will be noticed later.

The planet Jupiter must have reigned in the midnight sky, during the winter when the poet wrote C. III., 10, just as it has been during the past winter, the most attractive feature in our Canadian skies after the setting of Venus: "Dost thou perceive how Jupiter by his pure influence hardens the fallen snows?"

Jupiter is again mentioned along with the planet Saturn in a remarkable passage in C. II., 17:

"Te Jovis impio Tutela Saturno refulgens Eripuit."

Here again we have an astrological belief to be noticed later.

These four planets, Venus, Mars, Jupiter, Saturn, were the only four that struck the attention of the ancients. It is true that Mercury's fiery planet is mentioned by Virgil in the First Georgic, but on account of its nearness to the sun and its rapid changes of place, comparati to say tha Indeed, O Mercury.

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Now let us notice the individual fixed stars that shine in the poetry of Horace. The greatest star in the heavens, that star which modern astronomy tells us is 500,000 times as far from the earth as the sun is, that star whose brilliancy is 200 times greater than that of our sun, that star which to the unaided eye appears the largest in the whole heavens, is mentioned by Horace more than any other star, and no wonder. Sirius, the great dog-star, was regarded with awe, almost with terror, by the ancients. The heliacal rising of that star occurs at the heat of midsummer, and its white light was regarded as baneful to vegetation and to animal life. Horace's frequent mention of the star shows that his philosophy did not free him from the influence of the prevailing belief. To Tyndaris in C. I., 17, he says:

> "Hic in reducta valle Caniculae Vitabis æstus."

To the Fountain of Bandusia (C. III., 13), he says:

"Te flagrantis atrox hora Caniculae Nescit tangere."

To Mæcenas (Epode I.) he says :

"Before the approach of the scorching star my cattle may change the Calabrian for the Lucanian pastures."

To Fuscus in Epistle 10 of B. I., he praises the country breezes as moderating the *rabiem canis*.

In Epode 3, the same malign influence of this star is referred to: "Nor has such a scorching heat from the stars ever settled on thirsty Apulia." And in Epode 16, again we have it: "Nor does the scorching violence of any star distress the herd." And in C. III., 1: "The stars that parch the fields."

You will see that it is the farmer as well as the poet who turns his eyes so often to Canicula.

The smaller dog-star, Procyon, whose heliacal rising is almost synchronous with that of Sirius. Horace mentions once (C. III., 29):

> "Jam Prŏcy̆on fŭrit \* \* \* \* Sole dies referente siccos."

Another farmer's star is *Capra* or Capella, the brightest star in Auriga, rising amid the storms of an Italian October: "Insana Caprae

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sidera" (C. III., 7). In the same constellation of Auriga is the Kid, mentioned in C. III., 1.

#### "Nec saevus Arcturi cadentis Impetus aut orientis Haedi."

This mention of Arcturus, the great star in Bootes, the "malignant violence" of whose ruddy glare sank in the Etruscan sea when the Kid was rising over the Apennines, must complete the catalogue of the single stars mentioned in the verses of our poet.

We now come to the constellations of the zodiac. Of the twelve signs of the zodiac Horace mentions seven. In making out a list of the five signs that he has not mentioned, I have discovered an odd circumstance. Four of the five omitted signs are not conspicuous in the heavens and only an observer with good vision can discern the contours of Virgo, Cancer, Pisces, and Aries. Horace you will remember, was troubled from his earliest years with a malady of the eyes, and so probably never saw these constellations, and naturally he never refers to them. The seven that he does mention, in the order of their appearance, are the Hyades (in Taurus), Gemini, Leo, Libra, Scorpio, Capricorn, Aquarius. The Hyades, that compose the face of the Bull, including the great star, Aldebaran, he mentions in C.I., 3. They are called *tristes Hyadas*, because their rising in November and their setting in April were accompanied with rain. In this ode also he mentions Gemini, the proximate constellation :

#### "Sic fratres Helenae lucida Sidera."

This third ode of Book I., you will remember, is addressed to Virgil on the occasion of his voyage to Athens, and the brothers of Helen, Castor and Pollux, were the patrons of navigation.

> "Safe comes the ship to harbour Through billows and through gales, If once the great Twin Brethren Sit shining on their sails."

Next comes Leo, mentioned twice, "Et stella vesani Leonis, Sole dies referente siccos" (C. III., 29), and "momenta Leonis" (Epistles I., 10). In both passages we have a reference to the fierce heat of the season when the sun entered this zodiacal sign at the beginning of July, as it did in the days of Horace.

The next three signs, Libra, Scorpio, and Capricorn, are all named in the same passage (C. II., 17): "Whether Libra or terrible Scorpio, the most dangerous part of the natal hour, or Capricorn the ruler of the western waves, presides over my life, our respective horoscopes agree in a wonderfu noticed her hints at the regarded by Aquarius tioned (Sat

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a wonderful manner." This is another astrological passage to be noticed hereafter. The adjective *formidolosus* attached to Scorpio hints at the terrible red star Antares, the heart of Scorpio, which was regarded by the ancients as malign in its influence.

Aquarius, the waterman, is the last sign of the zodiac to be mentioned (Satires I., 1):

# "Simul inversum contristat Aquarius annum."

"As soon as Aquarius saddens the inverted year." Before leaving the constellations of the zodiac I should like to call attention to this last passage as illustrating a peculiar difficulty that faces the student of Horace in several places where the zodiacal signs are introduced. The sun enters Aquarius now at the beginning of February, and the phrase *inversum annum* has no meaning to one who does not know that in consequence of the precession of the equinoxes all the zodiacal signs have shifted one place since the days of Horace, and that the sun did enter Aquarius at the beginning of January in the days of our poet. So where Horace speaks of the raging Lion, we should have to speak of the raging Crab, and where he says the rainy Hyades, we should have to say the rainy Ram.

We have now come to the constellations outside the zodiac. And here we find what we might expect. Just as Horace mentions most frequently among the single stars the largest star in the sky, Sirius, the brilliant dog-star, so he mentions most frequently among the constellations, Orion, the most glorious figure in the heavens. Four times is Orion introduced and always with the same attribute. In Horace's day the setting of Orion was usually a season of rain, and the farmer-poet always has his weather-eye open when he looks for Orion. In C. I., 28, he calls the south wind "the tempestuous attendant of the setting Orion." In C. III., 27, we read :

# "Sed vides quanto trepidet tumultu Pronus Orion."

In Epode 10, we read of "that gloomy night on which the destructive Orion sets," and in Epode 15:

## "Dum nautis infestus Orion turbaret hibernum mare."

It may be well here to refer to a difficulty that meets the student in connection with the "setting of Orion." We have to remember that many of the ancients had the habit of getting up early in the morning, and when they speak of the rising or setting of stars they speak of what they saw in the early morning just before sunrise. So the "set-

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ting of Orion" is not what we may see to-night at nine o'clock, or what Tennyson describes in Locksley Hall:

" Many a night from yonder ivied casement, Ere I went to rest, Did I look on great Orion sloping Slowly to the west."

The "setting of Orion" to the ancients was the going down of the Hunter just before daybreak. We lie-a-beds never see that sight. Horace doubtless often saw Orion set either when laudably he was inspecting his goats and lambs, or culpably was returning in the morning after some all-night detention by wine or woman.

Another difficulty that meets the student respecting "setting Orion" is this, just as the precession of the equinoxes has shifted to the east the signs of the zodiac, so Orion has moved thirty degrees to the east since the time of Horace, and all the epithets of storm and rain that once were legitimately Orion's must to-day be removed from his broad shoulders, however capable. Orion now sets at the beginning of December.

The Pleiades, not far off from Orion, may be noticed next. The poet represents them as dancing (C. IV., 14):

#### " Pleiadum choro Scindente nubes."

The long list of the Horatian constellations is nearly concluded. In C. III., 29, we meet with Cepheus and his daughter, Andromeda, two of the so-called "Royal Family" of the sky. In C. III., 3, we read of Hercules attaining to the starry citadels, probably referring to one of the most conspicuous of the constellations. Lastly, from C. II., 19, may be quoted :

#### "Beatae conjugis additum Stellis honorem "—

which gives the legendary origin of the Northern Crown, or Ariadne's Crown.

As might be expected from a poet so familiar with the face of the night sky, Horace uses the stars frequently in metaphor. Many instances will occur to you:

"I shall strike the stars with my towering head" (C. I., 1).

"Cease to spread a cloud over the maidens, those bright constellations" (C. III., 15).

"Enrolling the undying renown of the illustrious Cæsar among the stars" (C. III., 25).

"Calling down from heaven the unsphered stars" (Epode 17).

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General references to the stars are also numerous.  $\mu I$  will quote only three typical passages:

"When the stars do not shine with steady lustre for the mariners" (C. II., 16).

"Until Phœbus returning puts the stars to flight" (C. III., 21).

"Whether the stars spontaneously or by direction wander about and are erratic."

This last passage, you will remember, is in the Epistle to Iccius, an amateur philosopher and astronomer. What a mystery to the ancients must have been the movements of the stars and especially of the planets. Erratic, indeed, must have seemed to them the wanderings of Mercury and Venus, convinced as the ancients were that the earth was the centre of all things.

Were there any comets in the days of Horace? Yes, when Horace was just twenty-one years of age a glorious comet lit up the heavens for many nights. Of it the Romans were not afraid, for to them it was the spirit of the recently assassinated Cæsar translated to the skies. The wonderful luminary makes its appearance in C. I., 12:

> "Micat inter omnes Julium sidus velut inter ignes Luna minores."

Here, too, we have the first mention of the moon in Horace. The Queen of the night skies, "Luna, siderum regina bicornis," (Carmen Sæculare), is, of course, mentioned very often. Two passages must be noted. In C. IV., 6, we find : "The goddess that illumines the night, increasing in the splendor of her beams, propitious to the fruits of the earth, and swiftly rolling onward the recurring months." In Epistle XIII., that letter to Iccius, we have the note of wonder : "What throws obscurity on the moon and what brings out her orb."

This paper on the astronomy of Horace cannot conclude without a brief reference to astrology, which has been called "the false sister of astronomy." It is generally believed that Horace had no faith in astrology and that he poured ridicule upon it. This notion is based on the Ode to Leuconoe (I., 11). He exhorts her not to consult the Babylonian astrology, but to bear patiently whatever may occur. We must remember, however, that Rome at this time swarmed with impostors from the east who pretended to cast nativities and to tell fortunes, and these quacks, we may be sure, imposed on hosts of women; so it is not surprising that Horace warns one of his women friends against the prevailing imposture. It is not likely that Horace had any very decided opinions about the matter, but the 17th Ode of Book II.,

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addressed to Maecenas, indicates that he had given some attention to his own horoscope and to that of his powerful friend, and there is nothing in the passage to show that he is not serious in his allusion to the influence of the stars on the natal hour. The poet who ridicules all creeds and systems in turn would have spoken out more plainly if he had been quite free from the fascinating thrall of the astrological cult.

We have now taken a pretty complete survey of the Horatian astronomy. My paper has grown to such an unconscionable length that I must abruptly close. The pleasure I have had in the pursuit of the subject is my only excuse for detaining you so long.

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## C. J. LOGAN, B.A., GALT.

It is well-known that optimism is popular and has to do with the present and the future, while pessimism is distasteful and often consists in harping on the past and disparaging the present. To speak of the days when Plancus was consul, or George the Third was king, meets with little favor, but, at the risk of being dubbed "a praiser of bygone days," I shall, mindful of our present advantages, try to show some points in which our present system of education has not improved on that of the past. One of the greatest evils perhaps of which teachers have to complain, is the number of subjects to be taught and the utter impossibility of doing them all justice. In the old days classics, mathematics and modern languages, comprised the curriculum, and it is difficult to see what more could be desired for a good school training. In this limited programme thoroughness, the great want of the present day, was much in evidence. With our present system and the increased number of subjects too much has to be done for the pupil; he has not time to do independent work and think for himself, and these two great features of true education are not at all prominent in the schools of to-day.

Many improvements most certainly have been made in our schools and methods of teaching, and of these may be mentioned the basing of the composition on the authors read in class, and the encouragement of idiomatic translations of incalculable value in the study of composition both Latin and English.

We have all no doubt compared the classical papers of twenty years ago with those of to-day and none of us would be willing to go back to what we had then. The utter lack of connection between the pieces set for composition and the authors read; the absurd importance attached to mythology and derivation and the dragging in of rather irrelevant allusions in the text were features that we surely do not miss. But have we not gone rather fast? Was there nothing good in those old papers which we might have retained and have not the changes been too sweeping? Though our chief aim in studying Latin and Greek should be, to read these languages with some facility, still questions on the subject-matter, especially historical allusions—such a marked feature in the old papers—are, it is to be regretted, treated very lightly in the present. Then again the quantity of Latin syllables, so accurately observed in the old days that a false quantity was looked

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upon as the unpardonable sin in language, has come to be held of very little importance. Have we done wisely in rejecting these two features of the old papers? How do Virgil or Horace sound to the boy who recites or the teacher who hears him recite, if nothing is known of the rules of quantity?

For it must be remembered that, with an examination before us we teach, whether we will or no, just as the character of that examination shows us we are likely to gain the greatest number of marks. While on the subject of Latin quantity would it be heresy to speak of the Roman pronunciation of Latin which is solemnly laid upon us?

There are, it is believed, some half-dozen good reasons to be given why pupils should study Latin. Of these, one, though perhaps not of greater force in many cases than the other five, yet of much wider application, is the fact that to the general mass of students-to those who never become proficient-the greatest benefit derived from the study is the revelation which is given them of their own language. If this is gained by the average pupil, and the writer has taken the trouble to prove for himself, that a considerable knowledge of the derivation of English is gained even in the lowest division of the First Form, such a knowledge can not be had if Latin words are pronounced by any but the English method. The word "civitas" when pronounced by the English method, will bring to a boy's mind many kindred words; if pronounced kee-wee-tase, all this is lost to him. If he is allowed to shout "Vivat regina," he will likely become an Imperialist; if he has to pronounce it Wee-waht ray-gee-nah, he will drift to Anarchism. The two great objections, then, to the Roman mode are the obscuring of derivation and, what is of infinite importance to us, the greatly increased difficulty of teaching Latin to a Junior Form. What the advantages are, all that the writer has been able to read on the subject has failed to discover. Does any one pretend to say that the Roman pronunciation is definitely settled and that the sound of its diphthongs is a certainty? The only good reason for adopting a system would be uniformity and English pronunciation would serve this purpose quite as well, especially if we were as careful in regard to quantity as were our fathers.

To revert to examination papers of which something has been already said. During the past decade the papers set in classics have been eminently fair to the candidate. The examiners have shown a wonderful knowledge of what should fairly be expected of a pupil, and in framing their questions have evidently put themselves for a time in the pupil's place. It is, however, unfortunate that they are so hampered by grammar and examiners the and, as it is a parts of the gamble on the proper plan, is translation on the other. The translation and higher mathem

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has been ssics have shown a f a pupil, ves for a ney are so hampered by regulations that it is necessary to put all the authors, the grammar and the sight translation on one paper. It is certain that examiners themselves must feel increased difficulty in setting papers, and, as it is an impossibility to give an equal representation to all the parts of the authors prescribed, pupils take advantage of this and gamble on the chances of two out of three books of Cæsar. The proper plan, it is submitted, would be to put composition and sight translation on one paper, and the prescribed authors and grammar on the other. This would seem the logical division of the work; the sight translation and composition would correspond to the problem paper in nigher mathematics and the author paper to the paper set on book-work.

However, notwithstanding these limitations, pupils have, for a long time had very little to complain of in classical papers, and the weakest link in their examination chain has been found in other quarters, and often in that quarter where the men who examine are from their training supposed to be most exact. Several features in our teaching have been pointed out which are honestly believed to be in need of improvement, but all these sink into utter insignificance when compared with the last evil of which it is proposed to speak. An evil of comparatively recent growth, and, no matter with what intention introduced, it is one that has done more to destroy the efficiency of secondary education than anything which has ever found a place in the regulations.

It is thought that no one present will fail to recognize in this brief introduction the Public School Leaving Examination and what it entails. All teachers in High Schools rejoice in anything tending to the efficiency of the Public Schools, and would gladly see the standard of entrance raised, and if the Public School Leaving does that well and good. It is not with the examination as such that we are so much concerned, but with its effect on the High Schools. To those who pass this examination the privilege is given to enter the second form of a High School. Most successful candidates exercise their right, and the effect on the teaching of Latin, which is begun in the junior division of the First Form, is most disastrous. Surely the tendency of the age is to go too fast, and yet this regulation sets a premium on haste and consequently on inefficiency. Not one pupil of ten that pass this examination is able to do the work of the Second Form, and the result of their poor equipment makes itself felt throughout the whole school. Could not the head master of a High School be trusted to give each pupil his proper place in a school for whose order, time-table and efficiency he is responsible? The welfare and progress of pupils is destroyed by such a rider attached to an examination of a primary school and made

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binding on a secondary school where the conditions naturally are changed.

It is to be hoped that the evil effects of this privilege will be strongly protested against, and that the privilege itself will soon be taken away. If not, the teaching of languages will continue to deteriorate and an inspection of the schools will soon show this to be the case.

What we who teach Latin in High Schools should wish for is an increased standard of entrance, and that some check be put upon the ever increasing tendency of the age to get through as soon as possible. So long as an education is looked upon as something which has a certain commercial value, and not as something much higher to be valued for its own sake, we cannot conscient: busy call ourselves an educated people. The natural desire in men to be pre-eminent has been and always will be, but if we boast ourselves to be "better than our fathers" let us surely look to it that it is no empty boast. MATI

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# MATHEMATICAL AND PHYSICAL SECTION.

# METHODS IN PHYSICS.

# I. J. BIRCHARD, PH.D.

A short time ago while waiting a few minutes in the office of the Confederation Life Association my eye chanced to fall on one of their advertising cards, where I read these words in bold type, "There are no bargains in Life Insurance." The truth was not a new one, but the pointed mode of its expression and its exact agreement with the facts of my own experience, forcibly presented an old truth with a new application. So much so that the words acquired in my mind the permanence and importance of a law of physics or a formula of mathematics. On several occasions since I have used them as a lesson-text in the slightly altered form, "there are no bargains in algebra." Today I want to emphasize the same thought in another department, and I consequently observe that "there are no bargains in modes of teaching (or learning) physics." Full price must always be paid or there will be no delivery of goods.

During the last eighteen years in which I have been engaged in teaching physics many radical changes have been made both in the work prescribed and in the modes of teaching. The former have in some cases been rendered necessary by advances in science itself. The dynamo, for example, and the recent applications of current electricity very properly find a place on the curriculum, even though other important work must be excluded in consequence. Changes in the latter, however, cannot be justified on the same ground. No new modes of learning have or can be discovered. Whatever advances may be made in the subject itself the modes of teaching and learning must forever remain the same. The radical changes to which I refer appear in some cases to be an effort to secure results without fairly earning them, and like all other "easy methods," "cheap goods," "bargains," etc., must end in disappointment and failure.

There are two chief modes of acquiring knowledge, from nature direct and through the medium of books. Each mode has its advantages and disadvantages, and each in turn is superior to the other, according to the particular circumstances of the case in hand. It is

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the business of the educationist to so combine the two modes as to give the maximum result with the minimum of effort, to apply each method in turn where it can be employed to the greatest advantage.

Another mode of classification, nearly identical with the former, is into inductive and deductive methods. By the former we first gather the facts and then construct a theory to fit them, by the latter we first learn the general principles and then deduce from them the particular cases called facts. By whichever method we proceed the essential conditions are that the theory and the facts must agree. Facts with no theory to connect and explain them is not true knowledge, it is only the raw material from which knowledge is made. Theory without, or in opposition to the facts, is worthless.

In all cases nature itself is the supreme court from which there is no appeal. And again, mere book knowledge bears about the same relation to knowledge from nature direct that a picture bears to an original living object. Having thus emphasized the necessity of direct experimental work in physics, I shall proceed to point out some of the absurdities existing in current methods of teaching that subject.

A few years ago our physics, or natural philosophy as it was then called, was wholly theoretical and taught from books. No practical work was done in any of our High Schools. In Toronto University we had a few, very few, illustrations along with lectures and books. but no real contact with nature. The part of the work which in itself is essentially deductive, viz., statics, dynamics and hydrostatics, was fairly well done, and the work, whilst somewhat difficult for both teacher and student, was most valuable mental discipline. The remaining portions in which experiment is essential was not worth much. Suddenly a radical change was made, but instead of supplying the defect by introducing experimental work in addition to the valuable theoretical work already being done, the latter was entirely dropped. The inductive method alone was to be used. Mathematics, being somewhat difficult, and requiring time and effort for their mastery, were laid aside as being mentally expensive, and more popular methods were introduced. Everything was to be practical. Facts were to be collected by each student for himself, and from them he was to draw his own conclusions and construct his own theories. Students were to be simply turned loose into a laboratory to extract the secrets of nature as Kepler, Newton and Faraday, had done before. It is already beginning to be discovered, however, that unfortunately not all students are Newtons in embryo, and that in consequence, the method is not quite so successful as was expected. It is very nice to

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# METHODS IN PHYSICS

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be relieved from the necessity of acquiring the elements of geometry and algebra to be used as working tools in physics; it is pleasant to replace hard study with amusing experiments; the price is cheap; it is "bargain day" for the student, but the goods so obtained are worthless.

While realizing that nature is the original source and experiment, the only certain means of testing knowledge, it was forgotten that experimental work may be quite as worthless as book work. It is possible for a boy to turn the crank of a machine and watch, with his own eyes, the wheels go around and still remain in profound ignorance of the principle exemplified. Crank work with a machine is quite as common as parrot work from a book, and equally worthless. Physical principles, though usually simple in themselves, are so interwoven the one with another, that it is difficult to separate them. The apparatus employed is largely for the purpose of eliminating extraneous forces and conditions, and its complexity frequently conceals the single principle to be studied. In such cases students frequently miss the object of an experiment or even derive entirely erroneous ideas. This is quite possible even with well devised experiments, accompanied by clear exposition from a competent teacher. But if, as is frequently the case, they are performed by the student alone, not preceded by any thorough explanation, it is almost certain that the vital part of the phenomena will remain unobserved. Again, in some cases the experiments are not well devised, they are positively misleading and the results, though correct in themselves, are obtained by making false assumptions. An example here is necessary to make my meaning clear. A common experiment to show that metals differ in their power to conduct heat, consists in placing bits of wax on the ends of little rods of metal radiating from a central source of heat which is the same for all. The rod on which the wax melts first is assumed to conduct heat the most rapidly. This tacitly assumes that the rise in temperature of the end of each rod is dependent on its conducting power alone, an assumption which is not correct. Two other elements are distinctly involved, viz., the specific gravity of the metal and its specific heat. The fact that the conclusion in a particular case is correct only intensifies the evil. Nothing can be more injurious to a student's future progress than to obtain correct results from incorrect methods. Such an experiment in the hands of a skilful teacher may be highly valuable as a problem for the pupil to expose the fallacy-or as a good example of how not to do it.

Experiments are frequently devised to prove some physical law 25

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originally derived from theory. The total pressure of a liquid on the base of the vessel containing it, depends only on the area of the base and the verticle height of the free surface above the base. To prove this we are directed in our authorized text-book to procure a set of glass vessels, whose sides are of different shapes but whose bases are of equal areas, and kept in position by weights on strings passing over pulleys. Now, the best apparatus of the kind I have seen and which, by the way, was manufactured expressly to accompany this text-book, does not prove the law at all. If our knowledge were derived from this source we should never even suspect such a law to be true. The experiment does not even suggest it. The results not only differ with the different glasses, but successive experiments with the same glass give different results. The fact is the extraneous forces, friction, capillary action, etc., which cannot be eliminated, nor even rendered constant in successive trials, completely obscure the truth of the law in question. The net result of such an experiment is annoyance to the operator, and confusion in the mind of the observer. Other experiments of the same general character, devised to prove the equations of energy, momentum, parallelogram of forces, etc., are found ad nauseam in the popular works on physics without mathematics. These laws were not discovered by experiment and are unsuitable for experimental verification. The machinery necessary to eliminate the extraneous forces, distracts the attention from the principle under consideration, while the experimental errors vitiate the result. The usual school-room experiments in such cases are not only useless, but are positively mischievous. Instead of confirming the truth of the law proposed, they cast doubt upon it; instead of assisting in the understanding of it, they obscure it; the results to both teacher and student are only evil and that continually.

Thoroughly satisfactory work in physics consists of three parts or stages, (1) A clear understanding of the principles involved; (2) The making of actual measurements; (3) Working numerical problems; a few words under each of these headings.

To say that a student should understand what he is doing is a truism, but there are truisms which sometimes need repetition, and this is one of them. There is no subject on the curriculum more liable to be misunderstood. A text-book with good diagrams and clear statement of principles is very desirable. Actual specimens of objects and instruments are of great assistance. But a live teacher with chalk and blackboard are the necessities for this stage of the work. An example from my own class-room experience will make clearer the point which

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I am here trying to emphasize. I was teaching "electromotive force" and "difference of potential," and the class had much difficulty in understanding. After an exposition with chalk and blackboard I arranged an experiment exemplifying exactly the same principles. Still the class did not understand and the blackboard work was repeated. After a time the point became clear and a ! were satisfied. I then asked, "Which enabled you to understand, the instruments or the blackboard?" At first all replied, "The instruments." But after a little reflection, one of them said, "We got our ideas from the blackboard; the voltmeter merely confirmed the truth of what you said." That reply contains a very important truth. For purposes of explanation a diagram is usually superior to the actual object. This is especially true for complicated machinery such as the dynamo. In a diagram the parts can be drawn separately and their use explained in detail. The essential parts can be exhibited without the supporting framework, etc., which in the machine itself distract the attention and frequently conceal the essential parts from view. The study of diagrams should, wherever possible, be followed by an examination of the object itself.

Again, the facts brought out by an experiment need explanation. Isolated facts do not constitute knowledge. They must be connected in the understanding and their mutual interdependence clearly perceived. An good example of my meaning here is found in the authorized text-book in connection with lenses and mirrors. The student is there directed by a series of experiments to observe the relative position of object and image in a variety of experiments; the facts thus obtained are expressed in words in the shape of laws, etc., but the underlying principle, which connects all these laws is omitted. Nature through experiment gives the facts, but again, let me remind you, that understanding is necessary to transform isolated facts into organized knowledge.

Good explanation from books and blackboard are a necessary, but not sufficient condition. It goes without saying that actual personal contact with the original source of knowledge is necessary. An experienced examiner can determine in a moment whether a student's knowledge is confined to mere explanations. There are many things which cannot be put in books or words but must be seen or felt. Practical work rightly conducted is a great educator. But since our time is limited, it is important that the practical work should be of the most profitable character possible. This, in my opinion, does not consist in mere qualitative observations. The student should be

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required to make a few actual measurements with as great a degree of accuracy as circumstances will permit. These should be accompanied by a written report on the work done, embracing (1) a statement of the end to be accomplished, (2) a description of the instruments employed, (3) a record of the observations made, and (4) the calculation of the result from the data obtained. These points I consider essential.

When circumstances permit it will be found instructive for the student to state in writing the nature of the difficulties which occur in his experimental work, the errors which result therefrom, with an estimate of their limits, the advantages and disadvantages of the method employed, and the explanation of any incidental phenomena which occur in the work. These observations in many cases are highly instructive, but, of course, should not be permitted to obscure the main purpose, that of making measurements. Science is nothing if not precise. A reasonable amount of such work should be performed by every student and reported upon in the manner indicated, before being permitted to receive a certificate of qualification. The following are some of the measurements which should be made: The velocity of sound; the number of vibrations of a musical string; the focal length of concave mirrors and convex lenses; the electrical resistance of wires; the electromotive force of voltaic cells, etc. A moderate amount of work of this kind will give the average student an appreciation of what measurement means, and the accuracy involved in a given number (say four) of significant figures which he could not otherwise obtain.

We now come to the last point, the working of problems. Formerly this was the whole subject; now it is nothing. Both are wrong. I am not certain whether the last state is worse than the first, or not; certainly it is bad. The working of problems is the most effectual means of fixing the principles in the mind and especially of showing the connection between the various elements involved. A student, who has worked a series of problems on lenses and mirrors, has a conception of the connection between focal length, radius of curvature, conjugate foci, and index of refraction, which he could not readily obtain by any other means. Together with measurements it gives accuracy and precision of thought. Many persons can talk eloquently and learnedly on a given subject so long as no question of number arises. They can talk all around a subject, but just ask a pointed question requiring a precise answer and their silence is eloquent.

Another advantage of no inconsiderable importance is the facility problems afford for work when no apparatus is available for experiment. Ph instrument problems a others are that I sha about the a working an

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# METHODS IN PHYSICS.

ment. Physical apparatus is expensive, and for the most part but one instrument of a kind is available for a whole class. The solution of problems affords excellent employment for a part of a class whilst others are engaged with instruments. The advantages are so obvious that I shall not take your time to discuss them; it is like talking about the advantages of a knowledge of the multiplication table for working arithmetic.

There is one other feature to which I should like to call your attention which, perhaps, is not quite so evident. Physics without mathematics is a delusion and a snare. But it is also true that mathematics without physics are shorn of half their beauty and power. I do not know which gains most by their union, or which loses most by their separation. You all know the difficulty in causing a student to realize the true nature of negative, zero, and infinite quantities. Chapter I. of volume II. of the High School Algebra is but vaguely intelligible to the average student, even when accompanied by an exposition from the author. But when they find that the sume formula solves problems on concave or convex mirrors by simply changing the sign of the radius of curvature, the algebraic symbols begin to shine with a new light. And when they see that by making the radius infinite the mirror becomes plane and the formula gives the well-known position of the image behind it, infinity ceases to be merely a crooked mark, and becomes a living reality. The summation of infinite series for finding areas, distances, etc., can be made exceedingly interesting and highly instructive.

Mathematics and physics are the counterparts of each other. The beauties of physics are concealed behind a lock of which mathematics alone furnishes the key. The glory of mathematics is its power to furnish the key, and their beauties are never fully disclosed except in being thus employed. What, therefore, nature has joined together let not the Education Department put asunder.

The defects in our present course in physics may be summed up in a few words.

The practical work should be restricted to the parts of the subject most suitable for experiment.

A moderate amount of quantitative work should be required from every student.

The mathematical part should be restored; the subject should not be simplified by omitting all the difficulties.

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#### MATHEMATICAL AND PHYSICAL SECTION.

# REPORT OF SPECIAL COMMITTEE, 1898.

At the meeting of Easter, 1896, the Mathematical and Physical Section of the Educational Association appointed a committee to report on recent mathematical literature, and on new books as they came from the press. It was intended that short reviews should be presented to the section and published in the volume of Proceedings. At the meeting of 1897 such a report was presented, but there arose some difficulty in regard to printing the report. On account of the fact that many members of the Association have expressed a regret that a list of the books reviewed was not printed when it was found impossible to publish the reviews, a list of the books mentioned in the report of 1897 is here given. Following this is a list of books included in the report presented at the meeting of Easter, 1898.

#### FROM THE REPORT OF 1897.

CASEY, John.—A sequel to the first six books of the elements of Euclid, containing an easy introduction to modern geometry, with numerous examples. London: Longmans, 1886......\$1.00. LACHLAN, R.—An elementary treatise on modern geometry. London:

F. J.—Exercises in geometry, including the statement of the geometrical methods of reasoning, and two thousand solved propositions. Paris : Gauthier-Villars et Fils. (In French.)

RUSSELL, J. W.—An elementary treatise on pure geometry. Oxford: At the Clarendon Press, 1893.

CHRYSTAL, G.— Algebra, an elementary text-book for the higher classes of secondary schools, and for colleges. Edinburgh : A. and C. Black, 1886 and 1889. Two vols., octavo. XX. + 559 pp. and XXIV. + 588 pp.

PETERSEN, J.—Théorie des équations algébriques. Traduit par H. Laurent. Paris: Gauthier-Villars et Fils, 1897. Octavo. XV.+350 pp.

ELLIOTT, E. B.—An introduction to the algebra of quantics. Oxford: At the Clarendon Press, 1895. Demy-octavo. XIV. ---- 423 pp.

HOBSON, E. W.—A treatise on plane trigonometry. Cambridge: At the University Press, 1891. Demy-octavo. XVI. + 356 pp.

LONEY, S. L.—The elements of co-ordinate geometry. New York: The Macmillan Company.

## REPORT OF SPECIAL COMMITTEE, 1898.

Scorr, Charlotte Angas.—An introductory account of certain modern ideas and methods in plane analytical geometry. New York: The Macmillan Company, 1894. Octavo. XII. + 288 pp.

CASEY, John.—A treatise on the analytical geometry of the point, line, circle, and conic sections. (2nd edition.) London: Longmans, 1893. Octavo. XXIX. + 564 pp.

HEATH, T. L.—Appolonius of Perga: Treatise on conic sections, edited in modern notation with introductions, including an essay on the earlier history of the subject. Cambridge: At the University Press.

HEATH, T. L.—Diophantus of Alexandria : A study in the history of Greek algebra. Cambridge : At the University Press.

Gow, James.—A short history of Greek mathematics. Cambridge: At the University Press.

ALLMAN, G. T.—Greek geometry from Thales to Euclid. Dublin: University Press Series.

CAJORI, Florian.—A history of elementary mathematics. New York: The Macmillan Company.

DIXON, A. C.—The elementary properties of the elliptic functions, with examples. London : Macmillan and Co., 1894. Crown octavo. VII. + 142 pp.

DAUGE, Felix.—Cours de méthodologie mathématique. (2nd edition.) Paris : Gauthier-Villars et Fils, 1896. Gr. Octavo. X. + 525 pp.

THOMSON, J. J.—Elements of the mathematical theory of electricity	
and magnetism. New York : The Macmillan Company, 1895. Octavo.	
510 pp	
MACH, Ernst.—The science of mechanics. Chicago : The Open Court	
Pub. Co., 1893. Octavo. 518 pp	
PRESTON, Thomas.—The theory of heat. London : Macmillan and Co.	
1894. Octavo. XVI. + 720 pp\$5.00.	
PRESTON, Thomas.—The theory of light. (2nd edition.) London:	
Macmillan and Co., 1895. Octavo. XVII. + 574 pp\$4.50.	
STRUTT, John William, Baron Rayleigh.—The theory of sound. Vol.	
I. (2nd edition.) London: Macmillan and Co. Octavo12s.	
GREENHILL, A. G.—A treatise on hydrostatics. London: Macmillan	
and Co	
MACDONALD, W. JHigher geometry; introduction to modern geo-	
metry and elementary geometrical conics. (2nd edition.) London:	
Thin, 1897. 12mo. 198 pp	

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## FROM THE REPORT OF 1898.

