

MINUTES
OF THE
TWENTIETH ANNUAL CONVENTION
OF
THE ONTARIO ASSOCIATION
FOR THE
ADVANCEMENT OF EDUCATION,
HELD IN
THE PUBLIC HALL, NORMAL SCHOOL, TORONTO,
AUGUST 10th, 11th, and 12th, 1880.



TORONTO:
C. BLACKETT ROBINSON, PRINTER, 5 JORDAN STREET.
1880.

TRINITY MEDICAL SCHOOL.

(Established 1850.)

INCORPORATED BY ACT OF PARLIAMENT.

In affiliation with the University of Trinity College, the University of Toronto, the University of Halifax, the University of Manitoba, and recognized by the several Royal Colleges of Physicians and Surgeons in Great Britain.

The Session commences the 1st October of each year, and continues six months.
The Lectures are delivered in new College Building, close to
Toronto General Hospital.

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Professor of Principles and Practice of Surgery and Clinical Surgery.
- WALTER B. GEIKIE, M.D.,** F.R.C.S., Edin.; L.R.C.P., Lond.; Dean of the Faculty; Member of the Council of the College of Phys. and Surgs. of Ont.; Member of the Staff of the Toronto General Hospital.—256 Victoria Street (St. James' Square).
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Professor of Physiology and Institutes of Medicine.
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Professor of Sanitary Science.
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Demonstrator of Anatomy.
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Professor of Medical Jurisprudence.
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Lecturer on Practical Chemistry.
- CHARLES SHEARD, M.D.,** M.R.C.S., Eng.; Lecturer on Histology, Normal and Pathological, Practical Microscopy, and Botany.
- GEORGE S. RYERSON, L.R.C.P.,** L.R.C.S.E., late Clinical Assistant and Acting House Surgeon, Royal London Ophthalmic Hospital, Moorfields; and Clinical Assistant Central London Throat and Ear Hospital.
Lecturer on Ophthalmology, Otology and Diseases of the Throat.

All Degrees, Scholarships and Medals given by the University of Toronto are open to the competition of the Students of this School, on precisely the same terms as are laid down for all affiliated Institutions.

Full information respecting Lectures, Fees, Gold and Silver Medals, Scholarships, Certificates of Honor, Graduation, Diplomas, Fellowships, &c., is given in the annual announcement, for which apply to

DR. GEIKIE, Dean of the Faculty,

256 Victoria St., St. James' Square, Toronto.

Or to **DR. FRASER, Secretary,**
482 Yonge Street.

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OFFICERS.

1880-1881.

President :

ROBERT ALEXANDER, GALT.

Vice-Presidents :

DAVID BOYLE, JAMES L. HUGHES, AND JOHN SEATH.

Recording Secretary :

ROBERT W. DOAN, TORONTO.

Corresponding Secretary :

ADAM PURSLOW, PORT HOPE.

Treasurer :

F. S. SPENCE, TORONTO.

Executive Committee :

MESSRS. MAXWELL, SOMERSET, MACKINTOSH, LITTLE,
DEARNESS, MACMURCHY, MCHENRY, MILLER, CARSON,
RANNIE, SMIRLE, DUNCAN, McALLISTER, AND HARVEY.

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HELD IN THE PUBLIC HALL, NORMAL SCHOOL, TORONTO,

On the 10th, 11th, and 12th of August, 1880.

Tuesday, August 10th, 1880.

The Convention met at 11 a.m.

The President, Mr. R. Alexander, in the Chair.

The Meeting was opened with the reading of a portion of Scripture, and with prayer by Mr. A. MacMurchy.

Moved by Mr. Maxwell, and seconded by Mr. Strang, That inasmuch as the Minutes of the last Convention were printed and distributed, the reading of them be dispensed with, and that they be confirmed.—*Carried.*

Moved by Mr. Hughes, and seconded by Mr. Boyle, That Mr. Wm. Rannie be Minute Secretary.—*Carried.*

Mr. Spence, the Treasurer, read his Annual Report.

Mr. Seath called attention to the fact, that one of the papers read during the last Convention had been published in an educational journal before appearing in the printed Minutes. The Secretary, Mr. Hughes, gave a satisfactory

explanation in regard to the matter referred to by Mr. Seath.

Moved by Mr. McAllister, and seconded by Mr. Miller, That Messrs. Mackintosh, MacMurchy, and Doan, be the Auditing Committee.—*Carried.*

Moved by Mr. Mackintosh, seconded by Mr. Taylor, That the Secretary, the Treasurer, and Messrs. McAllister, Seath, and the mover, be a Committee to ascertain the most economical way of printing the Minutes.—*Carried.*

Moved by Mr. Hughes, and seconded by Mr. Dearness, That Messrs. MacMurchy, Scarlett, and Mackintosh, be a Committee to prepare a memorial notice on the death of Mr. McGann.—*Carried.*

A telegram from Mr. D. Fotheringham, of Aurora, was read, stating that illness made it impossible for him to fulfil his engagement to introduce "Recent School Legislation." A conversation followed in regard to procuring a substitute. It was finally agreed that Mr. Harvey, of Barrie, who had been appointed to introduce the above-named subject in the Public School Section, should be asked to read his paper before the Convention. If Mr. Harvey could not do so Mr. Miller, of St. Thomas, agreed to introduce the subject.

The Convention then adjourned.

AFTERNOON SESSION.

The Convention met at 2.30.

The President in the Chair.

The Chairman introduced Hon. Adam Crooks, Minister of Education, to the Convention.

Mr. Crooks cordially welcomed the Convention to the Normal School building. He said that he warmly sympathized with their efforts, and that he had always watched the proceedings of former Conventions with great interest, in order to ascertain the opinions of the educators of the

country. He also read statistics showing that the number of first and second-class certificates was on the increase, while the number of third-class certificates was decreasing.

Mr. Miller, of St. Thomas, introduced "Recent School Legislation."

The discussion on this subject was continued by Messrs. Allen (Grey), McHenry, Hughes, Chapman, Lindsay, Dearness, Dickenson, Tamblin, Mackintosh, McPherson, Taylor, and Maxwell.

Mr. McAllister moved, seconded by Mr. McHenry, That while the members of this Association highly estimate the efforts made to secure improvement in the training of teachers by means of County Model Schools, and the encouragement given to the establishment of County Associations, they cannot but feel called upon to condemn, as retrogressive steps, the withdrawal from School Boards of the power to levy rates for school accommodation, and the discretionary power given to some School Boards to curtail the summer holidays.—*Carried.*

Moved by Mr. Hughes, seconded by Dr. Tassie, That this Association appoint a Committee on Legislation to report to the Minister of Education annually, or oftener, the views of the teaching profession on those questions which are, or ought to be, brought before the Provincial Legislature; said Committee to consist of nine members, three to be nominated by each section of the Association.

This motion was discussed by Messrs. Dearness, Strang, Mackintosh, Jennings, and MacMurchy.

Moved in amendment by Mr. Dearness, seconded by Mr. McAllister, That the Board of Directors be instructed to appoint a Standing Committee on Legislation affecting Education, to report to the Minister the opinions of this Association, and to watch such Legislation and advise on it, in accordance with the expressed opinions of the local Associations, while it is occupying the attention of the House.

The discussion that followed was participated in by Messrs. G. W. Ross, Dickenson, Spence, McLean, Johnston, and others.

The original motion was *Carried*.

Moved by Mr. Jennings, and seconded by Mr. Ross, That the thanks of this Association are due, and that they are hereby tendered, to Mr. Miller for his address on "Recent School Legislation."—*Carried*.

The Executive Committee reported that they had the subject of "Representation at the Provincial Association" under consideration, and that they begged to report progress, and asked leave to sit again. The request of the Committee was granted on motion of Mr. Mackintosh, seconded by Mr. Hughes.

The Convention then adjourned.

EVENING SESSION.

The Convention met at 8.30.

The President in the Chair.

The President, Mr. R. Alexander, delivered an address on the Early History of the Association, and on the Teaching of English.

Moved by Mr. Smith (Wentworth), seconded by Mr. Wood, That the thanks of this Association be tendered to Mr. Alexander for his able and interesting address.—*Carried*.

The President said that he had much pleasure in calling upon an ex-President of the Association, Prof. Goldwin Smith, to address the meeting.

Mr. Smith then gave a very pleasant address, and closed by extending to the members of the Convention an invitation to visit him and Mrs. Smith, at the Grange, on Wednesday afternoon, at 5 o'clock.

At the conclusion of Mr. Smith's address, on motion of

Mr. Hughes, seconded by Mr. Chapman, a vote of thanks was tendered him for his presence at the Convention, and for his kind invitation.

Mr. John S. Clark, of Boston, favoured the Association with a few remarks on educational matters in the State of Massachusetts.

A vote of thanks to Professor Clark was moved by Mr. F. S. Spence, and seconded by Mr. H. Dickenson. The Motion was *Carried*.

The Convention adjourned at 9.30 p.m.

Wednesday, August 11th, 1880.

The Convention met at 2.15.

The President in the Chair.

Minutes of previous meeting were read, and on motion of Mr. Duncan, seconded by Mr. Wood, they were approved.

The Board of Directors reported, That it is desirable that no change be made in the Constitution in the way of altering the system of representation, but that the local Associations be urged, at the proper time, by circular, to appoint a delegate annually to the Provincial Association.

Mr. Hughes moved, seconded by Mr. A. Morrison, That the report of the Directors be received and adopted.

The report was discussed by Messrs. Reazin, Harvey, and others.

In amendment, Mr. Smirle moved, and Mr. Duncan seconded, That the report of the Directors be laid on the table for further consideration.

The amendment was *Carried*.

Mr. John S. Clark, of Boston, delivered an able and exhaustive address on Industrial Drawing, exhibiting a large collection of drawings and models.

At the close of Mr. Clark's address, Mr. Wood moved a vote of thanks to the lecturer, Mr. Hughes seconded the motion, and intimated his willingness to furnish the Association, at its next Annual Convention, with an exhibition of the progress of Art Education in the Toronto schools. ✓

The motion was *Carried*.

Mr. Boyle, of Elora, read a very instructive and interesting paper on "Physical Science in the Schools of Ontario."

Mr. J. M. Buchan, in an appreciative speech, moved a vote of thanks to Mr. Boyle for his paper. This motion was seconded by Mr. Smith.—*Carried*.

The Convention adjourned at 4.35 to meet at the Grange, in accordance with an invitation extended to them on the previous evening by Professor Goldwin Smith.

After spending a couple of hours pleasantly at the Grange the President called the members together, when Mr. McFaul, of Lindsay, moved, and Mr. Fotheringham, of Aurora, seconded, a vote of thanks to Mr. and Mrs. Smith for their hospitality.—*Carried*.

EVENING SESSION.

The Convention re-assembled at eight o'clock.

The President in the Chair.

The President announced the receipt of a telegram from Professor Wells, Canadian Literary Institute, Woodstock, stating that he was prevented by illness from being present to address the Convention on "The Teacher as a Moulder of Character."

Moved by Mr. R. W. Doan, seconded by Mr. Herner, That the Committee appointed to prepare a memorial on the death of Mr. J. B. McGann be, and is hereby empowered, to insert such memorial in the Minutes for the present year.—*Carried*.

