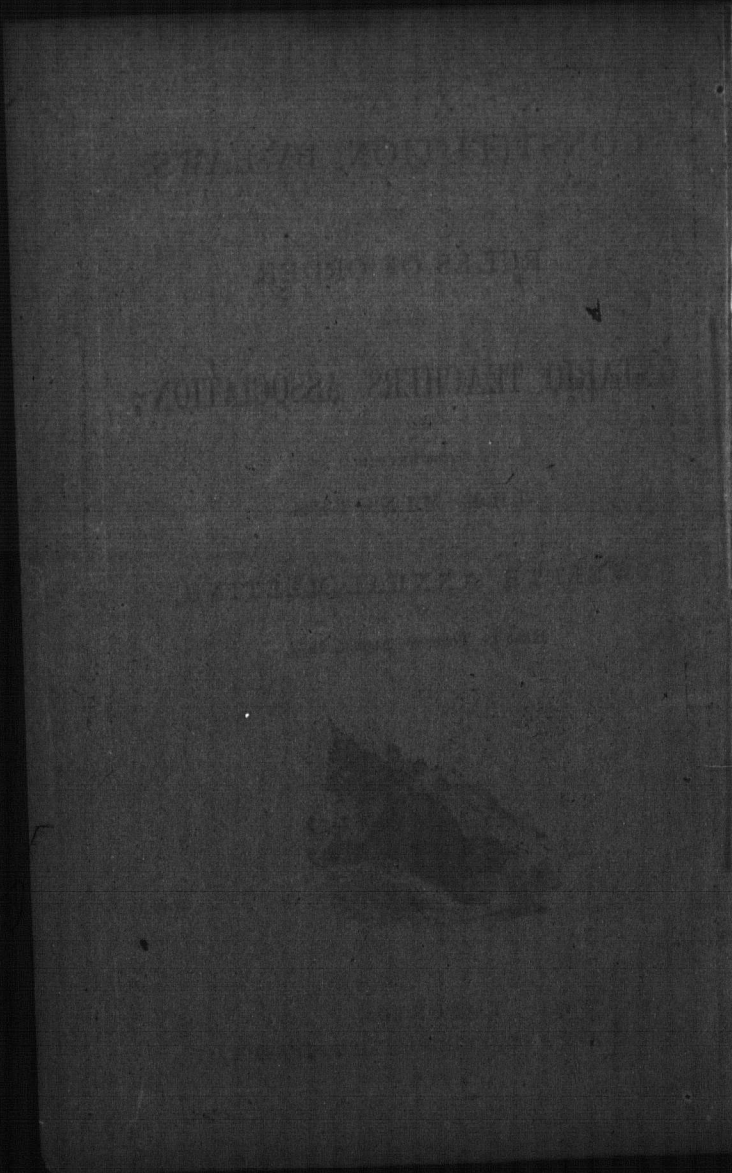


CONSTITUTION, BY-LAWS,
AND
RULES OF ORDER,
OF THE
ONTARIO TEACHERS' ASSOCIATION;
TOGETHER WITH
THE MINUTES
OF THE
TWELFTH ANNUAL MEETING,
HELD IN TORONTO, AUGUST, 1872.



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CONSTITUTION
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PREAMBLE.

The objects of the Association are:—

1st. To advance the interest of Education, by encouraging the formation of Local Associations throughout the country, and affording them the means of comparing their views on the various subjects connected with the interests of practical Education, and of the Profession; and of giving expression to such views and conclusions as they may, in general Convention, agree upon.

2nd. To suggest to the Council of Public Instruction, and press upon the attention of the Legislature, such improvements or modifications in the School Law, as from experience may appear to Teachers expedient or necessary.

CONSTITUTION.

NAME.

Article 1.—This Association shall be styled "The Teachers' Association of Ontario."

WHO ELIGIBLE FOR MEMBERSHIP.

Article 2.—All persons engaged in any department of Education shall be eligible to Membership.

MEMBERS, HOW ADMITTED.

Article 3.—Application for admission to Membership shall be made, or referred to the Board of Directors, or such Committee as they shall appoint; and all who may be recommended by them, and

CONSTITUTION.

accepted by a majority vote of the members present, shall be entitled to the privileges of this Association, upon signing the Constitution, and paying the prescribed fee. This fee is dispensed with in the case of Lady Teachers.

HONORARY MEMBERS.

Article 4.—Upon the recommendation of the Board of Directors, any person who may have been distinguished as an educator may be elected an honorary member by a two-thirds vote of the members present (the vote to be by ballot), and as such shall have all the rights of a regular member, except those of voting and holding office.