BURNSIDE, W.-Theory of groups of finite order. Cambridge: At the University Press, 1897. 398 pp.....\$3.75. APPELL ET LACOUR.--Principes de la théorie des fonctions elliptiques et applications. Paris: Gauthier-Villars et Fils, 1897. 421 pp. . \$3.00. KIEPERT, L.-Grundriss der Differential- und Integral-Rechnung. I. Theil: Differential-rechnung. Hannover, 1897. (8th edition.).. \$3.00. KLEIN, F.-The mathematical theory of the top. (Princeton lectures.) New York: Scribner, 1897. 74 pp......\$0.75. MURRAY, D. A.-Introductory course in differential equations. New York: Longmans, 1897. 250 pp.....\$1.90. PAGE, J. M.—Ordinary differential equations, with an introduction to Lie's theory of the group of one parameter. New York : The Macmillan Company, 1897. 18 and 226 pp.....\$1.25. DARBOUX, G.-Leçous sur les systèmes orthogonaux et les coordonnées curvilignes. BURALI-FORTI.-Introduction à la géométrie différentielle suivante la méthode de H. Grassmann. Lévy, L.-Précis élémentaire de la théorie des fonctions elliptiques. LONGCHAMPS, G. de.-Cours de problèmes de géométrie analytique. PICARD ET SIMART.-Théorie des fonctions algébriques de deux variables indépendantes. RAFFY, L.-Leçons sur les applications géométrie de l'analyse. RICHARD, J.-Leçons sur les méthodes de la géométrie. ZEUTHEN.-Geschichte der Mathematik im Altertum und Mittelalter. LAMB.—Infinitesimal calculus. LOVE, A. E. H.—Theoretical mechanics ; an elementary treatise on the principles of mechanics. WHITEHEAD .--- Universal algebra. (Vol. I. is all that is out. Cam-BAKER.—Abelian Functions. GRAY, A.-Magnetism and electricity. (Vol. I. just out.) WEBER, H.-Lehrbuch der Algebra. Braunschweig: Vieweg und Sohn, 1895-96. Vol. I., pp. 653. \$4.00. 2nd edition 1898. Vol. II., pp. 796. .....\$5.00. HEATH.—The works of Archimedes edited in modern notation, with introductory chapters. Cambridge: At the University Press, 1897. 514 pp. .....\$3.75. CHRYSTAL, G.-Elementary algebra. London, 1897.....5s. KLEIN, F.-Famous problems of elementary geometry; the duplica-

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# REPORT OF SPECIAL COMMITTEE, 1898.

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weg und Vol. II., ...\$5.00. on, with ss, 1897. ....5s. duplication of the cube, the trisection of an angle, the quadrature of the circle. Translated by Beman and Smith. Boston: Ginn, 1897. 10 and 80 pp. FISHER, Irving.—A brief introduction to the infinitesimal calculus, designed especially to aid in reading mathematical economics and statistics. New York: The Macmillan Company, 1897 .......\$0.75. LAMBERT. — Analytic geometry for technical schools and colleges. New York: The Macmillan Company, 1897. 216 pp......\$1.50.

COMMERCIAL SECTION.

## COMMERCIAL SECTION.

# SOME THOUGHTS ON THE TEACHING OF BOOK-KEEPING.

### R. H. ELDON, TORONTO.

The foundation principles of book-keeping being a settled fact, are as unchangeable as the laws of certain ancient nations were said to have been; but their application is as variable and as wide as trade and commerce themselves. These principles are, primarily, but two in number—debit and credit, but being of world-wide application, the subject is a more extended, as well as a more important one, than is conceded by educationists in general.

Many have been the modifications of the old Italian method of Day Book, Journal and Ledger, until now hardly any two offices use books of the same form, each book-keeper choosing to put his own individuality into the method of recording transactions. It is thus the province of the teacher not to turn out finished book-keepers, but so to ground the student on the nature and general application of the terms debit and *credit*, that he may be able to adapt himself readily to the methods employed in any office in which his service may be desired. True, the teacher may make the student familiar enough with various books of original entry, with the use of special columns, with general methods of ruling, and the ordinary business forms, to take charge of a simple set of books, but it is a wiser plan to impress the aspirant to accountancy, with the fact that he must first adapt himself intelligently and unquestioningly to the system of the office that may call him into employment before seeking to introduce or even to suggest any improvements, fancied or otherwise.

It is not the aim of the writer of this paper to revolutionize the present methods of teaching book-keeping, but rather to call forth some little discussion, out of which may come some good results tending to advance this department of High School and Public School work.

Double entry book-keeping should be taught first, as by so doing the student may easily be led to see that single entry is, in the main, double entry with the impersonal accounts dropped out. Begin with teaching the nature of a transaction—a purchase or a sale, first for cash and the the need of on credit, a tell the least credit and the debit and c for both probusiness sol bought of J side party, "John Mac whether we it is on the this will be using the est

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# SOME THOUGHTS ON THE TEACHING OF BOOK-KEEPING.

cash and then on account, the latter leading up to the introduction of the need of recording transactions. I would avoid using the expression on credit, and especially as an equivalent for the expression on account; tell the learner that he may buy on credit and also that he may sell on credit and you tend to confuse him on the difference between the terms debit and credit. Rather than use the term on credit indiscriminately for both purchases and sales, it would be more consistent to say "the business sold merchandise to John Brown on debit" and "the business bought of John Macdonald & Co. on credit"; or as applied to the outside party, to say "John Brown bought of the business on debit" and "John Macdonald & Co. sold to the business on credit"; and thus whether we consider the business as selling, or John Brown as buying, it is on the terms of a debit to John Brown's account. Now at best this will be confusing to the beginner, but is readily overcome by using the expression on account for both purchases and sales.

Next teach the force of the terms *debtor* and *creditor*, first separately in connection with detached accounts, and later in combination in connection with journalizing. Apply these terms first to a personal account, explaining that the person is a *debtor* when he receives value on account, and a *creditor* when he gives value on account. Drill on exercises to be entered as follows:

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As each item is entered, require the student to say, "A. McIntyre is a debtor for \$30, or is debited with \$30, because he received value on account," and "A. McIntyre is a creditor for \$20, because he gave value on account." Distinguish between the proprietor and the proprietor's business, showing that for the purposes of book-keeping, it is the business and not the proprietor with whom A. McIntyre is dealing. When A. McIntyre's account is being considered the student must think of A. McIntyre as receiving from and giving to the business, not of the business as giving to and receiving from A. McIntyre; and so in all accounts keep the attention directed towards the heading of the account under consideration. It seems to me that a point is made by requiring only the date and the amount, leaving the explanation space unfilled.

Then take up impersonal accounts—Cash, Merchandise, Expense, Bills Receivable, Bills Payable, Interest and Discount, etc., and make use of the impersonal pronoun *it*. Require the student when reciting to say,

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#### COMMERCIAL SECTION.

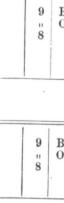
"Merchandise is debited with \$50, because it was received as a purchase (by the business)"; "Merchandise is credited with \$20, because it was given as a sale"; "Bills Receivable is debited with \$30, because it was another person's note received," and so on. Interest may be considered as use after the sum is due, and discount as use before the sum is due, and thus as use, may be received and given; it sometimes makes this account clearer, however, to reason that Interest and Discount (account) is debited when it is a loss, and credited when it is a gain.

Last of the accounts take up the proprietor's account, and show that, but for the matter of the net gain or the net loss, this account may be treated much the same as any personal account, that he may be considered as an outsider, giving to and receiving from the business on account.

I should next proceed to take up journalizing, and now instead of referring to the head of the account or ledger heading, should direct the attention to the business as being the receiver and the giver, and would again and again impress the student with the fact that it is the business and not the proprietor that must be considered, and thus prevent such an entry as "Merchandise Dr. and Stock Cr." in the case of a purchase of goods by the business. The old rule "debit what the business receives and credit what the business gives "may be used very generally and to good effect. When a sale of merchandise is made to Jno. Brown on account, his oral promise (as distinguished from his written promise—bills receivable), his word, his name is received, and merchandise is given; and thus we have "Jno. Brown Dr. and Merchandise Cr." When a purchase of merchandise is made from John Macdonald & Co., on account, merchandise is received and the business has given its oral promise (as distinguished from its written promise-bills payable); but as the business cannot give its name, it gives credit to John Macdonald & Co., and thus we have "Merchandise Dr. and John Macdonald & Co., Cr." This last step may seem a little weak, but it works all right, particularly if the fact is impressed, that a purchase or sale on account always concerns the outside person's account. Interest and Discount account should be treated as a use account-use received and given; Commission as a service account, etc. It is well to throw in side hints at times, such as commission is debited when a loss and credited when a gain, and thus the student is led to grasp the full force of the terms debit and credit. The debit item in a journal entry should be treated as having no other relation to the credit item than that the same transaction gave rise to both of them;

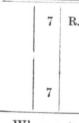
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# SOME THOUGHTS ON THE TEACHING OF BOOK-KEEPING.

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nstead of uld direct giver, and t it is the and thus " in the ebit what y be used andise is shed from received, n Dr. and ade from and the s written s name, it rchandise nay seem mpressed, e person's a use account, etc. is debited t is led to item in a on to the of them;

each year I am more and more convinced that the use of "To" and "By" in Journal, Cash Book and Ledger are not only useless and devoid of meaning, but an absolute hindrance to the learner; in the journal "To" appears before the credit item, as also in the Cash Book, when this book is used as a book of original entry, whereas in the Ledger it appears on the debtor side; if a proposition must be used *for* would have more meaning.

From the very first, I think it best to combine journal and day book in some such form as follows :

1	1		Dr.	Cr
9 " 8	Bills Rec. O. T. Mather Sold O. T. bal. on acc	MDSE. Mather for B. R. No. 1 and t. 50 bush. Potatoes. 50	200 50	250
		Токолто, Максн 30, 1898.	Dr.	Cr.
9	Bills Rec. O. T. Mather Mdse.	Sold him for B. R. No. 1 and bal. on acct.	$200 \\ 50$	250

The terms Dr. and Cr. placed over the money columns answer as good a purpose as when repeated in connection with each entry, and might even be omitted over the money columns. But in reading the journal entry, the student should be required to say "bills receivable debtor \$200, O. T. Mather debtor \$50, and merchandise creditor \$250." For a single entry day book, the following seems to me preferable to that in the High School Book-keeping :

TORONTO,	APRIL	12,	1898.	
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7	R. Simpson, Dr. 3 lbs. Tea 4 Coffee	60 30	1	80 20	3	
	Cr					
7	Cash in part payment				2	50

When a transaction concerns the Journal, Day Book, the Cash Book, and the Bill Book, the entries should be made at the same time, not leaving the cash entries for the whole month to be entered by themselves, etc.

#### COMMERCIAL SECTION.

In practical book-keeping it is generally recommended that the posting be done in the order of time, but some book-keepers prefer to post all the debits of a day first and then all the credits, as a precaution against making mistakes. In a set in theory, there does not seem to be any great objection to posting all the items of each account at one time, say all the merchandise debits and credits, then the cash items, and so on; no omissions need occur if the folio column be filled in promptly. Indexing the ledger should not be neglected in theory.

Owing to the lack of time and the amount of work required of office hands now-a-days, the practical book-keeper does very little ruling in his ledger, but it is best not to drop out too much in theory. The following forms have at least the virtue of having enough ruling :

Dr.		L. THOMPSON.	Cr.
Apl. 1		5 30 Apl. 12	8 30
		D. PAT TE RSON.	
Apl. 5 Md 6 12 15	lse.—30 days.	$ \begin{bmatrix} 5 & 70 \\ 7 & 30 \\ 10 & 50 \\ 12 & 30 \end{bmatrix} $ Apl. 11 Note—2 mos. 18	9 100 13 80
		80	80

The filling in of the explanation column in the Ledger accomplishes no useful end, at least when the explanation is but the name of the companion account. The "To" and the "By" should certainly be omitted; and what force is there in writing "To Sundries" or even "To Merchandise"? If in a personal account we enter "Merchandise at 30 days" or "Note at two months," an entry is made that may be of some use for reference. The old method as taught still in many text books, is not only a stumbling block to students but is obsolete in practice.

It will serve a useful purpose to teach the beginner, that all red ink entries are so written because they are on their wrong sides. Why place these entries on their wrong sides? Simply to make the account balance, or in the case of an inventory, to find the loss or the gain. All ruling had better be done in red ink.

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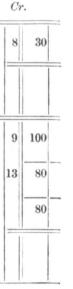
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# SOME THOUGHTS ON THE TEACHING OF BOOK-KEEPING.

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Let the ruling for all the accounts on the page be the same as for the one at the top of the page. When a personal account is settled, it should be ruled off by some such method as that indicated above. But when closing the books, it is necessary, neither in practice nor in theory, to close any but the loss and gain accounts. A Balance Account in a Ledger is both unpractical and useless; a book-keeper having 2,000 accounts open would have 50 or 60 foolscap pages of a Balance Account when closing his books; the Financial Statement or Balance Sheet contains, item for item, the substance of the Balance Account, and this statement is usually made from the Trial Balance and Inventories. Closing a set of books terminates the loss and gain accounts which should, therefore, be closed, but not so the resource and liability accounts which should, therefore, remain open. Thus in theory, I favor leaving the unbalanced resource and liability accounts open, and omitting the Balance Account, but should always require a Financial Statement.

The student should rule his rough note or work book, and do his earlier sets in lead pencil. After he has copied a few of these in ink and acquired a fair knowledge of the principles, he should stop the lead pencil work and use only pen and ink, for the use of pen and ink cultivates more carefulness and greater accuracy than the use of the lead pencil.

Book-keeping seems to divide itself naturally into three sections: first, ordinary transactions including the use of notes and drafts, to be recorded by either double entry or single entry; secondly, transactions in commission including shipments, consignments, shipment companies, and merchandise companies, and the use of special columns; and thirdly, joint stock company book-keeping. These three divisions are covered respectively by the Form I. Course, the Diploma Course, and the Commercial Specialist Course.

This paper has been devoted to the more elementary part of bookkeeping, as this is really the harder part to teach. Just as in other subjects, the more advanced work, as in our Diploma Course, presents no great difficulty, for once the student understands the general principles, little explanation serves to put him in a position to make his own way.

In conclusion may I say, that as ruling several sheets of Journal or Ledger is no particular test in a book-keeping examination, consumes a very considerable amount of the time allotted on the time table, and is not required in actual business, it would be advisable that an effort be made to have the Education Department allow the use of ruled Journal and Ledger paper.

#### COMMERCIAL SECTION.

# THE HIGH SCHOOL COURSE AS A PREPARATION FOR BUSINESS.

#### W. E. EVANS, GALT.

In dealing with this subject I may say that I do not expect to present any striking facts for your consideration, but I may be permitted to hope that by reiterating facts already well-known to you, their importance will be the more apparent. Sometimes we imagine ourselves blocked by seemingly insurmountable obstacles, but if we patiently and persistently set ourselves to remove them, success would to a greater extent crown our efforts. Should it not be some part of our duty as teachers to point out "the more excellent way," and to endeavor by all legitimate means to help, and lead out on broader lines, those of our pupils who otherwise would be hindered in their life's work through the lack of intelligent direction on the part of their parents or guardians?

The time was when boys were frequently prevented from pursuing this or that study, or even a fairly thorough elementary course at school, not because of poverty, but because an undiscerning and hardfisted parent had autocratically declared that he did not see any good in it. Readin', "ritin" and "rithmetic" were all *he* learned, and the boy was no better than his father. This of course does not exist to any extent to-day, but very often we find what is perhaps more ruinous in its effects—an entire lack of intelligent interest on the part of parents in the studies of their children while at school, and hence the lack of ambition and settled purpose upon the part of so many of our pupils. Nothing could be more inimical to their success, and it is in cases of this kind that the teacher may with tact and care point out the possibilities within the pupils' reach, and further, excite their ambition and lead them to persevering effort.

Coming now to the subject at the head of my paper we may enquire, "What constitutes a thorough and practical preparation for business life?" Perhaps if this question were put to the parents of those pupils who are seeking such an equipment, seven out of every ten would answer, "Oh I merely want my son (or daughter) to write a good hand, be accurate in figures and have so far as possible a knowledge of book-keeping, stenography, and typewriting." This, too, be it remembered as the boy or girl is entering a High School or even before it.

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Of course even such a preparation is not to be lightly esteemed, and if one's resources only permit that much, have it by all means. But the ambition of the youth should not be content with this. required of the professional man of to-day that he should have not It is only the technical knowledge pertaining to his profession, but a fair degree of culture as well. Can there be any good reason why a business man should have less, and why he should not be a man of intelligence and mental power? Surely the management of business interests in these days of intense competition and changing conditions, calls for men with brain power, not one whit inferior to that of the lawyer, the doctor, the clergyman, or the professor. And this power will be induced not alone by a cultivation of the modus operandi of commercial pursuits so far as schools can do that, but by a wider course determined by the tastes of the individual and extending through High School and college if possible. The successful man of to-day is the "man of ideas," the man who has the power of grappling with new facts produced by the shifting processes of the age in which we live, and evolving therefrom plans adequate to overcome the difficulties which thus arise. He is the man who is logical and correct in his conclusions and has become sufficiently conscious of that power to be self-reliant.

Now it seems to me that for the average person such a power will be best attained by a thorough training in those subjects of study which afford the most rigorous mental exercise. It is true that many men-self-made so-called have been able to rise to prominent positions in the business world, without the aid of schools or instructors, but I am now speaking of the average case. And hence it is desirable to take the full advantage of all the training which our High Schools can give, and even to take the full college course, because the expansion thus made possible will be of very great value indeed. For, a business man should not be a mere money-making machine, devoid of interest in anything but schemes by which he can gain a few more dollars. Even the value of scientific and literary tastes thus cultivated as a means of relaxation from business cares has been very widely despised. But then there is the practical side as well." The old adage "there is room at the top" is well exemplified here, for, in large mercantile houses there are book-keepers earning double the salary they otherwise would, simply because they are able to correspond in several of the European languages. The foreign buyer, too, would undoubtedly find such a power of great advantage.

I know it will be urged as an objection to such a course that a boy's  $\frac{27}{27}$ 

#### COMMERCIAL SECTION.

taste for business will be destroyed by his spending so long a time in school. But this is not greatly to be feared, for if the youth's ambition be high it will not easily be diverted. If he intends to rear a mighty edifice in life, he surely will not neglect to lay the foundations deep and firm. Then, even after such a course, it is imperative to begin at the bottom and acquire the necessary experience in the details of trade, but here his ability to grapple with and master new facts will place him far in advance of his less fortunate competitor, in a comparatively short time.

But, while a college course is to be coveted for the youth who contemplates a business career, in the majority of cases it is out of the question from pecuniary considerations. He must then fall back upon the next best thing and follow so far as may be the regular course of study in a High School or Collegiate Institute. It is desirable that he should at least complete the commercial diploma course, and if he has been carefully taught all along he should have attained a fair degree of mental power and self-reliance. The training in the commercial subjects of this course should be made as thorough and practical as possible, and if this is done I believe a better and wider training will have been given than is usually obtained from other commercial courses.

There is one thing which, I think, should be made clear in connection with any business course of study, namely, that a thorough accountant, book-keeper, or business man is a product of the school in embryo, only. Very often people imagine that after a few months' training in the commercial branches, they are qualified to fill positions of responsibility and trust. If any student thinks so it is to be feared he is doomed to disappointment and failure. Schools can and do teach the principles involved and many of the details, but it would be an impossibility for any school however perfect in its methods it may pride itself to be, to teach all the details of the multitudinous forms of commercial life. So that the safest course for the "graduate" in the commercial branches, is to seek first a subordinate position and so gain an experience adequate for the more responsible work. The distrust so common among business men of the training given by schools in book-keeping, etc., has largely sprung from this cause. But yet I claim such a training has a distinct value, not alone from the practical advantages to be derived from it, but because of the opportunity for mental training thus afforded. However as an honored member of this department is to address you upon this point I shall not transgress upon his ground.

Two difficulties in the way of carrying out the commercial diploma course present themselves. The first is that the people generally are н

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# HIGH SCHOOL COURSE AS A PREPARATION FOR BUSINESS. 211

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not aware of its existence as a course in the regulations of the Education Department. Were its character generally understood it is quite certain that there would be a demand for it on the part of pupils. It is to be feared that the Principals of the High Schools and Collegiate Institutes of the Province have taken no interest in having the facts concerning it known. Many of them stand out for the classical education of the past, and have striven to keep the courses of study along the old lines. They are not to be blamed for this because the demand has been in that direction, but they forget that by adhering to it too strictly they are driving many, who do not wish to take the full course of study in High School, to seek a commercial education elsewhere and who thus lose the value of the training afforded by the subjects of Part II. of the diploma course. If the matter were brought before the Boards of the more important schools of the Province, in such a way as to make the advantages of the course clear to them, there is no doubt but that they would take the proper means to bring it before the people as a matter of business. We should then see a much larger number of pupils taking up the course than, in many cases, take other courses at present.

The second difficulty is that of finding time to do the work in schools of moderate size, without increasing the number of teachers. This is a question which each school must decide for itself. It might be found if an earnest attempt were made in the way I have just indicated that it could be substituted for some other course which is now not well supported in point of numbers.

In conclusion I may express the hope that you will discuss this question as its merits demand, and lay bare any fallacies or confirm any truths which I may have brought before you. If I shall have succeeded in calling forth an expression of your opinion upon these matters the purpose in view will have been attained.

#### COMMERCIAL SECTION.

## JOINT STOCK COMPANY ACCOUNTS.

### GEORGE EDWARDS, F.C.A.

The wide application of the joint stock company idea to commercial enterprises gives considerable importance to a special course of instruction in the commercial department of our High Schools upon the principles of joint stock companies whereby the pupil may the more readily adapt himself to their requirements when graduating from academic to mercantile life. These organizations are constantly becoming more complicated, and are constantly presenting new situations, even to expert accountants. It is not, therefore, to be supposed that as a subject for study in our schools, every phrase can be considered. It is rather a question in how simple a form the essential features of joint stock company book-keeping can be presented in the curriculum prescribed by the commercial department of our High Schools. And although it may be said that "debit" and "credit" as terms have a precise meaning, and that therefore the principles to be taught are the same, it is only by consideration of the inventions and devices by which the company book-keeper's path is beset, that we can appreciate the extent to which it may be necessary to apply these principles.

Joint stock company book-keeping may be considered under two heads, (1) The features of accounts common to all trading concerns; (2) Those peculiar to joint stock companies. Under the first head comes all the ordinary and routine business with persons who have no proprietory interest in the venture. The purchase and sale of goods and supplies, the receiving and paying of cash, the passing of notes and bills, these are matters, which, I apprehend, do not call for particular notice at the present time. I might here, however, venture to suggest that the simpler forms of books upon which the student expends his first efforts, be supplemented by books more nearly approaching in form those he is likely to find in use in "real business," so that he may not experience too keenly the sense of bewilderment which is apt to overcome one brought face to face with a situation which he knows he ought to understand, but does not.

The second branch of the subject includes all the special features of accounts required to properly exhibit shareholders' interests. That it may be more clearly understood what *is* required it will be helpful if we have a definition which will enable us to perceive the difference between a company (or a corporation) and an individual. The individual sonality is the individ capital.

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## JOINT STOCK COMPANY ACCOUNTS.

individual trader risks not only his capital and resources, but his personality is inseparably identified with the enterprise. The business is the individual, to quite the same extent that it is the individual's capital.

In a partnership the proposition is the same, and the partners are each jointly and severally, as well as their joint and several capital, a part of the business. In a company the capital contributed is alone considered. There is no personal credit or responsibility beyond what each undertakes for himself, and each may dispose of or acquire interests without in any way affecting the relation of the corporation to outside parties. The company is a distinct thing or entity, which continues, independently of individuals or of the death or retirement of those who own it; and is thus free from the many disturbances which may arise in the case of an individual trader. The shareholders' interests collectively are termed the capital of the company, and the capital is in turn to be considered under two heads, namely, the authorized capital, the subscribed capital, and the capital paid up. The "authorized capital" has reference only to the statutory authority for the volume of capital which may be employed in the business, and is subdivided into shares. The subscribed capital is collectively what has been subscribed by individuals towards the carrying on of the venture. With every transfer of shares, the amount of which has not been fully paid, the transferee assumes the liability of the transferor. If, however, the shares are fully paid, there is no further liability. The paid up capital is in the aggregate the amount paid in upon the amounts subscribed, and cannot in any way exceed the amount subscribed, but may be less. The paid up capital of a company is the capital for all purposes of accounts. In the business of an individual trader, it has been the custom to designate the trader's capital or surplus as "stock," and by pupils who have studied accounts in our High Schools some years ago, this term is well understood, although now hardly ever applied in business circles. In a partnership business as many stock or capital accounts are kept, as there are partners. In a corporation the ledger account shows the whole amount which has been paid under the general designation of capital, by which is understood, as I have already said, paid up capital. For each shareholder there is kept his account in the share ledger, which differs essentially in form from the common ledger ruling.

The shareholder's account in the share ledger does not show the profits or losses of the company (these remaining at the debit or credit of the profit and loss account in the general ledger). Whether the company has been successful or otherwise in its operations, the record

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it contains gives no indication of these results. This peculiarity in the treatment of shareholders' accounts was introduced primarily from motives of convenience, it having been found that to facilitate the purchase and sale of share interests, it was desirable to deal only with the nominal interests represented, the surplus or deficiency in actual value following or attaching to the share as a matter of course, and without any statement as to such values accompanying it.

Shares are acquired by what is known as a share subscription, which may consist of a formal application to the company to be allotted shares; or may consist in signing a stock subscription book, by means of which several persons jointly and severally bind themselves to constitute a company and secure a charter. Upon the allotment of shares by the directors, the subscriber is debited with the number of shares in the stock ledger, and the amount which such shares represent, no entry being made to capital account in the general ledger, unless for a payment on account. As calls are made upon the subscribers, and the amounts of such calls received, the aggregate is credited to capital account, and in detail the several payments are credited in the share ledger to the parties respectively making the same. The shareholder parts with his shares only by transfer in the books of the company, subject to any regulations which may be imposed by the directors as to the eligibility of the purchaser. The posting medium is, of course, the transfer book, the purchaser being credited and the vendor being debited. The shareholder may require to pledge his interests for a loan of money, or as security for a debt or contract, and in such a case, the transfer not being an absolute one, the entry must show clearly the character of the transaction, so that the shareholder may not be deprived of his voting power upon the stock, or of his interest otherwise in the affairs of the company. It sometimes happens that a person having subscribed for a number of shares finds himself unable to meet the calls, and after the payment of one or more calls, falls into arrear. Under these conditions he is liable (in common with other classes of persons who may find themselves in default) to lose the amount which he has paid, and the directors may summarily deprive him of his interests and dispose of these shares to whomsoever they see fit. The original holder of the shares remains liable for whatever they may fail to realize of the amount unpaid upon them, and in case they realize more than the sum unpaid he would be entitled to receive the surplus; so that in no case can there be a profit to the company arising from transactions of this kind.

Partners in a private enterprise are under no statutory restrictions

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## JOINT STOCK COMPANY ACCOUNTS.

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as to capital. They are not hedged about by legal prohibition as to what is and is not withdrawable from the business, and the bookkeeping is consequently of a very simple description.

In the case of a joint stock company, however, it being necessary that five persons shall be mutually interested, the question of account keeping becomes relatively more important, and when, as is the rule, persons are interested as shareholders, who do not give any time or attention to the business, but have invested to assist friends or relatives, or for the purpose of deriving an income without any exertion on their own part, such account keeping as will properly show the profits which have been earned from time to time, becomes of the very highest importance; and this may be better understood by noting comparatively the effect of the withdrawal of profits by a shareholder and the withdrawal of profits by a partner, from the point of view of the creditor. In the latter case the partner will probably invest his profits in some other form, and as both his credit and his capital are held responsible to creditors, these creditors may have a chance to recover any undue amount withdrawn from the business by following the debtor's property or investments. A shareholder's profits once withdrawn cannot possibly be made available to creditors, who suffer without having any remedy. The law has therefore provided penalties which may be incurred by directors and officers of a company for the improper declaration and payment of dividends, and as this depends upon whether their profits have been properly or improperly ascertained, the process of accurately determining the profits is one with which a company book-keeper requires to be tolerably familiar, in order that he may protect from penalties those by whom penalties may be incurred. Ignorance at such a time is no excuse: a dividend, if improper at all, is equally so if declared ignorantly as if declared deliberately. There are questions of values which cannot be ignored, values of plant, fixtures, stocks of merchandise, book accounts, and other assets, which a company may possess, and upon intelligent valuation may depend the immunity from liability of the directors for dividends. The recent case of a loan company which failed in this city well illustrates the complications which may arise through irregularities on the part of ignorant or unprincipled manipulators, of accounts which show the earnings of a joint stock company.

One of the marked differences between the account keeping of a company and of an individual trader or partnership is in the methods of showing profits or losses. In a partnership the profits are placed to the credit of each partner in the proportion to which they may be

entitled to the same, and similarly the losses are charged to the partners' accounts. The individual trader credits his "stock" or "capital" account with profits, or debits it with losses, as the case may be.

In a company's books, profit and loss is never a closed account. There is always a balance, debit or credit. as the result of previous trading. The profit and loss account, is, as a rule, the ultimate destination of the balances of the working accounts of the company. I may mention the exceptions. If an excess of profit be shown, it is competent for the company to provide that the shareholders shall receive these profits by way of a payment upon or an addition to their stock. This privilege of allotting profits by way of paid up stock is subject to the limit authorized by the charter, and if there is no authority for the issue of further stock, it is necessary that power should be obtained for the purpose from the legislature or other body granting the charter. A more usual way of disposing of profits is by the opening of accounts variously known as rest account or reserve account, but it is usual to transfer to these accounts only such amounts as will leave to the credit of profit and loss an amount sufficient to meet all expected losses arising from future business, the intention being that whatever is placed to the credit of rest or reserve shall be a permanent addition to the resources of the company. If the company has sustained losses, and the balance of the profit and loss account is on the other side of the ledger, the usual plan is to allow this account to carry the loss from year to year till counterbalanced by earnings. If the company cannot by reason of the condition of business or trade or other causes, overtake the misfortunes which have befallen it, but has still a fair earning power upon the remaining capital, another course is open of reducing the capital stock of the company. This can only be done by special authority of the legislature or other power granting the charter and this authority being granted, the shareholders are charged pro rata with the loss, and the profit and loss account is relieved of the charge. The reduction of capital renders possible the declaration and payment of dividends out of future earnings upon such reduced amount.

A feature to be met with in the account keeping of companies not often to be considered in partnership or individual trading accounts, is good will. Good will is usually the outcome of the conversion of an individual trader's or a partnership business into a joint stock company when it is ascertained that the earning power of the business by reason of its having been long established and having a valuable trading connection, exceeds the normal rate of interest upon capital invested by the individual or the partners, even after allowing liberally for ordinary

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# JOINT STOCK COMPANY ACCOUNTS.

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business risks. To compensate the vendors for the surrender of an investment which yields an abnormal return, a calculation is made for the purpose of ascertaining the sum upon which the normal earnings of the business would represent a fair rate of interest, and the outgoing partners receive in cash or in shares in the joint stock company, this capitalized amount instead of the actual capital invested. It is, however, very often stipulated, that the excess of earning power over the normal rate of interest shall be taken over by the company on a basis of three or five years' purchase, which very much reduces the amount to be paid to the outgoing partners. However ascertained, or whatever the amount, the transaction necessitates dealing in the account keeping of the company with the item of good will. Naturally it will appear as an asset, and its ultimate disposition is the question requiring our attention at the present time. An asset of this description represents nothing except the company continue the business and continue it profitably. If it should discontinue the amount is an entire loss to the shareholders. If continued profitably, the item will eventually disappear from the books without loss to the shareholders, the surplus of profits earned being applied in liquidation of it. sometimes been the practice to continue the item of good will as an It has asset of a fixed amount. This is an incorrect method of treatment, and opens the door to irregularities of various sorts, with which, in the affairs of large public corporations, and especially corporations holding franchises, we are familiar.

Another account coming into the same classification, and subject to the same mode of treatment is the item of "preliminary expense," which includes all promotion charges, expenses of securing stock and generally organizing the company's business, expenses which are not of a character to warrant their being charged against the profits of a single year, but which nevertheless have to be provided for. It would seem at first sight to be of little consequence whether expenses of this nature were charged against the profits of one year, or the profits of a number of years, but the distinction is important, and the privilege of so distributing the loss or expense has a bearing upon the question of dividends, when it is remembered that dividends are only legally declarable out of the surplus earnings of the company's business, and it has been held by the highest court of the realm that the existence of an expense feature of this description shall not prejudice the right of the company to distribute to its shareholders the ascertained profits, but that only such reasonable portion of these expenses need be charged to profit and loss each year as will insure ultimate provision for the whole.

I might notice in detail many other classes of transactions which are peculiar to company work, but to do so, this paper would have to be extended beyond reasonable bounds. I have said sufficient to support my plea for recognition of the importance of joint stock company accounts as a subject for instruction in the commercial departments of our High Schools.

The pupil who has completed the course of instruction marked out for him at school and mastered the great principle that every debit requires a credit, should be made to realize that, he is only upon the threshold of knowledge in accounts, and that his future as a book-keeper will depend upon his willingness to continue his studies in accounts, and take advantage of every opportunity offered him for acquiring knowledge. For the accountant who constantly seeks to add to his store of information, becomes more and more conscious of the vastness of what he does not know, and the ever widening field of research that is being revealed to his gaze, and his occupation ceases to be a mere exchange of his time for someone else's money, and becomes to him an art. In its b "agreemen mutually a one difficul of agreeme This is an o terms proba itself.

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#### CONTRACTS.

## CONTRACTS.

## D. E. THOMSON, Q.C., TORONTO.

In its broadest sense the word "contract" is synonymous with "agreement" signifying something to which two or more persons have mutually assented. In law, however, it has a narrower meaning and one difficult of exact definition. Anson says: "A contract is that form of agreement which directly contemplates and creates an obligation." This is an excellent definition, subject to the one observation that its terms probably stand in greater need of definition than does the word itself.

A less accurate but more easily understood definition is that ordinarily used by lawyers, that "a contract is a promise by one person to another to do or abstain from doing a particular thing in return for something done, paid or promised by that other person." This, it will be observed, is a one-sided definition. It looks at the subject from the standpoint of the party who is seeking to enforce the contract or obtain redress for its breach.

To elucidate this definition, and to further indicate the agreements which the law recognizes as creating enforceable obligations the following points may be noted :

(1) There must be parties to the contract legally competent to bind themselves thereto.

(2) They must have mutually assented to the same terms and have communicated such assent to each other.

(3) The object of the contract must be a legal one.

(4) The contract must be possible of performance.

(5) There must have been a consideration recognized by the law as valuable for the making of the promise sought to be enforced.

(6) In certain cases there must be written evidence of the contract.