Reports were received, regarding County Associations,
from—

Mr. Reazin.....	Victoria.....	Representing 250 Members.		
" Knight.....	E. Victoria	"	40	"
" Coates.....	Halton	"	70	"
" Herner.....	Waterloo	"	70	"
" Duncan	Essex.....	"	100	"
" Smirle	} Ottawa	"	50	"
" Munro		"		
" Maxwell	S. Essex	"	60	"
" Lewis	Toronto	"	140	"
" Hunter.....	} Simcoe	"	124	"
" Harvey ...		"		
" Boyle	S. Wellington ...	"	120	"
" Johnston.....	Northumberland	"	130	"
" Smith	Wentworth	"	190	"
" Dearness	E. Middlesex ...	"	118	"
" Mackintosh...	N. Hastings.....	"	70	"
" Jennings	Ontario	"	75	"
" Wood	W. Middlesex ...	"	112	"
" Ferguson.....	Lambton	"	80	"
" Henderson ...	S. Simcoe	"	50	"
" Allen	S. Grey.....	"	90	"
" Park.....	S. Hastings	"	117	"
" Taylor	E. Huron	"	75	"
" Munro	S. Perth	"	120	"
" McLurg	W. Lambton ...	"	109	"
" Lindsay	E. Grey	"	70	"
" Rannie.....	N. York	"	75	"

The Convention adjourned at 10 o'clock.

Thursday, August 12th, 1880.

The Convention assembled at two p.m.

The President in the Chair.

The Minutes of last meeting were read. On motion of Mr. Herner, seconded by Mr. McLurg, they were confirmed.

Mr. Mackintosh presented the report of the Auditing Committee, which was as follows: "Your Committee appointed to audit the accounts of the Treasurer of this

Association beg to report that they have carefully examined the accounts presented by the above-named officer, together with the vouchers therefor, and that they have found them correct."

Mr. Mackintosh moved, and Mr. Smith seconded, the adoption of the report.—*Carried.*

Mr. Miller referred to a mistake in the report of the newspapers, stating that he considered the County Model Schools were in an inefficient state. He had stated that he considered them very efficient.

Mr. McAllister moved, seconded by Mr. Smith, that a clause be added to the Constitution, providing that the Secretary of each Section be, *ex officio*, a member of the Board of Directors.—*Carried.*

The report of the Executive Committee on the Election of Officers was then read, as follows:—

The Executive Committee beg to report that the following gentlemen be appointed as Officers for the ensuing year:

President—MR. ROBERT ALEXANDER, Galt.

Vice-Presidents—1. MR. DAVID BOYLE, Elora.

2. MR. JAMES L. HUGHES, Toronto.

3. MR. JOHN SEATH, St. Catharines.

Recording Secretary—MR. ROBERT W. DOAN, Toronto.

Corresponding Secretary—MR. ADAM PURSLOW, Port Hope.

Treasurer—MR. F. S. SPENCE, Toronto.

Mr. Rannie moved, and Mr. Duncan seconded, the adoption of the report.—*Carried.*

Mr. Spence presented a report of the Special Committee on Printing the Minutes, as follows: "It is recommended that the Minutes of this Association be furnished by the Secretary, for publication, to the *Canada School Journal*, and to the *Educational Monthly*."

Mr. Spence moved, seconded by Mr. Henderson, That the report be adopted.

The report was discussed by Messrs. MacMurchy, Mackintosh, McAllister, and Doan.

Moved by Mr. Carson, seconded by Mr. Wood, in amendment, That the Board of Directors cause the Minutes to be printed, as usual, in pamphlet form, it being understood that they will issue the Minutes at as early a date as possible.

The amendment was carried, after discussion by Messrs. Spence, Knight, Mackintosh, Barker and Harvey.

Moved by Mr. Boyle, seconded by Mr. Wood, That the thanks of the Association be tendered to the Great Western Railway Company, for their courtesy in endorsing the tickets issued to teachers west of Hamilton, and in offering to place a special car at their disposal.—*Carried.*

Mr. Dearness read a paper on "Professional Examinations in County Model Schools."

Mr. W. Mackintosh moved, and Mr. McFaul seconded, a vote of thanks to Mr. Dearness for his paper.—*Carried.*

Mr. G. W. Ross gave an interesting address on the working of Model Schools, containing many hints in regard to the work necessary to be done, and suggestions for improvements in the future.

Moved by Mr. J. H. Smith, seconded by Mr. Scarlett:

1. That the Head Masters of the County Model Schools should be the holders of first-class Provincial certificates.

2. That an extra room for Model School purposes be considered indispensable.

3. That the Legislative grant be not less than \$200 per annum, and that the County Councils be required to raise an equivalent, either by making a grant for the purpose or by imposing a rate bill on teachers-in-training not to exceed \$10 per term, and in the case of cities, that the Board of Education be invested with the same powers as County Councils in regard to the imposition of fees.

4. That the Model School term shall begin on the 1st of September and end on the 30th of November.

5. That Boards of Trustees be recommended to engage an assistant during the Model School term in order to enable the Head Master to devote more attention to the students of the County Model School.

6. That Head Masters, in addition to delivering the lectures prescribed for County Model Schools, be required to carefully supervise the method of teaching pursued by the students themselves, and to award the marks for teaching given them while in attendance.

7. That instead of the present maximum of twenty-five teachers-in-training at each Model School, Public School Inspectors be instructed to admit only qualified candidates to the number of not more than five for each room used for Model School purposes.

8. That it is desirable to have a convention of Model School Masters called at some central point to discuss the best means of increasing the efficiency of the reports.

—*Carried.*

Moved by Mr. McAllister, seconded by Mr. Carson, That Messrs. Smith, Scarlett, Dearness, Ross, Prof. Young, and Alexander, be a deputation to the Minister of Education to present the resolutions just adopted.—*Carried.*

Moved by Mr. Wm. Rannie, seconded by Mr. Smirle, That when this Convention adjourns it do stand adjourned until the next Annual Meeting.—*Carried.*

Votes of thanks were passed to the Minister of Education for the use of the Normal School Hall, to the Railway Companies for reduced travelling rates to members, and to the city daily papers for the very full reports given of the proceedings of the Convention.

After singing the National Anthem the President declared the Convention adjourned.

ONTARIO ASSOCIATION FOR THE ADVANCEMENT OF
EDUCATION.

Treasurer's Report for the year ending August 9th, 1880.

RECEIPTS.

Balance from last year—in bank	\$148 99	
“ “ Cash on hand.	9 98	
		<u>\$158 97</u>
Interest on deposit up to May 1st, 1880		9 05
Members' fees		48 00
Proceeds of sale of Reports		62 64
		<u>\$278 66</u>

DISBURSEMENTS.

Paid Dr. McVicar's travelling expenses	\$15 00
“ caretaker Normal School Buildings	5 00
“ Minute Secretary, Mr. A. Hendry	4 00
“ for printing Minutes	87 00
“ “ express charges and postage	4 90
Balance on hand—on deposit, \$158.04; cash, \$4.72	162 76
	<u>\$278 66</u>

F. S. SPENCE,
Treasurer.

PUBLIC SCHOOL SECTION.

THEATRE, NORMAL SCHOOL, TORONTO,

Tuesday, August 10th, 1880.

The first meeting of the Public School Section was held in the Theatre of the Normal School, Toronto, this morning at 12 o'clock—Mr. Rannie, the Secretary of the Section, in the Chair.

Mr. McAllister moved, and Mr. Alexander seconded, That Mr. R. W. Doan be Chairman of the Section in the absence of Mr. Dickenson.—*Carried.*

Mr. Alexander moved, and Mr. Taylor seconded, That Representation of the Provincial Association be the first subject to-morrow morning, providing the General Association does not dispose of it this afternoon.—*Carried.*

Mr. Alexander moved, and Mr. Chapman seconded, That this Section meet in this room at 9 o'clock a.m., to-morrow, Wednesday.—*Carried.*

Wednesday, August 11th, 1880.

Section met at 9.15. Mr. Dickenson in the Chair.

Opening exercises by Mr. Duncan.

Minutes of previous meeting read and approved.

Mr. Chapman (Waterloo), introduced "Representation of the Provincial Association."

Discussion continued by Messrs. Munro (Ottawa), McQueen (Kirkwall), Boyle (Elora), Smirle (Ottawa), Suddaby (Berlin), Jennings, Spence (Toronto), Johnson (Cobourg), Duncan (Essex), Kinney (Prince Edward), Bole (Frontenac), Taylor (Clinton), Alexander (Galt), Morrison (Toronto).

Moved by Mr. F. S. Spence, and seconded by Mr. Robert Alexander, That in the opinion of this Section the basis of Representation should be as follows, viz.: Five delegates to be elected by each local Association recognized by the Education Department, at least one of whom should be a High School Master, except in cases where no High School Master is a member of such Association, and one a Public School Inspector, it being understood that such arrangements should be made as would not cause one Association to be at more expense than another in sending such delegates.—*Carried.*

Mr. W. B. Harvey, of Barrie, made a few remarks in reference to "Recent School Legislation," and explained that on account of a storm he was unable to be present yesterday.

A discussion followed Mr. Harvey's remarks, participated in by Messrs. Alexander, Jennings, Taylor, Johnson, Wood, and Gibson.

Moved by Mr. S. McAllister, and seconded by Mr. W. B. Harvey,—

1. That the discretionary power given to Public School Inspectors to permit Third Class Teachers, holding Intermediate and Third Class Certificates, to go up for their professional training for a Second Class Certificate, at the end of a year's experience in teaching, should be withdrawn.

2. That the present method of granting permits, and permanent certificates, to Third Class Teachers, is liable to abuse, and should be altered so as to afford a reasonable guarantee that those teachers securing these privileges are worthy of them.

3. That the votes for Public School Trustees should be by ballot.

4. That the age of Candidates on entering the Profession of Teaching should be—for females, eighteen (18), and for males, twenty (20) years.

These motions were carried consecutively.

Messrs. Boyle, Duncan, and Smirle were appointed a com-

mittee to co-operate with members selected from the other Sections on the matter of Superannuation.

The Section then adjourned to meet on Thursday morning at 9 o'clock.

—

Thursday, August 12th, 1880.

Section met at 9 o'clock a.m.

Mr. R. W. Doan (Toronto), in the Chair.

Opening exercises by Mr. McQueen (Kirkwall).

Mr. Alexander moved, and Mr. Henderson seconded, That at 10.30 a.m. the Section proceed to the Election of Officers.
—*Carried.*

Mr. David Boyle then read a paper on the question: "Is it desirable to make any change in the Superannuation Regulations?"

Mr. S. McAllister read the Report of a Committee appointed to confer with the Minister of Education in reference to the Superannuation Fund.

The Committee, in fulfilment of the duty imposed upon them by the resolution passed at the last meeting of the Public School Section, waited upon the Minister of Education on the 13th of December last, by appointment. He courteously received them, and entered very largely into a discussion of the various aspects of the Superannuation Fund. As opportunity occurred, they laid the terms of the resolution before him, and advanced various reasons in its favour. He admitted the anomalous condition of the Fund, and also the meagre allowance it provided for worn-out teachers. He did not see, however, how the latter could be increased except by the co-operation of those to be benefited by it, in making larger contributions. He pointed out that already the Legislature appropriated a very large sum to supplement the moiety the teachers gave; two years ago it was two-and-a-half times, and last year it was three times as much as theirs. The Committee assured him that there would be no lack of reasonable co-operation on the part of the profession to put the Fund on a proper basis, provided the time of active service to secure the benefit of the Fund could be reduced to a reasonable length, say twenty-five years, and the allowance be increased to

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afford a possible means of support on retirement. His attention was directed to the liberal scheme of superannuation the English Government had adopted in favour of the Irish National school teachers. He would not hold out any hope of lessening the period of service, or, in fact, of doing anything with the Fund during the session then approaching; but he promised to give the matter his earnest consideration during the present summer, after which he would be able to indicate in what direction his opinions tended, with a view to legislation.

The Committee, after thanking him for his courtesy, then withdrew.

All which is respectfully submitted,

SAMUEL McALLISTER, *Convener.*

Discussion by Messrs. Henderson, Duncan, Allen, Taylor, Harvey, and McQueen.