BRANCH ASSOCIATIONS.

Article 5.—Every Local Association appointing a Delegate to represent it at the Annual Meeting shall be a Branch Association, and shall, through its Representative, have one vote for each of its members connected with this Association not present at the Annual Meeting; provided that the names of such Members and such Representative, together with the annual fees for the same, be transmitted to the Secretary on or before the first day of August in each year.

ANNUAL FEE.

Article 6.—The annual fee to members of Branch Associations shall be 50 cents; to others, \$1.

LIFE MEMBERS.

Article 7.—Any person eligible to Membership may become a Life Member by at once paying ten dollars.

OFFICERS AND BOARD OF DIRECTORS.

Article 8.—The Officers of this Association shall consist of a President, six Vice-Presidents, a Recording Secretary, a Corresponding Secretary, a Treasurer, five Councillors, and the Delegates from the Branch Associations. These Officers shall constitute the Board of Directors, and shall be elected annually.

MEETINGS.

Article 9.—A meeting of the Association shall be held annually, in the first or second week in August, at which meeting twenty members shall form a quorum. The place and the precise time of meeting shall be determined by the Association, at its annual meeting. Special meetings shall be held at such times and places as the President shall determine, on the recommendation of twenty members.

ADOPTION OF BY-LAWS.

Article 10.—By-laws, not inconsistent with this Constitution, may be adopted by a two-thirds vote of the Association.

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AMENDMENTS TO THE CONSTITUTION.

Article 11.—This Constitution may be altered or amended at any regular meeting of the Association, by the unanimous vote of the members present; or by a two-thirds vote, providing the alterations or amendments have been substantially proposed at a previous regular meeting.

BY-LAWS.

DUTIES OF BOARD OF DIRECTORS.

The Board of Directors shall have power to fill all vacancies in their own body; shall have in charge the general interests of the Association; shall make all necessary arrangements for its meetings; and shall do all in their power to render it a useful and honorable Institution. The Board of Directors shall hold their regular meetings two hours before the time of the assembling of the Association; as occasion may require during the meeting of the Association, and immediately after the adjournment of the same. Five of the Board of Directors shall form a quorum for business. The President shall have power to call a meeting of the Board whenever the interests of the Association may seem to demand it.

DUTIES OF PRESIDENT.

The President shall preside at all meetings of the Association and of the Board of Directors, and shall perform such other duties as by custom devolve upon a presiding officer; and shall be *ex officio* member of all Committees. In his absence, one of the Vice Presidents shall preside; and in the absence of all the Vice-Presidents, a *pro tempore* Chairman shall be appointed on nomination, the Secretary putting the question.

DUTY OF SECRETARIES.

The Secretaries shall keep a full and just record of the proceedings of the Association and of the Board of Directors; shall give notice of the meetings of the Association and of the Board of Directors; shall conduct such correspondence as the Directors may assign; prepare a daily order of business for the use of the Chairman; and shall have their records present at all meetings of the Association and of the Board of Directors.

DUTIES OF TREASURER.

The Treasurer shall receive and hold in safe keeping all moneys paid to the Association; shall invest, deposit, or expend the same as the Board of Directors shall order; and shall keep an exact account

of his receipts and expenditure, with vouchers for the latter, which account he shall render to the Board of Directors prior to each regular meeting of the Association; he shall also present an abstract thereof to the Association; and shall give such security for the faithful discharge of his duties as may be required by the Board of Directors.

DUTY OF COMMITTEES.

That each Standing Committee shall bring before the Association, at its annual meeting, a written report upon the subject or subjects it was appointed to deliberate upon; and when its deliberations cannot be carried on in the usual manner, each member shall forward to the Chairman his opinions in writing upon the subject to be considered, in order that the latter may prepare a report that shall embody the conclusions arrived at by a majority of the Committee.

1. All questions proposed for debate shall be in accordance with the declared objects of the Association, and shall be delivered to one of the Secretaries in writing, for the approval of the Board of Directors.

2. Theological questions of a sectarian nature shall not be introduced or discussed at any meeting.

3. Each speaker in a debate shall be allowed ten minutes; the mover shall be allowed five minutes at the close for a reply; five minutes shall be allowed for each Reading, and twenty-five minutes for an Essay.

4. The questions debated at each meeting shall be decided by a majority of the members present.

5. The Lecturers for each public meeting shall be appointed by the Board of Directors, and one of them, at least, shall be a teacher of a High or Public School.