Taking these points up in order; as to persons legally competent to bind themselves, the general rule of law is that any one may bind himself to any contract he chooses to make. To this general rule there are, however, several exceptions. Perhaps the most important one to the business community is that referring to infants, namely, persons under the age of twenty-one years. Infants are legally disqualified from entering into any contract except for their personal employment or for necessaries suitable to their personal use. All general contracts including trade contracts, they are competent to bind themselves to.

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The anomaly is that if you enter into such a contract, for instance, as buying or selling goods with a person under age you are bound by the contract while he is free to repudiate it. He can enforce it against you. You cannot enforce it against him. Even if he takes the goods purchased, sells them and puts the money into his pocket you cannot recover. Nor does it matter that he represented himself to be of age; nor yet that appearances favored such misrepresentation. It does not matter how completely you may have been deceived on the point. The law says an infant, subject to the qualifications already noted, is incapable of binding himself by contract. He may incur criminal liability, he may be civilly liable for damages caused by misrepresentation or other wrong doing under some circumstances, but so far as all general contracts are concerned he is absolutely disqualified by the fact of his infancy from binding himself thereby.

In the good old days another important exception to the general rule applied to married women. In those days a man who took to himself a wife took her for better or for worse. If she possessed any property at the time of her marriage it thereupon became the property of her husband. If she acquired anything afterwards it also became his. If as against her property, debts or obligations existed, they ceased on marriage to bind her and became binding on her husband. Even if she had no property or means present or prospective her debts or obligations, if any, were transferred to her husband and became binding on him. In that happy time a husband and wife were one and that one was the husband. The result was that the wife, although in some circumstances capable of binding her husband, as his agent, could not bind herself by any contract.

Before the gradual but resistless oncoming of the new woman all this has slowly faded away together with the husband's right, generally conceded in those halcyon days, to administer moderate chastisement when necessary. With the modern privileges accorded to married women have come corresponding responsibilities including liability upon her contracts.

Another exception to the rule of legal competence covers the case of insane and intoxicated people, provided they can be shewn to have been in such a condition as not really to have assented to the terms of the contract in question, a proviso which, perhaps, brings their case under our next heading, that requiring mutual assent, as appropriately as under the heading of personal disqualification.

The only other exception which need be here noted is that of corporations. A corporation is a legal entity having no corporeal existence, no entity is l business of

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tence, no body to be kicked and no soul to be—lost. This legal entity is bound only by such contracts as come within the scope of the business contemplated by its creation.

Coming now to the second requisite of a contract enforceable in law it must be clear that the parties have mutually assented to the identical terms of the contract and that they have communicated such assent to each other. The derivation of the word is suggestive here. The parties must have been completely drawn together. There may have been negotiations of any length including mutual concessions and approaches, but until the parties have communicated to each other their assent to the same terms there is nothing binding upon either party. Even though one in making an offer expressly allows a stated time to the other to accept or reject such offer he may before the expiration of that time withdraw the offer, and so long as he does so prior to acceptance there is no contract and no liability.

The third requisite is that the object of the contract shall be legal, in other words, a contract to do an illegal act is not enforceable no matter how solemnly entered into. This includes among others all agreements to commit crimes or tending to pervert the course of justice or which are contrary to good morals, and, in certain cases, contracts in restraint of trade.

As to the rule that to render a contract legally enforceable it must be possible of performance it will be sufficient here to note that the impossibility which relieves a man from his contract must be an absolute one. It is not sufficient that a person making a promise subsequently finds it beyond his power to perform what has been promised.

This brings us to the fifth requisite that there must be a consideration, recognized by the law as valuable, for the making of the promise sought to be enforced. This applies to all ordinary, or, as they are called, simple contracts. Contracts under seal are subject to a different rule. There on account of the supposed solemnity of the act the consideration is presumed and need not be proved. In all simple contracts the mere promise, creating a moral obligation, is insufficient; there must have been a consideration for the making of the promise. It is assumed that in the long run more harm than good would result from an attempt to enforce by process of law merely moral obligations.

The consideration must be a valuable one, not necessarily an adequate one. Of the adequacy the parties must judge for themselves. But there must be some valuable consideration or the promise is merely *nudum pactum*, and not binding. One promise, however, may be the

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consideration for another promise, that is to say, if A. promises to do a certain thing for B. in consideration of B. promising to do something else for A. such promises are mutually binding, each being the consideration for the other. To constitute a valuable consideration, however, it is not always necessary that it be capable of estimation in money, for instance, marriage, which the law always favors, is regarded as a valuable consideration for any promises made upon the strength of the union.

In analyzing our definition so far it will be noticed that nothing has been said or assumed as to the contract being reduced to writing. The common idea that nothing is properly designated a contract unless reduced to writing is a mistake. A contract is that to which the parties have assented, and which meets the requirements indicated. Even when reduced to writing, in strictness, the writing is not the contract, but evidence of its terms. A contract may exist and may be binding, not only without writing, but without words. Our language is only one of the means by which we convey our thoughts to each other. If we convey them in some other way the result is the same. If you order goods in a shop and they are delivered to you without a word being said on either side about the price, your action has made it perfectly clear that you are to pay the regular and ordinary price. Many other cases of binding contracts implied from the acts of the parties might easily be added. For instance, many a defendant, in a breach of promise suit, has discovered, to his sorrow, that a very sacred contract can be entered into and be binding, not only without writing, but without formulated language. He has found that the tender look or the loving caress may be construed into potent evidences of intention.

There are, however, many contracts which are not enforceable unless evidenced by writing. This applies to cases where on account of the value of the subject matter of the contract, or of the time to elapse before its performance, or for some other reason, experience has demonstrated that it is unsafe to trust to verbal testimony, which may possibly be unscrupulous or affected by interested motives.

In olden days before writing was common, other precautions were sometimes taken for similar reasons. Many a heap of stones in the East came into existence as confirmatory evidence of some compact. So in the days of our forefathers, when interests in land represented people's chief wealth, we find confirmatory ceremonies required in case of a transfer of title. For instance, in certain localities the vendor went with the purchaser and a certain number of witnesses to the premises, particular purchaser their with thus open the right turn rem again shu possession

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ions were es in the compact. presented ed in case ne vendor res to the premises, and handed a clod of earth to the purchaser, going over a particular form of words. Or when the sale embraced a house the purchaser and vendor went together to the premises, accompanied by their witnesses. The vendor then went inside and shut the door; thus openly testifying that he was then in possession as owner, having the right to exclude others. He next admitted the purchaser, who in turn remained inside, while the vendor withdrew. The door was again shut thus evidencing a change; the purchaser being now in possession and having the right to exclude others.

Writing has been proved by experience better confirmatory evidence than all such ceremonies. One of the earliest matters, with reference to which it was provided that there must be written evidence, was this very case of the conveyance of real estate. In the development of modern business a similar provision has been found necessary with reference to many other classes of contracts, until now a large proportion of the world's business contracts are incapable of legal enforcement unless evidenced by writing. These include not only contracts which owe their origin to writing, such as negotiable instruments, etc., but many others; a few of which seem to call for special notice.

One class is that of guarantees-promises by one person to become responsible for the debts, obligations, or good conduct of another. There was such a temptation held out to creditors to construe mere recommendations, mere assurances of confidence, mere introductions, into undertakings to be answerable for the fidelity, or responsible for the obligations of another, that it was deemed wise to provide that no such promises should be binding in law unless reduced to writing and signed by the person to be charged. So if it is sought to make an executor or administrator liable personally for a debt or obligation of the estate, his undertaking so to be answerable must, before it is binding, be in writing. Of a kindred kind is a man's undertaking, after having attained his majority to discharge an obligation or pay a debt incurred by him during infancy. Although a person is not liable on general contracts entered into during his infancy, if after his majority he promises to carry them out, they become binding on him. It was found, however, that the effect of this rule was practically to do away with the protection which the law intended to throw around the youth of tender years. Any expressions of acknowledgment of the fact that he had entered into an obligation were treated as so much evidence of a promise to pay them in the future. As one judge remarked, the only safe course for a man who was asked to discuss the question of an obligation that he had incurred during his infancy, was to knock.

his creditor down, since almost anything he said or did was treated as some evidence of his intention to make good his obligation. Consequently, in order to render effective the contemplated protection it was provided that no person should be held liable upon a promise made after he attained his majority to pay a debt or discharge an obligation he had incurred during infancy, unless the promise was evidenced by writing signed by him.

Another class of cases in which the law requires written evidence is that of contracts that are not to be performed within the space of a year from the making of them. It was found necessary with reference to contracts that are to stand for a considerable time that same should be evidenced by writing. An arbitrary limit had to be fixed somewhere and the law fixed it at one year. This applies, however, only to contracts which from their terms could not have been performed within the stipulated time. The mere fact of delay in performance beyond a year, not contemplated when the parties entered into the contract, will not bring the case within the rule.

Another class is that of contracts made upon the consideration of marriage. This does not apply to the contract to marry, but to any contract whereby a person undertakes to convey property, pay money, or do any other specified thing, in consideration of the marriage of a person to himself or to another. For reasons similar to those above explained with reference to guarantees it has been found necessary to provide that no such contract is binding unless evidenced by writing.

The last class of cases to which reference need be made, possibly in practice the most important of all, relates to contracts for the sale of goods. Experience demonstrated the necessity of better evidence than verbal testimony, in the case of sales of goods of considerable value. An arbitrary limit in amount had to be fixed. That limit in England is £10 sterling. Here it is \$40. The requirement of writing in this case is not absolute. It is only an alternative. What a man requires to show, who seeks to enforce a contract for the sale of goods of more than \$40 in value, is that the contract has not only been made, but partly carried out; or else that there is written evidence of its existence. He may show that the contract has been partly carried out, by showing the delivery to the purchaser, and receipt by him, of the goods, or part of them; or by showing payment of the price or part of the price. Unless he is able to show such part performance he has no enforceable contract, unless it is evidenced by writing.

Before leaving the subject of contracts evidenced by writing, one very important collateral rule of law should be noted. Whether aparticula its terms that the contract, contract. speak for intended which ar missing p within an requisite

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ting, one hether a particular contract is one required by law to be in writing or not, if its terms are once reduced to writing, under circumstances showing that the parties intended such writing to cover all the terms of their contract, then the writing becomes the exclusive evidence of such contract. Subject to certain very limited exceptions, the writing must speak for itself, and the parties' mouths are closed as to what they intended to agree to. There may, however, be contracts only parts of which are in writing. In that case it is permissible to supply the missing parts by oral testimony, provided the contracts do not fall within any of the classes where the law makes written evidence a prerequisite of enforceability.

A word now about the remedy for breach of contract. You may take a horse to the water but you cannot make him drink. The law undertakes the enforcement of very few contracts. It sometimes restrains a breach of them by injunction, enforceable by imprisonment for contempt in cases of disobedience. In a proper case it will enforce specific performance of an agreement for the sale of land. The operation of this remedy, however, in the case of other contracts is extremely restricted, and applies to a class of cases which could not be profitably dealt with here.

Ordinarily the redress granted for breach of contract is by awarding the injured party damages to compensate him for the loss he has sustained by the failure of the other party to carry out the contract. If no loss has been sustained there is no remedy no matter how glaring the breach.

Even a brief summary to the law of contracts would be incomplete without some explanation of the law of agency. It will not have escaped your notice that, as business is carried on to-day, those who are really the parties to transactions, are able personally to do but a small proportion of the work necessarily involved in such transactions. Hence, there is no branch of commercial law more important than that which relates to agency, nor, it may be added, is there any so commonly misunderstood. The general rule is that anything a man may do himself he may do by another. The authorized act of that other is his act. As it has been put the agent is the hand of the principal for doing the act. It is the principal's act when done. So true is this that although an infant cannot bind himself by a contract, he can bind any one else who authorizes him to enter into it.

The agent's power to bind his principal depends on the principal's authority. There is no difficulty when express authority to do the act in question is proved. Difficulties arise where there has been a mis-

apprehension by the agent of his principal's instructions, where there has been, through mistake or wrong intention, a violation of instructions, an act done in defiance of the orders of the master, or exceeding the authority conferred. Here is where a safe guiding rule is essential to determine the cases in which the principal will be liable, and those in which he will not be liable for the agent's act. It will not do obviously to assume that any person who employs another in any capacity is bound by everything that other does. That would not be reasonable. There must be some limit. Ordinarily it appears to be assumed that once an agency of any sort is proved, there is at least a strong presumption that the principal is bound by what the agent has assumed to do. This is approaching the subject from the wrong end. If you propose to charge a man with a particular act that was done by some one assuming to be his agent, the law casts on you the burden of proving not only the agent's act, but his authority. That is the principle we begin with. The principal is bound by the agent's acts because the agent acted with his authority. Frequently different classifications of agency are attempted. We hear of general agency, special agency, particular agency, universal agency, etc. We have such classifications in some legal text books, but all such divisions are misleading. The only safe rule is that an agent's power to bind his principal depends upon the principal's authority to him, which may be actual, or which may be ostensible. There is no difficulty when it is proved that the act was done with the actual authority of the principal. The difficulty arises where the act has not been expressly authorized. The rule then is that the principal is bound by the act of the agent, if it can fairly be said to him that by his conduct, by his representations, he has justified a reasonable belief on the part of those who dealt with the agent, that such agent was acting with the principal's authority.

Let us see whether we understand this. If you pursue the investigation you will find that it is on the same principle that the power of a partner to bind his firm is based. If those who have dealt with the agent, or with the partner representing the firm, were reasonably justified by the representations to them of the principal, or of the firm, either in words, by writing or by conduct, in believing that the agent or partner was acting within his authority, the act binds the principal or the firm as the case may be. This test is sometimes difficult of application. It is, however, the only safe criterion. You have to look at all the circumstances and the question (when you are not able to prove express authority for the act of the agent) always is are you able to sa by the co you are e to have a the agent

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able to say that by this act and that act, by this word and that word, by the course of business and the nature of the agent's authority which you are entitled to assume from other acts, the principal may be said to have acted in such a way as to justify the belief on your part that the agent had authority to do the particular act in question.

These representations observe must emanate from the principal. It is not enough to say that the agent led you to believe that he had authority. You must be able to say to his principal—"From your own acts I was justified in believing that this man had your authority for what he did."

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## COMMERCIAL LAW, ITS RELATION TO OUR SUBJECT BOOK-KEEPING.

## E. C. SRIGLEY, WOODSTOCK.

In giving a few thoughts to show the relation above named, it will be well to give a definition of the terms book-keeping and commercial law. Book-keeping we have defined somewhat similar to the following, by every author, as the science of recording business transactions in such a manner that a clear and accurate statement of affairs is always shown.

Commercial law, in its widest scope, comprises all the regulations deduced from the practice and custom of business men, subsequently aided and regulated by the courts and legislative enactments, which have been laid down for the guidance of everyone involved in a business transaction, to which the persons must conform if they would avoid the consequences.

Every business transaction has its usages, methods and laws. The methods of recording business transactions vary as the business varies, and we can say that the law does not compel any man to keep books in any set way, although it recognizes none in a court of justice except those proven to be kept in a correct and intelligent manner. The business failures of the past have taught us the need of keeping records of our dealings in the business world, so as to know our standing in the community, and whether we can afford certain expenditures for additional transactions. In recording the transaction, we have only dealt with one side of the question. What about its methods, usages and laws? We find that ignorance of the law excuses no man from penalty. How often do we hear of fraud being perpetrated upon those who, knowing nothing of the results accruing from particular transactions, are induced to sign their names to business paper, when a knowledge of commercial law would have placed them upon their guard, and not only upon guard, but in a position to expose anything tending to mislead those who are not so fortunate as themselves. Will not this knowledge of commercial law tend to make a person keep a record of his transactions?

The business community hails with delight any system that will establish commerce upon a firmer basis. To-day we have our cash system, not yet to the degree wished for by some of our merchants and business men. Let us consider some of the changes it has wrought.

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A few years ago everyone who dealt with our tradesmen had to trust to the system of book-keeping adopted, and how many there were who, when their long bill came in, declared they never had received some of the articles on the list as recorded. Every household, for its own protection, needed a book-keeper, and thus a record of their dealings in the business world was kept, very imperfect in most instances you may be sure, but not having the opportunity of obtaining in youth the needed knowledge, we are surprised that there was not a greater number of business failures, or resulting law suits. In regard to the law surrounding the business transaction, nothing, or very little, was known. To-day, thanks to the press and the experiences of some in our courts, some knowledge of business usage and regulations is permeating our land. Where else can the individuals of the community obtain an idea of the law? Some will say experience is the proper teacher in commerce, but experience has been proved to be too dear. How often does a man find to his cost that, had he known but little of the law about the transaction in which he was involved, it would have saved him more than the profit of the transaction.

What is the result, to-day, under the cash system? If I were to ask how many of those here assembled kept a scientific record of their business transactions, perhaps one out of every ten would say they tried to. If I ask if you pay regard to the regulations and limitations the transaction calls for, you would say, "The law compels one to do so." What do these facts lead us to think? If the teacher of book-keeping under the cash system does not keep a true record of every cent, how can we expect the pupil in future life to do so. Does the average man think it necessary, under such a system, to keep books? If he does, he does not always do it. He is more impressed with the fact that there are certain usages and laws to follow in performing the transaction, and to these he pays particular attention, for the experience of others have taught him the resulting penalty in not keeping within the law.

"Do you say, then," you ask, "that we should not pay as much attention to book-keeping as to commercial law and usage?" I do say that, in teaching book-keeping alone, we are not teaching all the facts connected with a business transaction. We, in doing so, are attacking the subject from one standpoint only, namely, the individual's personal benefit in keeping the record; but I make the statement, perhaps to be contradicted by some, that as our dealings with our fellowmen are largely of a financial nature, we should be thoroughly conversant with the law in regard to our transactions. Book-keeping and commercial

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law and usage are so inseparable that we fail in imparting to those under us the practical side of business life, if we teach the recording of the transaction without its complements.

What has been done in this direction ?

In our business colleges, a few years ago, we found some lawyer as lecturer on commercial law, and he lectured perhaps once a week on some obstruse subject, the circumstances of which would occur perhaps once in fifty years to one person out of every hundred in a community. What benefit was this to one who required to know the law about transactions of his daily life? Is it any wonder that we heard of tradesmen saying business education was not practical. The colleges were made to feel the popular demand, and we find business law and usage courses established, and now the students must pass an examination in commercial law.

In the schools of our Province we have not made as much advancement as our business colleges. It is true that in our diploma course we have commercial law and usage, but when you consider the few who take that course, of what benefit is it to the great mass of our pupils ? In our First Form and Public School Leaving course, have we any, except the little incidental teaching that the teacher feels bound to give? Now, why is this? Perhaps we may look within ourselves; perhaps to the teachers of the other branches in our schools. Do we feel the popular demand? Are we in touch with the business world as we should be as commercial teachers, and do we try to educate those we teach for practical life, or for examination purposes? We all are disgusted with our system of cram at heart, but outwardly we follow it. Look at our results at examinations. Do we not feel happy if we have forced a goodly number of candidates through, and if our forcing did not show fruit we feel offended at the examination, or the examiners? What have the teachers of other departments done to prevent a fuller commercial course? They have done nothing intentionally, but did you ever hear a specialist in languages, English, mathematics, or science, say that any other department was as important as the one he taught, and does not the majority of the teachers in the other departments think that commercial work should not be taught as fully as it is in our schools, and that pupils should go to business colleges or to practical life to get the knowledge which the state should impart? Who is responsible for the subjects on our curriculum ? Not the people, perhaps, as much as the teachers. We should have a fuller course in the commercial branches in our First Form and Public School Leaving, but the opposition of the other departments is raised, and the Minister of

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### COMMERCIAL LAW.

Education, however kindly he is disposed to add to our course, is debarred from doing so by the oppositions raised, or the additional subjects wished by the other departments.

It is not the object of this paper to show in any manner what commercial law should be taught in our First Form and Public School Leaving. I leave that to those more capable of dealing with that part of the subject than I am. I will feel satisfied if in any way I have succeeded in impressing on you the great need of commercial law and usage in our schools.

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# MORAL TRAINING IN PUBLIC SCHOOLS.

# PROFESSOR JAMES GIBSON HUME, M.A., PH.D.

Every teacher is familiar with the distinction between instruction and education. This paper deals with moral training or moral education. Morality also should be distinguished from religion. Religion is wider than morality, it includes morality within it. It so includes morality that it transforms it, gives it new significance and deeper meaning. Nevertheless, throughout the whole of the transformed religious life morality continues to form an essential element as the human side of the obedient response to recognized and adopted Divine commands and ideals; the individual's allegiance to the claims of the Divine personal leadership.

The teacher who is aware of the relation in which morality stands to religion may consciously utilize the moral training of the child as a preparation for the religious life, and as an indispensable element afterwards, throughout the whole of the transformed religious life. The explicit recognition and conscious adoption of the religious standpoint does not usually take place in the child's life until a certain stage of self-consciousness is reached. Statistics of conversion place the greatest number at sixteen to seventeen years of age. But neither moral training nor religious instruction needs to wait for this period. On the contrary they should precede and prepare for it, and it is evident that from the earliest years, and all through the child's life, moral training may be efficiently carried on. If the child has learnt to respond obediently, willingly and gladly to the moral demands, he is being prepared to take the further step involved in the moral, manly attitude of admitting the claims of the Divine Person, when these become explicitly recognized.

Let us notice the bearing of our conclusions upon the charge that our Public Schools give merely an intellectual training, and that religious instruction, the reading of the Bible without comment, is required to remedy this defect. If this charge were true there seems to be a certain amount of inconsistency in the proposal to amend this condition by simply adding some more mental drill. For the mere reading of Even the exercise of at all affec The tea

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reading of the Bible without comment is simply an intellectual exercise. Even the memorizing of Bible truths may be a merely intellectual exercise of an inferior order even from the intellectual side, and not at all affecting the moral or religious nature of the child.

The teacher's comment being prohibited, any attempt to make the religious instruction educative is seriously handicapped. It might be in order to ask: "If the teacher be entrusted with any religious exercises, should he not be more trusted ?"

But it is simply untrue that the Public Schools of Ontario give merely an intellectual drill. I am not referring to the modicum of religious instruction in the opening and closing of the schools with prayer, and the reading of a few verses from the Bible. Altogether apart from this, the whole exercises of the school are moral as well as intellectual. Every part of the school work can be utilized and is being utilized by efficient teachers in the moral training of the pupils.

The true teacher is not teaching arithmetic, literature or history to his pupils, but is training his pupils, mentally and morally by means of these topics. He keeps before him constantly an ideal for which he strives, the harmonious development of all the child's powers, and he is never forgetful of the higher æsthetic, moral and religious demands of the child's nature. With patient care he trains the child with these higher results constantly in mind.

Let us first notice the moral aspect of school organization and management, and of the intellectual exercises in a general way.

There can be no teaching without school organization and school management. But there can be no organization or management of pupils rising higher than mere compulsion and fear that does not rest upon a moral basis—on right, not might.

The very first prerequisite for teaching is a moral condition involved in the organization of the school. Furthermore, such organization and management is not merely a means or condition of the mental training. It has significance also for the further moral training of the pupils. In school management the teacher is endeavoring to morally train his pupils in the habits and virtues of order, obedience, courtesy, and respect for law.

The child learns social co-operation; respect for others and their rights—the basis of good manners and good morals. He is taught selfcontrol and self-expression in the orderly social life of the school. He is thus led to develop his own moral nature and acquire moral habits as he takes his place in the organized school life and fulfils its duties.

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that is sometimes strangely overlooked. There can be no intellectual advance without attention. But on the moral side attention demands earnestness and concentration of purpose. If continued, as it must be in the more difficult parts of the intellectual training, the child acquires in this painstaking application the moral qualities of perseverance, patience and self-denial. If the intellectual training is successful in arousing, quickening and establishing a genuine interest in the discovery of truth, the child gets a glimpse of the significance of the ideal. He learns the lesson of self-control, self-expression and self-development in devotion to the claims of truth, which is higher than selfishness, higher than mere likings, aversions and individual waywardness and caprice.

This attitude to truth is invaluable in leading to a similar recognition of the claims of beauty, goodness and righteousness.

It is evident that the habits above mentioned are not merely intellectual achievements. They are moral elements incorporated into the life and forming part of the character of the child.

Subdividing the above general considerations, we may note the possibilities of moral training in the physical, intellectual, æsthetic and social aspects of the school life.

Physical training may be made a basis for valuable moral results. Erect and manly bearing helps courage, and courage is a fundamental virtue. Cleanliness and neatness helps self-respect. Courage and selfrespect will assist in repudiating many degrading habits. These will appear as mean, unworthy, contemptible, to the self-respecting child. The boy's desire to become strong and manly should be utilized in warning him against cigarette smoking and all debilitating and debasing practices. The girl's desire to be comely and attractive may be appealed to in a similar manner, and true beauty of soul inculcated. From this standpoint all degrading forms of punishment, such as pulling the ears of the pupil, are to be deprecated. The teacher should train the pupil to regard the body as the sacred temple of the spirit.

Intellectual training has been already dealt with in general terms. The moral value of a genuine interest in study must not be overlooked. To work assiduously to pass an examination may train the pupil to overcome lazy tendencies. Although there may be concentration of purpose without true morality, for an evil end may be persistently pursued, it is nevertheless true that there can be no strength of character, no advance in goodness, upon the basis of vacillating instability of disposition. In the prevention of copying an occasion is given to teach honesty, self-respect and self-reliance. The cest There sho taught to a potent r children's is worthy

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ral terms. verlooked. e pupil to tration of ersistently rength of vacillating occasion is The esthetic side of the child's nature is influenced by surroundings. There should be good pictures in the schoolroom. The child should be taught to appreciate the beauties of nature. Music may be made a potent refining influence. The wide possibilities for influencing the children's dispositions through suitable music and appropriate words is worthy of the teacher's careful attention.

The social side of the child's nature is developed in connection with the organization and management of the school which involves at every step the co-operation of the pupil.

The playground should be supervised by the teacher to assist the pupils in forming a true code of honor in the games, where the child may learn to despise meaness, cheating and roughness, and may cultivate a spirit of fairness, truthfulness, and brave self-control.

In all the discipline of the school the moral aspect becomes more prominent. No punishment is properly viewed apart from its moral tendency. The whole purpose of discipline is to correct, modify, amend and improve the conduct, and through this the character of the pupil. In this way the pupil is being prepared for the duties and responsibilities of later years in the home and civic life.

If the axiom that all punishments and corrections should be administered with dignity, calmness, kindness, courtesy and mutual respect were kept in mind, corporal punishment would tend to become a vanishing quantity if it did not disappear altogether.

It is the teacher's duty to assist the pupil in preserving self-respect. For this reason reproof or correction should in nearly every case be privately given, seldom before the other pupils, never before visiting strangers or inspector. When rules are broken the teacher should very carefully seek for the motive that actuated the disobedient child. Was it ignorance, carelessness, mischief, or defiance? The teacher should lead the pupil to regard him as a true friend. The teacher should expect a great deal from his pupils. Unblessed is the teacher who expected little—he will not be disappointed. The teacher should trust his pupils and endeavor to assist them in living up to the high standard of his confidence in them.

No rules should be arbitrary, and all rules should be explained. In this way the pupil learns that right and duty are not mere commands capriciously enforced by a stronger power, but based upon deepest reason.

With regard to the direct enunciation of moral rules and principles, we may notice that all through the literature used in the schoolroom are to be found skilful and beautiful expositions of moral ideals. The

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teacher of tact and insight will know when and how to add his hearty approbation of noble sentiments. He may also utilize essays and supplementary reading in the same way. This is more effective than learning definitions of moral virtues. Beware of Pecksniffian moralizings.

Although my topic is Moral Training, not Religious Instruction, I have been compelled to take some notice of the latter vexed question.

It should be evident from what has been said that a great deal of moral training can be carried on successfully whether religious instruction be given or not.

Those optimistic people who say we all ought to agree upon the more important religious truths, and have these taught in the Public Schools, should be reminded that we live in a world of stern realities, and must not shut our eyes to the fact that it is notorious that people do differ about these truths; and even with regard to those religious truths about which there is most agreement, there is an inveterate tendency to fight over the points of difference to an astonishing extent.

While this remains the state of affairs, it is evident that such dividing topics should not form a compulsory or essential part of the exercises in national schools, which were intended to be a bond of union, not a bone of contention among citizens.

It must not be forgotten that the Public School is only one of the agencies employed in educating the child. The Public School was intended to co-operate with home and church influences, it was not meant to supersede them.

If some of the more zealous clergymen who spend much energy in an attempt to incorporate religious instruction in the Public School program would direct some of it to the revival of family worship, perhaps more results would be attained. The home is the central institution; Church, Sunday School and Public School are subordinated to it. At any rate the Public School teacher is not meant to supersede the parent, but to be his efficient and sympathetic assistant.

The foolish statement that the Public Schools are creating criminals scarcely needs refutation. It is as senseless as it would be to charge the medical men in the city of Toronto with the increasing death rate from trolley car and bicycle accidents. As the Public School is only one of the factors educating the child, we must examine the other influences to locate the cause of criminality.

The child is only a comparatively short time under the teacher's supervision. Look at the influences that are frequently thrown around the child when he is not in the teacher's charge, and the impropriety of charging the criminality upon the teacher will be evident. In fact it is the work, th of home have don greater of School. parental

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eacher's a around ropriety In fact it is the recognition of how well the Public School performs its special work, that leads many parents to desire to relegate to it the work of home and Sunday School. We may look to the teachers who have done their part so successfully to make an effort to secure a greater co-ordination of the forces of home, Sunday School and Public School. The teacher should endeavor to reach the parents and arouse parental solicitude and co-operation.

The Sunday School could be greatly improved by the adoption in it of methods that have been so successful in the Public School. The kindergarten element in the Public School might be greatly extended, so that there should be no more neglected waifs running at large on the back streets. It should not be forgotten that one of the fundamental principles of the kindergarten is that the mothers should be taught to be the true kinderg artners.

Lastly, let it be remembered that the majority of the unregenerated are not in that condition from want of knowledge of what is better and nobler, but from want of moral responsiveness to recognized right and duty. The teacher's work will not be in vain if he succeed in strengthening and developing the moral natures of his pupils, habituating them to loyal and willing response to the claims of right and righteousness, and in this most important work the teacher's own character and example is the mightiest factor.

Give us teachers, the nation should cry. Its usual call is for cheap teaching. But there is one educator who counteracts the blindness of trustees and the indifference of parents—the child. The child teaches the teacher. The very presence of these eager young innocent minds looking up to the teacher for guidance and example stirs him to noblest endeavor.

How could be deceive or injure these confiding little ones? His nature, if it has a spark of manliness or nobility, responds to this appeal, and thus it is that the teachers become the most sensitive to moral demands. The teacher from day to day learns to realize more and more that his work is not to "keep school," or prepare pupils for examinations, but to aid in that spiritual process whereby human souls are strengthened, developed, uplifted and ennobled.

> That to perfection's sacred height They nearer still may rise, And all they think and all they do Be pleasing in God's eyes.

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## THE ETHICS OF TALEBEARING.

## S. B. SINCLAIR, M.A., OTTAWA.

The primary object of this paper is to give a summary of answers received from 1,409 persons in reply to questions of a syllabus sent out in the month of February. One hundred and six replies were from students of the Ottawa Normal School, one hundred were from students of Ottawa Collegiate Institute and the remainder from Public School pupils of varied ages and classes mostly residing in the cities of Toronto, Kingston and Hamilton. A number of typical answers have been selected and where stated on the paper the age has been given. When the age is not stated it is between ten and fourteen years. None of the answers quoted except one are from Normal School students. The following case was proposed for consideration.

"John throws a snowball through a pane of glass in the school building window. James sees him do it. No one else sees him do it. They know that if they report the case the only punishment will be that John will be required to pay for a new pane of glass."

Pupils were requested to answer yes or no to each of twelve questions proposed and to give their reasons.

Ist Question. Should John tell on himself if the teacher asks him if he broke the pane? 1,398 answer Yes, 11 answer No.

2nd Question. Should John tell on himself if he is not asked? 1,288 answer Yes, 114 answer No.

Of the 11 who answer No to the first question, any who attempt to give reasons for their answers show that they have in mind imaginary conditions not intended in the question, *e.g.*, a boy ten years of age answers "No, because then he would get his beatings all in a bunch."

The following are some of the reasons assigned for answering No to the second question.

"He should not tell unless he is asked because he might have no money to pay for it. What's the use of getting into trouble until you have to? Because you should not tell on yourself before you are asked. Not until some other boy was blamed then he should tell on himself and take the consequences. He must grin and bear it."

An analysis of the affirmative answers to these two questions reveals 510 reasons which may be classed as egoistic or prudential, that is, emanating primarily from a regard for the well-being of self, 519 which may be classed as altruistic or benevolent, that is, finding their orig as moral oughtnes

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their origin in a regard for others and 1,010 which may be classed as moral or religious arising from a conception of the rightness or oughtness of the act.

Question 3. Should James tell on John without waiting to see if John is going to tell on himself and without being asked to tell? 83 answer Yes, 1,192 answer No.

The following are typical answers. "Yes, because if you saw a burglar enter your house at night and did not report you would be as guilty as the burglar (age 16). No, everyone should mind his own business and not interfere with other people's until they (other people) are unable to attend to their own (13)."

Question 4. If James is asked to tell should he tell without waiting to see if John is going to tell on himself? 544 answer Yes, 753 answer No.

Typical answers. "Yes, it would show that he was manly and not afraid of any consequences that John might bestow upon him (14). If he has a spite against John (14)."

Question 5. If John does not tell on himself should James ask him to tell? 1,091 answer Yes, 276 answer No.

Typical answers. "Yes, it would be trying to make him honorable although it might cause a fight (14). Yes, because James might have a better control over John than the schoolmaster (14). No, James should not ask him, that looks as if he wanted him to get into a racket in the school (14). It is none of James' business (11)."

Question 6. If John then refuses to tell and James is not asked to tell should James tell? 500 answer Yes, 846 answer No.

Typical answers. "Yes, it would take away any suspicion or alleged guilt of any one except the guilty which would be right (14). James should ask the teacher to let John off this time. If he does not tell, he will be 'compounding a felony,' and perhaps allow another to bear the blame or rest under suspicion (17). If James did not tell then he would be helping John to do wrong and as he is then forming his character, he is likely to do the same all his life (13). Yes, because it would be robbing the school board of a piece of glass (13). No, it is manners to wait until you are asked (15). Yes, because it would not be right to have a mystery like that in the school. Yes, for there would be two guilty consciences that night instead of one. Even though John is the stronger boy, he may give James a thrashing (13). Yes, because a boy who is asked and is not honest enough to tell should be told on (13). If James did not tell perhaps he would have to pay for the glass (13). Yes, because he needn't make a liar of himself if

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John cares to (16). No, to give John's conscience a chance to make him tell (10). No, he must not act as confessor for John."