Mr. Duncan moved, and Mr. Wood seconded,—

1. That twenty-five years' service in the Profession or having attained the age of fifty entitle a teacher to superannuation.
2. That no teacher who retires before ten years' service be allowed a refund of more than ten per cent. of his payments to the Superannuation Fund.
3. That the allowance to superannuated teachers be increased, and if need be, that the yearly subscription to the Fund be increased also.
4. That provision be made for the widows of superannuated teachers.

ELECTION OF OFFICERS.

Chairman—DAVID BOYLE, Elora.

Secretary—WM. RANNIE, Newmarket.

Committee—ARCHIBALD SMIRLE, Ottawa.

SAMUEL McALLISTER, Toronto.

JAMES DUNCAN, Windsor.

W. B. HARVEY, Barrie.

JOSEPH S. CARSON, Strathroy.

Legislative Committee—SAMUEL McALLISTER.

R. W. DOAN.

F. S. SPENCE.

Moved by Mr. Alexander, seconded by Mr. R. McQueen, That in the opinion of this Section it would be to the advantage of the schools of the Province to retain the apparatus

part of the Depository for the present, and we would very much regret to see it closed.—*Carried.*

Mr. W. B. Harvey moved, and Mr. J. Duncan seconded, a vote of thanks to the Secretary for his services during the past year.—*Carried.*

Mr. Smirle moved, and Mr. Wood seconded, a vote of thanks to the Chairman and Committee for their services during the past year.—*Carried.*

Moved by Mr. F. S. Spence, That we, as a Section, sustain the first clause of our yesterday's resolution, and ask for a committee to consider the same.

Moved, in amendment, by Mr. Duncan, seconded by Mr. S. Herner, That the Representation Question be remitted to the Local Associations for further consideration.

Amendment *Carried.*

Moved by Mr. McAllister, seconded by Mr. C. B. Linton, That rotation of examiners applied to the various Departmental Examinations would add to the improvement of education throughout the country.—*Carried.*

It was also resolved that Mr. S. S. Herner's paper on the "Uniformity of Text-books" be postponed, to be read if possible this afternoon, or if not, that the Executive Committee of this Section be requested to put it as one of the first items of business on the programme for next year.—*Carried.*

Adjourned.

WM. RANNIE, *Secretary.*

HIGH SCHOOL MASTERS' SECTION.

Tuesday, August 10th, 1880.

The Section met in the Minister's room at noon. Mr. Seath took the chair, and Mr. Strang was appointed Secretary.

The Chairman having explained that it had been thought best to alter the arrangement of the original programme, it was agreed to take up the subject of Departmental Examinations first.

Mr. McHenry read a paper on the subject, the reading of which was followed by some discussion, in which Messrs. Millar, MacMurchy, Tassie, Strang, and others took part.

Owing to the lateness of the hour and the fact that several of those present had to attend a meeting of the Executive Committee at 1.30 p.m., it was decided to adjourn the discussion until to-morrow morning.

Present at the session:—Messrs. Seath, MacMurchy, McHenry, Tassie, Purslow, Millar, Knight, Fessenden, Orr, O'Connor, Mackintosh, Smith, and Strang.

Wednesday, August 11th, 1880.

TL. Section met again at 9.30 a.m.

The Minutes of the last meeting were read and confirmed.

According to previous agreement the subject of Departmental Examinations was taken up first. Quite a lengthened and vigorous discussion followed, mainly with reference to the Entrance and Intermediate Examinations, the necessity of a change of examiners, and the unfair character of some of the examination papers. Messrs. Orr, MacMurchy, Oliver, Millar, Fessenden, O'Connor, Wightman, Tamblyn, Tassie, Henderson, Strang and others took part in the discussion.

Several resolutions were submitted to the meeting, but it was finally agreed to refer them to a Committee, consisting of Messrs. McHenry (Chairman), Oliver, Orr, O'Connor, and MacMurchy, with instructions to frame and report a series of resolutions at to-morrow's session covering the points on which there appeared to be substantial agreement of opinion.

Mr. Purslow then read a paper with reference to the Special Grant of \$750 to Collegiate Institutes.

A discussion followed, in which Messrs. Tassie, Fessenden, McHenry, Millar, Strang, Tamblyn, and others took part. Finally, owing to the lateness of the hour, it was agreed to adjourn the discussion until to-morrow morning.

Present at the session:—Messrs. Seath, Tassie, MacMurchy (Toronto), Hunter (Barrie), Smith, Tamblyn, O'Connor, Fessenden, Henderson, Orr, Oliver, Strang, Purslow, Millar (St. Thomas), McHenry, Mackintosh, Wightman, Tamblyn, McMurchy (St. Mary's), Hunter (Waterdown), and Millar (Bowmanville).

Thursday, August 12th, 1880.

The Section met again at 9.30 a.m.

The Minutes of last meeting were read and confirmed.

On motion of Mr. Millar, a Committee, consisting of Messrs. Seath, MacMurchy, Purslow, Strang, Miller, Fessenden, Tamblyn, and Oliver, was appointed to consider the question of Superannuation of Teachers, and to suggest such alterations in the present law as would place the scheme on a more satisfactory basis.

Mr. McHenry then read the report of the Committee which had been appointed to prepare a series of resolutions covering the points discussed at the previous sessions. The Section then proceeded to discuss the proposed resolutions *seriatim*, and after some alterations and additions the following six resolutions were, on motion of Mr. MacMurchy, seconded by Mr. Hunter (Waterdown), unanimously adopted:—

1. Inasmuch as the Department has issued a regulation appointing Head Masters of High Schools presiding examiners in their own schools at the Entrance Examinations in those cases where the Inspector cannot be present, and inasmuch as the Head Masters have their full share in the examining of the papers afterwards, the High School Section would respectfully recommend that the Head Masters be placed on the same

footing as the Inspectors with regard to remuneration, as is already done in a number of schools.

2. Inasmuch as the Intermediate Examinations have reference largely to work done in High Schools, and as often those appointed to preside at the examinations have no special fitness for the work, the High School Section thinks that, as a class, the High School Masters are most competent to preside on such occasions, and would respectfully suggest to the Minister of Education the propriety of making appointments as examiners from among such, direct from the Department.

3. That this Section would desire to impress upon the Minister of Education the advisability, in the interest of education, of adopting the principle of rotation of examiners as put into practice in connection with the examinations of the University of Toronto.

4. That in order to secure a more regular gradation in the difficulty of the papers, the High School Section would recommend that the examiner who prepares the paper in any subject for the Entrance Examination should also prepare those for all the other Departmental Examinations in that subject.

5. That, taking into consideration the object of the Intermediate Examination, and the instructions given to the examiners by the Honourable Minister of Education in his circular of December, 1877, this Section considers that the paper on English Literature, given at the last examination, assumed too great maturity on the part of purely Intermediate candidates; that the paper on Arithmetic was too difficult, while that on Algebra was wholly unsuitable.

6. That in the opinion of this section the tendency of the Intermediate Examinations has been, and is to give undue prominence in our schools to the subjects composing the mathematical group; and to prevent the other departments from receiving that measure of attention to which their importance entitles them.

The adjourned discussion of the subject of the Special Grant of \$750 to the Collegiate Institutes was then resumed. After considerable discussion, it was agreed to appoint a Committee, consisting of Messrs. Purslow (Chairman), Fessenden, MacMurchy, Strang, Seath, Oliver, and McHenry, to take into consideration the subject of the Legislative Grant for Secondary Education, and to take such action as may be agreed on by the Committee—five members to form a quorum.

Mr. Tamblin having referred to the recent action of the Medical Council in reference to the requirements for matricu-

lation in the College, on motion of Mr. Parker, seconded by Mr. Oliver, Mr. MacMurchy was requested to attend the next meeting of the Executive Committee of the Council, and acquaint them with the wishes of the High School Masters in regard to the Matriculation Examination.

On motion of Mr. Oliver, seconded by Mr. Parker, last year's Executive Committee was re-appointed, viz., Messrs. Seath (Chairman), MacMurchy, McHenry, Millar, and Inspector Carson.

On motion of Mr. Parker, seconded by Mr. Tamblyn, Messrs. Seath, Fessenden, and Oliver were appointed members of the Legislative Committee of the Association.

Owing to the lateness of the hour, and the meeting of the Executive Committee, it was decided to adjourn to meet again at 2.30 p.m.

Present at the session:—Messrs. Seath, MacMurchy, McHenry, Millar, Orr, Mackintosh, Smith, Tamblyn, Fessenden, Oliver, Strang, Purslow, Hunter, Tilley, Wightman, Shields, Parker, and Johnston.

The Section met again at 2.30.

The minutes of last session were read and confirmed.

Mr. Miller introduced the subject of the Relations of the University to the High Schools.

A lengthy discussion followed, in which most of the members present took part, and during which Mr. MacMurchy, the representative of the High School masters in the Senate, gave explanations on several points in regard to the proceedings in the Senate.

Finally the following resolutions were adopted:—

1. That the present regulations of the University Senate preventing candidates over twenty-three years of age from obtaining scholarships at the Junior Matriculation Examination should be amended.

2. That this Section would respectfully urge upon the Minister of Education the advisability, in the interest of the High Schools, of taking steps to give the High School masters additional representation in the Senate of the University of Toronto.

3. That in the opinion of this Section, before the Senate finally adopt any statutes or resolutions affecting the interests of the High Schools, they should authorize the Registrar to furnish the representative of the High School masters with such documents as he may deem necessary for obtaining thereon the opinion of the High School masters, or of such committee of them as they may appoint for that purpose.

Mr. Millar gave notice that at next meeting of the Section he would move that the regulation requiring attendance on lectures before receiving a degree in arts should not apply to Public School teachers and assistants in High Schools.

The Section then finally adjourned at 5.30 p.m.

PUBLIC SCHOOL INSPECTORS' SECTION.

Tuesday, Aug. 10, 1880.

The Section assembled at 10 a.m.

No business was transacted, the time being occupied by informal discussions on Inspection, Model Schools, and Recent Legislation.

Members present, Messrs. Agnew, Carson, Clapp, Dearness, Fotheringham, Hodgson, Hughes, Knight, Little, Maxwell, McKinnon, Mackintosh, Ross, Reazin, Scarlett, Somerset,—Mr. Mackintosh, Chairman; Mr. McKinnon, Secretary.

Wednesday, Aug. 11, 1880.

The Section met at 9 a.m.

Mr. Smith of Wentworth presented the report of the Committee appointed in 1879 to lay before the Minister of Edu-

cation, the views of the Section with regard to proposed Legislation. This report was adopted.

Mr. Ross gave an address on "Methods of Public School Inspection."

Messrs. Ross, Scarlett, Carson, Maxwell, and Mackintosh, were appointed a Committee to prepare a draft form of Report to be sent by Public School Inspectors to Trustees.

Mr. Dearness introduced the subject of Recent School Legislation.

Messrs. Smith, Dearness, and McKinnon were appointed a Committee, to suggest amendments to the School Law, such as would to some extent remedy the injustice suffered by the smaller and weaker Sections of a Township under the present system of taxation for school purposes.

It was unanimously resolved, That in the opinion of this Section, gentlemen holding first-class, grade A, certificates should be eligible to the Head-masterships of High Schools.

The Section adjourned at 12 noon.

Thursday, Aug. 12, 1880.

The Section met at 9 a.m.

Mr. Ross presented the report of the Committee appointed to draw a draft form of Inspectors' Report to Trustees. This report, with amendments, was adopted with one dissenting voice, and Messrs. Ross and Carson requested to submit the draft to the Minister.

Messrs. Hughes, Fotheringham and Dearness were appointed the Legislative Committee of the Section.

Officers of the Section were appointed as follows:—Messrs. Hughes (Chairman), Maxwell (Secretary), and Somerset, Mackintosh, Little, Dearness and MacMurchy, Executive Committee.

It was unanimously resolved, that in the opinion of this Section, no Public School Inspector's certificate should be granted to any person who has not passed the Professional

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First-Class Examination, including successful practice in a Provincial Model School, and that no First-Class Provincial Certificate should be granted to any one who has not taught successfully for at least two years in a Public School in Ontario.