RULES OF ORDER.

1. On a point of order being raised while a member is speaking, the member speaking shall at once take his seat. The point of order shall then be stated by the member objecting, and the Chairman shall without further debate decide thereupon, stating the rule applicable to the case without argument or comment.

2. No motion shall be put from the chair unless submitted in writing, except a motion to adjourn, to lay on the table, or of the previous question.

3. Without the permission of the Chairman, no member shall speak when there is not a motion before the Association.

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4. No member shall speak to a motion until it has been delivered to the Chairman in writing, with the names of the mover and seconder thereon. The mover shall then have the first, and the seconder the second right of speaking to such motion.

5. No amendment to a motion can be received after an amendment to an amendment, nor any motion unless for the previous question, to lay on the table, or to adjourn simply.

6. A motion to adjourn simply shall take precedence of all motions and amendments; a motion to lay on the table of all except to adjourn; a motion for the previous question of all except to adjourn or to lay on the table.

7. The yeas and nays upon any question shall be recorded on the minutes, when called for by five members.

8. When a member intends to speak or submit a motion, he shall rise in his place, and respectfully addressing the chair, confine himself to the question, and avoid personalities; and any member once reprimanded for the indulgence of improper language and persevering in it, shall be liable to public censure or expulsion, as the Association may determine.

9. Should more than one member rise to speak at the same time, the Chairman shall at once, and without appeal, determine who is entitled to the floor.

10. Members shall speak but once on any question, including amendments, without the consent of the Association.

11. The previous question shall be put in this form—"Shall the question be put now?" If this be carried, no further motions, amendments, or debate shall be permitted, but the question put without delay.

12. The following questions shall not be debateable—1st. To adjourn simply. 2nd. To lay on the table. 3rd. The previous question.

13. No amendment to the minutes shall be allowed after their adoption; and no resolution to expunge any part of them shall have any other effect than the erasure of the record, nor shall any motion to expunge be in order until after a motion for their adoption.

14. A motion to adjourn simply shall always be in order, except 1st. when a member is in possession of the floor; 2nd. when members are voting; 3rd. when an adjournment was the last preceding motion; 4th. when it has been decided that the previous question shall be put.

15. A rule may be suspended at any meeting of the Association, by a two-thirds vote.

16. These Rules of Order shall also, as far as possible, apply in Committee of the whole.

ORDER OF BUSINESS.

The following shall be the Order of Business at the Annual Meetings:—

- 1st. Meeting opened with prayer.
- 2nd. Roll of Officers called.
- 3rd. Reading of Minutes.
- 4th. Reading of Communications.
- 5th. Reports of Committees.
- 6th. Receiving of Delegates.
- 7th. Discussion of topics announced in the annual circular.
- 8th. Discussion of topics submitted by Branch Associations.
- 9th. New Business.
- 10th. Election of Officers.
- 11th. Closing Business—Time and Place of next Meeting.
- 12th. Adjournment.

The Association may at any time, by a majority of votes, alter the Order of Business.

NOTE.—The Evening Sessions shall be devoted to the hearing and consideration of Essays, Addresses, Readings, and practical Illustrations of Modes of Teaching.

The following Report forms a part of the Constitution:—

The Committee on Union met according to appointment, and, after discussing the various points brought under their notice, decided upon the following report:—

1st. That the Societies lately known under the names of the "Ontario Teachers' Association" and the "Ontario Grammar School Masters' Association" be united, under the name of the "Ontario Teachers' Association."

2nd. That the Association shall have three different sections, representing respectively, 1st, Teachers in High Schools; 2ndly, Inspectors; 3rdly, Public School Teachers.

3rd. That, in all subjects pertaining to education generally, the Association shall act as one body, both in discussing and deciding upon such subjects.

4th. That subjects pertaining specifically to any one or two of the sections mentioned in the second clause, shall be discussed by the members of all sections, but that the decision of the subject shall rest alone with the section or sections particularly interested.

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5th. In the event of any dispute regarding the clause in which any specified subject may be included, the decision shall be made by a majority of the Board of Directors present, and such decision shall be final.

6th. That there shall be three Standing Committees, corresponding to the three sections mentioned in the second clause, and that the composition of the Committees shall be as follows:

(1.) High School Committee, consisting of four High School teachers, and one member selected from either of the other two sections.

(2.) Committee of Inspectors, consisting of four Inspectors and one member selected from either of the other two sections.