Question 8. When the teacher finds that the pane of glass is broken should he say to the class that he wishes the boy who broke it to report privately? 934 answer Yes, 247 answer No.

Typical answers. "Yes, the boy would be more likely to tell the truth if asked to see the teacher privately, if he were asked before the class, he could hide in a crowd (15). The other boys might jeer at him when going home or any other place outside of school and it might hurt John's feelings (10). No, if it was not found out the cost would be laid to the funds of the school. I think he ought to ask him to report before the whole class so as the class would not have their suspicion on another boy and it would make John stronger in the future (16). I think that a pane of glass broken in the winter affects the class and therefore the culprit should be publicly exposed (13). No, it is not the teacher's duty to find out the boy if he will not tell himself. He will have to answer for it some day (12)."

Question 10. Should be ask each boy if he broke the pane? 808 answer Yes, 338 answer No.

Typical answers. "Yes, it wouldn't hurt those who did not do it and were right in their conscience to say no (13). Yes, because one was as apt to break it as another (15). Yes, so he could see whether they look guilty or innocent."

Question 11. Should he ask each boy if he knew who broke the pane? 721 answer Yes, 359 answer No.

Typical answer. "Yes, for it would be the only way he could find out if the boy were not honest enough to tell (14)."

Question 12. If every boy says he did not break it and James says he knew who broke it should the teacher ask James to tell who broke it? 829 answer Yes, 297 answer No.

Typical answers. "Yes, because it would settle the matter and teach John to tell the truth (13). James would be justified in telling as a last resource after John has had every chance to get out of the matter easily and fairly. James now tells in self-defence and in defence of the good moral standing of the school and because the teacher is a friend of his whom he can trust to deal with the case. Since John steadfastly denied the breaking even though James saw him, James has to tell to make himself true and not John (N.S. student). Yes, he should ask James who broke it because a deceitful boy should be told on and not let the teacher have the impression that he was truthful (13). If James tell half he should tell all (13). She could find out the coward who was to make to was not h being how would mo without a

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who was afraid to tell the truth (12). No, the teacher would not like to make the boys sneaks (11). No, most emphatically no, for if John was not honorable enough to tell on himself and James was asked, he being honorable would not like to tell on John and if he did tell, he would most likely be disliked afterward (16). No, he should find out without asking one boy to tell on another (14)."

The answers were given by pupils of different ages varying from five to twenty years and it may be of interest to note a few generalizations which in my opinion can safely be made as a result of a comparison of answers.

The evolution of the content of the oughtness category from early childhood to adult life is not only marked by constant change but is also accompanied by certain epoch making periods of moral advance when new horizons suddenly appear.

The reasons for doing right assigned by children of from five to eight years imply that obedience to the authority of the teacher is the main impelling principle.

With those from six to twelve years of age there is evidenced a strong desire to secure the approbation of fellow-pupils or of the teacher. This feeling seems to be specially prominent in the case of boys.

After the adolescent period there comes a rapid growth into larger and richer conceptions of duty and possibility. There is then expressed the opinion that we should do right not because we are commanded to do it nor because it will win the applause of our fellows or be the best policy but simply because it is right and therefore ought to be done. I find this position emphatically taken by 185 out of 232 girls between the ages of 12 and 16 years.

Then, too, a spirit of helpfulness manifests itself and becomes a powerful conditioning factor in moral choice.

In fifteen papers chosen indiscriminately from pupils between the ages of fourteen and sixteen years I find sixty-five answers where interest in and sympathy for the offender, other pupils, the teacher or the community is definitely expressed.

There is at all ages a deep-seated aversion to what many pupils call "a row in school," and the majority strongly approve of private rather than public treatment of cases of discipline. Nearly all agree that the discipline of consequences as proposed in the case submitted furnishes a just form of punishment.

With pupils of five or six years of age the inclination to tell on other pupils is strong and becomes weaker with advancing years. At the age of sixteen years or over, pupils say that they think it better never

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to tell on another or only in extreme cases where it would be for the general good and where all other means have failed.

In conclusion I may say that the high moral tone of the majority of answers received was such as to tend to convince anyone that moral training has been strongly emphasized and that the children of these schools (which may be said to be typical of Ontario schools in general) are developing the most precious of all possessions,—a noble character.

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## NATURAL METHODS OF ILLUSTRATING PHONICS.

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# NATURAL METHODS OF ILLUSTRATING PHONICS.

# L. T. LOCHHEED, M.A., TORONTO.

The numerous inconsistencies in the spelling of so many words render their phonic analysis and accurate reproduction in writing a very difficult and perplexing task. An exceedingly small percentage of our printed words show their true pronunciation by their spelling; and only when the expert phonic teacher shows in some way the approximate vowel sound, the silent letters and their apparent use (if any), and strives to give intelligent reasons for the changes of sound of the same vowel and of the powers or uses of the same consonant, can these difficulties be partially explained or made intelligible. Even then many changes in sound and use of letters remain untouched and many others have to be taught as simply numerous exceptions to the rules, or arbitrary, inconsistent and unphonetic in their spelling : e.g.: not, note, don, done; does, eight, colonel; so, do, stove, love, move; cough, though, through, thought, phthisic.

Pronunciation has been partially shown in two ways:—First, by arbitrary diacritical markings of various kinds; second, by so-called "phonetic spelling," and sometimes by the attempted combination of these two. But they have ever been and always will be incomplete, inaccurate and perplexing. Even in our best dictionaries the manner of showing pronunciation requires not a little investigation and study by teachers themselves, and in very many cases is quite beyond the power of pupils to unravel.

Hence, at present, pronunciation is almost entirely traditional, being handed down by word of mouth from parent to child and from teacher to pupil for generations. This accounts largely for the fact that many of our words have become to be pronounced one way while spelled another. Changes in spelling have never been allowed to keep pace with changes in pronunciation, hence the variety and great inaccuracy in the pronunciation of so many words. Who can say but that in time spelling may be little or no guide to pronunciation ? In fact it has degenerated to that now in very many cases.

Diacritics fail chiefly because they are arbitrary and so variable. They are also foreign elements tacked on to words forming no integral part of letters, hence change the ordinary outline (or mental picture in dictation) of words, and are repulsive to the eye and confusing to the

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mind. They retard reading and make spelling more difficult for these reasons, and also because they are not uniform and complete, they are discarded in readers at the earliest possible moment, and are soon forgotten or disregarded by the pupil. The lack of uniformity in diacritical marking is a confusing feature in their use. The same mark usually indicates a different vowel sound when placed over a different letter, as for example the  $\sim$  mark used as in ă, ĕ, ĭ, ŏ and ŭ, does not show that these letters have the same sound as the child naturally expects, but shows the sound which these letters individually have in most words, and which in phonics is associated with these letters without the mark, therefore it is not only inconsistent but useless, or worse than useless.

These markings not only fail to show all the vowel sounds, but also ignore the various powers of the same consonant or consonant combination, leaving these to be guessed at.

Attempted phonetic spelling by means of the very insufficient number of our letters to represent all the elementary sounds and powers of letters in our language, is still more useless and injurious, as it fails utterly to show even approximately the accurate pronunciation of words, but gives a mere hint, thus forcing the pupil to learn the art of expert (?) guessing so prevalent in all subjects of school study. Not only so, but since pupils must guess at the pronunciation of the true spelling of words from attempts to study it out from a wrong spelling. the result naturally is that that form of spelling which the eye has scrutinized the most and the mind studied the most, viz., the wrong spelling, will be that which the child would of course be most inclined to use in both oral spelling and dictation. How can we expect pupils to spell many words such as circle, comfort, handsome, manœuvre, etc., accurately when in our present readers they are directed to study out the accurate pronunciation of new words from such spelling as s-i-r-k-l (circle), k-u-m-f-u-r-t (comfort), h-a-n-s-u-m (handsome), m-a-n-o-o-v-e-r (manœuvre), etc.? Is it any wonder we hear the cry of poor reading and bad spelling throughout the Province?

Any method then which is to fully illustrate the accurate pronunciation of all words so that they may be both phonically analyzed consistently and spelled accurately must show everything that can be shown in order to assist both teacher and pupil to the greatest extent possible.

Seven essentials can be presented to the eye in all our school reading lessons and dictionaries by the printed forms of words and letters being made to show the pronunciation without any diacritical marks whatever or the slightest change of spelling.

## First.cation of variation indicate letters. S cur, a (ind and o in ) same, espet that whic phonics) i of which when ind should als **sir, wore**

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## NATURAL METHODS OF ILLUSTRATING PHONICS.

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nool readnd letters al marks First.—The sounds of each vowel can be shown by a slight modification of the printed form of the letter to harmonize with the slight variation in sound to be indicated. The same modification is used to indicate the same sound or very closely related sounds of different letters. Space permits but one illustration. In such words as cup, cur, a (indef. art.) comma, the last a in grammar, her, sir, word, other and o in humor, etc., the sound of the u, a, e, i and o, is practically the same, especially if the r in examples be not sounded. This sound is that which "u" generally indicates and is the one to be (and is, in phonics) identified with the letter "u," the distinguishing characteristic of which is that it is open at the top. Therefore those other letters when indicating the sound, which more properly belongs to the "u," should also be opened at the top, thus:—**a comma, grammar, her, sir, word, other, humor,** etc.

Such modifications cost little in the way of new type, and can be made as large and conspicuous as desirable in the First readers, and also made very small and almost imperceptible (if the great conservatism and prejudice of the present age so demands) in the advanced readers after pupils have become very familiar with the elementary sounds and powers of our letters as represented by such modifications. Thus the pupil is never left in uncertainty regarding the accurate pronunciation of any word (new or old) he may come upon in the readers, and therefore avoids hesitancy, stammering, doubt, guessing and the inaccuracy now so common among pupils, even adults, when reading. All the other modifications of the vowels and consonants are based on the same logical and natural relationship of the uses of the letters by making their modified forms harmonize with the very closely related, if not identical, sounds and powers of different letters.

Second.—All silent letters are shown in skeleton type, or mere outline of the letter, which does not change either the general outline or the recognized spelling of our words, but in a natural manner shows children the "skeletons" or outlines of those letters which are of no practical utility in phonics except in some cases to show the sound or power of some other letter in the same word.

Third.—The various powers of the same consonant as of c, g, s, etc., or of consonant combinations as ch, th, ti, si, etc., are shown by modifications of each type form according to a natural logical basis like those of the vowels.

Fourth.—All combinations of letters having a single function as oo, oi, oy, ou, ow, wh, qu, etc., are joined together by a slight stroke in the print to show they are as one letter.

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*Fifth.*—The accented vowels are most naturally and emphatically shown by a heavier face of type for those letters, the heavy impression of the letter showing naturally heavy stress of the voice thereon.

Sixth.—All the syllables are shown by a very small space between them, sufficient to be noticed, but not so as to destroy the unity of the word. Thus the phonic analysis and pronunciation is made as easy as possible by presenting but one difficulty at a time, proceeding from the known to the unknown and combining these.

Seventh.—Lastly, these means of individualizing the elementary sounds and powers of our letters in a visible manner to show as fully as possible accurate pronunciation, are to be used in printing every word in all reading lessons, not in a few new words at the end of the lessons, and those misspelled, as is now the case in our readers.

This seventh essential in illustrating phonics places ever before the pupil in reading a full and complete illustration of the "accurate pronunciation and spelling" of all words in every reading lesson. This will very materially improve not only reading in every respect, but also "spelling" in dictation, since the pupil, recalling the mental picture of words he has seen, sees mentally the vowel sound, consonant function, silent letters, accents and syllables, and has contrasted therein every element of both pronunciation and spelling, hence the latter is easy of reproduction.

Thus by giving pupils the means of "seeing" all that can be seen in pronunciation and spelling, our readers will show the truth as they should, our school dictionaries be easily interpreted, and grammars of foreign languages as French and German will indicate in a familiar manner how foreign words are to be pronounced. Will not every one say, "Let the 'Truth' triumph"?

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## TEACHING PATRIOTISM.

# TEACHING PATRIOTISM.

## E. W. BRUCE, M.A., TORONTO.

Love of one's country is patriotism, the passion which leads a person to serve his country with zeal. The definition of patriotism which has been handed down to us through the ages is "to die for one's country." And nearly everybody associates patriotism with death. But true patriotism means life, to live for one's country. Any person who has made his country better for his having lived in it is a patriot. A patriot lives for his country because he loves his country. It is his birthplace. It contains the old homestead where he learned to lisp his mother's tongue at his mother's knee. The old school house where he acquired a still further knowledge of his national language has ties that can never be effaced. The old country seat where he acquired his growing muscle and his young strength fills his mind with grateful remembrance of his father's example. The scenes and haunts of his sportful boyhood days are ever fresh. In his quiet and thoughtful moments, too, his Sunday school class mates and their painstaking teacher are not forgotten, nor is the faithful minister who "allured to brighter worlds and led the way." Thoughts like these made Goldsmith, when tramping over continental Europe, away from his own country, write to his brother and say,

> "Where'er I roam, whatever realms to see, My heart untravelled fondly turns to thee."

Since true patriotism means to live for one's country, teaching patriotism resolves itself into making the best citizens. There are the two chief agencies. The mother is the first teacher. It is she who first instils into her child the germs of true patriotism. Napoleon when asked why the soldiers of England were superior to the soldiers of France, gave all the credit to the superior English mothers. Then the teacher continues the education of her child. President Lincoln gave the teachers the credit for the overthrow of slavery in the southern states. It was they who inspired the idea into the future soldiers of the north, that it is unpatriotic to make a bondsman of a brother human being. These two, the mother and the teacher, have in their hands the moulding of the nation's destiny. As are the mother and the teacher, so is the nation. But I think the major portion of the nation's development is the province of the teacher. It is the latter chiefly, who holds the hands and hearts of to-morrow's nation. It is the great and serious duty of the

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teacher, therefore, sustained by the devotion of the parents of the taught, at all times to keep in view the perpetuity of national life. To fit his pupils for life should be his aim, to give them the training in mind and heart that will enable them to take up life's work with the assurance that they can be useful to society, to inspire them with lofty notions of existence and hope for prudent service, to make a citizen whose intelligence, moral rectitude, and steadfast virtues will counteract all kinds of disintegrating forces and social disorder.

The patriotism which can thus be developed in the schools is of two kinds: first, that which comes through exercise of the emotions; secondly, that which comes through a knowledge of the rights and duties of the citizen.

As a basis for teaching emotional patriotism, we have the universal instinctive love of home, which draws its earliest breath from the caressing touch of a mother's hand, which is hallowed and strengthened by the sacred relations of the family, which throughout life is the anchor to upright conduct, nobility of character and good citizenship. The question of the teacher is, how upon this basis can he best build up loyalty and love of country in the hearts and intellects of our children.

The word patriotism implies fatherland, and it implies something more, the love of fatherland. What is the fatherland? To the young child it implies the small piece of soil on which he was born. As he grows older it implies his school section, the township, the county, the province, Dominion, the British Empire. Should fatherland end here, or loyalty to fatherland end with being true to British institutions and loving only the free people of our own blood who worship British institutions? Should we not rather go a step further and say as the British Empire forms an integral part of the world, then the whole world is our fatherland and our sentiment will be love for humanity all the world o'er. If so, let us teach along these lines, and pray for the time when the whole world will be organized into a symmetrical whole, when the armies of the world will be turned into the paths of productive industry, and international law will control and settle all the affairs of the world, and then we will have the poet realizing its federation.

The transition from love of home to love of country is easy. The love that finds expression in "Home Sweet Home" is universal. That touch of nature makes mankind akin. We all love the home of our birth; that much is instinctive, untaught. As a pernational f should be annals of a of law, ju becomes of understood will stead through it

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y. The d. That he of our "Breathes there a man with soul so dead Who never to himself hath said, This is my own, my native land ?"

As a perpetual inspiration to patriotism, every school should have its national flag or emblem. The significance or symbolism of the flag should be explained, because when uplifted it concentrates in itself the annals of a nation and all the traditions of an empire. It is the symbol of law, justice, protection, liberty and government, and therefore it becomes of additional value in proportion as its symbolism is better understood and its story more fully known. Sentiments of reverence will steadily develop as it dawns upon the mind of childhood, that through its flag the nation guarantees their inalienable rights.

A passerby one day noticed that the boys of a certain school, as they approached the flag flying over their play ground, took off their hats. This having sent a spirit of thrill through him, he on enquiry found that the custom grew out of the following incident: A heedless boy one day sent a stone through the waving flag. Some few of his companions started an outburst of approving laughter which was suddenly hushed by the grave aspect of the approaching principal. Pointing toward the ugly rent, he asked "Who has dishonored his country?" The culprit hung his head and said he was willing to pay for the damage. He was at once interrupted with, "What price can repay an insult to the flag of your country?" "It's just an old piece of bunting," The stern gravity of the principal's face increased. said the boy. "To insult that old bunting is to insult your country. Where there is no love of country, there is not a good citizen." As the principal spoke he moved nearer the flagstaff. "Hats off!" he ordered, and simultaneously every head was uncovered. "And now on your honor, let no boy ever approach this banner except in love and reverence."

Why did the old principal respect and reverence the flag? The following poem on the Union Jack contains the answer:

"It's only a small bit of bunting, It's only an old colored rag,
Yet thousands have died for its honor And shed their best blood for the flag.
It's charged with the cross of St. Andrew Which, of old, Scotland's heroes have led;
It carries the cross of St. Patrick For which Ireland's bravest have bled,
Joined with these is the old English ensign, St. George's red cross on white field,
Round which, from King Richard to Wolsley. Britons conquer or die but ne'er yield. 249

D

It flutters triumphant o'er ocean, As free as the wind and the waves

And bondsmen from shackles unloosened 'Neath its shadows no longer are slaves. It floats over Cyprus and Malta,

O'er Canada, the Indies, Hong Kong; And Britons, where'er their flag's flying,

Claim the right which to Britons belong. We hoist it to show our devotion

To our Queen, to our country and laws; It's the outward and visible emblem

Of advancement and liberty's cause.

You may say it's an old bit of bunting, You may call it an old colored rag;

But freedom has made it majestic,

And time has ennobled the flag."

The different colors should be explained. The traditional color, red, indicates courage; white is the emblem of purity, and blue is the emblem of truth.

I was much impressed with the method a mother once took to instil into the mind of her ten year old boy the answer to the question he asked her; "What is showing colors, mother?" This mother was not strong, but she had the heart of a patriot, and she was devoted to the cause of freedom. Love of country was to her next to love of God. Her loyalty to her flag was as true as her faith in her Bible. She began to knit a pair of mittens for her boy, and upon the back of each, she fashioned the flag of her country, knitting it in as she went along, so that it was a part of the woof of the mittens. Standing by her side the boy watched the shining needles. She gave him the history of the flag, as she threaded the red, white and blue, into her work. She told him how many and how great have been the sacrifices for its defence on land and sea; and as the boy looked and listened, he felt as if he were standing on holy ground. "There," she said gravely when the mittens were done, "when you wear these you will show your colors, you must always show them." So the little boy wore the patriotic mittens for the first time to church, and after that to school and play. He was proud of them and he never forgot their pictured lesson. Enthusiasm for freedom and country, fidelity to truth and duty, love of honor and right, had all been knit into his young life, by his good mother's teaching, as her needles had knit the flag into his mittens. Shortly after the faithful mother died; but the boy became a man. The time came, as it happens to every man of affairs, with the temptation of the world around him, when it seemed more profitable to be shrewd and unscrupulous than to be strictly honest. In his office hung a st the prote for him so backs, tha show his was true a He was as wrought h

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hung a strange little picture. There, mounted in a neat frame, behind the protecting glass, were the identical mittens his mother had knit for him so long ago; the very pair with the flag of his country on their backs, that he had worn in the old days when she told him he must show his colors. In the man's heart the boy's reverence for all that was true and noble came uppermost, when he looked on his early lesson. He was ashamed to do a questionable thing. The little frayed mittens wrought by the fingers of a dead mother were a monitor to him.

Again, patriotism may be silently and powerfully taught by having appropriate and suggestive pictures hung on the wall. National holidays, too, memorial days and decoration days, may be freely used to implant ideas of genuine patriotism into the natures of our children.

Have the parents and friends of the children come to the school occasionally, and in recitation, and patriotic speeches and in song, instil into the young mind love of country and deepen their spirit of fervency and zeal and loyalty.

I doubt after all, if there is anything better from an emotional standpoint in teaching patriotism than singing it. The human voice is wonderful in its influences. The sound of the human voice, especially in uttering musical sounds has a most peculiar and mysterious influence not only over the human but the brute creation. When cultivated, it has almost magic power in inspiring and controlling feeling and sentiment. It softens human nature, helps to quicken the intellect, elevates human life, and brings mankind into closer relationship and harmony with the laws and processes of the great universe of which he is a part, and with the sublime laws of his own life and being.

> "Where'er in rich creation Sweet music breathes, in wave or bird or soul, "Tis but the faint and far reverberation Of that great tune to which the planets roll."

Let us now consider shortly, the teaching of the knowledge side of patriotism. Education should, by all means, include character formation. On the first day and on the last day and on every day between, some principle of practical ethics should be inculcated: obedience and courage, honor and courtesy, honesty and charity, truthfulness and justice, self-control and self-denial, attention, industry, self-respect, patient labor. These are the prime elements of fine manhood and womanhood, and it takes every one of them to make a patriotic citizen.

In the history of our country, we meet with the very finest topics for the inculcation of lofty patriotism. Nowhere is found such loyalty as was shown by the United Empire Loyalists, who gave up their

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homes, farms, companionship and wealth, and took their wives and little ones into an undeveloped and almost unknown land, because in Canada they would have their own loved British institutions and live under their old Union Jack.

> "Right staunch and true to the ties of old, They sacrificed their all, And into the wilderness set out, Led on by Duty's call. The aged were there with their snow-white hair And their life course nearly run, And the tender, laughing little ones, Whose race had just begun."

The patriotic gems of literature should be read and studied and the best of them memorized. These will broaden the pupil's view of patriotism, and show him, that in all lands and times, love of country has been regarded among the worthiest emotions of the human heart.

Above all, and through all, let us exalt and inculcate a sacred devotion to the fundamental principle of local self-government so that the youth, knowing its value, shall have courage to preserve this priceless bequest of centuries of struggle, the inheritance we hold in common with all English speaking people, the keystone in the arch of freedom.

Teaching patriotism, in whatever way, means training and inspiring youth to live most worthily, to shape their lives after the models of humanity's noblest and truest, to develop their highest individual powers, and lock into their hearts the sublime word—*Duty*. LADIES A address wh the favor s thank you Annual Me 1898, and t this now fa standing its past, all the vention and did Longfell thing done, add strengt

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# OUR PROGRESS AND OUR AIMS.

## A. A. JORDAN, MEAFORD.

LADIES AND GENTLEMEN :—Allow me, before entering into this short address which every President must read as a sort of compensation for the favor shown him by the worthy electors of this Association, to thank you most cordially for the high honor done me at our last Annual Meeting by electing me to preside over your deliberations for 1898, and to state that it is with great pleasure that I greet you in this now far-famed and historic and most comfortable room, notwithstanding its comfort however, I hope to hear ably discussed, as in the past, all the questions that may arise during the course of this Convention and I trust that when we depart we shall be able to say as did Longfellow of his village blacksmith, "Something attempted, something done," and may it be attempted and done in such a way as to add strength, dignity and respect to this Association.

For this work I hope each one among you has come prepared with some new thought on each of the subjects to be presented. Leaving out the President's address, there is a tempting bill of fare. Be prepared then to contribute something. There is nothing like being well prepared. It is a good thing to be properly armed and equipped for a great Convention like this. Of course you could not be expected to be prepared—and perhaps your friends would be sorry if you were as well as the Irishman who sent a letter to a friend telling him how he was armed and equipped for the battle of life. He said that while he was writing, he had a pistol in each hand and a sword in the other. I hope you are all well prepared but not quite so well as this.

And now I trust for your sake and for mine that this meeting may be the most successful in the history of this Association, you know we are a year older, and consequently we ought to be a year stronger. You know we are severe sometimes if our pupils do not grow stronger and able to accomplish more, and we sometimes grow impatient, but not often—if they do not improve in their thinking, in their working and in their expression. The professor that I read of looked for improvement. He was examining a student and during the course of the examination he put this question to the student: "What is a virgin forest?" The student replied, "A forest where no one has ever been." The professor was annoyed and answered severely "Shall I never be able to induce you to express your ideas elegantly and classically?

Why could you not say, 'it is a forest where the hand of man has never left its footprints'?" 'His watchword was improvement, let ours be so too at this meeting and at all our meetings and let everything said be pithy and to the point.

Now, I wish to note briefly what we have accomplished since we have become—if I may so express it—self-sustaining, since we have become the Public School Department. Sometimes we *think* and *say* we have done nothing; have accomplished nothing; have *no* influence. Before thinking or saying that it is well to take stock. If, when that is done we find we have accomplished anything, no matter how little, it will be a stimulus to further progress, an encouragement, even if gentle, to go on.

First, then we have made some progress in the matter of attendance. This has increased of late years and to your officers and to you is due the credit. I have done what I could to encourage those with whom I have come in contact to attend. I am going to continue to do so. It is the duty of us all whether we are officers or not, to endeavor to make our meetings large and representative ones.

With this increase of attendance has come increased interest and so the good accomplished and the work done is ever finding a wider field of influence. Let us never imagine that we have our Conventions as perfect as they can be made, but let us rather, as a great man puts it, keep summing up the past, and keep striving to surpass its accomplishments in the future.

Then, again, we have made progress in solidfying opinion among the Public School teachers. Three or four years ago we all wanted something—we want it still—but we were not unanimous on many of these wants. Now there are a few points upon which we are almost, if not altogether, a unit. One of these is the absolute necessity of increasing the efficiency and permanency of our profession by raising the age standard of entrance and by other means pointing in the same direction. We believe that in the near future our efforts will be crowned with success. The only way in which we can expect success is by being united in our desires and requests. I believe, therefore, I am safe in making the assertion that opinion amongst us has crystallized in the past few years and that means progress. It means success when we do as the Irish corporal commanded his men to do at Waterloo: Fire simultaneously, all together and at once, we shall have great results.

Again, can we not claim that we have to some extent influenced legislation? Did we not for several years plead for a week at Easter for the rura in urban n we passed to the matter

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influenced at Easter for the rural teachers, as was the privilege enjoyed by those teaching in urban municipalities? At successive meetings of our Association we passed the same resolution and we went further, we aided in laying the matter before the other departments of this Association.

These responded heartily and in the General Association it was received very cordially. Now, what we asked for has become law and with its inception has come new spirit and an increase in the attendance in this Department, an increase which is bound to be augmented in the future as our Department becomes better known and more appreciated.

Besides, as our worthy President in 1896 pointed out, we have influenced public opinion, and as a result we have the Public School Leaving Course and examination and Continuation Classes established. Both of these tend to increase the efficiency and importance of the Public Schools. The examination of Public School Leaving work has been restored to the local Boards in accordance with our resolution passed last year.

And we not only have but we are influencing public opinion in favor of the Public Schools. The eyes of the Province are turning towards the improvement in Public Schools. I am strongly in favor of the secondary schools and I believe they are not receiving too much, but I submit that our schools are receiving much too little. In this connection Mr. McMillan's paper read before this Association some time ago, is well worthy of reperusal. So I am bound to say that after looking over the work we have done during the past few years, we have no reason to be discouraged, no reason "to writhe our limbs" and think like the jaundiced individual that every thing is off color; but I believe we have strong reason to be encouraged; strong reason to look ourselves square in the face and say we are proud of you.

Now, as to our aims. These may be considered under two heads, namely: 1, Legislative, and 2, Purely Educational. Under the first we aim at improvement in our educational system particularly in regard to details. We aim at suggesting from time to time, such changes in text books as may be thought desirable in the interests of the pupils of this Province. For example, this Department has suggested **a** change in the present system of drawing books. It has suggested **by** resolution that the present series of drawing books for Public Schools be withdrawn, and a new series prepared, consisting largely of blank pages, with a few well-executed models for pupils to see not to copy; said series to be accompanied by a Teacher's Manual, illustrating and explaining the work in detail.

As already intimated we have urged that rural teachers have the same vacation privilege at Easter as that enjoyed by urban teachers. We aim to continue to urge any changes that may be in the interests of pupils and teachers.

Again, we aim at suggesting desirable changes in the amount and character of the work to be done in certain subjects, or in any or all of the subjects on the school curriculum. For example, this Department requested that "The Forsaken Merman" be dropped from the list of selections for memorization at the Entrance Examinations. Our wishes have been complied with. We have from year to year suggested changes in the amount of history required to be taken at the same examination.

Thus far we have not been a unit on the question, but our purpose is to continue to examine the question, and no doubt, in the near future, we shall be able to see eye to eye on the matter. When that time comes, we shall not have long, to wait for the desired change. One thing I hope, and that is, that we shall pass only *one* resolution on this question at this meeting.

Again, we aim to have the Government grants to Public Schools increased liberally, and distributed on a basis different from that which now obtains. We have resolved that the basis of apportionment of legislative grants be dependent upon the following conditions, viz. :--(a) Building and equipment, (b) salary paid to teacher, (c) average attendance. We shall obtain this, or something equally good, in the near future. Why should we not? Is it not reasonable and fair? Have not the secondary schools in the past ten years made amazing strides in the character of the work, and in the character of the teachers who now enter ? Have not the increased grants, and the manner of their distribution, contributed to this development? Certainly, they have. We want something which will solidify and increase the permanency and efficiency of the primary schools. We are going to have it. It's coming. How do I know? Because we are a powerful factor in this commonwealth, and we are going to make our influence felt. And once more, we aim at securing for the Public School teachers their proper proportion of influence in matters connected with the control of educational affairs in this Province. We are always unanimous on this point. There are never any amendments to this. During the past ten years our star has been in penumbra, but now we are emerging, and although not yet satisfied, still the objects of that hope which "springs eternal in the human breast," are beginning to be realized. We are beginning to get there, and we are determined to keep our

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faces set in that same direction until the proportion of influence and dignity, to which we are in justice entitled, is ours.

Under the second head, I may say that we aim at assisting one another in the arduous work in which we are engaged. We wish to stimulate one another by our mutual experiences, to enterchange views on the work we are doing from day to day, to learn from one another what each is doing, and how each is proceeding in order to render his services to his pupils more efficient; to exchange views upon how to advance a school morally and intellectually, in order to mature in the pupils those elements which make good and noble men and women.

We have had some excellent papers in the past, papers which have been very helpful in showing us how others view the problems with which we have to battle from day to day, and from year to year. Some of these have stimulated us to rise to a higher plane ourselves. Others show us how to lift up the child with whom we have to deal, and still others which indicate how we may broaden and deepen our knowledge of the subjects we have to teach. A few of the subjects dealt with have been "The Ideal Teacher," "The Ethics of the School Room," "National Patriotism," "The Elements of our Population." These, and many others which could be cited, illustrate the point I wish to make. No teacher could listen to or read these papers without being filled with an ambition to be better, and to do better. In short then, under this head, we aim to stimulate one another, to rise to a full realization of the importance of growing ourselves unto the full stature of the truest and best teachers, and to reach the inmost recesses of the child nature, to study him, to understand him, to know how to deal with him, to enter into his feelings and thoughts. To be able to do this is worthy of years of toil. It is a wonderful power to be able to go down and think and feel as the child thinks and feels, and yet be strong and sturdy men and women. A man once lost a mule, and find him he could not anywhere, though he searched for him high and low. Then he offered a reward to anybody who could find him. After some days a half-simpleton of a fellow brought the mule to him and asked for the reward. The man said, "Joe, how did you succeed in finding that mule ?" "Well," said Joe, "I'll tell you." "I first inquired around until I found the last place where the mule was seen, and I sat right down on a log and I looked around me and fell to thinking, and I thought to myself, 'If I were a mule what would I do.'" He put himself in the place of the mule, and he succeeded very well. We are here to aid one another in doing this. We are here to assist one another by practical papers, practical suggestions, all bearing upon the every-day

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work of the school room. We are not theorists. We are not faddists. We have a few faddists in Ontario, but only a few, and we are sorry for them. We believe with all our powers in child study, but we have no patience with child study run mad. Here is an illustration which makes clear this point. A young child was being studied, and this was the result of the investigation : "Fear was manifested in the fifth week. The child was laid nude on a bed, whereupon he started and threw up his arms as though afraid of falling. His fears were removed by throwing a light covering over him, or by putting on a garment." We do not aim at child study after this fashion, for this is nothing more or less than unmitigated slop. We aim at studying the child in a rational manner. And whatever of use we may discover we gladly impart to our fellow teacher. We are not selfish. We are not like the teacher who taught on one concession, and who having found out a good method, suffered untold anguish of soul lest his fellow teacher on the next concession might hear of it and do as good work as he. Let us be glad we have not that spirit, but rather let us be glad that we have the spirit which realizes that it is more blessed to give than receive, even in school teaching. Our aims in meeting here from year to year are not selfish, but they are to make our profession noble in the highest sense; to so train and educate ourselves as that we shall not take second rank to any class of educators in the world; to rise to a fuller recognition that teaching is incomparably the greatest work on earth; the noblest creations of art fade and crumble, cities and nations and worlds grow old and pass away.

Minds only are immortal; the teacher's work alone endures; and that minds grandly developed; hearts attuned to the true, the beautiful and the good; lives devoted to every ennobling work; spirits occupying a lofty position among the eternal tenantry of God's boundless universe, are to be the everlasting monuments of the teacher's labors. In on interest was add of the p by the g the city beautifue mistake It was a seemed into the have re education Educa

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## SUPPLEMENTARY READING.

## SUPPLEMENTARY READING.

### J. W. ROGERS, TORONTO.

In one of the cities of this continent a student watched with intense interest the erection of a magnificent municipal building. As story was added to story the beauty of the structure attracted the attention of the passers by, and many were the expressions of satisfaction uttered by the grateful citizens. A few years passed, and the student, being in the city again, walked towards the building with a friend. "What a beautiful building!" he said. "Yes," was the reply, "but a great mistake was made in calculating its weight, the foundation is defective." It was too true. The walls were cracked and open, and the openings seemed as many mouths exclaiming "Beware!" Had the builder dug into the earth and laid his foundation broad and deep his pride might have remained. How many, alas! how many human structures educationally are like this.

Education has been defined as the harmonious and equable evolution of the human powers. This implies that in his natal state man possesses the foundation rock upon which may rest the superstructure of character, or the germs which, when matured, constitute all that is perfect in true manhood.