Mr. McKinnon presented the report of the Committee on Inequalities of Taxation in Rural School Sections, which recommended that the preamble, with clauses 1, 2, 3, 4 and 7 of a memorial addressed in January last by the County Council of Peel to the Minister of Education, should be generally endorsed by the Section, and that clause 4 should be particularly recommended to the attention of the Minister.

This report was unanimously adopted, and Mr. McKinnon was appointed to represent to the Minister the views of the Section on the question.

It was unanimously resolved, that in the opinion of this Section the half-yearly subscription to the Superannuated P. S. Teachers' Fund should be increased, that Public and High School Teachers, male and female, as well as School Inspectors, should be required to contribute; that no refund of subscriptions should be made, except in case of death, and that Teachers and Inspectors should be allowed to retire on the completion of a stated term of service. Messrs. Carson, Somerset and Smith were appointed to represent the views of the Section on this subject to the Minister.

It was resolved, that the examination of candidates for entrance to High Schools should be entrusted to the Boards of P. S. Examiners.

The Section adjourned at 12 noon.

PAPERS READ
BEFORE THE ONTARIO ASSOCIATION
FOR THE
ADVANCEMENT OF EDUCATION.

PRESIDENT'S ADDRESS.

We have under discussion a scheme for the changing of the Constitution of this Association, and I have thought it might be well to tell, in a brief manner, how the Teachers' Association of Canada West was commenced, and some of its proceedings.

The passing away of some of the Charter members—as those who were its first members may be called—requires that, if the facts are to be related, some one acquainted with the circumstances should relate them before all knowledge of them is forgotten. In the year 1860 I was appointed by the Teachers' Association of the North Riding of York as a delegate to the annual meeting of the American National Teachers' Association of the United States, held in Buffalo. On my return I brought before the Association of North York the need of a Provincial Association, and pointed out the benefits that might reasonably be expected to flow from the union of the teachers of Canada West in such an annual gathering. The Association of North York appointed a committee to bring the advisability of such a convention of teachers before the Profession. The committee having appointed Mr. Wm. Henry Irwin chairman, and Mr. R. Alexander secretary, issued a circular calling the attention of the teachers to the matter, and also requesting delegates to be sent to a preliminary meeting, to be held in the Court House in Toronto, on the 25th of January, 1861. In response to the call of the committee about 120 persons assembled to take the matter into deliberation. The meeting organized by electing the late Rev. Dr. Jennings chairman. The following resolution was passed unanimously: "That the interests of the Profession render it necessary that we form ourselves into a Teachers' Provincial Association." On motion it was agreed that the Association "shall be styled the Teachers' Association of Canada West." A Constitution was adopted subject to amendment by a majority vote of a meeting to be held in

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Toronto in August. The preamble to the Constitution declared that the objects of the Association were: 1st, To secure the general adoption of the most approved systems of imparting instruction; 2nd, To secure the improvement of our text books, or the adoption of others more suitable to the wants of the community; 3rd, To enlarge the views of teachers and stimulate their exertions for the advancement and diffusion of knowledge; 4th, To encourage the frequent interchange of ideas and kindly intercourse among the members of the Profession throughout the country. The first President of the Association was the late T. J. Robertson, Esq., M.A., Head Master of the Toronto Normal School, and the first meeting for the discussion of educational topics was held on August the 6th, 1861, in the city of Toronto, and continued for two days. In the absence of the President the first Vice-President, the late Mr. McCallum, of Hamilton, presided. The second President was the Rev. Dr. McCaul, of University College, Toronto, and the meeting for 1862 was held in Hamilton, but on account of the absence of the President the first Vice-President, Mr. McCallum, filled the chair. Allow me to quote two motions which were discussed at the Hamilton meeting, for the purpose of showing the subjects which then engaged the attention of the Association. The first is this: "That our Secretary be instructed to invite the attention of the Chief Superintendent of Education to the necessity of providing greater facility for school visiting on the part of teachers, requesting that not less than four days in the year may be placed at their disposal for that purpose, the particular days to be determined by the teachers and their employers."—Carried unanimously. The second, which was moved by Wm. Anderson, Esq., of Toronto, is as follows: "That this Association considers the provisions of the present School Act, in reference to the examination of teachers and the granting of certificates of qualification by County Boards of Public Instruction, have a tendency to lower the professional status of teachers, and retard the progress of common school education in the Province, by subjecting that large class of teachers not holding Provincial Normal School Certificates to repeated and unnecessary examinations, and that it is highly desirable that a Central Board of Examiners be appointed, with power, after due examination, to grant certificates of equal extent and duration with those granted by the Chief Superintendent of Education to students who have attended the Provincial Normal School." This motion, after a long and spirited debate, was voted down by a small majority. From the above motions it will be seen that this Association was, even at that early period of its life, anxious to bring the influence of the Profession to bear upon the authorities for the purpose of improving the School Law. The President for the next year was Dr. D. Wilson, of University College, Toronto, and by a resolution of the Hamilton meeting Kingston was to be the place for the next meeting. The annual meeting for

1863 was held in Toronto in consequence of the apparent apathy of the teachers of Kingston. In the absence of the President the first Vice-President, Mr. Lusk, presided. When the meeting was about to proceed to business on the first day it was found that there was not a quorum present. The gathering considered it best not to disperse, and proceeded to discuss the subject of Corporal Punishment. The business of the Association was begun on the following day, when the following subjects were discussed: Truancy, its Influence and Remedy; Arithmetic as a School Study; Compulsory Education. Prof. Wilson was re-elected President. The meeting of 1864 was held in Toronto, and the proceedings were commenced by the President delivering an address. This was the first time the President had filled the chair at the annual meeting. Among the subjects discussed were the following: "The fitness of the Irish National Series of School Books for the requirements of Canadian Schools;" "The Examination of Teachers." On the latter subject the following motion was carried by a large majority, thereby showing the influence of discussion: "That in the opinion of this Convention it would be conducive to the interests of education were the system of granting certificates by County Boards abolished, and one Central Board having power to grant Provincial Certificates established, and likewise the present system of Local Superintendents superseded by the appointment of County Superintendents." Prof. Wilson was again re-elected President. Thus I have briefly gone over the acts of this Association up to the meeting of 1865, the minutes of which were issued in pamphlet form in which, and the succeeding annual issues, are contained the proceedings of this Association from that to the present time. This is—including the preliminary meeting—the twenty-first meeting of this Association. During its life-time it has changed its name a number of times. In 1865 the Constitution of this Association was amended, and a new preamble adopted and the name of the Association changed, and it was styled "The Teachers' Association of Upper Canada." In 1867 the name was again changed, and it became the "Ontario Teachers' Association." In 1871 the "Ontario Teachers' Association" and the "Ontario Grammar School Masters' Association" were united under the name of the "Ontario Teachers' Association," and the work of the Association divided into three sections. In 1873 a further change was made in the name of the Association, and this time it received the title of the "Ontario Association for the Advancement of Education."

I have stated that about 120 persons were present at the preliminary meeting; perhaps I should here say, that a large number of students, who were then in attendance at the Norman School, attended the preliminary meeting and thus contributed to the success of the meeting. Those who remember the Association in its early days, will easily recall the concern of many in regard to its usefulness and life. Some very

anxious friends were afraid that it would receive harm from having so many Normal School trained teachers among its friends and supporters, while on the other hand, many among the Normalites were very nervous about its future because of its friends being so numerous among the County Board teachers. Notwithstanding the apprehensions of its many friends, it has grown to be a strong and independent Association. It pursued such a steady, straightforward course that very soon all reasonable persons were convinced that it aimed at being the honest exponent of the Profession on matters educational. The influence that it has exerted, the good that it has accomplished, and the reforms that it has commenced and helped to carry to completion, during the twenty years of its existence, are, I hope, but an earnest of its future in the work of stimulating and aiding the cause of education.

I will now ask your attention, for a short time, to some matters connected with the work of the school-room.

Addison, in the *Spectator*, says: "I consider a human soul without education like marble in the quarry, which shows none of its inherent beauties till the skill of the polisher fetches out the colours, makes the surface shine, and discovers every ornamental cloud, spot, and vein that runs through the body of it. Education, after the same manner, when it works upon a noble mind, draws out to view every latent virtue and perfection, which without such helps are never able to make their appearance.

"If my reader will give me leave to change the allusion so soon upon him, I shall make use of the same instance to illustrate the force of education, which Aristotle has brought to explain his doctrine of substantial forms, when he tells us that a statue lies hid in a block of marble; and that the art of the statuary only clears away the superfluous matter, and removes the rubbish. The figure is in the stone; the sculptor only finds it. What sculpture is to a block of marble, education is to a human soul. The philosopher, the saint or the hero, the wise, the good or the great man, very often lie hid and concealed in a plebeian, which a proper education might have brought to light."

In the above extract there are two words that would challenge attention from any reader, but more especially the attention of a teacher. I refer to the words *proper education*. I ask your forbearance for a short time while I direct attention to one point, in which I think our practice is not in accordance with the science or theory of education. The first period of school life should be so arranged that it would make the change from home life to school life easy. There should be no unnatural and violent changes. The child's curiosity which has been so potent in its education in the home, should be the teacher's ally in the primary course of the child's training. Can the freedom of the home life, with its many questions, be allowed any place in the work of the school? I think it can, and not only that it can, but

that a large part of the first year or two of the work in the school ought—so long as children come to school at the age of five—to be much more free from unnatural restraint than we now make it. I think we greatly retard the child's education by the unnecessary break that we make between home and school life. Think of what the child's life was before he entered the school; remember the liberty of motion he enjoyed, the freedom to handle and examine the things that came within his reach or observation. Remember how persistent in asking questions about the thousand and one things seen by him in the world of nature. Think, on the other hand, of the ordinary school session of two or three hours each forenoon and afternoon, with the—to him—unusual restraint, of the school, compelled to remain for a length of time in one position, forced to be silent, required to attend to lessons, that, to him, are unmeaning and dreary. Think of him, with nothing but a first book or slate allowed him, with which to break the tedium or relieve the dulness of the session after his short lesson. How irksome and monotonous must such a life be to a child. If such be the proper education for primary classes, then the theory of education as expounded by eminent writers on education, is at fault. Pestalozzi says:—"Nature develops all the human faculties by practice, and their growth depends on their exercise." "The circle of knowledge commences close around a man, and thence extends concentrically." "Force not the faculties of children into the remote paths of knowledge until they have gained strength by exercise on things that are near them." "There is in nature an order and march of development. If you disturb or interfere with it, you mar the peace and harmony of the mind. And this you do, if, before you have formed the mind by the progressive knowledge of the realities of life, you fling it into the labyrinth of words, and make them the bases of development." "The artificial march of the ordinary school, anticipating the order of nature, which proceeds without anxiety and without haste, inverts this order, by placing words first, and thus secures a deceitful appearance of success at the expense of natural and safe development."

It is an undoubted fact that childhood is specially marked by the activity of the perceptive faculties and through them, mainly, we should attempt the child's early education. Why not at least make of nature a helpmate, if we will not consent to be wholly guided by it in the early stages of the child's education? Why not give the pupil more time in the playground for physical development, and while there encourage him to continue his former acquaintance with the natural world? Why not have in the school-room a sufficient number of objects calculated to arouse his curiosity, to fix his attention, to call forth his observation, and enlarge his knowledge? Why shut the child up in a school-room, without a single thing in it, purposely designed to arrest his attention, or to gratify a single sense. Are not the majority of our

school-rooms dingy and dreary? Are not the younger scholars compelled to spend long hours in looking at, or trying to print the letters of their lessons?