(3.) Public School Committee, consisting of four masters of Public Schools and one member selected from either of the other two sections.

7th. That, in case of any sudden emergency necessitating prompt action on the part of any of the sections mentioned in the second clause, the President of the Association, on the written application of at least two members of the Standing Committee for such section, shall call a special meeting of the Committee for the aforesaid section; and in the event of the President refusing or neglecting to call such meeting, the Committee, or a majority of the Committee, shall have full power to meet at the call of their chairman and to take action upon the subject so specified.

MINUTES
OF THE
TWELFTH ANNUAL CONVENTION
OF THE
ONTARIO TEACHERS' ASSOCIATION;

HELD IN THE THEATRE OF THE NORMAL SCHOOL BUILDINGS,
ON TUESDAY, 6TH AUGUST, 1872.

In the absence of the President, the Rev. Principal Snodgrass, of Queen's College, Kingston, the First Vice-President, Edward Scarlett, Esq., Inspector of Public Schools, Northumberland, took the chair, at 3 o'clock in the afternoon.

J. R. Miller, Esq., at the request of the Chairman, read a portion of Scripture, and engaged in prayer.

The Roll of Officers was called by the Secretary.

The Secretary read a communication from Principal Dawson, McGill College, Montreal, in which the Principal explained his inability of reading a paper before the Convention this year;—also a letter from the President, in which he stated that owing to previous engagements, he was unable to be present at the Convention for this year.

On Reports of Committees being called—

Mr. McMurchy, on behalf of the Incorporation Committee, verbally reported the steps taken during the year, and explained why the Act of Incorporation had not been asked for.

Moved by Mr. J. B. McGann, seconded by Mr. John Campbell,

That Messrs. A. McMurchy, A. Macallum and William Anderson, are hereby reappointed to attend to the matters connected with the Incorporation of the Association.—Carried.

Moved by J. R. Miller, Esq., seconded by Mr. David Johnston,

That the hours of meeting during the present session of the Association be from 10.30 a.m. to 12 m.; from 2 to 5 p.m.; and from 7.30 p.m. to adjournment; excepting that on Thursday the Association assemble at 10 o'clock in the morning.—Carried.

On the next item of business being announced, Mr. Macallum moved, seconded by Mr. J. C. Brown, that the order of business be changed.

In amendment, it was moved by Robert Alexander, seconded by Mr. D. Johnston, that the order of business be adhered to.—The amendment carried.

EVENING SESSION.

Mr. Edward Scarlett, First Vice-President, in the chair, who introduced the Rev. Dr. Ryerson as the speaker of the evening.

The Chief Superintendent proceeded at once to deliver an instructive and interesting address; at the conclusion of which Mr. Harrison, Inspector of Public Schools (Kent), moved, and Mr. A. Macallum, M.A. (Hamilton), seconded a most cordial vote of thanks to the Rev. Dr. Ryerson for his able and interesting address.—Carried.

The subject of "Technical Education" (Topic No. 2, on the Annual Circular) was introduced by J. H. Hunter, M.A., Principal, St. Catharines Collegiate Institute, by reading a most exhaustive paper on the subject. A cordial vote of thanks was tendered Mr. Hunter, moved by Mr. J. B. Somerset, seconded by Mr. J. R. Miller.

MORNING SESSION.—7th August.

The Association met at 10.30 a.m., First Vice-President in the chair.

At the request of the Chairman, the Rev. Mr. McKee (Simcoe) opened the session by reading a portion of Scripture and prayer.

Minutes of last day's business read and confirmed.

The first subject on the programme of business for the session was the discussion of the Essay on Technical Education, read by Mr. Hunter.

The discussion was carried on by Messrs. Hunter and Macallum, when Mr. Somerset moved, seconded by Dr. Comfort,

That in the opinion of this Convention, the Natural Sciences should be introduced into our Public Schools, and faithfully taught and illustrated by means of *Object Lessons*.

MINUTES.

The resolution was discussed by Messrs. McGann, Cameron, Miller, Fotheringham, Glashan, Munroe, Alexander, McAllister, Knight, William Johnson and McIntosh, when it was put to the meeting and carried.

A communication was read from the Deputy Superintendent, enclosing a copy of a letter from William McCabe, LL.B., offering a *Gold Medal* for competition by the candidates for first-class certificates of qualification as Teachers, at the July Examination in 1878.

On motion of J. R. Miller, the communication was received.

AFTERNOON SESSION.

First Vice-President in the chair.