Set out on the pinnacle of the nineteenth century in an age of snap shots and electric speaking machines, man reads for the purpose of business or pleasure; even the youth seek entertainment in books, and the pastimes chosen are calculated rather to prepare them prematurely for the gay circle of fashion and sentimentality than for the wisdom and soberness of old age. How to make a living, how to succeed without pick and shovel, have been cries ringing through the past decades, till at this late hour of the century it is hard to get either children or parents to think that power, strength of mind and body, true manliness of character, is the grand object to be attained. Children are sent to school "to learn," not to be trained; to show what they know, to take diplomas, scholarships, and other marks of distinction, not to gather sound moral and mental power. Hence other factors in their education are lost sight of.

As the physical powers necessarily demand a perfect physical constitution in its embryonic state and proper nutritive acquisitions thereafter, so the mental also imply those favorable conditions which, when nourished by accretions of knowledge suitable for the present

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conditions of growth, produce a perfect condition of development. To take a concrete example, the child at first is unable even to distinguish what is food and what is entirely unsuitable for nourishment. Its nutriment is carefully selected and quantities regulated by wisdom born of experience and judgment. Later its own experience in the very assimilation of that provided by more mature judgment becomes the guide in determining what is to be the basis of future growth. It follows, then, that mental development must likewise be carefully guarded, even after the implication of a perfect natal condition. And as our tastes for food depend upon our experiences in alimentation so our knowledge becomes the basis of future desires in matters educational.

Consider for a moment the importance of the Grand Trunk Railway in developing the resources of our own Province. Yet how insufficient this would have been without the innumerable side lines or branches shooting off to outlying hamlets, thus bringing the whole into immediate contact with the centre. So, though teachers may have the grandest trunk system of imparting knowledge, it becomes insufficient without the side lights thrown on the work by the reading of books outside the mere texts prescribed by the Education Department. Therefore, admitting the importance of our unexcelled system of education, even it becomes the main or trunk line, while real development is to be based on the numerous side lines of supplementary reading which lie at the door.

It is a well-known principle in pedagogics that no new idea may be implanted in the mind without some principle in the inner nature of the student akin to that which is being taught. Thus the value of a dissertation on political economy before a class of Third book pupils must be placed at the minimum, while the ocular demonstration of the incorporation of a luscious pome is all that is necessary to prove in the same class the presence of the sub-lingual and sub-maxillary glands. Children readily recognize that of which they have some knowledge. These powers of recognition, what some psychologists choose to call "apperceptive centres," are the basis of all improvement and advancement. They are indispensable, and the chief business of the educator is to multiply these as far as possible in the children. under his care. How is this to be done? Certainly by the multiplication of their experiences. These may be acquired in various ways. The first and best is to let the pupil have the actual contact with the difficulties to be overcome. But life is not sufficiently long nor does it afford opportunities for this. Then let the children supply the experiences of others through imagination inspired by books suitable for

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their mental condition. Hence it is that children coming from homes where they have access to a good library grasp with ease the thoughts and principles under consideration, while those of similar age and temperament who have not had the same advantages acquire with some difficulty the complete mastery of such principles. Two causes may be assigned for this—first, a natural adaptability due to heredity, for the possession of the library indicates the intellectual tendencies of the parents; and, second, the experiences of the child in gaining from this library many ideas which prove valuable in the acquisition of educational principles which could not be acquired intuitively.

No higher object than the promotion of self-development can actuate the educators of the young. Teachers are not walking cyclopædias, nor is it in the interests of the child that they should be. The richest and gratest blessing they can bestow is the inculcation of a love of study, a desire to know, a purpose to seek out of books the treasures of the past, the golden links that bind us to the future. Are the texts sufficient for this? Are the dry details of history sufficient to establish a thirst after the knowledge of them? The experience of all teachers says no. The historical novel is as necessary here as the ballad, the song or the military display to the patriotism of the nation.

Who can ignore the value of Scott's "Ivanhoe" in marking the social conditions of the early Plantagenet period? How vividly the memory recalls the picture of Flodden Field portrayed in "Marmion"! What light "Kenilworth" throws on social life in the Elizabethan period. Such books serve the purpose of fixing the several features of the time on the minds of their readers. Disraeli recognized the value of the art when he attempted in the social novel to open the English Constitution.

This leads me to the subject of ideals. No man is better or greater than his ideal. What is an ideal, and how is it formed? Every one has some high standard of manhood, some man in his mind's eye who possesses all the qualities admired in the *genus homo*. Did such an one ever exist? No. He is the product and compound of all the good and noble qualities recognized in man, one good quality from one source, another from another, and so on, and all summed up in one the ideal. In short, he is the resultant product of past experiences.

Children strive to be like their ideals. They imitate the highest model of man or woman they know. Any art, mannerism or trait of character displayed by a favorite teacher or friend is quickly acquired. Why? Because it is human nature to do the best they can and that is to become like their ideal.

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"The ideal is to be attained by selecting and assimilating into one whole the perfections of many individuals excluding everything defective."—*Fleming.* 

"At certain times we observe ourselves at our best. Now we acquire with surprising ease; now imagination towers; now our thoughts are penetrating. We observe ourselves at these supremest moments and learn what high intellectual activity means. Through reading, hearing, and observing, we appropriate the experiences of the mightiest men at their best."—Baldwin.

Our efforts to become like our ideals make us great. To get these ideals we ought to read the best literature. And in this connection I would say that poetry and fiction are of foremost importance. They are the representations of idealized characters. They will hence tend to stimulate the imagination, will arouse the mind to greater activity and stronger desires to attain to the realization of the ideal. Biographies also produce good results. Lives of explorers, warriors, heroes, statesmen, historical characters, religious celebrities, all leave lasting impressions for good and elevate and ennoble our ideals.

> "Lives of great men all remind us, We can make our lives sublime."

Therefore the choice of literature becomes the question of the hour. The promiscuous reading of books is likely to produce mental effects analogous to those physical ones brought about by masticating all kinds of materials. That there are plenty of books to read need not be stated; the question is what shall children read? And in answer, I say anything in science or art that contains fundamental and logical truth whether couched in language matter-of-fact, parabolic, or allegorical. In truth much more can be expressed by a variation from the dry narration to, say, the parable. Who will say that the Master related an actual occurrence in the parable of the tares and the wheat? Who will deny that the truth was well taught? Let the book contain, then, elements of truth and purity.

There are dangers in attractive literature of the sentimental character, which leave the mind in a surfeited condition—unable to grapple with the problems which face the average youth of the day. Such books unfit pupils for duties, such as obedience to authority, sympathy for suffering fellows, promptness in action. They generate selfishness, awkwardness, self-consciousness or backwardness. Then what should be the qualities of their reading matter? First, it should supply information, and, second, it should arouse the mind to greater activity and inspire the soul with a desire for nobler and greater and better things. One of the p of the point elevate children of pure the and the mind an to keep

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characgrapple . Such mpathy fishness, should ly inforvity and things. One of the issues of a magazine called *Success* contains a photogravure of the promoters of the Atlantic cable. The grandeur of countenance, the nobility of character portrayed in such pictures, has a tendency to elevate and ennoble the race. They make adults consciously and children unconsciously, better. I say give the rising generation plenty of pure ideals, whether in the form of novels, periodicals or pictures, and the results will be found satisfactory. But as we value purity of mind and heart, the up-building and ennobling of the race, let us strive to keep away pernicious and low ideals.

Following up our high ideals, such a character is acquired, as will prove invaluable to the race in the product of thought. At no time in the history of the world has it been more desirable to have at the helm of state in all lands men of sterling character and richness of thought than at the present juncture. How can we expect thought, free independent unselfish thought, without a pre-eminent character? And how can this character be produced without experience? And how can we get the experience without the widest scope of pure literature.

The mechanics of reading must be taught. But much, very much, of the time should be spent in thought-getting rather than in thoughtexpressing. Give the child thoughts clearly defined, and the expression of them may be safely left to him. He should, then, live in the society of the best and purest characters, actual or imaginary. No one will doubt that living with those whose manner of life and character are ideal is of first importance. This is not always possible. But it is quite possible to supply in imagination through books the highest and best of society. Now let us consider what would be regarded as a proper mental equipment for a child. It is desirable that the mind should be as completely and as well furnished as circumstances will permit. Professor MacCallum, in his lecture on Fatigue and Rest in the Nerve Cells, points out that development depends not on the multiplication of the Nerve Cells, but on the duplication and extension of the protoplasmic prolongation of these cells. This, he says, must be begun in early life. Other scientists have limited the age for the beginning of new studies to a great extent and practice bears this out. These experiences then should be given early and on demand. A young man whom I know was desirous of obtaining in English, stories of Greek mythology. He enquired for years at bookstores for such books in vain. They may now be had. Time has made its demands on the treasures of the world and educators have supplied them. Those who know anything of Greek literature say that it is remarkable for the absence of sentimentality. While their stories abound

with the marvellous and the heroic, the soul-sapping sentimentality of a certain class of American literature is entirely wanting. No book in my experience outside of sacred literature is more elevating and more calculated to inspire with true ambition and holy regard for the rights of others than the revelation of the character of Greek heroes by Charles Kingsley.

Can we not get such stories for the young? Let the mighty catalogues that yearly charge the teacher or that represent the vendor's shelves crowded with new books, answer.

In determining what literature should be placed in the hands of children circumstances must be considered. No one can dogmatically state that this or that should be the book. Age, experience, heredity, must all be considered. When the age is tender the child should have stories told or read to them, and as the mind turns over and reconsiders truths already acquired, while the hands are employed with other things, so children when at play con over the stories read to them by wise mothers or teachers. Hiawatha may be divided into stories and told to children of tender age. Each character in it will bear close scrutiny and children love to have them retold. It is sometimes startling what phases of character children will supply in their imagination.

The demands which the needs of children have made on the authors of the nineteenth century have brought forth books in abundance for their special use. There are books on geography, on history, on botany, and other sciences, reduced to suit the minds of children of any age. "All the Year Round," a series on nature study is eminently adapted to the use of children of even infantile years. The pussy-willow, the lilac twig, the bean plant are personified, and their manner of growth revealed to the child. He is thus brought into touch with the phenomena of nature and the mysteries of it become an incentive to the acquisition of knowledge. "The Golden Lady," L. T. Meade; "Two Years Before the Mast," Richard Henry Dana, Jr.; "Lamb's Tales from Shakespeare," are worth much in the juvenile library. Lamb's Tales from Shakespeare reveals the substance of Shakespeare's dramatic works as they could not be revealed to children (or even many adults) from the originals, "Ten Nights in a Bar Room," by T. S. Arthur, is possibly too sensational, but it contains sound moral and social principles. Many of the standard authors are being specially prepared Ivanhoe, by Sir Walter Scott, is retold in language for children. suitable for Third and Fourth book pupils, the plot remaining and the language of the author retained where possible in keeping with the

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purpose of the book. Books of travel, books of adventure, biographies of explorers and their adventures, coupled with history, give life and reality to the dry details of the past.

But why continue, you know all these things, and are possibly better acquainted with books than I am. But I would like to recommend that in every class room of this Province a library suitable to the needs of the class be established. To secure uniformity they should be selected by and under the supervision of the inspector and the teacher. Responsibility could thus be maintained.

"Our mother, while she turned her wheel Or run the new-knit stocking heel, Told how the Indian hordes came down At midnight on Cochecho town, And how her own great uncle bore His cruel scalp-mark to fourscore. Recalling, in her fitting phrase, So rich and picturesque and free, (The common unrhymed poetry Of simple life and country ways), The story of her early days,-She made us welcome to her home; Old hearths grew wide to give us room ; We stole with her a frightened look At the gray wizard's conjuring book, The fame whereof went far and wide Through all the simple country-side; We heard the hawks at twilight play, The boat-horn on Piscataqua, The loon's weird laughter far away; We fished her little trout-brook, knew What flowers in wood and meadow grew, What sunny hill-sides autumn-brown, She climbed to shake the ripe nuts down, Saw where in sheltered cove and bay The duck's black squadron anchored lay, And heard the wild-geese calling loud Beneath the gray November cloud. Then, haply, with a look more grave, And soberer tone, some tale she gave From painful Sewell's ancient tome, Beloved in every Quaker home,

Our uncle, innocent of books, Was rich in love of fields and brooks, The ancient teachers never dumb Of nature's unhoused lyceum."

This in part represents the early history of one of America's greatest poets-one in whom was sown the seed of experience-which became

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a tree of character, and which bore and is bearing a great harvest of thought and action. Where did there ever exist a greater without there being in his earlier history a greater experience on similar lines. These experiences come from such teachers as the mothers of the first generation born in this Canada of ours, and co-existent with the mothers of the sons of New England.

Let us give young Canadians a store of such materials to build their lives of, and who knows but on their seventy-seventh birthday, on being presented by their loving pupils with a wreath of seventyseven roses they also may be able to say :--

> "For life to me is as a station Wherein apart a traveller stands, One absent long from home nation In other lands,

And I as he who stands and listens Amid the twilight's chill and gloom; To hear approaching in the distance

The train for home."

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# KINDERGARTEN DEPARTMENT.

# SULLY'S "STUDIES OF CHILDHOOD."

BY F. TRACY, B.A., PH.D., UNIVERSITY OF TORONTO.

Professor Sully's "Studies of Childhood" does not pretend to cover the whole field of child psychology, but deals somewhat fully with a few important topics. At the request of the Association I propose making a few remarks upon this contribution to the literature of genetic psychology.

Probably one of the most commendable features of the work is its cautious and conservative tone and its freedom from hasty generalizations. Over and over again Professor Sully calls attention to points upon which, as he remarks, "more observations are needed." This attitude of care and caution must commend itself to everyone who has observed on the one hand the recklessness with which general statements are made in some quarters, based upon entirely insufficient data; and who has on the other hand appreciated the extreme difficulty of properly interpreting the facts observed. "The phenomena of a child's mental life," Professor Sully remarks, "even on the physical and visible side, are of so subtle and fugitive a character that only a fine and quick observation is able to cope with them. But observation of children is never merely seeing." It is one thing to see the movements and gestures of children, and hear the sounds they utterit is quite another thing to declare with certainty what is the character of the mental state of which these sounds and movements are the "outward and visible sign." I am convinced that it is a matter of the greatest difficulty to know for a certainity that you have given the proper interpretation to what you have seen and heard. Among adults there is a certain conventional vehicle of expression, by means of which we can, if we choose, directly declare to one another our mental states. But the observer of young children has to contend against the difficulty that his subject has not yet attained to a perfect control of this vehicle of expression. I hope I do not minimize the difficulty of reading the adult mind; a difficulty just as great as in the former case, perhaps, and yet arising from a different cause. In the case of the adult, the difficulty arises from his power of concealing

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his thoughts; in the child it arises from his lack of power to express his thoughts.

Another very commendable feature of Mr. Sully's book lies in his full appreciation all through, of the individual differences that exist among children. He is fully aware of the fact that all children do not "rigorously correspond to one pattern, of which we have a perfect knowledge." Here, again, we are in danger of falling into one of two opposite errors. On the one hand the error of supposing that all children are alike in every respect, and that therefore the same theories, the same discipline, the same lessons, the same kind of encouragement, the same kind of rebuke, the same everything, will do for all the pupils in the school; that the one thing needful for the teacher is to provide himself with a theory concerning the training of that abstraction called "the child," and straightway to apply that theory without modification or adaptation, to all and sundry who come to receive instruction at his hands. The consequences of this error are of course baleful both to teacher and to pupil. The teacher stagnates completely; fails entirely to come into sympathetic living relationship with his pupils, and wonders why he fails; and as for the pupils-well, those whom the theory happens to fit will manage to worry along, provided they be of robust constitutions; those whom it does not happen to fit, will as likely as not be strangled by it.

But occasionally we find a teacher who is more likely to fall into the opposite error of supposing that no two children are alike in any respect, and that therefore he must be everlastingly experimenting with every child who comes into the school, with regard to the most primary and fundamental capacities; that he must not take anything for granted but must test everything, small and great, in each individual case. This latter error reduces the teacher to a mere rudderless empiric, and the pupil to a victim of his constant and superfluous experimentation. There are surely some things that do not require to be tested over again with every child. All children the world over are alike in some respects. There are some laws of mental development that may be called universal laws; and because this is so, there is hope that some day pedagogy and psychology, upon which pedagogy must ever be based, shall be worthy to be called sciences. There can never be a science of education unless there are uniformities of mental development. The true view here, as everywhere in inductive sciences is to recognize the co-existence of uniformity and diversity-of general uniformity with respect to the type or genus co-existing with marvellous and inexhaustible variety of individual characteristics. This is

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# SULLY'S "STUDIES OF CHILDHOOD."

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how God has done His work everywhere in nature, and this is how He has done it in the realm of developing intelligence. There are no two trees in all the world exactly alike, and yet all trees are alike in some respects. There are no two children exactly alike in all the world, and yet in some respects all children are alike the world over. To my mind this is one of the most encouraging things about the study and practice of pedagogy, viz., that we are neither shut up to the dead monotony of an unvarying uniformity, nor bewildered by a chaos of unregulated diversity. But in every child who comes to us from the Creator's hand, we behold the same divine type clothing itself in individual expressions that are ever new and fresh and interesting. This constitutes the charm and delight of the teacher's vocation.

It might be worth while to refer to another topic on which Mr. Sully has had the wisdom to steer his way along what Aristotle would call the happy middle way between two vicious extremes I refer to his treatment of the child's moral nature. On the one hand it seemed to be taken for granted by some teachers, especially of the older school, that children come into the world with a moral nature that is essentially evil, and that if they are ever to have a single good thought or desire, it must be thrust into them from without, and that therefore the main business of the teacher is to thrash the demon out of the child, to repress in every possible way his natural tendencies, on the assumption that it is perfectly self-evident that all those natural tendencies are downward only. To the teacher of this school it was just as certain that all children are evil and evil only, as that things equal to the same thing are equal to one another. It was one of those propositions that neither *require* proof nor are capable of proof (we may grant the latter half of the statement).

But the other error is even more pernicious, if that is possible. I refer to that tepid sentimentalism, which in our day seems to be crowding the old rigorism entirely to the wall; that sentimentalism which falls down daily and worships, offering incense at the shrine of immaculate childhood; that sickly theory that assumes that all children are little angels who never go wrong until we teachers and parents in our stupidity and brutality drive them wrong; that declares that the teacher has nothing to do but let the child lead him, just to watch for the indications of the natural tendencies and foster them in every way, assuming that these natural tendencies of course are upward. According to this view of things it is a crime to punish a child, the teacher can and must do everything by love. Give the child everything he asks for, do not repress him in anything, for in so doing you are stultifying some divine instinct in him.

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Now I have stated both these extremes nakedly and perhaps in a somewhat exaggerated form, but I have myself met with teachers whose ruling maxims were not essentially different from what I have stated. Need I say that these positions are both one-sided and false: or at the very best that they are only half-truths. The little child is neither the vicious monster of the one picture, nor the spotless cherub of the other. In fact, as Professor Sully remarks, he is not, strictly speaking, a moral being at all as yet, and there is a certain impertinence in trying to force him under our categories of good and bad, pure and corrupt. The infant is neither moral nor immoral, he is *non*-moral. He is everything potentially, he is nothing actually. In him there is no morality at all, but only the raw material thereof, in the shape of tendencies, some of which are pro-moral and others contra-moral. There is no other animal, which, on its entry into the world is in actuality so little, in possibility so much. He has it in him to scale the divinest heights of holiness, or to sink to the lowest depths of depravity; but at the outset he is neither holy nor depraved. We must beware here of over-interpretation. We must not read too much into his conduct. It is not fair to call him a thief because he shows himself supremely indifferent to the distinction of meum and tuum, to put him down as wholly egotistic because of his boundless greed, or to describe him as a savage because of his violent fits of passion. He is terribly cruel to animals sometimes, but this is not cruelty in the real, strict, moral, meaning of that term. He does not vet understand suffering, and its outward expression, and if at one moment he does an act which looks like boundless selfishness, very likely at the next he does something else which looks like beautiful generosity, but in both cases the motive is lacking which would be necessary to give the act the pronounced moral character which we might be tempted to assign to it. He often tells falsehoods, but it would be exceedingly rash to call them lies in every case, without more careful consideration. In many instances they are spoken in perfect sincerity and full belief of their truth. The child himself is deluded by the vigor of his own imagination. A similar remark may be made regarding his relation to authority. The young child is neither obedient nor disobedient by nature, but there are in him impulses in both directions.

If the immediately preceding remarks seem to apply more especially to the infant and the child below school-age, there are similar remarks which apply to the child who has come under our instruction in the school. It is a mistake to assume that our pupil is wholly bad; it is as so yet far m he is in f of his ac good, and obstacles wrong, as The way make it s rigorous n as Rousse violation purifies a ing, which

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## SULLY'S "STUDIES OF CHILDHOOD."

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e especially ar remarks truction in holly bad; it is as serious an error to assume that he is wholly good. He is even yet far more a creature of impulse than of deliberate motived action; he is in fact on the way from the impulsive to the deliberative stage of his active life, and these impulses are just as likely to be bad as good, and vice versâ. And it is not the teacher's only duty to remove obstacles out of the child's way; it is equally incumbent on him to put obstacles in his way, to make it hard and unpleasant for him to do wrong, as well as to make it easy and pleasant for him to do right. The way of the transgressor should be made hard, and if you cannot make it sufficiently hard in any other way, then fall back on the old rigorous method of inflicting corporal pain. This is nature's method, as Rousseau pointed out. She always visits with her penalties the violation of her laws. This is the method of the Divine Teacher who purifies and exalts the character of his children by means of chastening, which for the present seemeth by no means joyous but grievous.

There are two chapters in Mr. Sully's book devoted to the Art of Childhood; and here is to be found some of the newest and best material in the whole work. A large number of children's drawings are reproduced and some generalizations made which ought to be of great service to the teachers of this subject. The earliest infantile drawings are merely free, aimless, swinging movements of the pencil to and fro, arising out of the impulse to muscular movement, and only very remotely connected with the thought of reproduction or imitation. This was just what we would expect if we remembered that the earliest movements of children are *impulsive* rather than *deliberative*, and that they use the larger muscles first and the finer ones later on. After passing through this impulsive, non-imitative stage, juvenile drawing tends to assume what Sully calls the character of primitive design; i.e., the figure is now intended to stand for the object, and yet there is but little attempt at anything like exact representation. The figure is largely symbolic rather than imitative; e.g., a large rough square with possibly a couple of marks leading off from the lower corners does duty for a man. It is not to be supposed for a moment that the child believes himself to have produced an exact representation. The need of detailed representation has not yet occurred to him. Then gradually his drawing comes to be more fully representative and reproductive, and here it is very interesting to observe how those features that play the largest part in our psychic life are given the most prominent place in the drawing. When first the hands and feet are drawn they are apt to be very much exaggerated in size; and as for the eyes, those all-important features of the face, upon which so much

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depends, they are usually enlarged out of all proportion to other parts of the face, and the child is so impressed by their importance, that he usually places them both in his picture even though it be a profile.

The short chapter with which the book closes, (a condensed account of the childhood of George Sand, compiled from her autobiography), is a gem, which no oneinterested in children from any point of view, can afford to miss. The account of her intensely vivid imagination, her original and striking interpretations, and above all, her self-evolved religious system, with its elaborate ritual, its temple among the shrubbery, and its god Corambé—all this constitutes one of the most interesting bits of child literature with which I am acquainted.

I have avoided all adverse criticism of Prof. Sully's book, and contented myself with calling attention to a few of the principal truths upon which he has laid something like the necessary emphasis. In spite of one or two points on which I cannot feel the force of Mr. Sully's arguments, I think I am within the mark in saying that this volume, the "Studies of Childhood," with its careful description of facts, its admirable arrangement of topics, its cautious and conservative generalizations, its modest tone, its fascinating style, and its wealth of illustrations, is certainly the most readable, perhaps the most valuable, work on this subject written in the English language. The earlier play, and to educa to any ounderlier games.

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# THE SPIRIT AND METHOD OF THE GAMES.

# THE SPIRIT AND METHOD OF THE GAMES.

# MISS JEAN R. LAIDLAW, LONDON.

The earlied expressions of the child-mind are always in the form of play, and the Kindergarten, based upon a study of child-nature, aims to educate through and by means of play. But play is not restricted to any one exercise or to any one hour in the Kindergarten. Its spirit underlies the exercises with gifts and occupations as well as the circle games.

Freebel recognizes the universality of this appeal to the child-mind in his commentary on the Taste Song, where he says :---" Who does not know and rejoice that you, dear mother, can carry on everything as a game with your child, and can dress up for him the most important things of life in charming play ?"

Both in Freebel's writings on the Gifts, and in the Mother-Play, we find much written that bears directly upon the games of the circle, and from these I recall a few paragraphs.

In discussing plays with the ball, Froebel says :--- "The spirit in which a play is conceived and originated, as well as the spirit in which the plaything is treated and the play played, give to the play its significance and worth." (Pedagogics.) Again, commenting on the use of the second gift, he says :--- "One must not wilfully go on with this or that play in opposition to the wish of the child, but always follow the child's circumstances, requirements and needs, and his own expressions of life and activity."

The earliest plays of the child give him control of his limbs and senses, but Froebel reminds us over and over again that "the fostering of the innermost spiritual life of the child must begin at once with birth, and must be directly connected with the care of his bodily life." (Pedagogics.)

The mere external training of the child is not Freebel's object, but the "getting hold of the innermost springs of his being which make him yearn to adapt himself to the universe about him;" and culture is never considered as an end in itself, but only as a preparation for a life of service.

The games employ the whole child, body as well as mind, and it is especially important in considering them to remind ourselves of the effect of our actions in determining the child's spiritual life.

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I quote again from Froebel :—"Through the attitude of others towards himself the recognition of what is good should be awakened in the child," and from this also should come the feeling, later to develop into thought, that "my parents, and also the grown-up experienced people around me, not only exert themselves to supply the outward needs of my life, by food, clothes, shelter, and even by means of exercise, employment and play, but they are actually anxious, also, to develop my powers and capacities, to foster my inner life, to fulfil the requirements of my heart and mind. And this fostering of my innermost being is actually the ultimate foundation and aim of all their outward care." (*Pedagogics.*)

"The child is incited towards pursuit of the good not only, or even chiefly, by the recognition accorded himself, but by the respect, consideration and honor shown to the good in others." (Mother-Play.)

"The most active and influential force in the education of your children is your own true character." (Mother-Play.)

Concerning the place of the games, in the Kindergarten system, no one has written more forcibly than Dr. Harris:—"The Kindergarten, in using the gifts and occupations, does not use the best that Froebel invented. The peculiar Froebel device is found in the plays and games. The child in the plays and games in which all join (pupils and teachers) ascends from the world of nature to the world of humanity; from the world of things to the world of self-activity; from the material and earthly to the spiritual.

"In the gifts and occupations he becomes conscious of his will as a power over matter, to convert it to use and to make it the symbol of his ideals. But in such work he does not fully realize his spiritual sense, because he does not find anything in it to make him realize the difference between his *particular* self and his *general* self. In the plays and games he becomes conscious of his social self, and there dawns the higher ideal of a self that is realized in institutions, over against the special self of the particular individual.

"In the songs and pantomime the child uses his self-activity to reproduce for himself the doings of the world of society. He produces a reflection of this world of human life above him, and repeats to himself its motives and its industries, putting himself in the place of the grown-up citizen and mimicking his mode of thinking and acting."

This development of the child's social self is rightly considered the most important function of the Kindergarten. The development of the child individually can be done in the home, even where there is but one child. He can be trained to use his body and his intellect, and can be taught comes f active l of abou

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taught obedience, reverence and helpfulness; but self-reverence that comes from self-knowledge, and the moral training that will fit him for active life with his fellows, can be gained only where several children of about the same age play together.

In this playing together the child comes to see the necessity for law, and the necessity for co-operation—the principle that underlies civilization. From these perceptions should be developed the habit of obedience, and of each individual contributing to the whole.

Imitation is not less important here than in an earlier stage of the child's life. He imitates people and things, and through his imitation penetrates to the cause of action. In each of his imitations he takes on the nature of the thing imitated, and thus his personality expands. Each new experience adds power to his imagination and aids in the final conquest of space and time. The child plays partly through delight in the activity, partly in the unconscious endeavor to understand himself and the world. Left to himself his plays are aimless, and sometimes frivolous, so that guidance is a help.

The spirit of play is the spirit of joy, and imagination is the root of joy. The more joy in the spirit of the games, the more power have they to develop the children.

The games are one form of self-expression, and as much liberty as possible should be allowed. This means freedom to choose and freedom to originate, but obedience to all laws for the good of the whole. Not repression, but not license.

Suppose our circle gathered together, and the first thing to be thought of, is how we stand. "Are we on our heels ready to fall backward, or properly poised and alert?" Remember that our children copy our ways of standing and walking, as well as our spirit.

In our walking games (or marches) there should be enough variety to keep the children's thoughts busy. They should not be a mere repetition. As the children grow in bodily control and intelligence, there should be a corresponding change in the marches.

When the children come to Kindergarten, the first thing to be begun in the bodily training is the development of the sense of rhythm. This includes ear-training and balance of the whole body. It may be begun in the ball exercises, and is helped by singing simple little airs without words, with rhythmic clapping. Rhythmic games in which the whole circle take part are especially desirable. Of these "Equal Measure" (Mrs. Hailmann), "Ring-a-round a posey bed," "On the bridge now while we sing," and for older children "Looby-loo," and Froebel's beautiful Transformation game have been found helpful. In these games

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the child sees more clearly than elsewhere the relation of each member to the whole.

There is much need for a better understanding of the meaning, and of the effect upon children, of different rythms. It is desirable to draw the children's attention to the different rhythms used, and to have the time of the music counted. The  $\frac{2}{4}$ ,  $\frac{4}{4}$ ,  $\frac{3}{4}$  and  $\frac{6}{8}$  time can be easily observed and eventually recognized by the children.

The dancing and skipping games have a special service to perform in giving balance to the whole body. A large majority of both four and five-year-old children that enter the Kindergarten are quite unable, when they come, to dance or skip with both feet alike. When they have watched others dance they soon notice differences of gait, and set themselves to practise aright. Great is the joy of achievement!

To a certain extent, the games so far mentioned may be classed as activity games, and the nature and trade games as symbolic or representative. But to Froebel each of these exercises was symbolic, and the physical gain only prefigured the spiritual. We see this in his explanation of the game of tossing the ball and catching again, from which "the child will learn to hold fast the one high purpose amid all the vicissitudes of time and place."

Miss Blow points out that the symbolism of the Kindergarten is of two kinds. The first is described in Wordsworth's ode—

## "Behold a child among his new-born blisses,"

and is found in the trade games. The second kind is found in the game of the bird's nest, wherein the mother-love of the bird is a picture to the child of the mother-love that cares for his own life.

In choosing games choose the most typical. If there are several settings of song or game, choose the most poetic words, the best music. Some of the songs found in our music books are a mere recital of facts. Let the facts come in story, picture, occupation, etc.; and *don't* choose your song by the number of facts it fixes in the child-mind, but by its images. To make clearer what I mean I would have you compare the "Wind Song" in the Hill book with Stevenson's song in Eleanor Smith's.

Sometimes in developing a special thought in the Kindergarten, we find we have gone over more ground than any game in our books, and the play seems not complete. If you can write a song better than any you have, do so, but aim to have it above the children's intelligence rather than below, and give them something to grow towards. The pia hands a ga

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garten, we books, and r than any ntelligence s. The piano can add much to the spirit of the games, but if not in good hands a game is sometimes better without it.

In the nature games let us be sure that it is the spirit and not the literal thing we try to represent; and let us remember that there are some things we cannot represent at all. To myself it always seems a desecration for anyone to try to represent the sunshine by dancing or skipping on the circle. I would much rather have a child represent the *wind*, although in leading him to realize the power of the wind, I find it is the tree, the weather-vane and the windmill that he tries to represent; and my *aim* is to lead him to see that there are powers in the world that we know without seeing, through their effects.

In the games, as elsewhere in the Kindergarten, the idea of connection is kept in mind. The connection may be, as in the gifts, either a connection of purpose or a connection of form. If we have a windy day on the circle and represent the things moved by the wind, we illustrate the connection of purpose. The transformation game is a type of form-sequence.

While there should be connection in the games this does not imply that the games are chosen by the Kindergartner. She will help to make the connection. It may be a long time before the children of themselves choose naturally a series of connected games, but *that* is the sequence that should be our ideal, and not a sequence formulated by ourselves.

Sometimes after a skating game a child chooses to be a butterfly. Then we change from winter to a summer's day in the Kindergarten, and we have our chance to recall the story of the butterfly. While the games and songs should be connected with the other work of the Kindergarten, and the child's daily life, they should not be limited by it. They are to be connected with the child's past, as well as his present. Sometimes a much loved song is asked for months after we have ceased to sing it in the Kindergarten. (Wake ! says the sunshine and Santa Claus.) I am glad when this happens, because it goes to show that the song has been of lasting value. For children recently arrived in Kindergarten, with whom the song has not been developed, it is a glimpse beyond, and—

# "A man's reach should exceed his grasp."

It is sometimes very difficult to get much original suggestion from the children. The marches can be made to help in this, and very useful games to stimulate invention are, " Equal Measure," "Did you ever see a lassie?" and " Welcome little traveller."

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Where the circle is as large as we generally find in the Public School Kindergarten, it is well to have many of these games in which all can take part. One of the difficulties in most of the Kindergartens is the difference in age of the children. Where there are children only four years old they are not easily interested in watching others play, and the games they most need are not the ones that appeal to the children between six and seven. If the circle is very large the problem is harder to solve. Sometimes the ball games will help to solve it, as they interest children of all ages. This mixing of children of different ages implies that some of the children do not repeat all the steps in the development of the game.

If any present are not familiar with Froebel's chapter on movement plays (*Pedagogics of the Kindergarten*), I would advise its careful study. In it he shows the genesis of several series of plays, including some that have their starting-point in the ball. In the course of one of these series the children after winding from the circle return to it, facing outward instead of to the centre, when, of course, their attention is called to their changed position and a comparison made between the present and their former position. Of this Froebel says :--

"Such comparison is essential to help the child to clear insight. In so far as play affords this comparison it has a developing, educating, formative influence." (*Pedagogics*, p. 282.)

Do we always direct the child's observation enough? Is there not danger that sometimes we trust too much to the influence of the symbol, and fail to help the child enough in his effort towards selfconsciousness? It was g a few pracing of you object, the terms to pushould I be tion of a conclusions insufficience view of it.

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CHILD-STUDY (AN ABSTRACT).

# TRAINING DEPARMENT.

# CHILD-STUDY (AN ABSTRACT).

## T. A. REID, OWEN SOUND.

It was particularly requested that I should in this paper introduce a few practical phases of child-study having some bearing on the training of young teachers. While my paper may fall far short of this object, the request makes my work easier, for I am not obliged by the terms to propound any theories and support them by argument; and should I be found doing this, bear in mind that I am taking the position of a learner making observations, and very naturally reaching conclusions—conclusions which may be erroneous because of the insufficiency of the data, or from my failure to take a comprehensive view of it.