How much more natural and real would primary education be if it consisted in some well considered system that would aim specially at the exercise and development of the perceptive faculties. How may this be done? By allowing the child to have access to those things that will call into exercise his senses. Think how effectually and pleasantly form, colour, and number may be taught through almost any natural object, notably a flower, a bird, or an insect. The handling of such objects leads to expression both by voice and hand; how natural to talk about the object handled, and attempt to sketch it. The step from observing to comparing and grouping, or classifying, is easy. That pupils who have had exercises adapted to develop the perceptive faculties are better fitted, thereby, for subsequent study, is evidenced by the more rapid progress made by ex-kindergarten pupils than that made by non-kindergarten pupils. Hear what the teachers of St. Louis say:—"The average intelligence of the kindergarten pupils is greatly superior to that of children who enter school without previous training. They observe accurately, seize ideas rapidly and definitely, illustrate readily, and work independently. Thus far the promoted pupils of the kindergarten have led every class into which they have been received. In addition to superior general development, the kindergarten children show special aptitude for arithmetic, drawing, and natural science, have quick comprehension of language, and express their own ideas with accuracy and fluency." In the majority of our schools, I am afraid that the system adopted has the effect of producing inertness, by the repression of the child's love of change; apathy, by repressing his natural curiosity; and dullness, from want of proper training of the senses. The point to which I wish to direct attention is this, that the teacher of the primary class in school should strive to make the change from home life to school life gradual, that the desire, which is in all young children, to become acquainted with the things with which they are surrounded, should be utilized in the school-room, and for a definite end. I think that if a large part of the child's first year or two in a school were employed in training the perceptive powers, he would be greatly benefited, and would advance more rapidly in all his after school life.

The moral training which may be given through such a method of elementary education is a feature that is a strong recommendation in its favour, but on which I shall not at present say anything.

We may ask what should the teacher aim at as the result of his work upon the minds of his pupils? He should aim at producing, as one of the results of his work, pupils with such a knowledge of English as would make reading a pleasure and an efficient instrument of improve-

ment and refinement. Another of the results of his work should be to develop a manly character—to impart such views of life, its responsibilities and duties, as would help to form his pupils into generous and virtuous citizens. You will notice that I have mentioned, of the many things to be attended to by the teacher, two only, *viz.*, a knowledge of English and formation of character.

In reference to a knowledge of our mother-tongue, I think we do not give it that prominence which it deserves—we do not devote enough of time to it. It does not occupy the first place in Public School work. This in part may be due to the influence of the Limit Table issued by the school authorities. In June, 1871, there was issued by the authorities a Limit Table with the amount of time to be devoted, per week, to each subject on the Public School Programme of Studies. Allow me to quote from the time table then issued. I quote the time allowed per week for the fifth and sixth classes, which classes read in the Fourth and Fifth Books, respectively, and would nearly correspond with the present fourth and fifth classes; the time for Reading, $2\frac{1}{2}$ hours; for Arithmetic, 3 hours; for Grammar, 2 hours; for Algebra, 2 hours; for Composition, 1 hour; for Geometry, $1\frac{1}{2}$ hours. I think, that in the Limit Table at least, a knowledge of English is made to appear less important than a knowledge of mathematics.

I am aware that it is not necessary now for the teacher to confine himself in teaching any subject to the time set apart for it in the Limit Table—I am aware that it is not now obligatory to conform to the Limit Table in the division of time to the respective classes. But as it is the only table of the kind ever issued by the Department for the guidance of teachers, it has influenced teachers, and that influence, I think, has placed the study of English as less important than that of mathematics. As to which of the two studies—English or mathematics—has the greater practical value for the pupils of our Public Schools, I have no hesitation in saying that English is by far the more important of the two. But it may be said that for the mental discipline that the mathematics give they are entitled to the first place. In reply to such a claim Mr. E. L. Youmans says that the advocates of mathematics “make extravagant claims for mathematics, on the ground of the discipline they afford, and then usurp for them an educational predominance to which they are not entitled. In their subordinate place they are invaluable; as a too engrossing subject of study, injurious.” Now my acquaintance with, and observation of the work done in our Public Schools lead to the opinion that we give less attention to the study of English than we do to mathematics. Before English becomes, as it should, the main study in our Public Schools, we must have better books from which to teach it, as well as giving more time to it. In place of the Fifth Reader we require some book or books that will arrest the attention of the pupils and beget in them a love for the study

of good English. What would you substitute for the present book? The question would doubtless not be answered by all in same manner. I will quote Professor Seely on that point: "The selection of the series of writers to be read in the classes is an important question. You would naturally begin with what is most attractive to young boys, such as Macaulay's 'Lays,' Kingsley's 'Heroes,' Scott's 'Poems' and 'Tales of a Grandfather.' To give our pupils an opportunity to read with care some good English author with the view that they may become thoroughly acquainted with what they read, and thereby develop thought and taste, that they may become acquainted with some masterpiece of English, so that their style of writing may thereby be improved, is a thing much to be desired."

When we remember that there are over 19,000 pupils of the Public Schools who are in the fifth and sixth classes, and that there are more than 20,000 Public School pupils over seventeen years of age, the importance of such a study of English as would impart a desire and relish for reading the standard English authors, becomes very apparent. The importance of it, viewed from a national standpoint, is not easy to overestimate. In a country like ours, where so much depends on the intelligence of the public, anything that would tend to make the people a reading and thoughtful community should be attempted. Professor Young said some years ago: "I will call no English education decent which dismisses grown boys and girls from school unable to read ordinary English authors intelligently." President Eliot, of Harvard College, says: "I may avow, as the result of my reading and observation in the matter of education, that I recognize but one mental acquisition as an essential part of the education of a lady or a gentleman—namely, an accurate and refined use of the mother tongue. Greek, Latin, French, German, mathematics, natural and physical science, metaphysics, history and æsthetics, are all profitable and delightful, both as training and as acquisitions, to him who studies them with intelligence and love, but not one of them has the least claim to be called an acquisition essential to a liberal education, or an essential part of a sound training."

I would like to see more time given to the study of English in our Public Schools. I would like to see English more studied because it can be made an instrument of training as well as a channel of information. I would like to see English receive more attention in our Public Schools because it would tend to form a habit and taste that would be beneficial in after life.

We will all agree that the moral nature of our pupils should receive attention as well as the intellectual and physical. But there seems to be a difference of opinion in regard to the method of training the moral powers. Some entertain the opinion that example joined to the ordinary discipline of the school will suffice. Others entertain the opinion

that instruction in moral duties is required. I entertain the latter opinion. It is true that the discipline of a well-ordered school will teach the value of order and method, of industry and a judicious use of time, of resolution and perseverance. These, and other personal habits and qualities may be acquired through the discipline of a good school. But the higher moral duties of sympathy, honesty, integrity, truthfulness and the like should be pressed on the attention of the pupils through kindly and friendly talks. If something in the lessons, or some circumstance in the school or neighbourhood suggests the topic, well and good; but if nothing like that occurs, the matter is of such paramount importance as to deserve attention. I do not speak of this matter because I think there is any marked decline in the morality of our pupils, but because I think we do not discuss how to teach morals as frequently as we should. I think the subject should have more attention at our county associations than it has had.

The teachers of Ontario rank high, morally and intellectually, and while one, here and there, may not be fully alive to the claims of moral training, I am convinced that the great majority are working faithfully to train up a race that shall reflect credit on their teachers, and honour on their country, by obeying the injunction, "Fear God. Honour the king."

THE NATURAL SCIENCES IN THE PUBLIC SCHOOLS.

BY MR. DAVID BOYLE, HEAD MASTER, ELORA PUBLIC SCHOOL.

Mr. President, Ladies and Gentlemen,—

Cast as our lot has been, in this Province, at a time when it behoves pupils and teachers of every rank and condition to fall upon their knees before the chief mathematical deity, and cry out, Great is the Idea of Officials; at a time when a teacher, to be a teacher worthy of the name, must regard it as a sacred duty to be able to tell just how many x 's it takes to make a y ; how fast one train, so many feet long, is going in one direction when it passes another train, twice or half the same length, going the opposite way, or the same way, at such and such a rate; or when the hands of an eight-day clock, or a stem-winding watch, will next be together, or at right angles, or in some other position, having been so-and-so at a given time to start with; as well as scores of similar problems equally interesting, instructive and athletic; at a time when a boy is not much of a boy, and a girl no girl at all, who fail to make their mark, or rather their marks on a High School Entrance Arithmetic Paper, although this deficiency may be fully compensated by the

ability to read, write and spell well, having at the same time a fair knowledge of other branches usually taught in a Public School; at a time, when in fact, one doesn't need to know the specific differences between a cat and a cat-fish, or a sunflower and an ear of corn, provided always he can solve some crooked combination of figures by the unitary or any other method, but especially by the unitary method; at a time when the *Great Eastern* might easily be supplied with a cargo of the discarded Algebraic and Arithmetical Manuals, of which every house in Ontario can supply from half-a-dozen to a score, the cry being, "still they come"—at such a time it will, to many, appear little short of the rankest heresy, if one should dare to ask, even in the meekest manner possible under the circumstances, whether this sort of thing has not gone far enough for the present, and whether there is not some other means of mental discipline, nearly, if not quite as good as that which has been for so many years on the card.

From the half-ludicrous style in which the case has been opened, the thought may occur to you that the object of this paper is to decry the study of mathematics in its widest sense, and, correspondingly to laud the physical sciences. Such is *not* the intention, and he who would attempt to follow this line of argument would only lay himself open to the severest censure of every right-thinking member of the Association. To do so would, in fact, be to pursue a course exactly similar to that which it is the intention of these remarks to condemn.

Were examination papers, either for teachers or pupils so arranged as to demand a highly philosophical knowledge of the structure of the English language, or an ability to spell every one of its fearfully and wonderfully constructed words; were they so arranged as to require a perfect intimacy with universal history and geography; were they compiled in such a way as to prove the most extensive acquirements in the arts of elocution, penmanship, drawing, or music; or were they presented in a form insisting upon the minutiae of biological information, we should still feel warranted in entering a protest against the system.

Our charge is, not that there is too much mathematics, but that too much is made to depend upon it, to the exclusion of other, and to the minds of some people, equally important subjects.

On the same principle, it might be said that there is not too great a knowledge of orthography demanded at examinations of all kinds, but that too much is made to depend upon it.

What is pleaded for in this paper is a rational and liberal Public School education (and by the term Public School, in its largest sense, may be included High Schools), an education that will aim at cultivating the whole mind, at giving scope to all the faculties, at really and truly opening our eyes; and herein lies our plea for saying a word or two in favour of teaching physical science.

If it be granted, and surely few will deny it, that no particular

faculty of the mind should be *forced* without some very definite object in view, and if it be also granted that only that system of education is a correct one which insists upon a proper use of man's observing powers—the ability to use his eyes and ears aright—the way is quite clear for what follows.

But these are principles whose truth is not regarded as axiomatic, or, if so, only to such a limited extent as to render it quite possible (or convenient) for them wholly to be ignored.

That the mathematical athlete and the orthographical gymnast have, under certain conditions, enormous advantages over others not so gifted, is only a fact of the baldest, and most self-evident kind, but, we demur to the proposition that such attainments are a prime necessity for every one to possess. Granting, however, that everybody should have an opportunity to follow the bent of his inclination in this, or any department of a practical education, the question arises, should we close to the student other avenues by means of which the same object may be attained, viz., the laying down of a broad platform, upon which all may erect, at the least possible expenditure of time and trouble, the superstructure of what is understood to be, in this work-a-day era, a truly *liberal education*.

Whilst freely acknowledging that much may be done by means of application, in the way of removing innate poverty of ability to pursue successfully this or that particular line of study, it is, ladies and gentlemen, one of the most notorious facts to every one of us, that there are pupils whose capacity forbids that they shall ever shine in some one or more branches, whilst, they at the same time exhibit unusual aptitude for something else. The truth of the matter is that not one of us is perfectly balanced, and any attempt to make us all take the very same course of study, is just a means of preventing us from following some other course. If I am resolved to leave this city for Montreal, I may refuse to go by the boat because I am in dread of shooting the rapids, or am solicitous regarding my stomach; but that is no reason at all why I should be precluded from performing my journey by rail.