There is a disposition on the part of teachers to enter the field that properly belongs to the professional psychologist, in the hope that their researches may be productive of something of direct and practical use. Interesting and seductive as such investigations may be, they will altogether fail to be of much real good to the teacher. Teachers anxious for the improvement of imperfect methods may be pardoned if their zeal leads them to look with too sanguine eyes to sources that can furnish little. We can well afford to leave experiments of doubtful value to us, to the laboratories of psychologists, and profit by such assured results as can be applied to our work.

There is, too, a great danger that the yet new subject of child-study may become (if, indeed, it has not become) a sort of amusement. Syllabi by the score have been sent out from various sources in the United States during the past few years, seeking information that has little point or purpose—starting in many instances from nowhere to be lost in mazes of indefiniteness, massing statistics useless and unreliable about children on all sorts of subjects. Soulless dissecting and analysing is not child-study, and cannot take the place of that real knowledge that has its origin in loving sympathy.

Direct answers to direct questions, such as many of these syllabi have required, are not reliable; the average child will not reveal itself in this way as it will unconsciously when there is no apparent purpose

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in the observation. Children will give conventional answers or attempt to give what they think is the proper answer in much the same manner that an illiterate person, who never reads poetry, will say that Shakespeare is his favorite poet. They should be studied, not with that interest born of idle curiosity, but in a manner that will generate in the hearts of those studying them, a keener appreciation of their difficulties, a more active sympathy for them, and disposition to hold out to them helpful hands. It is because it can awaken from dormancy such qualities in the hearts of our training classes that I regard special child-study as of paramount importance in their course.

Each training term in our county Model Schools, we meet a class of young people too recently children to be in strong sympathy with child life. On the doubtful ground between childhood and assured maturity, their interests and sympathies in common with young people of their age, are all in the direction of the coming years, and they are often as ignorant of child-mind as if they had reached their years by some other route than childhood. It seems to me that we are beating the air in useless endeavour for progress until we give our students some conception of child-mind, its activities, and how that knowledge of which they are possessed got into those minds, and how new knowledge is acquired, and above all to awaken a sympathetic interest.

The study of children as a class is by no means easy. There are so many things to be carefully weighed to get even a reasonably correct conclusion from any line of study. Then a child is so affected by its environment and other circumstances that the steady conditions such as proper observation requires cannot be maintained. Their power of expression is limited, and the observer must translate what he sees in terms of his own consciousness.

The misconceptions of the average child is surprising, even to those who know children well. They draw a man at first with head and legs, usually without body, no arms or ears, in the first stages of pictorial man's development under youthful artists. When arms appear they sprout from the head, or may be attached to the same side of the body. They draw a face in profile and show two eyes and mouth on the side of the face,—support a dog on two legs, and are quite likely to be more generous with a hen. A man will be shown as high as the house he lives in, feet can be seen inside of boots, a baby through the side of its carriage,\* and the child sees no absurdity in its productions. They tell what things named are by stating one thing

\*Selected drawings made by children two to seven years of age were shown.

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# CHILD-STUDY (AN ABSTRACT).

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to those head and stages of nen arms same side eyes and and are be shown ts, a baby lity in its one thing about them, such as, "Bread is to eat," "A buckle is an ornament," "A horse is an animal." Left to itself the attention is usually absorbed in one striking feature of an object presented, which specially impresses him, and he fails to perform the separate acts of selective attention necessary to the acquisition of a correct concept.

The inferences that children make are often reached by complex means, and the results are peculiar. A clergyman's wife told me that her child when four years old expressed her indignation because some one at the prayer meeting said "amen" when her father was praying. On being questioned she said, "that 'amen' meant you have prayed long enough." The same little girl reached a conclusion by a remarkable process of reasoning for one so young, about the size of cups, from which she and her brother were drinking milk. She said, "Bobbie's is the biggest, because he drinked faster and has some left." The "amen" incident suggested to the mother a little reminiscence of her own child-life. She was very fond of a particular story about a poor man, who on breaking a loaf of bread, purchased by his last penny, to divide it with his hungry family, found in it five gold sovereigns that had been placed there by the baker at the command of the king, to be sent to his most worthy customer. The story said the poor man bent his head, for he thought that an enemy had done this to work his ruin. She greatly surprised her father by asking once, after hearing the story read for perhaps the twentieth time, if the man's head were made of tin, for how could it bend if it were not. Until this time she called a dinge in a tin pail or dipper a bend, and had no other idea for the word.

Formerly I thought no child was worthy of special study unless there was something abnormal in its make-up or in its mind contents, and used to try to direct the attention of teachers in training such children if they were available. There is something of special interest in every child, and not the least interesting are the uninteresting ones. Three years ago we had a bright little girl, eight years old, direct from London, England, whose mind contents and acquisition of new concepts, furnished us with many instructive and suggestive object lessons. She was ignorant of many of our common animals and familier objects; had never seen cattle, pigs or sheep. From a picture shown she thought a cow would be as large as a dog, "smaller than a big dog." The picture of a pumpkin suggested a fruit as large as an apple with similar qualities; it grew on a tree, she could eat it, or put it in her pocket. Her astonishment was unbounded when a large pumpkin was brought to view; size was the first absorbing quality; it seemed 36

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impossible for her to adjust the concept of her imagination to fit the reality. She thought the tree on which it grew must be larger than any she had ever seen and by her anxiety to taste she seemed to think that its edible qualities would have some proportion to its size. The following year an equally interesting child of ten years came to our town and school. Although ten years of age she had the immaturity of a child of two years. She did not speak in sentences and her utterance of words was so imperfect that we could not understand her. Her development was so rapid as to be noticeable from day to day, and in three months she was talking and reading nicely.

Little people, as every educator must realize, are creatures of impulses, prejudices, imitations, superstitions and nameless fears, in many ways strangely conservative, in many extremely radical. If it is true, as some think, that a child in developing from babyhood to maturity, reflects and embodies the life-history of his race, then it follows that the child is to a great extent like primitive man, unconventionalized, full of unreasonable likes and dislikes, doing many things without logical connection as between means and end or cause and effect; happy so long as the immediate need is provided for, careless of forms yet a ready mimic of those about him. Speaking broadly, is not the whole tendency and purpose of modern education, to conventionalize the unconventionalized young of our race,-that they shall be taught certain standards of particular conduct regarded as safe and desirable, and shall be brought to that degree of intelligence recognized by a race or nation as a safe minimum in the interests of society. To us our civilization is a legacy of the past, the very ark of the covenant without which society must perish.

The natural disposition towards imitation in children is most conducive to this training. Might it not be said, indeed, that the work of the educator is to teach the child the great art of imitation, to cultivate in him a sense of what is right and desirable that he should imitate, and what is right and desirable that he should not imitate; and is it not for this reason that the personality of the teacher is and must remain despite all mere systems and methods and technicalknowledge of average mind, the most important factor in the education of the young. The teacher must have something more than any ology or ism, or any mere knowledge of child-mind that cold dissection or analysis can give him. He must have heart power rather than head power, the power to generate an atmosphere of happy sunshine so necessary to vigorous growth—the power to sympathize with the child in all the trials and difficulties, desires and joys, that make up for him the great drama of life. We wou oncoming a our supers because set simple me amusement lous, for hi I have had origin fear study of ch and a strom

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most conthe work tation, to he should t imitate; her is and technical education any ology section or han head nshine so the child p for him. We would add greatly to the sum total of human happiness if the oncoming generations were saved from the baneful effects of many of our superstitions and dreads. What nameless fears haunt children, because senseless people will make use of the child's credulity as a simple means of discipline, even cultivating unknown fears for the amusement it affords. It is necessary that the child should be credulous, for his acquisitions rest upon authority as well as upon experience. I have had reminiscences from scores of people who can trace to such origin fears that have not abandoned them in maturity. A special study of children's superstitions revealed to me a more general belief and a stronger faith in some of these than I had anticipated.

This natural tendency of the child to imitate is of great importance to educators. One thing that should very specially concern us, as I have intimated in other words, is the formation of correct habits during the child's imitative period. The tendency of the child to imitate even his own unconscious acts, repeating them until a fixed habit is formed, is too well-known to require discussion, and the persistency of a habit once formed is equally patent. I know a boy, now thirteen years of age, who began at the age of two years hiding when he saw his father coming for the pleasure he got in rushing out upon him while he was vainly seeking in the places where his son wasn't hiding. This boy still keeps up the habit, hiding in the old places-behind the door, under the table, or back of his mother's chair. Prejudices of parents are likely to be aggravated in the child; experience and observation will furnish us with many examples, on a little reflection. Recently a boy of our town, six years of age, was found by his grandfather doing violence to a picture of Canada's Premier—" because he's a Grit," was his execuse. This strong party prejudice has developed despite his parents' persistent efforts against it from the time when it was first noticed in him.

With the assistance of fellow teachers, I collected about 1,500 original stories from children ranging from eight to twelve years of age, one about a bad boy and one about a bad girl. It was thought that in this way data might be obtained from which it would be possible to discern the children's ideas of moral badness, the results to which a course of evil in a child's opinion would be likely to lead, and the nature and virtue of punishments used. In every attempt I have made in studies of this kind other results as interesting and valuable as those for which I have sought have appeared. I was struck in working over the papers with the fact that children of this age have little or no conception of time in a child's life. Several gave imprisonments that lasted five, six or eight years, and then followed their

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characters through a further course of boy wickenness. One of the fictitious bad boys, apparently twelve or thirteen years of age, after a course of disobedience, truancy, etc., stole a turkey and was sent to jail after trial for seven years, "and when he got out he went home and his father asked him where he was. He said he was at his grandmother's. 'All right,' said his father, 'we shall see'; so next time he saw the boy's grandmother he asked her and she said he wasn't there, so his father gave him a whipping and he never played hookey or stole turkeys again." The element of improbability in this story was the exception not the rule. For the most part the children seemed to have developed their characters as any ficton writer might, from one or more concrete cases.

Differences in the views of boys and girls had not been considered in advance of the reading but they were most marked. Boys accomplished far more reformations of their fictitious bad boys than girls did. The greater number of those whose lives they followed to maturity became good and useful members of society. The very bad girls of the boy stories were, as a rule, found to be boys masquerading as girls. Girls painted so many of the bad boys as thoroughly and irredeemably bad, many of them coming to violent, unhappy ends, while their bad girls were, for the most part, guilty of isolated acts or trifling misdemeanors, that were given to serve as an indication of their characters.

If these generalizations are correct, does it point to the conclusion that boys are broader minded on questions or morality than girls? Are they more hopeful of their class? Do even the bad boys hope to be useful and respectable men? Are the masculine instincts born of modern civilization such that boys cannot imagine genuine badness in girls?

One feature of this study worthy of mention is, that punishment is never represented as being a necessary consequence of evil, but is introduced in an accidental way from an external source, such as father, mother, teacher; or violent punishments, such as going through ice and getting drowned, for venturing on forbidden skates. Few mentioned the unhappiness to the evil doer caused by his evil course; and not a single child mentioned an offended God, or future reward or punishment, though among the evil traits of a bad boy his dislike of Sunday school or church, were mentioned quite as often as lying and stealing.

I must add that several teachers reported to me that the mere writing of the story and talking over what they had written had an excellent effect upon the children.

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# CHILD-STUDY (AN ABSTRACT).

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The story of George Washington and the cherry tree was used for a double study begun last training term-one to obtain, if possible, spontaneously the children's ideas regarding the relation of truth-telling to the treatment of their offences, the other to procure original illustrations of which three were requested. The story as told to the children concluded with George's acknowledgment of the act; they were asked to write the whole story telling how it would be likely to end. About four hundred stories were collected from children eight to eleven years of age. The majority regarded the offence as a serious one, the boy ought to have known better, and telling the truth only his duty; a few said in effect that George's candor was a matter of expediency as the evidence was strong against him and he knew it. All seemed to show in some way that the boy's frankness should have a modifying influence on his treatment which varied from complete forgiveness, for the most part by the younger ones of this group, to such punishments as a reprimand, loss of his axe, keeping him out of the garden, or giving him a whipping. This study was supplemented by a study of another group of children's views of the treatment of "The Liar and the Truthful Boy," of the old Second Reader, which brought out some remarkable views, one child even went so far as to hold the mother culpable for the offence for not seeking to prevent it. Space will not permit me to give an analysis of these studies in this abstract; I can only say here that we look for a great deal from little children if we expect them to truthfully report their own offences, holding over them at the same time the possibility of a dreaded punishment. Not a child omitted the illustrations; some anxious to tell more of the story in picture, added a fourth. The subjects of these were mainly the house and garden, the presentation of the hatchet, the cutting of the tree, the father's discovery, George and his father at the fallen tree. Action and expression were attempted and obtained in most of the pictures. Inconsistencies, such as lack of proportion, modern dress, smoke from all the chimneys in summer, variations in pictures of house, tree, boy, etc., in the same pupil's illustrations, were common though far from general. In another study of illustrations, by larger pupils, the bullet was shown on its way from the gun by several; two showed a rabbit up a tree and one showed it dead in its own presence by picturing him before\* and after the shot in a single illustration.

Everyone who has observed children is aware that making pictures is as common an expression of activity as play. Such knowledge as is required for ordinary picturing and the development of the power of

\* In this abstract the child as an artist cannot properly be discussed without selected examples of the work shown in the chart used with this paper.

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seeing and expressing has a very intimate relation to the whole question of the development of his powers.

While the rude attempts of modern children appear to be strikingly similar to the first beginnings of primitive man, there is, however, great difference. It is quite impossible to think of an early enough example of primitive art to make a true comparison with the first efforts of the average modern child. The conditions with which the child are surrounded are so special that the development of his power to picture is so rapid as almost to be noticed from day to day; and though it is a mooted question, many believe in hereditary traits and ante natal influences being powerful enough to transmit dexterity of hand and such other qualities as go to make up the real artist. Much of what is regarded as instinctive power in this line, if investigated, could be traced to the influences of environment and special circumstances such as imitation of intelligent parents, or to words of commendation.

In a paper of this character it is impossible to do more than make brief reference to a few phases of this wide subject, any one of which could well occupy the whole time at my disposal. I must, however, before concluding make a plea for special child-study in our Model School work. The child is the one fact before every teacher, the one subject for study in his training course. Some practical method should be adopted by which the training classes can have the opportunity of studying children, not by desultory observation in play ground or class room, though this should be supplementary to more systematic work. The aim should be to lead them to discover for themselves, to put them into sympathetic contact with the child-mind and loving relation with the child-heart; when this spirit of inquiry has been awakened and is under the direction of sympathy and love, the desired goal is not far distant. The study of their own reminiscences will be induced if not made necessary by the study of children. Perhaps there is no one who can so quickly touch a chord of sympathy in the heart as that wee chap once you. To each one of us at times he comes out from the haze of the past, it may be to shake his head in disapproval or to give a glance that shows his disappointment at seeing how little we have profited by the chance he gave us. Happy indeed should we be if we can look him in the face with honest heart and hear his cheerful "well done." If teachers and parents would more frequently call to counsel these shadows of our former selves, if we would seek to interpret children, not so much through the self of to-day as through the remembered child-self, we would not so frequently err on the wrong side.

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# THE FUNCTION OF THE PRACTICE SCHOOL IN CONNEC-TION WITH CHICAGO UNIVERSITY.

# FREDERICK EBY, CHICAGO.

In this day of universal interest in education we are not surprised nor alarmed at the multitude of methods and institutions that have everywhere sprung into life. There are now schools, and schools; some have one function, some have another, while others again fulfil a totally different purpose, and yet all may strive for the same common goal of training and developing the youthful lives and powers entrusted The peculiar conception that distinguishes the to their charge. primary school of the University of Chicago is that of a laboratory. Now-a-days we have laboratories for every department of learning, no matter how theoretical it may appear; indeed, it is this mark that discriminates our modern culture and thought from that of the ancients. The Greek, for instance, philosophized and deduced his conclusions from his theory; but to-day every fact is taken into the laboratory, and faithfully observed under every kind of condition until the truth and the whole truth is laid bare before the searching eyes of men. You have all heard of the famous dispute between the philosophers who argued for a long time why, when a fish is put into a full pan of water, the water does not overflow. It did not strike these wise men that it might be well to try the experiment, as any school boy would do to-day. As has been said the University School is merely a laboratory, and bears the same relation to the work in pedagogy that a laboratory bears to biology, physics or chemistry, and like these laboratories it has two main purposes; first to exhibit, test, verify and criticise theoretical statements and principles, and secondly, to add to the sum of facts and principles in its special line.

But again, as it is not the primary function of a laboratory to devise ways and means that can at once be put to practical use, so it is not the first purpose of this school to devise methods with reference to their direct application in the graded school system. It is the task of some schools to provide better teachers according to present standards, it is the aim of others to create new standards and ideals, and thus lead to a gradual change of conditions. For example if it is advisable to have smaller classes, more teachers and a different working hypothesis of both subject materials and methods than is at present the case, there should be some institution to show this fact. This the school in ques-

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tion hopes to do, and while it does not aim to be impractical, it does not aim primarily to be of such a character as to be immediately capable of translation into the graded Public School.

#### BRIEF HISTORY OF THIS INSTITUTION.

No factor of the University of Chicago is more significant of its inner life and more prophetic of its stability and success than the interest it shows in primary education. As early in its career as June, 1896, the University Primary School was opened under the auspices of the pedagogical department with some sixteen pupils ranging from six to nine years of age. Miss Clara I. Mitchell, formerly of the Cook County Normal School, was the first to be put in charge of this new and peculiar departure in education. Soon afterward Mr. F. W. Smedley, a graduate student of pedagogy, took direction of the manual training work. Under the careful supervision of these two expert teachers the school continued for six months with numbers varying from sixteen to twenty. In October of the same year it was reopened with over thirty-two children ranging in age from six to eleven. Miss Mitchell continued in charge and taught literature and history, and Miss Camp, formerly of Pratt Institute, was appointed to instruct in science and the domestic arts. Mr. Smedley was retained for the manual training and three other assistants gave part or all of their time to the work.

In January, 1897, through the generosity of parents and friends, the school removed to its present quarters where it finds ample accommodation, much better light and air, and a large hall for gymnasium. At the present time there is an enrolment of over fifty pupils, which might easily be doubled if it were not necessary to turn away a large number of applicants through lack of accommodation.

It may fairly be stated that three points of exceptional importance stand out in an explanation of any institution of learning; we must know in the first place the aim or ideal toward which it strives, in other words the purpose of its existence; secondly we must know its relations, but the most essential of all is the fundamental hypothesis of its working organization. If we are to arrive at any correct view of the elementary institution of the University of Chicago it is imperative that we measure this school in these three dimensions.

#### AIM OF THE INSTITUTION.

Already has it been shown that the aim of this institution is distinctly novel. It agrees with other schools for primary education in seeking to give the children on its roll the widest and best development they can att significance become an a everywhere. highest stand and in this venture and

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ion is dislucation in evelopment they can attain, but in addition to this necessary aim, it has a broader significance for all educational thought. It aims most distinctly to become an example of an ideal method and training to be followed everywhere. It is in fact an experiment station. It seeks to test the highest standards of discipline, to put on trial the worthiest methods, and in this way furnish to the world of education, beyond peradventure and dispute, the best means for training children.

# RELATION TO THE UNIVERSITY OF CHICAGO.

This elementary school stands as the exponent of the pedagogical department of the University, under whose auspices it commenced its life, and through whose energy it has continued to exist. It is not in any sense a school where the students of education are permitted to indulge their theories or even to gain practical experience in the art of teaching. They give no instruction whatever. The work of the class room is entirely in the hands of the most competent and skilled experts in all departments. Head professors, who have been presidents of universities. or colleges, outline the work in their various branches and frequently help in the actual work of the classes. But while the students of pedagogy are never permitted to take any part in the work of instruction, they are encouraged to make frequent, sometimes daily, visits to this observatory, and at times they make careful records of every observation and criticism. Every day of the school term the rooms are frequented by visitors from far and near, who wish to see this wonderful institution at its work. As regards the department of pedagogy, the school is simply a result of the feeling, that there must be some institution in its connection, more or less ideal, in which the best and wisest theories of pedagogy are carried over into practice and may be constantly open to public observation. On the historical side, this phenomenal school points back to a similar experimental station conducted for many years and with commanding success by Herbart. It is also in some ways not far removed from the famous schools of Pestalozzi and Froebel.

But the University School finds a vital connection with several other of the departments of the magnificent institution under whose shadow it has flourished. It is particularly related to the study of psychology. Once a year the children are taken into the psychological laboratory of the University and the most accurate measurements are made of height, weight, girth, and more specific measurements of arms, limbs, chest, and other parts of the body. All these records are carefully filed, and form a ready basis for testing, year by year, the physical development of the

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children. Furthermore, these pupils are frequently tested for time reactions, fatigue curves, and many of the other problems of physiological psychology, which concern so profoundly the development of the children. At many of these experiments the various classes in Child Study and Education are present in order to see the latest methods employed in this work. More important, however, than these experiments, are the frequent tests made upon the eyes and ears of the children. This work has the most direct pedagogical value, since it is impossible for children to develop normally when either of these senses is incapable of its proper function. For this reason each child must undergo a complete examination for sight and hearing and any defect is registered and communicated without delay to all the teachers so that they may understand fully how to deal with the child. During the last two years all who have attended the school have been attracted to the careful training and attention given to a young girl of twelve who is almost totally deaf, but under the anxious attention of the teachers and her own private tutor she has made rapid and marked progress and is now fully capable of bearing the work with her more favored equals.

#### ORGANIZATION OF THE SCHOOL.

So far as the administrative organization of the school is concerned, the controlling principle is that education comprises three periods; (1) elementary, (2) secondary, and (3) higher or university training. These periods are not at all arbitrary divisions with fixed impassable lines, but each has its own dominant end or interest which determines the methods and subjects of instruction. At present the University School is organized to include only the first of these periods. This elementary period begins at the age of four and extends to that of thirteen, comprising in all nine school years. As laid down by Dr. John Dewey who, it may well be said, is the very Alpha and Omega of the institution, the special aims of this period are: (1) "to bring the child to an active, inquiring interest in, and consciousness of the world of society, and nature about him; (2) to bring him to a positive consciousness of his own capacities and, (3) to introduce him gradually to a command of the technical tools required in further work, viz., reading, writing and number."

These nine years of elementary work are broken into three subdivisions or grades, although these grades are not made outwardly prominent. However, these sub-divisions form a basis for the various groups of twelve or less students who form the classes. The first the social one side what is in habits of and eye.

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The first grade includes children from four to seven. It begins with the social experience which the child has already had, and endeavors on one side to bring him to a clearer and more definite consciousness of what is involved in this life, and on the other side to form in him habits of social service and ability to control his own powers of hand and eye.

The second grade is from seven to ten. Its main object is to secure to the child a command of methods and through the use of these methods to enable him to formulate his experience more definitely and accurately. These methods involve ability to use tools and utensils in cooking, in the carpenter shop and the laboratory, and to pursue a continuous line of work until it accomplishes definite results. It involves also, an increasing use of reading, writing and number, not as separate studies, but with reference to making reports, keeping records, outlining plans and conducting work in other studies. In the third grade from ten to thirteen, the controlling object is that the child shall acquire ability to conceive and formulate problems for himself, and to select and define the methods which are appropriate to them. In the second grade it is supposed that the child has got practical command of the methods and of their uses. He is now capable of reflecting upon them and of formulating them in more intellectual terms. This implies a more technical and formal use of books as aids in the investigation of problems of history, literature, geography and science.

But it is in the fundamental working hypothesis that the University School has broken away most effectually from the fetters of tradition. Our older schools have accepted with more or less modifications a curriculum of study and a method of work that has been handed down from generation to generation. In some respects the curriculum that we have received from the past is worthy to be cherished and respected but in many features it is neither in harmony with the psychological nature of the child nor yet in connection with his inner development. It was this profound fact that led Dr. Dewey, on the eve of commencing his work, to put forth the plan of organization of the University Primary School. And if we are to understand in the least degree the essential function and meaning of this new institution it will be necessary at the outset to master in outline the fundamental characteristics of Dr. Dewey's educational philosophy.

He believed that the ultimate problem of all education is to coordinate the psychological and social functions of the child. In regard to the last of these two functions he points out most forcibly that the school is a social institution—a place in which the child is for the time

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to live; to be a member of a community life in which he participates and to which he contributes. This thought that the school becomes the social home of the child is fully carried out in all the work of the institution. In the manual training department the children are led to manufacture such objects as they need in the school: wands, boxes, bicycle racks, and various other useful articles have been made, to the great interest of the small creators. And again, on the other side, it is a constant practice to have lunches prepared by the children themselves under the supervision of the teacher.

The school as thus conceived is but a path between the family and other larger social organizations. It must, therefore, grow naturally out of the one and lead naturally to the other. As the family is the institution with which the child is most familiar, the school life must be connected as far as possible with the home life, a principle which should certainly be fruitful for every school.

This social idea leads the minds of the students in two directions. As our present society is too complex to be treated by the child he is led back to more primitive forms of society through his own activity. He follows the growth of the home, of food products, and later, of manufactures, indeed, he traces human evolution from the pre-historic cave-dwellers through the stone and metal ages up to civilization. On the other hand his interest in the actual environment is stimulated by frequent excursions to farms, parks, and to the various manufactures and industries in the vicinity of the school.

On the psychological side Dr. Dewey believes that the child is primarily an acting, self-expressing being, and that normally, knowledge and feeling are held within the grasp of action, growing from it and returning to it. By this statement Dr. Dewey simply means that in educative, as in psychological life, we have a complete circle of mental action -namely, feeling, knowing and doing or willing. On the physiological side these divisions correspond to affective or afferent nerve currents, secondly to the central or brain processes, and lastly to the motor result that shows itself in action. It is in this feature that the University School breaks most radically with former standards of education. It is this doctrine of self active interest that forms the test for the manual training, cooking, sewing, and the other forms of constructive work practised in the school. Indeed, in a sense, these form the school and give it the character which distinguishes it as an advance upon the methods and standards of the present. If, finally, I were asked to say in a word what is the greatest feature of this University School, I should say, not that it teaches children to observe, not that it teaches them to

think, but children t lays supre thing in t transferred observation

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think, but that while it does both of these its chief business is to teach children to act. It trains the feelings, and the intellect, but it also lays supreme stress on the training of the will. And if there is anything in this wonderful experiment that is worthy to live and to be transferred to every school of the nation it is this triple lesson of observation, thought and motor training.

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### INSPECTORS' DEPARTMENT.

# WRITTEN EXAMINATIONS AND THEIR VALUES.

### A. B. DAVIDSON, B.A., NEWMARKET.

Every educational institution in the Province employs written examinations, either to educate, to determine qualification, to test knowledge and ability by competition, or for all of these together. It was, therefore, quite natural that the Executive of this Association should seek to bring before you for discussion the utility of such an extensively employed educational instrument.

To initiate a discussion on this subject, which may anew render clear to each of us the true function of written examinations, is the task assigned me.

As already stated, written examinations in all our schools and colleges are of three kinds, namely, educative, qualifying and competitive.

The educative examination is conducted by the teacher in connection with his work in the school-room, and may be held at any time he thinks it well to do so. When a pupil completes a previously assigned exercise, either he is subjected to an oral examination, or his written exercise is examined, or both these methods may be employed to discover how thoroughly the pupil has assimilated the matter of his lesson, to what extent he can apply it, and also to enable the teacher to decide whether the pupil is qualified to proceed to a higher exercise or not. If, however, the teacher wishes to discover the pupil's familiarity with the substance of several lessons, and his power to organize the subject in which he has received instruction in the class for some length of time, he usually subjects the pupil to a written examination. This constitutes the educative examination. It includes at least several lessons, and it therefore assists the pupils to take a more comprehensive view of the subject than they obtained in the oral exercises of the class.

In the oral examination the pupil usually unifies only one or two lessons, while in the written he unifies a large number of lessons, or even a whole subject of study. By this means he obtains a wider outlook and the subject acquires for him a richer content. The oral examination of a small s large sec given by own reso rather th The oral written f

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# WRITTEN EXAMINATIONS AND THEIR VALUES.

ination deals with the relations of part to part, or part to whole, within a small section of the subject, and the written with relations within a large section. In oral examinations much assistance is unavoidably given by the teacher. In written, the pupil is thrown entirely upon his own resources. The oral is employed to discover ignorance and error, rather than to discover the constructive force and power of the pupil. The oral examination is specially fitted for analytical work, and the written for synthetic.

The written examination, through its impersonality, clothes itself with the force and authority of an independent judgment respecting the value of the pupil's work, and it also serves as a mirror to reveal the pupil to himself. His knowledge and ability are objectified in his answer papers; they have become concrete and visible to his eye, in virtue of which vision he is better able to judge more justly respecting his attainments. It follows also from this that the pupils in the higher classes are in a position to receive greater benefit from the written examination than those in the lower classes. The written examination is valuable to the teacher as well as the pupil. In reading the answer papers of his pupils he discovers wherein his own work has been effective, and wherein defective in the work of each pupil, and in the work of the class as a whole. His pupils have been subjected to a severer test in the written examination than in the class recitation, and the knowledge of his pupils, obtained under the new and severer conditions, will certainly modify his judgment respecting the standing of his pupils, both individually and collectively. With his modified, but more correct knowledge of the attainments of his pupils, he will be able to teach and to guide them more wisely for the future.

In many schools these educative examinations are held monthly, and the results are entered in each pupil's monthly report. This report, showing his standing in class, his attendance, diligence and conduct, is presented to his parents or guardians, by whom it is signed and returned to the Principal. The results are also placed on the notice board of the school, and in this way sufficient publicity is given to them to check to a considerable extent the tendency to idleness and indifference on the part of the pupils. A monthly series of such examinations, judiciously conducted, is certainly of very great value to pupils, parents and teachers.

Qualifying examinations are educative, and educative are quailfying, but in the educative examination the emphasis is placed upon the educative function, and in the qualifying upon the possession of the minimum of knowledge necessary to qualify the candidate to enter the

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next higher class, division or school. These examinations are frequently called leaving examinations, and are placed at the end of definite courses of study, which should be so graded as "to allow each scholar of fair ability and proper diligence to pass a creditable examination with a quiet mind and without a painful preparatory effort, and the instruction should not degenerate into a preparation for the examination, but it should be such that the pupil may have the requisite time to come steadily and without over hurrying to the fulness of the measure of his powers and character, and may be securely and thoroughly formed instead of being bewildered and oppressed by a mass of information hastily heaped together."

The character of the examination papers is a most important factor in determining the immediate value of this examination, and the future value of much of the study and teaching in our schools. In order that they may be of the highest value to students and teachers they should be prepared with exceeding care and circumspection, and only our wisest and most experienced teachers should be entrusted with their preparation. I here venture to suggest some of the conditions needful to be observed in the preparation of an examination paper :—

1. The paper should be prepared entirely with reference to testing the knowledge and ability of the candidates. All other values should be incidental.

2. The paper should cover the whole of the work prescribed, and no part should have undue prominence.

3. It should be such that a pupil of average ability and energy, who has pursued the regular course of study, should be able to pass a creditable examination.

4. It should test the insight of the candidate and his organization of the subject.

5. Each question should be simple in its language, clear and unmistakable in its meaning.

6. The personal co-efficient of the examiner should be entirely excluded from the paper.

7. Questions should be alternative, and no values should be attached to them on the paper.

The marks assigned by an examiner are a register of the impressions made on his mind by the several answers taken one by one, but nothing is allowed for the impression made by the paper as a whole. The impression produced by the paper as a whole does not necessarily coincide with the value of the impression produced by the several answers, as every experienced examiner well knows. Doubt and uncertainty

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expressed in halting sentences characterize the answer of one candidate, while strength and force mark the same answer of another. Yet these answers are judged of equal value. Another candidate avoids the difficulties and answers the easiest parts of many questions and obtains a higher aggregate than one who answers fewer questions, but who does so thoroughly and well. The impression of the examiner is that the latter is the superior of the two, but he cannot, with our present method of marking, register this impression, but must assign to the inferior candidate the higher standing. This anomaly could not take place were a percentage allowed for the total impression. The impression produced by the paper of a candidate as a whole is at least as distinct as the impression produced by any single question, and should be utilized in determining the value of the answer paper. In valuing the several questions, quantity is much more sure of receiving full value than quality, let therefore the value allowed for the total impression be given with special reference to quality.

Experience has proved that in proportion to the importance of the results of the final examination to the candidates are the evils attending it. Because of this fact I would suggest that the result of the examination be determined, not only by the answer papers, but also by the character of the work of the term. In addition, therefore, to the data supplied by the impressions made on the reader of the answer papers, and the private report of the school staff, let the monthly school report of each candidate be certified and sent to the Education Department by the Principal, and thereby value would be added to the educative examination as well. In thus carefully collecting all available data before determining the final standing of the candidates all parties interested in the results would accept them with more confidence and respect, and appeals might no longer be entertained.

The written examination, like every instrument, is limited in its action. It is limited chiefly to intellectual results. It indicates little as to literary tastes, permanence of knowledge, or how it has been obtained. It enables us to see the candidate at one point, and at one point only. In the interest of justice that point ought to be illumined by every available ray of light, and for this reason I have ventured to make suggestions. But, while it is true that examinations are limited in their action, yet properly conditioned they are well-fitted to render most valuable services to pupils, teachers, and the community in general.

In schools in which educative examinations are not held, the energy

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of the pupils is relaxed, and the appeal of the teachers to the moral sense fails to produce the desired results. Until students become much more sensitive to the claims of duty than they are, the written examination will be found to be a most valuable auxiliary to the teacher assisting him much in securing concentration of purpose, diligence and energy in his pupils.

As society is constituted, qualifying examinations are indispensable, and it were wisdom not to depreciate them, but to disseminate more correct knowledge in regard to the conditions necessary to the best fulfilment of their functions. To obtain the best results it is necessary that pupil, teacher, examiner, presiding examiner, and reading examiner, be each faithful, intelligent and skilful in the performance of his part of the joint labor. To secure such a combination of co-laborers is a very difficult task, and yet such a combination is necessary in order to secure accurate results. Are accurate results, however, an absolute necessity? A written examination is simply a means of classifying candidates on a given basis. If the candidates have been placed in the order of merit, the examination has fulfilled its function as far as the candidates Although absolute accuracy cannot be claimed for the are concerned. examination of a single candidate, yet absolute justice has been done to each, seeing they have been ranged in order of merit. Yet many write and speak depreciatingly of written examinations, because they are are limited in their range and inexact in their results. Let me remind such that all our judgments, respecting the gifts and abilities of men, are necessarily limited and inexact, even when formed with the best opportunities of determining them, and most mercifully is it so.

Consider what would be the consequences to the candidates if the wishes of those who are dissatisfied were realized. Candidates who failed to pass the examination would be publicly and authoritatively branded as inferior. Hope would be replaced with hopelessness, and the candidates' lives would be blighted through their very efforts to improve themselves. Did written examinations absolutely determine the gifts and powers of a candidate, they would not only be powerless for good, but would be an unqualified evil.