Now, we learn from various sources, more particularly from Galton's works on hereditary instinct and talent, that a large number of those whose names are well known in the scientific world, only became conscious of their own proclivities by means of some simple incident, or only took to the study of a given "ology" owing to their attention being directed to it in a purely adventitious manner. What is wanted then, in our schools to-day, is an opportunity for every boy and every girl to find out and follow that for which they find themselves best qualified, not, by any means, to the total exclusion of what they may happen to dislike, and which may, no doubt, be of very great value to them at the same time. To a certain extent

this has been done, but done in such a way as *not* to demand unqualified praise, in the existing system of options. The options do not at present permit of a student taking any biological study in lieu of something else. Chemistry is the nearest approach to what is wanted.

When the new school law came into force, special certificates were granted to those who passed an examination in chemistry, botany, and natural history. More recently it would appear that this plan has been dropped, so that with the exception of the first named study, very little, indeed, is demanded.

In the advocacy of teaching physical science in our Public and High Schools, two difficulties always present themselves: first, the finding of those properly qualified to teach it, and second, the time to do it in. So far as the former difficulty is concerned, that it must continue to exist will appear evident to all, when it is considered what scant measure of attention is meted out to the subject by those who have the power either to make or to mar our schools, and therefore our country, for at least a generation.

There is nothing like so much trouble now in getting intelligent teachers of grammar and arithmetic as there was twenty, fifteen, or even ten years ago. You all know why. With properly directed efforts the existing difficulty, would in like manner, cease. But, then, there is the time. Most of us are already growing about having too many subjects. In rural schools, where only one teacher is employed, a dozen or a score of classes daily are found to require every moment at the teacher's disposal. In urban schools so much depends upon promotion, entrance, and intermediate examinations that only what is authoritative stands any chance of even a passing notice. How then is the thing to be done? Let us take rural schools first, and schools in the smaller villages. In such places, were the teacher properly qualified, nothing is easier than to imbue the minds of pupils with a love for nature and natural objects. Perhaps there is hardly a school of this character in the Province that does not fritter away half-an-hour or an hour every Friday in a spelling-match or some other unprofitable way. Just here there is a capital opportunity for a natural history object-lesson. Let it be distinctly understood, that if you begin with book dissertations on the history of your science, its aims and its uses, and long-winded stories about men who have signalized themselves in its pursuit, ten to one you will only succeed in disgusting those whom you set out intending to divert, interest, and teach to think. Butterflies and bees, frogs and snakes, rats and mice form splendid texts, and every one of them is easily procurable. Mulleins and thistles, burrs and dandelions, and the common trees in the nearest woods, may be made to yield abundant material throughout a whole season.

In quarries, field-stones, and gravel-pits, some of the long extinct

ancestors of our present fauna and flora may be found beautifully preserved, awaiting only the arrival of the youthful student to be picked up and asked to tell their silent tale. Short excursions once or twice a month in search of objects for the next few lessons always yield unspeakable pleasures both to teachers and taught. That, by-and-by, the taught will ask questions beyond the depth of the teacher, is not only what to expect, but is just what to wish for. In reality, when this point is reached one of the chief objects has been gained.

Let no teacher in such a case either pretend he knows, and yield to the temptation to give a doubtful reply, or feel ashamed to confess his ignorance, but rather express a desire to find out the truth. After a very little while it will be found that organized searching parties will be useless. Every one who has become interested (but that will not be every one in the school) will carry on an independent quest, so that your desk will be crowded with snail-shells, cocoons, insects, plants, pebbles, and fossils, as the auctioneer's advertisements used to say, "too numerous to mention." Amid these gatherings many specimens will undoubtedly turn up that even the University of this or any city would be glad to possess. Small cabinets then should be formed for the preservation of these. The teacher himself should make a collection, another ought to be the property of the school, and the pupils might be encouraged to form small ones for themselves.

In the larger villages and in towns, even, much can be done in an exactly similar way. Besides this, in many places the trustees might be sufficiently interested to make a small grant annually for the purpose of providing cases, and purchasing specimens not to be had otherwise. In places like these too, owing to the comparatively short distances the pupils have to travel, as well as for other reasons, a little extra time might occasionally be devoted to the work. So far as the method to be employed by the teacher goes, pretty much the same remarks will apply as in the case of rural schools, with this difference however, that where there is a good library in the place, the pupils' attention should from time to time be directed to biographies or books of travel calculated to throw light upon, or lend interest to, a subject, the teacher himself and the more advanced scholars referring now and again to technical treatises. In High Schools, as a matter of course, the opportunities for teaching physical science are, or should be, quite superior in their character. According to Prof. Huxley, and there is no better authority living or dead, about two hours a week would suffice to cover a great deal of elementary ground, and enable pupils to leave school with at least a moderate appreciation of the Shakespearean aphorism, that, "One touch of nature makes the whole world kin."

In all classes of schools, the teacher, in consideration of the training he ought to have received, should be so thoroughly saturated with physical science facts and theories, that he might be able to do a great deal

in the way of incidental teaching. Reading and spelling lessons, as well as lessons in political and physical geography, and even history, frequently afford excellent opportunities for directing attention to the subject.

In some city High Schools a natural science master is employed, and there, let us hope, things are as they ought to be; but what of the thousands who complete their course in the Public Schools, and whose only chance of picking up knowledge of the kind in question is confined to an observation of the domestic animals, a few insects (also domestic), with an occasional visit to some travelling so-called menagerie, perhaps to but a hurried and excited view of the street pageant, or a covert peep at the elephant's feet, under the tent canvas. So far as geology and ornithology are concerned his opportunities are almost *nil*, and *nil*, most probably, will be all his future knowledge of these interesting and highly valuable studies. In spite of these drawbacks, however, cities in many other respects present some peculiar advantages, chief among which may be named first, wealth, and second, more advanced ideas on education generally. The possession of these, with a desire that physical science *shall* be taught, is all that is necessary to have it well taught.

Writing masters, music teachers, and drill instructors, are frequently employed—why not science masters? It would be easy to cite one authority after another for hours in favour of introducing the teaching of Natural Science into our schools, but as most of these authorities are themselves physico-scientists their evidence may be regarded as *ex parte*. Let me, however, give you a very brief but very pointed sentence from the pen of one who never writes unless when he has something to say that is worth saying—of one who never wearies in his denunciation of sham—of him who is the greatest apostle of work that the world has ever seen—Thomas Carlyle. And here is what he says: "For many years it has been one of my constant regrets that no schoolmaster of mine had a knowledge of natural history, so far at least as to have taught me the grasses that grow by the wayside, and the little winged and wingless neighbours that are continually meeting me with a salutation that I cannot answer as things are."

Let us conclude this paper with what had perhaps been better said at the beginning of it, a few words as to the use of the teaching advocated. As a means of mental discipline, the study of physical science covers ground not otherwise occupied. It would be quite useless for me to take up the time of this Association with a mere repetition of what has been so often said, and said so very much better than I can ever hope to do, of its immense value in the development and cultivation of the observing faculties; but let me point out to you what many have, no doubt, noticed for themselves, that the great majority of those who exhibit a fondness for the pursuit of *natural* science seldom manifest

much love for mathematics. Now, to my mind, this simply proves, with some qualification, the truth of the old adage that "what is one man's meat is another man's poison;" in other words that there are two great classes into which the human family may be divided, viz., those with a bent in the direction of mathematics, and those whose inclination is towards physics. If this be granted, and it will be difficult successfully to gainsay it, let us ask the question, What resource do we leave those who have little or no mathematical talent? Is a man to be regarded as being in a state of mental vagabondage because he could never find his way over the "ass's bridge?" Are we to furnish our fellow-beings with no means of enjoying the sight of a grand old tree or a sheet of water apart from the ability to compute the solid contents of these objects? Must we condemn thousands to go on wondering ignorantly how it is that this stone contains a fossil, and that that boulder lies on the hill top? Shall we continue to send out pupils from our rural schools without one ray of light to illumine the total darkness that envelops them in regard to all the birds, and all the insects, and all the plants that surround them, in the woods, the fields, and the wayside? And yet this, ladies and gentlemen, is just what we are doing every day.

You all know, for you have heard it a hundred times, the cry which has been set up in more quarters than one, to the effect that we are over-educating young Canada, and that the result of this over-education is the swarming of our youth (and shall I say our beauty?) to the cities and the towns. So long as the present course of study is followed out no other result need be looked for. We are over-educating in the sense that what we teach is too commercial and too pseudo-literary in all its tendencies. Give a farmer's son a thorough drill in geometry, algebra, arithmetic and book-keeping, and ten chances to one the inevitable conclusion of all his day-dreams will be, that nature has intended him for something better than a farm-drudge, and that henceforth he must see about getting possession of a country grocery and post office, or find some sort of a clerkship in town, whence he may ultimately make his way to the Finance-ministership of the Dominion, or at the very least to becoming managing director of some bank, or proprietor of a large wholesale house. How can it be otherwise? Here is a boy, say sixteen years of age, surrounded by natural objects of every kind, and who has not probably ever heard one word to give him any interest in them, beyond his father's orders to do this or that piece of work on the farm, and this, we know, is not the sort of talk that delights the youthful ear. The course of education he has been put through, laid special stress upon the value of certain goods consigned from Liverpool to Montreal or Toronto, the interest and discount on given sums of money, the percentage chargeable on certain bills of exchange, etc., etc., all quite proper, no doubt, and what every

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young man should know, but it stopped there, and stopping there it resembled "My Grandfather's Clock"—it stopped short. To remedy the evil, an Agricultural School and Technological College have been established, where a great deal of the desirable kind of teaching is done, but how few comparatively of the young folk belonging to this Province can ever hope to avail themselves of these advantages. We want every country school in Ontario to be in some sort a physical science school, by means of which pupils may be imbued with such a love of nature in all its aspects that the city would present few charms in comparison, and we want the town and city schools to do their share towards inciting their young men to "go up and possess the land."

But there is another reason, also economic in its character, why we should devote more attention to the study of physical science. We live in a great country with a climate ranging from almost sub-tropical to purely arctic, and having within its boundaries some of the richest mineral deposits to be found anywhere in the whole world. We have coal and gold at both the eastern and western extremities, iron, copper, and lead at intervals everywhere, and various kinds of limestone (including marble and lithographic stone), besides roofing-slate, plumbago and large quantities of phosphates. Why should not every pupil be taught to recognize these and many more at sight, or by some simple chemical test when necessary? Would not such knowledge be at least as valuable as knowing the position of Kilimandjaro, Tobolsk, or Timbuctoo? We have an immense variety and quantity of timber, from the stately Douglas pine of British Columbia to the scraggy oak and stunted juniper of Labrador. Is there any reason at all why every Canadian boy and girl should not be able to distinguish our principal trees by name from a glance at the leaf, the bark, or the wood itself? Or is there any reason why they should not be able to tell where these trees grow?

Our permanent and migratory birds and insects also vary very much as we proceed in any direction; how much, or rather how little, is generally known regarding them? The same may be said of other creatures, and of our plants. The fact of the matter is, that for all practical purposes, so far as our knowledge of these things is concerned, most of us might just as well live in some other country altogether. We really don't know our neighbours, and what is worse, we are quite well satisfied not to know them. Not only so, but we are indoctrinating the youth of the country in such a manner that they shall not know any more than we do ourselves.