We see, therefore, that the true value of a written examination is not an absolute but a relative one, and yet though a relative value, it may be made to approach so near the absolute truth as to qualify the written examination to render great service in the cause of education. From the progress made in the science and art of written examinations in this Province during the last twenty years, effected through the more complete co-operation and delicate adjustment of the educational forces on labors alo means and of the pa written ex the final r co-laborer gence, skil our exami

# WRITTEN EXAMINATIONS AND THEIR VALUES.

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ion is not e, it may e written h. From ninations ough the ucational forces on this point, we have much encouragement to continue our labors along the same lines. As in every living organism each part is means and end to all the others, and the more perfect the co-operation of the parts the more perfect is the life of the whole, so in our written examinations, the co-operation of all those whose labors affect the final result should be made as perfect as possible, through each co-laborer bringing to bear on his part of the work increased intelligence, skill and virtue, for by this means only can the highest value of our examinations be realized.

# SCIENCE IN THE PUBLIC SCHOOLS.

# J. DEARNESS, PUBLIC SCHOOL INSPECTOR.

What is science teaching? Judged by their utterances, particularly some recent ones on "Agriculture in the Schools," some people seem to think that science teaching consists in filling the memory with facts, supposed useful knowledge, about the objects and forces of nature without regard to the method by which these facts obtain a lodgment in the memory. Others speak as though they believed that the chief purpose of science is to make the senses alert to the reactions of environment. These reproach our schools because farmer's children grow up so unobservant that they cannot tell whether cows have front teeth in the upper jaw, whether dogs, cats and hens have the same number of toes, how many spokes in a buggy wheel, etc. Were the work prescribed in botany for the Fifth class to be taken as a sample of science teaching, we might think it consists of the naming and comparison of forms. Science taught without a higher and more serious aim than any of these is not entitled to a greater educational value than the study of foreign languages which stops with the present requirements for a junior leaving certificate.

Some years ago our programme of Public School studies gave considerable time and space to exercises called "object-lessons." As a rule the best of these were only classifications of qualities —looking, tasting, etc.—and naming. Ostensibly they were studies in science to "train the observing faculties;" they might have been given a fair rating as language-lessons but as science, stopping where they did, they had very little value. These sense-percepts are, as bricks and mortar to a house, the raw material out of which the mind makes science; the building consists of the mental working over of these materials, the comparing, relating, judging, distinguishing essential from accessory, and recognizing *rule* and *law*.

The true aim of science teaching is not the accumulatior of knowledge, the sharpening of the senses, nor the cultivation of expression, although these are incidentally gained to a considerable extent, but it is the training of a pupil in the skilful use of his powers to gain knowledge. With that skill will come reliance upon his powers tempered by a consciousness of the liability of the judgment to err. Science deals with realities and their relations rather than with ideals, and science-teaching is more concerned with the principles and methods by which the selves.

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# SCIENCE IN THE PUBLIC SCHOOLS.

which the acquisitions are made than with the acquisitions themselves.

From this point of view nature is the teacher, and the schoolmaster the introducer of the child to nature. He essists in providing material, he stimulates, guides and directs the pupils to question and learn of nature. It is not implied that all the knowledge of science shall be gained by this experimental method, but that it shall be begun in this manner, and carried on until the learner becomes qualified by his own experience to enter properly into possession of the experiences of others.

2. What does the study of science do that cannot be as well done by the other studies in the curriculum? What result comes from it alone, and lacking which, an education is incomplete?

If you accept what I have said respecting the province of the living teacher it need not be added that in the elementary stages of sciencestudy text-books are entirely unnecessary and in every way disadvantageous. This marked difference in method suggests at least a difference in purpose.

The education of conception immensely increases mental power. Baldwin in his "Applied Psychology," puts its value thus : The thinking of persons who deal with percepts is narrow and infantile, while that of those who deal with concepts is broad and vigorous. In that author's table of the relative values of the different studies, he places the sciences of zoology and botany highest; representing these by 10, the relative values of geometry, grammar, history and literature, vary from 5 to 7.

Professor Coulter, in a thoughtful address at the N. E. A. Convention in 1896, discussed the peculiar intellectual value of science studies. He referred to the fact that nature-study presents the most favorable subject-matter for arousing interest; that it has great value as a means of cultivating the power of observation and of drawing conclusions from observed facts; that it cultivates the power and babit of analysis, but held that its ultimate and peculiar purpose in a system of education is through analysis to reach synthesis; that the mental attitude involved in this synthesis is peculiar; that in the studies called the "humanities" the student's critical sense is developed to discern the evil and good in human thought and action, and their peculiar effect is to give the power of appreciation or self-injection. The practical conclusions of these studies are related to self. The necessary complement of this education is the mental attitude developed by the proper study of the sciences. "If the proper intellectual result of the humanities is"

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appreciation whose processes demand self-injection, the proper and distinctive intellectual result of the sciences is *law* to obtain which there must be rigid self-elimination.... The two processes and the two results are so distinct and yet so complementary that any system of education which does not provide for the cultivation of these two mental attitudes results in distortion."

Fouilleè has written a volume to prove that France is menaced by decay because her youth are not sufficiently nurtured in the classics. In the last number of the Fortnightly Review, M. Bastidé, in an able article, offers a different diagnosis of French decadence. He quotes Pascal in specifying "the general literary intoxication to which the governing classes are addicted," and goes on to say, ".... There is a similar distinction between a literary and a scientific mind; while the latter has regard but for well authenticated facts and always reasons on clear principles, the former loves to trace the remote consequences of a principle, or discover and appreciate the slight differences between facts.... If two such minds be in the world of action, the one clearly divines the one road that leads him to the end he has in view, the other thinks he discerns by-paths, loses time before choosing, or even allows himself to be overwhelmed with a mass of contradiction and detail." M. Bastidé attributes this "strange natural perversion" to the educational system of France, which for the past sixty years has made literature and literary style its dominant aim. He points out that twice a month for five or six years French boys are regularly required to write a Latin and a French essay on literary subjects, that Pasteur labored twenty years without recognition, that the lectures of a literary or theatrical critic are attended by crowded audiences in large halls, while those of scientists of continental fame are listened to by small, half-foreign audiences. This observer plainly points the conclusion that excessive attention to literary studies in the schools, to the corresponding neglect of the scientific, is the cause of France's commercial and political decadence.

In the current number of the *Review of Reviews* a speech of Lord Salisbury's is quoted, in which he is reported as saying: "If you look at history you will see that many of the most powerful movements by which the face of history has been varied are due, not to this or that school of thought, and to this or that doctrine, or preacher, or formula, but to the silent action of some mechanical change which has accumulated conditions under which a new set of things bursts upon you." The writer makes Salisbury a revolutionist judged by Bertheroy's definition: "It is not by destroying, but by creating, that you do the work of alone is above all works for triumph Of cours a view, b golden m

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# SCIENCE IN THE PUBLIC SCHOOLS.

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ch of Lord f you look yements by his or that or formula, as accumuupon you." Bertheroy's you do the work of a revolutionist. How many times have I told you that science alone is the world's revolutionary force, -- the only force which, far above all paltry political incidents, agitations of despots and sectarians, works for the benefit of those who will come after us and prepares the triumph of truth, justice and peace."—Bertheroy in "Paris," Zola. Of course it is unnecessary to remark that I do not endorse so extreme a view, but I quote it because the extremes may help us to find the golden mean.

This leads to the practical enquiry as to the quality and quantity of science in the schools of Ontario.

So far as the Public School curriculum is concerned there are two subjects that might be classified as science,—geography in part and physiology. Baldwin, in the work already quoted, recommends that geography be defined to include zoology and botany, and that in elementary schools half the time for geography be devoted to these two divisions. I think I may safely say that not one-tenth, or even onehundredth of the geography taught in Public Schools has the essential qualities of science. Physiology, which might be largely a science subject, is taught almost wholly as so much history or descriptive geography. In all my experience I can recall only two or three lessons on this subject taught in such manner as would warrant their being graded as lessons in science.

Botany is now placed on the curriculum for the Fifth class, the limits and kind of work being the same as for Form I. of the High School. The results of that course have been before us for years and can be approximately measured. The best that can be said of them is that they are better than those of physiology in the Public School. The learning has consisted chiefly of looking and naming, and has reached its end with the power to trace a plant through a key and to fill a schedule with adjectives. The system is better than when students did the naming and describing without observing the plants; but when the study stops with a superficial analysis it hardly deserves the name of science. Natural questions when a new object which excites his interest is presented to a child, are: What is it? What is it for? How does it do its work? Why does it do that? The child, experimenting with the object and making it reveal the answers to these questions, is getting the benefits of a training in science. That can hardly be said of one who asks only the first question and is satisfied with a name.

The High School teachers know as well as any one that the results in botany, from an educational point of view, are very unsatisfactory

They are constrained to teach by the curriculum and for the examination. Mr. Lees, B.A., in an address before the Science Teachers' Association last year, showed how these limitations defeat the best effortsof the teachers. See pages 146-152 of last year's proceedings of the O. E. A. His criticisms of the results based on his large experience as a teacher and an examiner are severe, but we must concede that they are disinterested and just.

Much more could be said, but it is doubtless unnecessary to take even this much time to argue in this meeting that science is essential to a complete system of education, and that the educational system of Ontario is very weak in that quarter. It falls on us who best know this defect to make efforts to remedy it.

That kind of science-teaching now pretty well understood under the name of nature study should form an important part of the work in every Public School.

No text-book is needed, in fact text-books in the hands of pupils, if they contain anything else than interrogatories, defeat the purpose. In one of those admirable nature study leaflets issued by the Cornell College of Agriculture, it is urged in a notice to teachers that the leaflets shall not be placed in the pupils' hands.

No examination is needed, indeed it is impossible to give children a written examination in science that will test the proper kind of teaching. This is the greatest reason why inspectors should take an active, helpful, stimulating interest in this subject. If the statement be truethat a subject cannot be taught in the schools of Ontario without tacking an examination on it, it is because the inspectors are not willing or able to do their duty.

Neither text-books nor examinations are needed, but teachers trained in science methods are indispensable.

So much for our duty as inspectors. There are three ways in which I think the Education Department can promote this good work. First, by requiring more attention to science and science methods in Model and Normal Schools; second, by amending the course in botany so as to very greatly improve it; and third, by requiring every candidate for a teacher's certificate to take a real course in science. At present a person may obtain a life certificate to teach a rural school if he acquires an introduction to the Latin, French and Greek languages with a modicum of physics and botany. If such a person becomes fitted to teach science, he must obtain his qualification outside of the course for his academic certificate.

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farmer's children only, for I believe a rational course of nature study in the schools would be almost equally beneficial to every class.

It was encouraging last night to hear the Hon. Minister of Education state that he intended to introduce into the rural schools the elements of the sciences which are auxiliary to agriculture. Let us give him our cordial support, and spare no effort to prevent a mere name and pretence from taking the place of a most substantial advantage.

# THE INSPECTOR'S WORK IN EDUCATING TRUSTEES AND PEOPLE, AND HOW IT MAY BE PERFORMED.

# WILLIAM JOHNSTON, M.A., LL.B., ATHENS.

It is true, always and everywhere, that with all our getting we should not neglect to get understanding. But this great truth has especial force when applied to the school trustee, seeing that he is clothed in ample authority, and holds the educational interests of the people in absolute possession. He engages the teacher; by him the teacher may be dismissed; he is the court that adjudicates between teacher and pupil; he may be a merciful master or a petty tyrant; he should be a trustee in very deed, ever striving to improve the talents committed to his trust, and never endeavoring to subordinate his office to personal advantage or public parsimony.

The sovereignty of the nation dwells in the people : If the people are ignorant; if they are indifferent to their own interest; if they wilfully neglect opportunities which would advance their material prosperity, it cannot be expected that the trustee, as such, will be equal to the full discharge of the duties pertaining to his responsible office. A community intellectually low does not wish an educated man to rule over it. The envious Greek ostracised Aristides because he was a just man. Envy is yet a potent social factor, even in our boasted western civilization. Hence we cannot ignore the fact that the trustee is guided to a great extent, willing or not willing, by the voice of the people. Any attempt, therefore, to improve the efficiency of the trustee must have its initial force in an effort to advance the social and moral standing of the people.

The part of education which comes under the direct supervision of the Public School Inspector being the foundation of the entire educational edifice, it follows that the inspector's work is one of great responsibility; for, if the foundation is defective, the whole superstructure is insecure, and liable at any moment to fall into overwhelming ruin.

We can scarcely glance over a newspaper without seeing a proof of the statement that at some time during the education of youth the seeds of moral depravity were planted, when a better system of education would have trained up the child in the way he should go, so that when he became old he would not have departed from it. It can influence parent la But socia to counte The Publ habits of fails to do

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# INSPECTOR'S WORK IN EDUCATING.

It cannot be denied that home education has frequently a baleful influence upon the child. The offspring of an immoral or dishonest parent labours under very great social and hereditary disadvantages. But social control, as exercised in the Public School, should do much to counteract the evil effects of pernicious home training and heredity. The Public School should furnish the social control necessary to give habits of moral rectitude to all who come within its influence. If it fails to do this it stands convicted as a failure and a fraud.

And now a fierce conflict is waging between the humanitarian and the scientific educationists. The first regards a knowledge of man as the true means of elevating humanity; the second finds in a knowledge of nature the ultimate goal of human endeavor. Will a study of the mainsprings of human action, as discovered in literature, history, and philosophy, enable a pupil to live honestly, hurt nobody, and render to every man his due? It has not done so in the past; it is doubtful if it will do so in the future. Men will not live honestly while property is so unequally divided. Hungry men are always discontented.

Undoubtedly poverty is the greatest hindrance to education. The philosophical educationist will, therefore, direct his attention to the removal of the obstacles in the way of educational advancement. He will investigate the causes of poverty in order that he may endeavor to remove them. A careful examination of society will lead to the conclusion that poverty is caused primarily by an unequal distribution of this world's goods, and that waste, insufficient production, and poverty itself, are secondary causes.

Here we have planks sufficient to construct an excellent platform. Equalize the distribution of wealth, restrain waste, feed and clothe the laborer so that his working power may be increased, encourage the production of the necessaries of life; do all this and in a few years, or centuries, poverty will disappear and a reign of comfort, peace and happiness, will supplant the old régime of hunger, strife and bloodshed, which have disgraced humanity throughout all the ages of the past.

Indeed, the good work here indicated has already begun. Customs and excise duties are levied principally upon the luxuries of life; laws prohibiting games of chance restrain waste; the Factory Acts are conducive to health and increase of wages; protective policies encourage home production and hence favor the laborer. Each of these reforms has a tendency to assist the poor man, and is, therefore, beneficial to education, and we have good reason to hope that unremitting exertion in this direction will ultimately be crowned with success.

Knowing that knowledge is power, it is easily understood that it

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would be a fatal mistake to put a great increase of power into the hands of the masses before they are capable of exercising that power judiciously. Hence the great importance of the inspector's work in educating trustees and people. Discharging, as he does, the duties of a supervising officer, he can do much to direct aright any movement that has for its object the amelioration of the condition of those in poverty or distress. He can do much to advance educational reforms which apply more particularly to the middle classes; he should be a powerful factor in all the higher departments of education; his power and his influence should be felt, not only in the Kindergarten and the Public School, but also in the High School and the University. Wherever good is to be done he should be there to assist it; wherever evil is he should be there to destroy it. He should be a scholarly man, a manly man, a man void of offence, a man of large experience and of large heart, a man deeply in love with his profession, a man consecrated to the good of humanity.

So far it has been my object to place before you the work the inspector must undertake if he makes an honest effort to educate trustees and people. It now remains for me to indicate how that work may be performed. I know no better course for his to pursue than to copy the example of the Great Master, for "He went about doing good." His well-doing, however, should be systematized; and in order to keep the object he has in view constantly before him, it might be well to apply himself to the task of answering two questions which are of vital importance in all systems of education : (1) What are the benefits to be derived from education ? (2) What means should be employed to give those benefits to the people?

In answering the first question it should be observed that education is the harmonious development of all the powers of man—the physical, the mental, the moral, the religious. Hence, education increases the sum of human happiness. Development is the universal law of nature. From the simple to the complex 15 evolution, be it physical, mental or social. Education, therefore, is in accordance with nature's way of working, hence, it satisfies the deepest instincts and desires of our nature. It is organized human evolution.

Physical education gives strength and endurance to the body; and they, in their turn, give additional force to the mind. This part of education, also lessens human misery, because physical exercise prevents many diseases, and cures not a few. Continued throughout many generations the laws of heredity assure us that physical education will produce a race of human beings greatly superior to that of the present the public cation sha attending

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# INSPECTOR'S WORK IN EDUCATING.

the present time. Hence, every school inspector should impress upon the public the moral obligation resting upon trustees that physical education shall be part of the regular school work of every pupil while attending a Public School.

Mental education is of supreme importance as a part of school work. As a matter of fact it outweighs all the others. Here, it is not necessary to discuss psychological subtleties. It is not necessary to agree or disagree with Ladd that "the phenomena of human consciousness must be regarded as activities of some other form of Real Being than the moving molecules of the brain." But it is necessary to recognize the fact that, "while the mind acts and develops according to laws of its own, it is always specially correlated with certain material molecules and masses forming the substance of the brain."

The physical part of man is to a great extent a creature of environment, so also is the mind of man. It acts in accordance with certain well-defined laws; but environment, in many cases, is the law-giver. Admitted, if you wish, that there is an original nature, as well as an "original sin," you must still concede the important psychological principle that education is capable of so changing the original nature that almost a new being may be the result of the transfiguration. It is not necessary to cite examples in support of this statement. Each of you can do that for himself. Who has not followed the upward course of many a young man inspired by a good education; and who has not traced the downward course of a brilliant intellect done to death by a bad education? It is many years since the wise man observed that "the wages of sin is death." The laws of mind cannot be violated with impunity; they are as binding upon us as the laws of our physical being. Men do not gather grapes from thorns, nor figs from thistles. Human beings must think; if they do not think moble thoughts, they will think base thoughts. This principle should be kept constantly before the public. Ceaseless activity is the law of life; hence the necessity of directing that activity aright. Physical activity is more apparent than mental, and this explains why the unthinking, or uneducated, are often found providing for the physical, while they neglect the mental activities.

The chief function of the school is to direct mental activity under the guiding and controlling power of the teacher. Mental impressions made during the period of physical development are much more lasting than those made after the age of maturity. This fact contains a great truth, expressed in the well-known couplet :—

"Tis education moulds the human mind; Just as the twig is bent the tree's inclined."

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The inspector's work here is to see that the twig is bent in the right direction. He cannot mould the mind of every pupil over whom he exercises supervision; that is impossible. But he can do much to guide his teachers in correct training. His personality should be a tower of strength to the faithful teacher; his knowledge and experience should aid the teacher in applying methods of instruction best adapted to the capacity of the pupils, his authority should be a reserve force from which the teacher may derive assistance as often as exceptional cases require it.

The moral and religious elements of education cannot, in my opinion, be taught systematically in the Public or High School. But every teacher should be familiar with such great works as Janet's Theory of Morals, Thomas Hill Greene's Prolegomena to Ethics, Butler's Analogy of Religion, and Caird's Philosophy of Religion. Reading of the kind here indicated makes a "full man" in a nobler sense than Lord Bacon ever knew. It makes a teacher full of Christian integrity and manly honesty; and an honest man really is the noblest work of God. This is the kind of moral and religious instruction that should be imparted in our schools. If the teacher is full of the mind of the Master he will give moral and religious instruction as a lamp gives light to all in the house. The subtle influence of his sincere and upright intentions will permeate every part of the moral and religious nature of those with whom he comes in contact; and his silent instructions upon questions of truth and morality will bear a rich harvest in the exemplary lives of those who were fortunate enough to be his pupils.

And what the teacher should do for his pupils as a moralist, that should the inspector endeavor to do for the people. By being upright in all his dealings with the public, he will inculcate fair treatment of his teachers by trustees and parents.

In this way the benefits to be derived from education may be brought home to the heart of the people. The principle of utility is a powerful educator. When the masses believe that education makes a human being a better laborer, a more law-abiding citizen, a firmer friend, a merciful enemy, a more charitable neighbor, there will be no necessity for urging them to keep their children at school, even if they have to do so under great financial difficulties, and it is the duty of the inspector to educate the people in this belief.

The second question requiring an answer is : What means should be employed to give the people the benefits of education ?

In every civilized community there are state institutions for the education of its people. This fact is sufficient in itself to show the general consensus a great wants of not suita applies v tocracy. England for the ir lent prov tion prov European state nov but the p education Hence

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# INSPECTOR'S WORK IN EDUCATING.

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or the eduhe general consensus of opinion regarding education; but there has always been a great difficulty in adapting any state system of education to the wants of the people. The education adapted to one class is frequently not suitable to another class in the same community. This principle applies very forcibly to any state in which there is a well defined aristocracy. It is not many years since a large portion of the people of England were illiterate. The old system of education did not provide for the intellectual development of the laboring class, although excellent provision was made for the wealthy. The new system of education provides for rich and poor, and it is adopted in nearly all the European countries, as well as in Canada and the United States. The state now pays for education and provides ample teaching power, but the people frequently neglect to reap the full benefit of the great educational advantages placed within their reach.

Hence the new educational problem, how can we direct our educational forces so that waste may be reduced to a minimum? The enforcement of the law requiring attendance at school would do much to mitigate the evil. But experience has proved that it is very difficult to enforce such a law. The right of the parent to the services of his child is a stronger law, and therefore renders all compulsory education laws obnoxious to the class which they are intended to benefit. On this account such a school law is not likely to accomplish much in the cause of education. Hence we are compelled to rely upon social and moral incentives to educate.

Public opinion, by recognizing scholarship in the young man or woman as a badge of merit, encourages education. Reading rooms, Christian Endeavor Societies and others of a similar nature are powerful educators. Business assists education. The constant interchange of goods and thoughts between different countries has a tendency to educate. It broadens men's ideas, and makes the whole world akin. The pulpit and the press hold forth the lamp of learning in every habitable region of the globe. All the discoveries in science and art are additions to the sum of human knowledge, and they should ultimately increase, in like proportion, the sum of human happiness.

Perhaps the increased interest taken by woman in education has done more than any other cause to popularize the acquirement of knowledge. Who does not know that wherever Christianity reigns woman is free? This freedom is becoming a powerful social and educational force. Henry Drummond places the evolution of a mother ages before that of a father. This theory has great social and educational significance. If the mother is nature's guardian of the child,

why should she not exercise a like protecting care over man? How mightily has this principle been extended during the reign of our Gracious Sovereign Lady Queen Victoria! And may we not hope that the good work is only begun; that the night is far spent and the day is at hand; that the time is coming when we shall find woman pleading the cause of down-trodden humanity at the bar and in our legislative halls; when she shall assert her maternal rights, redress the wrongs of ages and give equality of opportunity to all the sons and daughters of Adam.

And the inspector's part in all this socializing, humanizing and Christianizing labor is as varied as there are diversities of human intelligence. He can do good everywhere. One inspector may accomplish much by giving public lectures, another by talking to trustees and people; but the main thing is to do all the good he can, and "let who will be clever." If he does this he will not fail to educate trustees and people.

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# WORK DONE BY PUBLIC SCHOOL TEACHERS.

CHARACTER OF THE WORK DONE BY PUBLIC SCHOOL TEACHERS GRADUATING FROM OUR TRAINING SCHOOLS.

#### W. CARLYLE.

In mental and literary attainments he ranges from nearly zero to those of a graduate in Arts, his non-professional status being a very poor criterion of his scholarship, when put to the test of teaching-not assigning a lesson and hearing it recited-he lacks astuteness and the power of logical thought. He appears weak, unfortunately, in reading (which he declares he was never taught), English grammar, English literature (restricted to understanding the meaning of the author) and composition. Grammar, he has great difficulty in understanding and in teaching. His command of language generally is exceedingly defective. In arithmetic he does well in problems, but fails in theory even of the simple rules, and mental arithmetic he avoids altogether. His studies in geography appear to have been limited to the maps and the printed matter of the text as memory work. The earth, with its atmosphere, and its relation to the sun, he is not prepared to teach. He writes well but cannot draw. His book-keeping is the result of copying mainly. In the exposition of any subject, he is weak in his grip of the subject and the power of expression, and is driven to a repetition of the text.

Some professional features, traceable to his academic course, are, serving out to children mental aliment, as to quantity and quality, as he himself had disposed of it in the High School; his language, too, is that of the High School, of the professor to his undergraduates; loading pupils with home-lessons without directions as to preparation; spurred to effort mainly by an approaching departmental examination; relying on written examinations for testing the progress of his youngest pupils. His academic course covering years and his professional a few months, his training in the latter does not correct these features.

The influence of the training schools, in determining his professional work, is not well marked. Some Model Schools are remembered with gratitude by young teachers, some receive their maledictions. "They exacted time and money and returned us only a certificate." There is a singular uniformity of opinion that the training received is of little value in the management of rural schools. "They made us memorize *methods* for *examination*, but we can make no use of them in teaching."

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The time for the Model School course is too limited and county Model Schools have too much given them to do. In the work to be done there is too little of the practical, too little teaching under criticism.

Candidates for Normal Schools, are presumably a better class than those entering the county Model School. But they form a medley of a class, possessing great diversity of scholarship, many unable to follow the course intelligently, and varying in experience from one year in a primary grade teaching Part I. of First reader, to six or more years in rural schools comprising all grades. But they pursue the same course of study, pass the same examination and graduate with the same status as teachers. Can the course be adopted to all of the class?

Two tests of the training received are available, the testimony of the graduates, and the work they do, these tests verify one another. Little difference can be observed in their style of work after graduation and they are quite unanimous in expressing the opinion that the normal course does not bear upon the practical work of the school-room. They speak of lessons taught in the the provincial Model Schools that were delightful events, stimulating emulation; result of seeing good teaching. But no elated satisfaction is expressed by a student who, after many failures possibly, had made a masterly stroke with a class such as without the "well done" of the teacher in charge, assured him of final success and victory; result of doing good teaching. Art is learned only through persistent practice under skilled direction, not by listening to lectures on it, and memorizing methods to imitate the technique of another. A gold medallist of a Normal School says, "The Normal School is full of theory but in the training of teachers it breaks down. Enter a skilful teacher, you come out skilful, enter unskilful you remain such unless subsequent means avail in remedying your defects."

We have strong teachers whose schools it is a pleasure to visit, but strong through the study and practice of their profession, not through means of their professional course as now operated. Training schools have like other schools been forced into the swing of the written examination. Teachers-in-training are coached so as to be prepared to tell how to teach but not trained so as to be able to show they can teach. Training schools are by precept and example preparing teachers to teach merely for examination not to develop subjects assigned them to teach. Ask the teacher whose sole ambition is to grind for examination where he obtained his pointers, and he can reply, at the training school, even to the memorizing of answers to ready-made questions of another man's make.

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### DEPARTMENTAL REGULATIONS IN PUBLIC SCHOOLS.

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# METHODS OF SECURING COMPLIANCE WITH DEPART-MENTAL REGULATIONS IN PUBLIC SCHOOLS (AN ABSTRACT).

# J. S. DEACON, MILTON.

It is probably quite fair to assume that the average teacher or trustee desires to obey the law and regulations. Any remissness on the part of either is generally due to influences which render it difficult to observe the law. The opposition of parents or ratepayers to increased expense, and the difficulty of securing workmen for needed improvements of a minor character, are some of the leading obstacles in rural schools. When officials can be led to see the necessity for action without having the consequences of a broken law looming up before their vision, all obstacles vanish speedily. In other words, the chief object to be secured by the Inspector is a spirit of co-operation and enthusiasm on the part of pupils, teacher, ratepayers, and trustees. This can be gained by manifesting friendship for (and interest in) the school and section, by his own enthusiasm, by commending progress already made, by wise comparisons with other sections, generally to the credit of the former, but occasionally the reverse, and by avoiding unreasonable demands.

In his talks with the teacher and pupils, the Inspector can profitably refer to the pleasant school-room he visited recently. The windows, walls and floors, were clean; the furniture, maps and apparatus, were in a perfect state of efficiency; the window sills were covered with flower pots wrapped in colored tissue paper and containing a great variety of flowering plants; fences, gates, outbuildings, yard and walks, were in proper condition. He can thus create a healthy public opinion among all the classes mentioned, for children repeat these accounts to their parents and exercise influence over them.

With Trustees, the best results are secured by having a friendly talk about defects and deficiencies in their school accommodation and equipment. Ask their opinion concerning its suitability and secure an acknowledgment that improvements are needed. Ask for suggestions as to the best methods of securing such improvements. Discuss these with them, giving your reasons for any modification of their plans or suggestions. Ask Trustees to visit, at their convenience, other school premises where such improvements are already made. Tell them of valuable changes in buildings, furniture or equipment in other school

sections, and thus stimulate their pride. In many cases a spirit of rivalry and emulation wisely generated will accomplish more in one year than formal letters of suggestion or coercion would effect in ten years. I could name some school sections where for many years the Trustees strenuously and successfully withstood the most persistent efforts of the Inspector to secure even decent accommodation, and whose appointments are now excellent. This latter condition has been obtained by a complete change of method so far as the Inspector is concerned. Instead of coercion and unpleasantness, there have come forbearance, co-operation and harmony.

A quiet and very effective way of stimulating a healthy spirit of emulation is to publish in the Inspector's annual report a full list of improvements made during the year, giving each school section credit for its expenditure on behalf of buildings, furniture, heating apparatus, maps, charts, water supply, etc., etc. Trustees read these reports and institute comparisons, which lead them to see the need of improvements in their own buildings, grounds, or equipment. Trustees have been known to ask the Inspector to report against some feature of their school appointments in order to strengthen their position against ratepayers who objected to additional outlay.

Great care is necessary to avoid making requests that seem harsh and unreasonable. For example, closets recently built and in many respects creditable are placed too low or the vaults are too small and, therefore, require attention more frequently than they should. The Inspector may sometimes find the premises far from perfect, yet it seems necessary to exercise patience, and some forbearance, until the circumstances warrant radical treatment, such as a complete change of building and plan. In any case where Trustees have erected buildings, purchased furniture or apparatus, unwisely, it seems a lack of tact for the Inspector to "open fire" upon them at once for reconstruction or change.

As a last resort only, when gentle measures had failed, an Inspector should warn Trustees that he would himself be held accountable for neglect of duty if he did not report them to the Board of Health or withhold the school grant as the case might demand unless the requirements of the law and regulations were met within a given time.

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### PROFESSIONAL CERTIFICATE.

TRUSTEES' DEPARTMENT.

THAT THIS DEPARTMENT MEMORIALIZE THE MINIS-TER OF EDUCATION TO THE EFFECT, THAT NO TEACHER, WHO IS UNDER TWENTY-ONE YEARS OF AGE, BE GRANTED A PROFESSIONAL CER-TIFICATE.

### JOHN A. LEITCH, BRANTFORD.

This change is demanded on the ground, that as at present constituted our system is weak where it should be strong, is defective in so far as it places the raw material in its most plastic and pliable condition, in the hands of young men and women who themselves have not attained to an age which the state recognizes as one of mature judgment and responsibility to assume the duties of citizenship. In law, young men and women are regarded as infants until they have attained to the age of twenty-one. Why then should they be commissioned to lay the foundations for future success in the minds of the boys and girls upon whom first impressions in the schools of our country are permanent either for weal or woe throughout the rest of their natural lives ?

A plant in its earliest stage requires the most delicate handling, the most skilled care in its culture, a continued watchfulness over its daily growth and development in order to be perfect in form and well adapted to the purpose for which it was intended. Is the vegetable world more important than those of our own household? We need to take such steps as will cause our educational system to effectively reach and begin with the masses.

That the quality and sufficiency of popular education are dependent upon influences that proceed from higher institutions of learning is not, we believe, sound doctrine. Their prevailing power is not as universal as the meagre and scant article furnished at our Public Schools under the management of young boys and timid girls.

We believe fully that no commission should be issued to undertake a work so important until at least some degree of maturity is arrived at to some extent commensurate with the importance of the work. Higher education has very little influence on the substratum of society where men are engaged in a hand-to-hand struggle for their daily

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### TRUSTEES' DEPARTMENT.

bread. The millions amid the dust and sweat of daily toil, away down at the very foundations of existence, are those whom it is our duty at least to make an effort to reach.

The majority of those who receive a so-called higher education are men. The influences that go to save the nation from peril come to a large extent from the women. How important it is then that from the very outset those influences should be wielded by men and women in whom character is as mature as possible before being intrusted to shapen and form character in others. No school should be placed under the care of young boys and girls who, from immaturity of age and experience are still but apprentices in a work the most important under the sun.

The qualifications requisite in a teacher before he undertakes the charge of a school are so extensive that before the age of twenty-one there can be but the merest semblance of fitness owing to the limited time which has been devoted to professional training. The academic training very often, in entire ignorance of the aim of the candidate, strives after attaining something too high up upon the upper shelves to be reached by a mere pigmy in stature even physically let alone mentally.

We must admit that moral training should be more effective. The stage at which this can be done is when the mind of the child is in the formative state. How then can moral training be effective in the hands of an infant, so recognized by law?

As it is we consider it poor economy for one to acquire the art of teaching slowly and at the expense of the best interests of the school he is endeavoring to conduct. I question very much whether it can be determined for an absolute fact whether a candidate has the natural tact and true spirit of the teacher before the age of twenty-one. One having the genuine impulse for teaching, preparing himself by every available means, under difficulties perhaps, will exercise a vitalizing power and influence that another, though equipped with all the modern and socalled improved methods will never have. We may all have known teachers unacquainted with educational reformers, who have made use of many of the very things that these great men taught because they themselves were endowed with the native faculty to see that these were the right things to do. An intuition into the workings of the minds of children and a sense of responsibility, will ensure a successful Such an one has already a certificate to teach. Children teacher. should not be looked at as specimers upon which to practice the arts of the profession. There should be a sincere love for children. This will count for more than being filled with all knowledge and stuffed to

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repletion with methods, psychology and the science of pedagogy. Very often the effect of overtraining in such as have no fitness to begin with, is to squeeze out entirely the juice of human kindness which might be made serviceable in some other walk of life.

Too much theory and not enough practice. The mind is dissected and its actions in the science of psychology are seemingly seen as if under a powerful microscope. This in my opinion is a huge imposition and the sooner it is relegated into oblivion the better. Before the age of twenty-one I question very much whether there is in the mind of any young man or woman that degree of maturity as to enable them to thoroughly comprehend mental philosophy or psychology. The power to analyze, to dissect, to connect mental processes in their relations is one of the most difficult achievements of the intellect. Even if thoroughly comprehended, a study of anything in the abstract as a preparation for teaching, is very apt to send the young teacher into the school with a tendency to impose and practice upon children a theory instead of a disposition to study actual conditions out of which the true teacher will develop his or her own theories and methods. Some one else's method is of no value to me unless it quickens and expands ideas already existing in my own mind.

In every other calling in life, as a matter of economy, it is required that a number of years' apprenticeship shall be served, and that in actual practice under the supervision and guidance of a person skilled in the same line. Why should teaching be made an exception to the general rule, and young boys and girls allowed to begin at such an early age as to be still young enough for law or medicine after having earned a competence sufficient to put them through a course in some more remunerative calling? Our schools will never attain to the necessary degree of excellence until we place them in charge of *artists*, not artisans; until the teachers have by age and experience acquired the power to exert an influence that will be to the lasting benefit of those most directly interested.

Now that there is a surplus of teachers and this surplus to a great extent the outcome of a liberal expenditure of the public funds of the country, why not raise the standard by taking steps to place in charge of our Public Schools men and women who, by reason of maturity in themselves, are fitted to form character in others? If our Province spends largely and freely in the direction of preparing for the profession, we should reap the benefits by securing for that profession persons of maturity and judgment and not merely such as purpose filling the bill until they acquire a little means and such a smattering knowledge

### TRUSTEES DEPARTMENT.

of human nature as will be of use in medicine or law or such other profession as they choose to follow. The teacher's calling is kept in the background by this very means and never can rise to the rank of a profession until placed on such a plane as will invest it with dignity and manliness.

Of course it may be argued that no teacher can attain to the higher ranks of the profession until a mature age is arrived at. That may be so, but the most important work in the child's career at school should be done at the outset and in the early stages of school life. If I had my way I would reverse the present order and place the junior schools in charge of those of greater attainments and skill and pay them accordingly. University and High School teaching, in my opinion, does not require that skill and care which is indispensable in the Public Schools, and while scholarship is the main requisite the true secret of the teacher's success may be altogether wanting. Give to the born teacher in the lower forms that standing and emolument which the importance of the work demands.

Then, and not till then, will we have the place sought after by the mature and well-trained mind, saturated with a love for children and full of spmpathy for, and interest in the welfare and final triumph of the Public Schools of our country which are the colleges of the masses. Respectfully submitted.

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# ENGAGEMENTS TO TEACHERS.

SHOULD TEACHERS BE ENGAGED UPON THE UNDER-STANDING THAT ALL ENGAGEMENTS TO TEACH WILL TERMINATE ANNUALLY; AND THAT BOARDS WILL ANNUALLY MAKE NEW APPOINTMENTS; FOR WHICH EXPLICIT APPLICATION SHALL BE MADE.

# JOHN E. FAREWELL, LL.B., WHITBY.

Some School Boards have had occasion to regret the very frequent changes in their staff of teachers.

Some Boards on the other hand have had occasion to regret that some members of their staff were as unchangeable as a Mauritius silver dollar.

A School Trustee has no more difficult or important task than the selection of a teacher to fill a vacancy.

Having regard to the ordinary means for making a good selection of a teacher which is available to the Board, it is a matter of thankfulness as well as a great marvel that so few serious mistakes are made. Most of us who have served on Committees, charged with the examination of applications, remember the anxiety with which we regarded the bundle of applications and testimonials from which we were expected to select the man of the best scholarship, greatest and most successful experience--from which we were to capture the man of tact, energy and principle. True we had testimonials written by Trustees, and testimonials written for Trustees, testimonials honestly given and testimonials given with the hope that the applicant should speedily be delivered over unto some other School Board. Some of them told us that the person recommended was a man of good appearance, and so well built that he was sure to command the respect of the pupils. No testimonial disclosed to us that its subject was of mean presence, or one having such idiosyncrasies or habits that his usefulness was gone before his service commenced.

There surely should be a Committee appointed by this Association to draft forms of testimonials which shall enable School Boards to form opinions as to whether the applicant is an up-to-date teacher or a back number, whether he has physical, mental or moral peculiarities which will speedily result in producing a feeling in the community where he is employed that "it is time for a change."

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#### TRUSTEES' DEPARTMENT.

applicant and the misfits and mistakes which fall to the lot of many School Boards, the question of annual engagements is of great importance.

Has this not been the experience of Trustees after having given the best attention to testimonials, when they get sight of the man of their choice,

> "How sink their souls, what blank despair, What horror fills their hearts."

The annual engagement plan is pretty sure to lead to the discontinuance of many an industrious, scholarly man whose misfortune is a mere physical defect, and who would otherwise be retained in such cases. The plan saves the unfortunate from a dismissal however.

Where the annual application for employment is followed will the best man apply for such situations—will there be constant canvassing for positions by other teachers who desire to better their position ?

When a Board has a good teacher will he not be engaged more or less during the year on a still hunt for a better situation and allege that he wishes to get a place where he will have some security that he will not be ousted by some industrious rival who is willing to accept a smaller salary. Will such a plan not result in unsettling the minds of teachers, boards and pupils by consideration of the probability of a change and impair the work of the school.

It is said that when American corn was introduced into some of the South Sea Islands by the missionaries, the natives were so interested in the growing of the corn that they dug it up every morning just to see whether it was growing.

There are in every community divers people who have a dash of this South Sea Islander peculiarity about them and who become easily dissatisfied with the teacher, and the less capable they are of forming an opinion as to his fitness the more likely are they to do so. A struggle for a teacher's removal is much more easily organized if the appointment is an annual one than if a termination of the engagement is for cause only.

It is claimed on the other hand that permanency in the tenure of a position begets negligence and arrogance in the discharge of duties, especially where there is a strong family influence ready to support the teacher if an effort is made to remove him. It is also claimed that an annual engagement tends to make the teacher diligent in business.

Some School Boards, I understand, have adopted this plan of annual applications for positions, and have found it to work successfully. My own Board has adopted the system as to future appointments.

# ENGAGEMENTS TO TEACHERS.

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While much is claimed for the plan, I am inclined to the opinion that where a School Board makes an appointment, after having seen the applicant, and after having made due inquiry as to the applicant's past history and success, that the annual engagement is not advisable. In deference to the action of my own Board, I propose to move a resolution in favor of the system. We are here to learn, and will all be benefited by the experience of those who have given the system a fair trial.

If the plan is a good one, it is submitted that its success would be greater if it was made applicable to all schools by legislative enactment.

# TRUSTEES' DEPARTMENT.

# SHOULD ANY STEPS BE TAKEN TO PREVENT TEACHERS FROM APPLYING FOR OTHER SITUATIONS, THE DUTIES OF WHICH COMMENCE BEFORE THOSE OF THE CURRENT ENGAGEMENT CEASE; AND SHOULD RESIGNATIONS UNDER SUCH CIRCUM-STANCES BE ACCEPTED ?

# JOHN E. FAREWELL, LL.B., WHITBY.

Where a School Board has succeeded in capturing a good teacher and matters are going on satisfactorily, the pupils having confidence in him and making satisfactory progress, there is nothing more annoying than to be informed that a vacancy has occurred in some other school where a larger salary is paid and that your teacher desires to be relieved at once from his engagement in order to obtain a better salary. If the Board assents to this proposition an effort has to be made to fill the situation at a time when there are few teachers who are worth employing who have not situations. If a suitable man is got the chances are that a similar breaking of engagement has to take place somewhere else and perhaps the mischief is repeated in several schools. Is this sort of thing to be permitted ?

In its favor it is alleged that the Board should not stand in the way of the teacher being enabled to get a position, that if this is not allowed the Board has on its staff a dissatisfied man whose heart will not be in his work, but who will certainly devote himself to hunting up a better situation to be taken when he shall be in a position to legally terminate his engagement. It is claimed that good men will accept an engagement with a Board which releases its teachers under such circumstances, although the salary is not so large as the teacher may be properly entitled to, and that good men will not accept a situation with a Board which has the reputation of requiring teachers to fill out their engagement.

Against this it is claimed that the obvious duty of a Board is to consult the interest of the school of which they are Trustees, and that the members of a Board, who release a good teacher from his engagement are Trustees who altogether disregard their duties in the matter. It is claimed that these alleged offers are sometimes for the purpose of enabling a teacher to obtain an increase of salary from the Board with which they are engaged. A release sure to wo teaching, o of time and ling the qu school is to

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# APPLYING FOR OTHER SITUATIONS.

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l is to conad that the agagement tter. It is se of enaboard with A release of a good teacher during the term of his engagement is sure to work an injury to the pupils by introducing a new system of teaching, or a new manner of teaching, to a certain extent, by a waste of time and interruption of the school work while the pupils are settling the question as to whether the new man is to run the school or the school is to run the new man out of it.

The moral effect of the transaction is disastrous to both teacher and pupil. When an engagement to fill his position for a certain time is once broken by a teacher, it is much easier for him to make the second attempt to escape honestly performing what he undertook to do. The teacher does, or should do, much to form the character of his pupils; a valuable part of his work is the influence he can and should exercise in forming the habits and cultivating the moral nature of those under his care. It is plain to those who have to do with the administration of civil and criminal law that notwithstanding the vast sums which are being expended for education and in carrying on churches and Sunday schools there is a greater lack of common honesty in business matters and a much less regard to the rights and duties of citizenship than there should be. As to the performance of contracts and the fulfilment of duties the question too often is, not what the party should do but what the law will compel him to do.

Those who have carefully studied the work performed by Dr. Arnold of Rugby, and other eminent teachers of the great schools of England, will have noticed that particular attention has been given to inculcating principles of honor, fair dealing and respect to the rights of others. The charters and rules of some of the old schools of England particularly provide for the teaching of morals and honest dealing.

May we not assume that this work has done much to mould and establish the character which the British merchant and manufacturer deservedly holds for honesty and thoroughness the world over? The breaking of contracts to perform important duties by those who should teach the duty of honestly fulfilling engagements must have an injurious effect upon the pupils.

#### IN MEMORIAM.

B<sup>Y</sup> the death of Mr. JOHN MUNRO, President of this Association, which occurred in Toronto on August 7th, 1897, the teaching profession of Ontario lost one of its ablest and most widely known members. For nearly a quarter of a century Mr. Munro had been actively identified with the work and growth of the Ontario Educational Association, so that his unanimous election to the chief executive office a few months before his death was but a natural and spontaneous tribute alike to his professional record and his personal worth.

Mr. Munro, like many others who have rendered signal service to education, was a native of Scotland, having been born in Rossshire in 1848. At an early age he came with his parents to this country and settled near Morriston, in county of Wellington. In this district Mr. Munro taught rural schools for a few years. Subsequently graduating from Toronto Normal School, he was appointed to the staff of the Ottawa Public Schools in 1874. Here he soon won a prominent place as a teacher and a citizen. In 1880 Mr. Munro became Principal of Central School West, and this position he occupied without interruption till the time of his death, achieving for the youth of Ottawa a noble work that will stand an enduring monument to his strong and fruitful personality.

As a teacher, Mr. Munro was marked by versatility, force, and practical judgment. A man of wide sympathies and a good knowledge of affairs, he brought into relation with the work of the class room a variety of intellectual interests that stimulated the efforts of his pupils and contributed to the marked effectiveness of his teaching. But beyond all the superficial qualities of manner and method that accompany the skilful teacher, we must look for the ground of Mr. Munro's success in the moral earnestness and heart power of the Christian man. To him as to every true teacher the agency of education is a contact of personality with personality, and its end the upbuilding of a lofty and consecrated manhood. A loss to his friends, a loss to his profession, a loss to his country is the passing of such a man. John Munro has gone to his reward, but with gratitude for a life of little dross and much gold his fellow-teachers will long cherish the memory of his high service and devoted spirit. A Public Department present, an HON. GEO. THE MAYO behalf of th

(Meeting to Presiden Address. General

OFFICERS dent, R. A. Toronto. COMMITT M.A., Ph.D Guelph; W. Kingston.

10.00 a.m.— 10.15 a.m.—

# APPENDIX.

#### PROGRAMMES, 1898.

# General Association.

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### TUESDAY, APRIL 12TH, 8 P.M.

A Public Reception will be held in the Buildings of the Education Department. SIR OLIVER MOWAT, Lieut.-Governor of Ontario, will be present, and the following gentlemen will deliver addresses of welcome: HON. GEO. W. ROSS, LL.D., Minister of Education, and His Worship, THE MAYOR of Toronto. Mr. A. A. JORDAN, President, will reply on behalf of the Association.

# WEDNESDAY, APRIL 13TH, 8 P.M.

(Meeting to be held in the Public Hall of the Education Department.)

President's Address. Mr. A. A. JORDAN, Meaford. Address. Rev. WM. CLARK, M.A., D.C.L.

General Business. Notices of Motion. Election of Officers.

## College and Bigb School Department.

OFFICERS :— President, Maurice Hutton, M.A., Toronto; Vice-President, R. A. Thompson, M.A., Hamilton; Secretary, F. F. Manley, M.A., Toronto.

COMMITTEE :- John Henderson, M.A., St. Catharines; I. J. Birchard, M.A., Ph.D., Toronto; W. H. Fraser, B.A., Toronto; E. L. Hill, B.A., Guelph; W. J. Robertson, M.A., LL.B., St. Catharines; W. H. Fletcher, Kingston.

#### PROGRAMME.

### WEDNESDAY, APRIL 13TH.

10.00 a.m.—President's Address. PROFESSOR HUTTON.

10.15 a.m.—Address : "The Value of Humanistic Studies." PROFESSOR W. GARDNER HALE, University of Chicago. 杨

11.00 a.m.—Discussion on Report of Committee on High School Entrance Examination. (See Proceedings O. E. A., 1897, page 13.)

# THURSDAY, APRIL 14TH.

10.00 a.m.—" Drill and Physical Training." FRED. F. MANLEY, M.A.
11.00 a.m.—A discussion on High School Regulations. Introduced by L. E. EMBREE, M.A.

New Business. Election of Officers.

# Modern Language Section.

OFFICERS :- President, F. H. Sykes; Vice-President, J. H. Cameron; Secretary-Treasurer, W. H. Fraser.

COUNCILLORS :---A. W. Wright, J. Squair, Geo. A. Chase, W. C. Ferguson, E. S. Hogarth, Miss E. M. Balmer, Miss J. S. Hillock, Miss M. E. T. Addison.

#### PROGRAMME.

### TUESDAY, APRIL 12TH.

10.00 a.m.-Address in French. MONSIEUR DE CHAMP, Toronto.

11.00 a.m.—" Some Living Men of Letters in Germany." Miss L. L. JONES, Eberswalde, Germany.

11.45 a.m.—Report of Committee on Form II. Limits in French.

- 2.00 p.m.—Joint Meeting of the Modern Language Association and the Historical Association, in the University Biological Building :
  - (1) "The Teaching of History in Secondary Schools." PROFESSOR MORSE-STEPHENS, Cornell University.
  - (2) "The Pre-Raphaelite Movement and the Poetry of the Rossettis, Morris, and Swinburne" (with lantern illustrations). F. H. SYKES, Philadelphia.

## WEDNESDAY, APRIL 13TH.

2.00 p.m.—"Shelley's Interpretation of Nature." O. P. EDGAR, Toronto.

2.45 p.m.—"Teaching of the French Verb." GEO. E. SHAW, Toronto. 3.30 p.m.—Election of Officers and other Business.

4.00 p.m.-" Educative Value of Grammar." S. A. MORGAN, Hamilton.

2.00 p.m.

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#### APPENDIX.

### THURSDAY, APRIL 14TH.

2.00 p.m.—Paper on Living English Poets :

- (1) "Rudyard Kipling." A. STEVENSON, Woodstock.
- (2) "William Watson." W. J. ALEXANDER, Toronto.
- (3) "John Davidson." J. E. WETHERELL, Strathroy.

All persons who are engaged in Modern Language Teaching in Ontario may become members of the Modern Language Association of Ontario, together with the Ontario Educational Association, on payment of an annual fee of one dollar, and all who are interested in Modern Language study will be welcome at its meetings.

## Matural Science Section.

OFFICERS :- Hon. President, W. H. Pike, M.A., Ph.D., Toronto;
President, J. R. Hamilton, B.A., Brantford; Vice-President, R. H.
Cowley, M.A., Ottawa; Secretary-Treasurer, E. L. Hill, B.A., Guelph.
COUNCILLORS :- J. A. Giffin, B.A., G. A. Smith, B.A., J. B. Turner,
B.A., R. Lees, M.A., W. H. Stevens, B.A.

#### PROGRAMME.

#### TUESDAY, APRIL 12TH.

2.00 p.m.-Reading of Minutes and General Business.

2.30 p.m.—President's Address.

3.00 p.m.—" Advances made in the Teaching of the Sciences during the past ten years, with Suggestions for Future Improvement." F. W. MERCHANT, M.A., London.

4.00 p.m.—(a) "Notes on Calcium Carbide."

(b) "Experiments to illustrate Law of Definite Proportions." J. A. GIFFIN, B.A., St. Catharines.

WEDNESDAY, APRIL 13TH.

### (In University Chemical Building.)

2.00 p.m.-Election of Officers and General Business.

2.30 p.m.-Address by Honorary President.

- 3.30 p.m.—"Outline of a Theory of the-Form of Atoms Deduced from Crystal Forms." W. L. T. ADDISON, B.A., Barrie.
- 4.30 p.m.- "Some Biological Notes." E. L. HILL, B.A., Guelph.

### THURSDAY, APRIL 14TH.

- 2.00 p.m.—" A Biological Survey of Ontario." D. G. REVELL, B.A., Paris.
- 3.00 p.m.—"Relation of Agriculture to our School System." C. C. JAMES, M.A., Deputy Minister of Agriculture, Toronto.

4.00 p.m.—Discussion of Science Curriculum.

#### Classical Section.

OFFICERS: -President, Lyman C. Smith, B.A.; Vice-President, O.J., Jolliffe, B.A.; Secretary-Treasurer, J. C. Robertson, B.A.

COUNCILLORS :- A. J. Bell, M.A., Ph.D., A. Carruthers, M.A., W. S. Milner, M.A., J. Henderson, M.A., W. M. Logan, M.A., S. F. Passmore, M.A., Miss E. S. Fitzgerald, B.A., C. A. Mayberry, B.A., LL.B.

#### PROGRAMME.

### TUESDAY, APRIL 12TH.

- 10.30 a.m.—"Classics in our High Schools." F. W. FRENCH, B.A., Napanee.
- 11.15 a.m.—"School Blunders." E. F. COOMBES, B.A., Richmond Hill. 2.00 p.m.—President's Address.
- 2.45 p.m.—"The Last of the Great Roman Historians." W. DALE, M.A., St. Mary's.

3.30 p.m.—"Certain Points in the Study of Latin." W. GARDNER HALE, Professor of Latin in the University of Chicago.

### WEDNESDAY, APRIL 13TH.

2.00 p.m.-Election of Officers and other Business.

- 2.30 p.m.-" Looking Before and After." C. J. LOGAN, M.A., Galt.
- 3.15 p.m.—" The Work and Status of the Classical Association." W. S. MILNER, M.A., Toronto.
- 4.00 p.m.—"Quaedam Undique Excerpta." S. F. PASSMORE, M.A., Brantford.

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# Mathematical and Physical Section.

OFFICERS :- Hon. President, Professor A. Mackenzie, Toronto; President, W. H. Ballard, M.A., Hamilton; Vice-President, A. H. McDougall, M.A., Ottawa; Secretary-Treasurer, I. J. Birchard, Ph.D., Toronto. COUNCILLORS :- J. D. Dickson, B.A. Niagara; C. A. Chant, M.A., Toronto; Wilson Taylor, B.A., Chatham; W. M. Doxsee, M.A., Hamilton.

#### PROGRAMME.

# TUESDAY, APRIL 12TH, 2 TO 5 P.M.

President's Address: W. H. BALLARD, M.A.

Report of Committee on Geometrical Teaching. A. H. McDougall, M.A.

"Methods in Physics ' I. J. BIRCHARD, Ph.D.

# WEDNESDAY, APRIL 13TH, 2 TO 5 P.M.

"Higher Mathematics-A Plea for their Study." W. J. RUSK, B.A. "Shall the Answers be Removed from the Authorized Text Books

in Arithmetic and Algebra?" F. F. MANLEY, M.A.

" Conductivity and Resistance." JAMES GILL, M.A.

# THURSDAY, APRIL 14TH, 2 TO 5 P.M.

"Post-Graduate Work in Mathematics." Miss L. CUMMINGS, B.A. General Business. Election of Officers.

Report on Mathematical Works. A. T. DELURY, M.A.

#### Bistorical Section.

OFFICERS : - President, Professor G. M. Wrong, Toronto; Vice-President, Mr. Reavely, Thorold; Secretary-Treasurer, Miss Nellie Spence, Toronte.

COUNCILLORS :--- Miss Janet Carnochan, Niagara; Miss E. Jean Graham, Toronto; Miss Scott, Toronto; Mr. Clarke, Toronto; Mr. Burgess, Owen Sound ; Professor Ferguson, Kingston.

#### TUESDAY, APRIL 12TH, 2 P.M.

Joint meeting with Modern Language Section, in University Biological Building.

(1) "The Teaching of History in Secondary Schools." PROFESSOR H. MORSE STEPHENS, Cornell University.

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(2) "The Pre-Raphaelite Movement and the Poetry of the Rossettis, Morris, and Swinburne" (with lantern illustrations). F. H. SYKES, Philadelphia.

## WEDNESDAY, APRIL 13TH, 2 P.M.

- "The Relative Educational Value of History." PROFESSOR GEORGE M. WRONG, M.A.
- (2) "The Link between History and Literature." Miss Ellen M. KNOX, Toronto.

# THURSDAY, APRIL 14TH, 2 P.M.

(1) "The Greek Tyrants." PROFESSOR MAURICE HUTTON, M.A.

(2) "The Status of History in Canadian Secondary Schools." Miss NELLIE SPENCE, B.A.

## Commercial Section.

OFFICERS :- President, R. H. Eldon, Toronto; Vice-President, A. Shultis, Brantford; Secretary-Treasurer, A. Voaden, London.

COUNCILLORS :--Miss C. J. McCutcheon, Strathroy; A. G. Henderson, Whitby; J. A. Wismer, M.A., Toronto; Wilbur Grant, Toronto; W. J. Evans, Galt; J. J. Davidson, Guelph.

#### PROGRAMME.

## TUESDAY, APRIL 12TH.

11.00 a.m.-Minutes of 1897, etc.

11.30 a.m.—President's Address: "Some Thoughts on the Teaching of Book-keeping." R. H. ELDON, Toronto.

2.00 p.m.—" The High School Course as a Preparation for Business." W. E. EVANS, Galt.

2.45 p.m.—Recitation: "The Race for the Derby." L.A. KENNEDY, M.A., Toronto.

3.00 p.m.—"Joint Stock Company Accounts." GEORGE EDWARDS, F.C.A., Toronto.

# WEDNESDAY, APRIL 13TH.

2.00 p.m.—" Some Suggestions on the Teaching of Model and Memory Drawing." R. HOLMES, Toronto.

2.45 p.m.—Mandolin-Guitar Sextette. B. S. HARRIS, D. PATERSON, S. SHENSTONE, R. D. HUME, and others.

3.00 p.m.—"Contracts." D. E. THOMPSON, Q.C., Toronto.

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#### THURSDAY, APRIL 14TH.

10.00 a.m.—" On Law in Relation to Book-keeping." E. C. SRIGLEY, Woodstock.

10.45 a.m.-Club Swinging. BERT THOMPSON, Toronto.

Dumb Bell Exercises. A class of girls under the direction of MAJOR J. T. THOMPSON, Toronto.

11.15 a.m.—"Commercial Work as a Mental Training." A. G. HEN-DERSON, Whitby.

12.00 a.m.—Election of Officers.

## Public School Department.

OFFICERS :- President, A. A. Jordan, Meaford; Secretary, George M. Ritchie, Toronto; Director, A. H. Musgrove, Wingham.

#### PROGRAMME.

#### TUESDAY, APRIL 12TH.

10.00 a.m.—Opening.

10.15 a.m.-Minutes, Accounts, Communications, etc.

10.40 a.m.—Treasurer's Report, Secretary's Report.

- 11.00 a.m.—" Moral Training in Public Schools." PROFESSOR J. G. HUME, M.A., Ph.D., Toronto.
- 2.00 p.m.—" The Unification of Instruction." A. EMBURY, Brampton. (Joint Meeting.) W. F. CHAPMAN, Toronto, Chairman. Training, Inspectors', Kindergarten and P.S. Departments.
- 3.00 p.m.--Paper from Kindergarten Department. (Joint Meeting as above.) See Kindergarten Programme.

WEDNESDAY, APRIL 13TH.

9.00 a.m.-President's Address. A. A. JORDAN, Meaford.

- 9.45 a.m.—" The Ethics of Talebearing" (a child study experiment). S. B. SINCLAIR, M.A., Ottawa.
- 10.30 a.m.—Discussion on Resolutions sent out last year. Introduced by CHARLES A. BARNES, London.

11.15 a.m.—Election of Officers.

2.00 p.m.—" Personality of Teacher Reappearing in the Pupil." J. A. McCABE, M.A., LL.D., Ottawa. (Joint Meeting.)

3.00 p.m.—" Natural Method of Illustrating Phonics." L. T. LOCHEED, M.A., Toronto. (Joint Meeting.)

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3.30 p.m.—" Supplemental Reading." J. W. ROGERS, Toronto. (Joint Meeting.)

These joint meetings consist of four departments: Inspectors', Training, Public School and Kindergarten.

# THURSDAY, APRIL 14TH.

- 9.30 a.m.—" Bible Knowledge in the Public Schools." A. BAYNTON, Waterdown. Discussion.
- 10.15 a.m.—" Teaching Patriotism." E. W. BRUCE, M.A., Toronto. Discussion.
- 11.00 a.m.—Unfinished Business. New Business.
- 2.00 p.m.—Reports of Committees and Discussion thereon.

3.30 p.m.-Adjournment.

3.40 p.m.-Meeting of Retiring Officers and Newly Elected Officers.

# Kindergarten Department.

OFFICERS :- President, Miss Louise N. Currie; Director, Miss G. Loveck; Secretary, Miss Florence Bowditch.

### PROGRAMME.

# TUESDAY, APRIL 12TH.

- 9.30 a.m.-1. Opening Exercises.
  - 2. General Business.
  - 3. Reports from Kindergartens.
  - 4. "Nature Work and its Relation to the Kindergarten." Miss E. Cody.
  - 5. "Practical Thoughts for Special Seasons." Miss E. READ-MAN.

2.00 p.m.--Joint Meeting of the Public School, Training, Inspectors' and Kindergarten Departments. (See Programme of Inspectors' Department.)

# WEDNESDAY, APRIL 13TH.

9.30 a.m.-1. Opening. New Business.

- 2. "The Place of the Gifts in the Kindergarten System." Miss M. E. MCINTYRE.
- 3. "Spirit and Method of the Games." Miss JEAN LAIDLAW.
- 4. Discussion of the Papers.

5. Election of Officers.

2.00 p.m.—Joint Meeting of Departments, etc. (See Inspectors' Programme.) 9.30 a.m

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9.00 a.m.

#### THURSDAY, APRIL 14TH.

9.30 a.m.-1. General Business.

2. Question Box. Answers.

3. "Composition and Color." T. MOWER MARTIN, R.C.A.

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#### Training Department.

OFFICERS :-- Chairman, J. J. Tilley; Secretary, Wm. Wilson; Director, Wm. Scott, B.A.

#### PROGRAMME.

## TUESDAY, APRIL 12TH.

10.00 a.m.-1. Opening.

2. Chairman's Address. J. J. TILLEY, Toronto.

3. Business. Reports of Committees, etc.

4. "Child Study." T. E. REID, Owen Sound.

5. "Some Suggestions in Connection with the Present Method of Supplying Teachers." A. BARBER, Brampton.
2.00 p.m.—A Joint Meeting of the Training, Kindergarten, Inspectors'

and Public School Departments.

(For Programme, see Inspectors' or Public School Department.)

WEDNESDAY, APRIL 13TH.

9.00 a.m.—1. Opening.

2. "The Professional Training of Teachers." F. WOOD, Port Hope.

3. Election of Officers.

4. "The Place of Art in Education." A. C. CASSELMAN, Toronto.

2.00 p.m.—A Joint Meeting of the Training, Kindergarten, Inspectors' and Public School Departments.

(For Programme, see Inspectors' or Public School Department.)

# THURSDAY, APRIL 14TH.

9.00 a.m.—1. "The Problem of Education." PRINCIPAL J. A. MCLEL-LAN, M.A., LL.D., Hamilton.

2. Special Session of Model School Masters to Consider Methods of Instruction. J. J. TILLEY, Toronto.

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## Child Study Section.

# THURSDAY, APRIL 14TH.

# (Principal Kirkland's Lecture Room.)

- 2.00 p.m.—1. "The Function of the Practice School in Connection with Chicago University." FREDERICK EBY, Ph.D., Chicago.
  - 2. "The Development of the Color Sense in Children, with special reference to Theories of Primary Colors. Miss H. B. MILLS, B.A., Toronto.
  - 3. "Sully's Recent Investigations in Child Study. FRED-ERICK TRACY, B.A., Ph.D., Toronto.

# Inspectors' Department.

OFFICERS :- Chairman, W. F. Chapman; Secretary, H. D. Johnson; Director, W. J. Carson.

#### PROGRAMME.

# TUESDAY, APRIL 12TH.

10.00 a.m.—General Business.

10.30 a.m.—" How to Increase the Efficiency of Teachers' Institutes." A. ODELL, P.S.I.

11.15 a.m.—" What Constitutes the True Value of a Written Examination." A. B. DAVIDSON, B.A., P.S.I.

#### AFTERNOON.

Joint Meeting of Four Departments: Inspectors', Public School, Training and Kindergarten. Chairman, W. F. CHAPMAN, P.S.I.

2.00 p.m.—" The Unification of Instruction." A. EMBURY, P.S.I. 3.00 p.m.—" Revelations of Kindergarten."

# WEDNESDAY, APRIL 13TH.

9.00 a.m.-Science in the Public Schools." JNO. DEARNESS, P.S.I.

10.00 a.m.—"The Inspector's Work in Educating Trustees and People, and How it may be Performed." WM. JOHNSTON, B.A., P.S.I.

10.45 a.m. - "Ups and Downs of the Public School Leaving Course." H. REAZIN, P.S.I.
11.30 a.m. - Election of Officers. 2.00 p.m.

3.00 p.m.

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1.00 p.m.— 2.15 p.m.—

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#### AFTERNOON.

Joint Meeting of Four Departments : Inspectors', Public School, Training and Kindergarten. Chairman, J. J. TILLEY, Toronto.

2.00 p.m.—"The Personality of the Teacher Reappearing in the Pupil." JOHN A. MACCABE, LL.D.

3.00 p.m.-(See Programme Public School Department).

## THURSDAY, APRIL 14TH.

Round Table Conference on the following subjects, to be led by the gentlemen named; about 45 minutes for each of the first two subjects and 25 for each of the others:

- 1. "How Recent Departmental Regulations affect Public School Inspectors." Rev. W. H. G. Colles, P.S.I.
- "The Character of the Work done by Public School Teachers graduating from our Training Schools." WM. CARLYLE, P.S.I.
- 3. "Proper Forms for Reporting for Diplomas for School Premises." Dr. W. E. TILLEY, P.S.I.
- 4. "The Cost of Text Books." W. J. SUMMERBY, P.S.I.
- 5. "Should Latin be Taught in the Public Schools?" J. E. TOM, P.S.I.

6. "Methods of Securing Compliance with Departmental Regulations in Rural Schools." J. S. DEACON, P.S.I.

- 7. "Is the Subject of Reading on a Satisfactory Basis in Ontario?" J. COYLE BROWN, P.S.I.
- 8. "Are the Authorized Series of Public School Drawing Books Suitable?" JOHN BREBNER, P.S.I.

# Public and Bigb School Trustees' Department.

OFFICERS :--President, Colonel James Deacon, Lindsay; Secretary, Geo. Anson Aylesworth, Newburgh, Addington County; Director, John E. Farewell, LL.B., Q.C., Whitby.

#### PROGRAMME.

#### TUESDAY, APRIL 12TH.

1.00 p.m.--Registration of Delegates. Opening Proceedings.
2.15 p.m.-Appointment of Press Committee. Minutes. Reports o Officers. Appointment of Auditors.

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2.45 p.m.—The President's Address. Discussion of the Prospects of the Trustees' Association. Report of the Special Committee on the Secretary's Report, 1897.

3.30 p.m.-Motion by Mr. J. A. LEITCH, Brantford:

"That hereafter no teacher under 21 years of age should receive a Professional Certificate."

4.15 p.m.—Notices of Motion. General Business. Discussion of topics not on the Programme.

## WEDNESDAY, APRIL 13TH.

9.30 a.m. – General Business. Auditors' Report. Election of Officers for 1898.

10.30 a.m.—Topic suggested by Mr. N. McNAMARA, Walkerton: "That it is desirable to institute in our High Schools a course of instruction on Good Manners."

11.15 a.m.—Paper by Mr. E. Y. GODFREY, Meaford :

"The extension of Third Class, or Primary Certificates, upon the candidate re-passing the Model School Examinations."

1.30 p.m.—Topic suggested by Rev. M. McGREGOR, Tilsonburg: "The Teacher's Tenure of Office."

2.15 p.m.—Topics suggested by Mr. J. E. FAREWELL, LL.B., Q.C., Whitby:

(a) "That teachers should be engaged upon the understanding that all engagements to teach will terminate annually; and that Boards will annually make new appointments, for which explicit applications shall be made."

2.45 p.m.—(b) "Should any steps be taken to prevent teachers from applying for other situations, the duties of which commence before those of their current engagements cease; and, should resignations under such circumstances be accepted ?"

3.15 p.m.—Topics suggested by Mr. GEORGE J. FRASER, Woodstock: (a) "That insufficient attention is paid in our schools to the teaching of National Patriotism."

3.45 p.m.—(b) "That our present system of Public School Examinations is faulty, and should be remedied."

4.15 p.m.—Notices of Motion. Discussion of Topics not on the Programme.

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# THURSDAY, APRIL 14TH.

- 9.15 a.m.—Question suggested by HIS HONOR JUDGE ARDAGH, Barrie :
  - "Has the Public School Leaving Examination practical value?"
- 10.00 a.m.—Topics suggested by Mr. J. E. FAREWELL, LL.B., Q.C., Whitby:
  - (a) "Does the Public School course comprise too many subjects? If so, what subjects should be omitted?"

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- 10.30 a.m.—(b) "In the Schools of the Province, should not more attention be given to Mensuration?"
- 11.00 a.m.—Topic suggested by the PUBLIC SCHOOL BOARD, Picton: "The Public School as a Social Factor."
- 11.30 a.m.—Discussion of Topics not on Programme. Suggestions ' for next Meeting. General Business. Adjournment.

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