Now, one of the beauties of physical science is its progressive character. Its student never ceases learning. He can't sit down and say, "It is done." Onward and upward he must go in spite of himself. It is also experimental. Its disciple is therefore frequently thrown upon his own resources. When one method of unlocking a secret fails, he

must try another. If according to Dr. Erasmus Darwin, "A fool is he who never tried an experiment," to how many of us does the definition apply? It is ennobling too. Only the natural scientist can exclaim intelligently, "Great and manifold are Thy works!" Neither is the liberal tendency of the study its least merit. The true student of nature learns to look beyond the narrow limits of time, country and creed; to regard every man as a brother, and if he be an evolutionist, as most are, to look upon the whole animate creation, in the words of "Pinafore," as "His sisters, and his cousins, and his aunts."

Scant as is the notice this study has received at the hands of our educational authorities, we find it making rapid headway in the mother countries, notably in Germany and our own Britain. It is almost impossible now-a-days to read a newspaper, or even a novel, without stumbling across some allusion to biological research. The press is pouring forth every year thousands of works having a direct bearing upon physical science, which has only succeeded, during the life-time of every one here to-day, in taking its proper place in the fore-front of those subjects that occupy the attention of intelligent men.

As a matter then of self-protection, or self-preservation, as teachers, we should see, in such a case, that we are not left behind. Even on the ground of being fashionable (and probably this will appeal to the feelings of the ladies), it is our duty to pay some attention to what all the rest of the world is talking about, to provide ourselves against being compelled to sit in any company "mute, inglorious," and abashed listeners to conversation beyond our depth; conversation which, from the position we hold, it ought to be our privilege to lead. In the meantime, and until we prepare ourselves in this as thoroughly as the law compels us to do in other things, we must just go on like educational quacks, administering to our juvenile patients doses of arithmetical astringents, and grammatical cathartics, utterly oblivious of the inherent curative properties possessed by Dame Nature, the mother of us all.

From the point of view assumed in this paper, it must appear evident how woefully deficient all our text-books are. They are as well adapted in almost every respect for Great Britain as they are for this "Canada of ours." That these books have the commercial tendency already complained of, a momentary glance will show.

Our cousins in Newfoundland are wiser than we in such matters. In the geography of that island for the use of schools, published in 1877, by Mr. Jas. P. Howley, out of the 70 pages the book contains, 30 pages are devoted to brief but concise descriptions of the climate, soil, timber, metals, minerals, mammals, birds, fishes and insects. There is nothing like this, so far as I am aware, in the whole of our series. We are afforded texts in immense variety, and behests to make use of them, for the analysis of complex sentences, and the parsing of oddly

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applied words ; we are commanded to teach the locality of every place of any importance, and many places of no importance, all over the world ; the solution of algebraic and arithmetical problems is understood to be one of our chief objects, but the idea of saying one word about the natural objects on all sides of us, seems never to have entered the minds of "our masters."

Ontario is now, and must always remain, above all things an agricultural country, and what strikes me most forcibly as the great educational problem for us to solve is just how best to utilize our schools for the purpose of familiarizing the young with all that appertains to the farm. Of course, agriculture is not natural science, but it is so nearly akin that its teaching necessarily involves much of botany, much of entomology, a good deal of zoology, and something of geology; besides a fair knowledge of chemistry. So far, then, as the purpose in view is concerned, it is quite immaterial by what name we call the study ; the object will be attained whether we designate it agriculture, and give our pupils the "reason why" as just indicated, or, natural science, keeping in mind its practical application on the farm.

Since this paper was begun, my eye caught a short paragraph in the educational column of the *Globe* for Wednesday, the 16th ult., in these words : "The French Government has ordered that a course of teaching in agriculture be introduced into every primary school in the country." Here is wisdom. One might have supposed that France, occupying the high position she does, as one of the first manufacturing and mercantile nations in the world, would rather have directed the energies of her teachers in some other direction. But, no ; recognizing the claims of natural science, and fully appreciating the value of the services it has already rendered, not within her own boundaries alone, but conterminous with those of civilization itself, her legislators determine that the youth of the land shall be so taught as to give them an intelligent grasp of such knowledge as will tend to foster an affection for the pursuit of agriculture, and increase the productiveness of the soil.

Now, that the Grangers have fleshed their swords successfully, although not to the death, as was their desire, in their attack upon the Provincial Parliament to secure shorter school vacations, they might not deem it beneath their dignity once more to make an onslaught for the purpose of compelling somebody to do something in the way of teaching the "young (agricultural) idea how to shoot." That they will not take any action in this direction will appear evident from the consideration of the one and great reason, that by so doing they would confine themselves too purely to minding their own business.

It has been attempted to show in this paper, then, if a few moments may be allowed to summarize : That the over-education cry is true, only in the sense that what is taught has too much of a commercial and

narrow literary tendency; that to this tendency is due the rush of so many young men to the large centres of population in search of what, looking at their scholastic training, they regard as the most congenial occupations; that it is possible for the schools to do as much towards counteracting the tendency in question as they now do towards its encouragement; that a course of physical science from the primary to the higher schools, would be likely, in a great measure, to fulfil the purpose in view, by directing attention to the natural resources and capabilities of the Province; that this may easily be effected by the demand for more knowledge of the requisite kind, and, perhaps, less of some other sort; and that the study of physical science is, as a means of mental discipline, fully the equivalent of any other course, generally, and, so far as Ontario is concerned, likely to prove of more than usual practical utility. Any fear that the ranks of commercial and professional life might, by pursuing this course, become depleted, is perfectly groundless. Natural selection, outside of any aid extended to it by artificial means, will always enable the right man to find the right place. The round man in the square hole, or *vice versa*, would be a thing of far rarer occurrence than it is to-day, and the number, who, as at present, have so much difficulty in meeting with any sort of a hole at all that they are qualified to fill, materially diminished.

Let us, at the very least, in all our teaching, try to impress upon the youth of this land, in whatever relates to its immense physical resources and great natural beauties, that ignorance is *not* bliss, and that it is *not* folly to be wise.

PROFESSIONAL EXAMINATIONS IN COUNTY MODEL SCHOOLS.

MR. JOHN DEARNESS, I. P. S., EAST MIDDLESEX.

In the preliminary discussion of my subject, "The Professional Examination of Teachers," at the meeting of the Directors, the only limitation or suggestion proposed was that I should consider the causes and effects of the large annual increase in the number of teachers, and how this increase could be checked in case it were shown to be an evil. This point I shall notice but briefly for two reasons: first, it is my intention to consider, not how to diminish or limit the number of teachers, but how to improve their efficiency; second, the over-crowding of the profession is the subject of a paper to be read before the Section of this Association which it specially affects. It is unquestionable that there is loss to the country when the number of persons annually added to the

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class of certificated teachers is much in excess of the number retiring voluntarily from the profession; for, besides reducing the salary and thereby reducing the respectability and influence of the teaching classes, this cause drives out the most energetic and experienced teachers, leaving the schools in the hands of young or unenterprising men. I have in my mind a case, and there are many similar, in which an inexperienced young lady supplanted her teacher, a tried and successful second class man, because she was willing to teach for \$150 a year less salary. The annual increase in the number of teachers for the six years preceding the establishment of County Model Schools was 1,782. It is observed that beginners rarely fail to secure schools, being willing to accept almost any remuneration; hence, since there are positions in the Province for only 6,400 teachers, and under the present system the annual increase may be approximated at about 1,600, it may be safely inferred that in about four years nearly all the teachers at present employed will have to leave their schools, if for no other reason than to make way for the novices. Fair remuneration for their services, with half the increase in the number of teachers would prove more advantageous in every way to the educational interests of the country. However, let us not view with dismay the magnitude of the army of aspirants seeking admission to the teaching profession, but rather, approving their choice, depend on and require those whose duty it is to certificate them under judicious legislation to give the country sufficient supply of the best material. Good men need not fear honourable competition. The system as in operation at present is not sufficiently eclectic as regards certification. The work of preparing and qualifying persons to be teachers is very differently done in different Model Schools, and to these we have to look exclusively for our new material. I have found by questioning teachers who apply, which they must do personally, for endorsement of their certificates, that some have had their teaching criticised for their benefit after every lesson they taught in the Model School, others say their mistakes in teaching were seldom or never pointed out to them; some have seen no organization other than is afforded by the Graded School in which the Model School is established, others have seen classes selected from the various rooms, organized and taught like an ordinary rural school; some have been taught that the first-book classes should receive only two lessons daily, others that they plain justly that the time allowed them is too short to prepare beginners to practise the difficult art of teaching. Seven weeks is a truly short apprenticeship to train youths of seventeen or eighteen years to become doctors of the mind. It takes the University of Philadelphia, except in special cases, as long as that to make a man a doctor of medicine, who usually pretends to treat only the casket in which the mind is set. Some of the Model School masters complain, too, of the imperfect pre-

paration of the candidates at the time of their entrance on the practical training work, mentioning particularly incorrect pronunciation, bad reading, ungrammatical conversation, general superficiality. I assert without fear of contradiction in the face of facts I can adduce, that passing the intermediate examination does not prove a sufficient criterion of the literary qualifications of the would-be teacher. It is not uncommon that candidates who write, in the same month, on both the third and second class examinations pass the latter and fail on the former. One such last year with us made only five per cent. on his third class arithmetic paper. At our Model School examination before the last, only one teacher-in-training in the whole class, comprising several "Intermediates," corrected, even after repeated trials, a sentence that had been used by one of the examinees. The sentence was "Let every one of you try and see if you can do it?" Reading is shamefully neglected in the High Schools, at least in those (there were eight of them represented at our recent third class examination) which supply us with candidates. I digress to state in this connection that it is frequently remarked by persons from Britain and the United States that our children read badly considering their advancement in other studies. Visiting a number of American schools this summer convinced me of a statement I had heard several times, that in reading, practical composition, drawing and singing, the Americans are in advance of us and *vice versa* with regard to arithmetic and technical grammar. This difference is largely owing to the text-books and examinations. In English grammar for example we may use our choice of Davies, Swinton, Morris or Mason, among them works as good as the best of their class, but in reading, the most important subject on the programme, we have no option. Let any one compare our authorized reading-books with Appleton's, for example. He will cease to wonder that there is a difference, to our disadvantage, between the reading in the American and Canadian schools. It is time to let the text-books on history, and grammar, and arithmetic rest for a season, and direct our attention and energies to the reform of our wretched text-books in reading. In order to hasten our readiness for the reception of such a much-needed reform, I recommend every teacher to procure a sample set of Appleton's, or McGuffey's readers, compare them with ours, and pass them round among the people of his neighbourhood to do likewise. To resume, the Model School masters are expected to teach those young people, thus ill-prepared, to read well in less than two months. Then there are hygiene and physiology, school law and mental arithmetic, all to be taught in this well-filled seven weeks' session. In Middlesex—I do not know how it is in other counties—writing, too, has to be taught. Penmanship is not one of the subjects on the Intermediate programme. It is unnecessary to add the consequence. The students seem to acquire a manner of scrawling their work on paper, with a regard to despatch only.

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The style of arrangement on paper or blackboard is often very faulty. Here is a sample: "7 ft. 6 in. long \times 4 ft. = 30 ft. \div 9 \times \$1.25 = \$4.16 $\frac{2}{3}$. Answer." Students who get into the habit of saving time at the expense of logic and perspicuity must be taught to take time even to punctuate their written solutions of problems. Yet all this is only a small part of the work to be done in this short session. The syllabus prepared for Model Schools contains twenty-seven lectures. Several of these lectures present in each one of them topics enough to engage the study of the teachers-in-training for a week. For example, in the third lecture, by no means the widest, the master is supposed to deal one hour with correction and prevention of offences, corporal punishment, public censure, demerit marking, detention, suspension, expulsion, and rules for inflicting punishment. I maintain that were the session lengthened there is necessity for cutting off all the work that could be fairly done before the would-be teacher enters the Model School.

The remedy which I propose to meet the cases of imperfect literary qualification, wretched penmanship, incorrectness and obscurity of method, and to relieve greatly the excessive pressure on the time of the session, is to establish an entrance examination, at which candidates should be examined by the County Boards on uniform papers on the following subjects:

Reading, to test correctness and fluency.

Writing, as shown by a portion of dictation, by specimens for head lines, methods of putting on paper, say, easy parsing and simple problems in Arithmetic.

School Law and Regulations, as far as relating to teachers.

Physiology and Hygiene, Buckton's text-book.

Theory of Education, from Currie's "Common School Education" and "Jewell's School Government."

This examination can be conveniently established to take the place of the non-professional third class examination, and it is very necessary for the reasons I have advanced, more particularly since lads passing the Intermediate, say at fourteen years of age, would have four years to rust perhaps before entering the Model School.

The work just outlined, which might as well, if not better, be done before the student enters, is at present, besides the real work for which the Model Schools were established, crowded into about forty days. The masters and teachers-in-training by the method I have proposed, relieved of a large amount of theoretical work, would have more time and energy to devote to the study and practice of modes of organization, management, and teaching. Then, too, the method of teaching drawing might find a place in the syllabus.

We come now to speak of the final examination at the Model Schools, and here a still greater want of uniformity prevails. At some

schools the examination occupies more than a week, including the time taken to read the papers; in others, two days. One young man who applied to have his certificate endorsed said their (his) examination commenced in the morning, and they went home with their certificates the same evening. According to the last published report only four per cent. of the applicants were rejected; thirty-three of the fifty Model Schools in operation rejected none. In Middlesex last year twenty-four were rejected (some of them the second time) out of forty-nine applicants. I know of three candidates who obtained less than five per cent. in aptitude and practice in teaching, and who seven weeks afterwards obtained about ninety per cent. in the same subject at other Model Schools.

These facts, and many more that could be added, show the very great want of uniformity in the final examination. Since the nature of this examination determines largely the character of the work done during the session, and is the protection of the public against the imposition of inapt and unqualified teachers, it is the duty of the authorities to provide for an examination that will prove fair, but thoroughly effectual for its purpose. I cannot more practically treat this part of my subject than by describing a programme similar to that of our own examination, which naturally would be the best I know, since every undoubted improvement we can hear or think of is adopted. Each candidate teaches two lessons before the full Board, one selected by himself, the other by the examiners. His teaching with regard to a variety of the most important points is discussed and marked by the Board. Out of the 200 marks assigned for aptitude and practice, the master and his assistants assign a value out of a possible 175, the Board assigns the value out of the other 25. Almost without exception these marks agreed in their proportions. The writing was valued, one-third of the marks being allowed for specimens as for head lines, one-third on the writing in their books containing the notes on the sessional lectures, and one-third on the writing on the blackboard. It is very important that teachers know how to write well and to make good figures on the blackboard. In reading, examples were selected to test specially pronunciation, fluency, and accentuation respectively. In mental arithmetic the master assigns a mark on the basis of his weekly examinations; the Board assigns a mark out of one-third of the total for a paper of easy problems, and the remaining value is assigned for rapidity and accuracy of addition, multiplication, etc., the candidates being taken separately and the time noted; additions, etc., are made aloud. Each is examined in what may be called conversation. To him are proposed familiar and easy questions requiring lengthy answers, in which his vivacity, choice of language, and correctness of syntax are noted. It may be added in this connection that too many of the teachers are careless and incorrect in the construction

of their sentences. In one forenoon a Normal School second-class teacher used the following expressions: "What *will* I do with that boy; he *does* be late *near* every day?" "The fourth class *have went* through fractions." I don't *learn* them spelling in the First Book." Equally fair and nearly as thorough is the written examination on the prescribed portions of school-law, hygiene, and the theory of education. Regardless of the standing a candidate obtains in the other subjects, he is rejected for a failure in the practice of teaching, including energy, order, and the power to secure attention. There are some who would make efficient assistants, whom the examiners do not feel warranted in certificating to take sole charge of a school. To meet these cases a regulation ought to be adopted allowing the Board to grant assistants' certificates. In publishing the names of successful candidates, the best arrangement would be in the order of the efficiency shown in their teaching. The County Model School system is yet crude in its details. I have touched on the examinations only. There is room for a more important paper on the management of Model Schools and the work done in them. This plan of training teachers has been proved to be practical; it is, or may be made, convenient, effectual, and economical. It is the *chef d'œuvre* of the school legislation under the present regime.

The Honourable the Minister of Education and the Sub-Committee on Model Schools, especially the Chairman, deserve our sincerest gratitude for inventing and inaugurating the scheme. The enthusiastic manner in which the Model School Masters have thrown themselves into the work cannot be praised too highly. As an experiment it may be regarded as a complete success, but the reports from all quarters indicate that the experiment is in danger of being lost to us, at least for a time, unless saved by early legislation affecting their sustenance and management. The Government and County grants must be made secure, if not increased. To discuss these questions is beyond the limits of the subject assigned me, but so great is the urgency of the case that I earnestly hope a carefully considered expression of opinion on these points will be given by the Association.

I cannot close the subject of Professional Examinations without referring to those held at the Normal Schools. The basis of the latter is not generally understood, therefore the results are very perplexing. At the examination before the last a large number, I believe about half the candidates, were rejected; at the last only two or three. Perhaps the difference was altogether in the attendants. At the former eight persons with whose success and experience as teachers I was acquainted were examined. Of these decidedly the most successful teacher failed; next to him came three of about equal efficiency, one of whom failed. Of the remainder, some failed and some succeeded. The first referred to failed in drill for one subject. There is only one other teacher in East Middlesex who teaches drill equally well. His failure was in-

explicable as he is a good scholar and a most successful teacher. It is unnecessary to multiply examples similar to the one just mentioned. There are enough of them to establish a rule that there is some important factor wanting in the examination of the Normal School students. The detailed report of the Public School Inspector on the experience of the teacher might be obtained and considered in the granting of certificates. More than in the case of County Model Schools is there room and need for a searching paper on the whole Normal School question.

In conclusion—for I wish to be brief to allow time for a full discussion—some may think that my illustrations are pictured in too sombre colours. I offer no apology. My statements are bright compared with what they would be in a paper written in a fault-finding spirit. I am proud of our national system of education, yet sensible to a few of its defects. In that able series of articles on the Dominion of Canada, in Scribner, the Rev. Principal Grant, of Queen's, states what has been frequently asserted before on good authority, that "the French members of the Legislature are a better average in point of education than the English. They are certainly their superiors in precision and elegance of language." This does not prove the system of popular education in the sister Province to be better than ours, for we know it is not, but it indicates one serious defect in our system. The lectures and discussions we heard yesterday on industrial drawing and physical science would lead us to consider whether our popular education is a grand delusion or not.

We have commenced to climb the hill of perfection with "Excelsior" for our motto; perhaps we have proceeded as far as any other nation, but we are yet so far from the top that it is lost to our view. A danger lies in the applause we have received, for what with diplomas and medals and conferences of the Order of the Palm Leaf and honourable mentions the world has awarded our educationists and system of national education, we may become so satisfied that, wrapping ourselves in stupefying self-conceit, we will, like the fabled hare, lie down to rest, and awaken to find even the tortoises abreast of us.

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FACULTY OF
TORONTO SCHOOL OF MEDICINE,

1880-81.

THIRTY-EIGHTH SESSION.

- HENRY H. CROFT, D.C.L., F.L.C., Professor of Chemistry and Experimental Philosophy, University College, Emeritus Lecturer on Chemistry.
- WM. T. AIKINS, M.D., Surgeon to the Toronto General Hospital and to the Central Prison, Consulting Surgeon to the Children's Hospital, Lecturer on Principles and Practice of Surgery and Clinical Surgery.—282 Jarvis Street.
- H. H. WRIGHT, M.D., L.C.P. & S.U.C., Physician to Toronto General Hospital, Consulting Physician to the Children's Hospital, Lecturer on Principles and Practice of Medicine and Clinical Medicine.—197 Queen Street East.
- J. H. RICHARDSON, M.D., M.R.C.S., Eng., Consulting Surgeon to Toronto General Hospital, and Surgeon to Toronto Gaol, Lecturer on Descriptive Anatomy.—46 St. Joseph Street.
- UZZIEL OGDEN, M.D., Consulting Physician to the Toronto General Hospital, Consulting Surgeon to the Children's Hospital, Physician to the House of Industry, Protestant Orphans' Home, and Home for Incurables, Lecturer on Midwifery and Diseases of Women and Children.—57 Adelaide Street West.
- JAMES THORBURN, M.D., Edin. and Toronto Univ., Physician to the Toronto General Hospital and Boys' Home, Consulting Surgeon to the Children's Hospital, Lecturer on Materia Medica and Therapeutics.—Wellington and York Sts.
- M. BARRETT, M.A., M.D., Medical Officer to Upper Canada College, and Lecturer on Physiology, Ontario College of Veterinary Medicine, Lecturer on Physiology.—Upper Canada College.
- W. W. OGDEN, M.B., Physician to the Toronto Dispensary, Lecturer on Medical Jurisprudence and Toxicology.—242 Queen Street West.
- M. H. AIKINS, B.A., M.B., M.R.C.S., Eng., Lecturer on Primary Anatomy.—Burnhamthorpe.
- W. OLDWRIGHT, M.A., M.D., Physician to the Newsboys' Home, Curator of Museum, and Lecturer on Sanitary Science.—50 Duke Street.
- L. MCFARLANE, M.B., Physician to the Toronto Dispensary and Home for Incurables, Demonstrator of Anatomy.—7 Wilton Avenue.
- GEORGE WRIGHT, M.A., M.B., Physician to the Toronto Dispensary, Physician to the Children's Hospital and Home for Incurables, Demonstrator of Anatomy.—243 Simcoe Street.
- ALEX. GREENLEES, M.B., Practical Chemistry.—250 Victoria Street.
- R. ZIMMERMAN, M.D., L.R.C.P., Lond., Pathologist to the Toronto General Hospital, Physician to the Toronto Dispensary, Physician to the Children's Hospital, Physician to the Home for Incurables, Demonstrator of Microscopical Anatomy.—171 Church Street.
- F. H. WRIGHT, M.B., L.R.C.P., Lond., Physician to the Toronto Dispensary, Physician to the Children's Hospital, Demonstrator of Microscopical Anatomy.—197 Queen Street East.
- J. E. GRAHAM, M.D., L.R.C.P., Lond., Surgeon to the Toronto General Hospital, Clinical Medicine and Dermatology.—66 Gerrard Street East.
- R. A. BEEVE, B.A., M.D., Ophthalmic Surgeon to the Toronto General Hospital and Children's Hospital, Lecturer on Diseases of the Eye and Ear.—22 Shuter Street.
- THOS. HEYS, Lecturer on Chemistry and Pharmacy for the Pharmaceutical Society, Lecturer on Chemistry.
- HENRY MONTGOMERY, M.A., B.Sc., Science Master in Toronto Collegiate Institute, Lecturer on Botany and Zoology.—32 Prospect Street.
- A. H. WRIGHT, B.A., M.B., M.R.C.S., Eng., Physician to the Toronto Dispensary, Physician to the Children's Hospital, Adjunct Lecturer on Physiology.—312 Jarvis Street.

Clinical Lectures will be given at the General Hospital by Dr. H. H. Wright, Dr. Aikins, Dr. Richardson, Dr. Thorburn, Dr. Graham, Dr. Reeve, and Dr. U. Ogdén. Clinical Instructions will be given at the Toronto Dispensary by Dr. McFarlane, Dr. George Wright, Dr. F. H. Wright, Dr. Zimmerman, Dr. A. H. Wright, and Dr. I. H. Cameron.

Janitor of School, James Pickering. Residence on the premises.

Any additional information may be obtained from H. H. Wright, M.D., 197 Queen St. East, Secretary of the Faculty, to whom all communications may be addressed.