The Secretary read the Report of the Board of Directors, in reference to the Petition ordered to be circulated, anent the Superannuation Fund.

The Report was received and adopted.

Mr. David Johnston moved, seconded by Mr. Henry Dickenson,

That in the decided opinion of this Association, the clause of the School Act of 1871, which relates to the Superannuation Fund, should, in compliance with the wishes of the great majority of the Public School Teachers, expressed through the medium of their various Local Associations, be repealed.

A very animated discussion arose on the motion, several contending that it would be wiser to seek for modifications of the Act than its repeal. Dr. Hodgins, the Deputy Superintendent of Education, was invited to give explanations in regard to the Fund. The Deputy addressed the Convention, explaining fully the management of the said Fund. The motion was carried.

EVENING SESSION.

First Vice-President in the chair.

Professor Robins, McGill Normal School, Montreal, most ably addressed the Convention, taking for his subject "The mode of inspecting Schools." (On motion of J. H. Hunter, seconded by A. Macallum, a very cordial vote of thanks was given to the speaker for his practical address.

The topic, "Higher Education of Women," was introduced most eloquently by Mr. Richard Lewis. Mrs. E. Stowe (Toronto) moved, and Miss Sherlock (U.S.) seconded, that the thanks of the Association be given to Mr. Lewis for his Essay.—Carried.

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MORNING SESSION.—8th August.

The Association met at 10 a.m., First Vice-President in the chair.

The session was opened by the reading of a portion of Scripture, and prayer by the Rev. Mr. McKee, of Simcoe.

The minutes of the previous day's proceedings were read, and approved after the addition of a note explaining that only Public School Teachers voted on motion regarding the Superannuation Fund.

On motion of Mr. Johnston, seconded by Mr. Alexander, a vote of thanks was unanimously tendered to Dr. Hodgins for his explanations regarding the Superannuation Fund.

The Treasurer, Mr. McAllister, presented a Statement of the Finances of the Association, which showed the total receipts for the year to be \$185.98, and expenditures \$76.95; leaving a balance on hand of \$58.98, of which \$52.94 was on deposit.

On motion of Mr. McAllister, seconded by Mr. Alexander, the Report was received and adopted.

The Chairman named Messrs. Hunter, Johnston and McIntosh as an Auditing Committee.

Moved by Mr. Anderson, seconded by Mr. Johnston,

That Messrs. Hunter, Strang, Smith (Wentworth), Platt (Picton), Miller, Watson, and the mover and seconder, be a Committee to nominate Officers and Standing Committees for the ensuing year.—Carried.

Mr. McAllister introduced the topic, "The new Regulations and Limit Tables for Schools," by reading an able paper on the subject.

Mr. Fotheringham moved, seconded by Mr. McGann, that the thanks of the Association be tendered to Mr. McAllister for his valuable Essay.—Carried.

The topic was then discussed freely by the members; Dr. Crowle and Messrs. Payne, Kirkland, Deerness, Glashan, Munroe, Hunter and McIntosh taking part in the debate.

AFTERNOON SESSION.

The debate on the Regulations and Limit Tables was resumed by Mr. Fotheringham, who was followed by Messrs. Alexander, Macallum, Glashan, McKinnon and McAllister, who closed the debate.

The Report of the Committee for the nomination of Officers and Standing Committees was presented by Mr. Hunter.

The following gentlemen were nominated by the Committee:

President—Prof. Nicholson, University College, Toronto.

Vice-Presidents—Messrs. R. Alexander, E. B. Harrison, J. H. Hunter, M.A., D. J. Johnston, G. D. Platt, and Dr. E. Crowle.

Treasurer—Mr. Samuel McAllister.

Recording Secretary—Archibald McMurchy, M.A.

Corresponding Secretary—Thomas Kirkland, M.A.

Councillors—Messrs. McIntosh, Macallum, Glashan, Watson and Anderson.

Standing Committees.—High Schools: Messrs. Hunter, Strang, Tamblin, Anderson and Miller. Public Schools: Messrs. Alexander, Lewis, McAllister, McCuaig and Smith.

Inspectors—Messrs. Miller, Fotheringham, Scarlett, Macallum and Turnbull.

After considerable discussion as to the propriety of changing the custom, hitherto followed, of electing as President a gentleman who is not a member of the Association, the nominees of the Committee were unanimously elected.

Mr. R. Alexander was appointed Delegate to represent this Association at the next meeting of the Quebec Protestant Teachers' Association, Mr. J. R. Miller to be an alternative.

The Business Committee wished to state that they were not to blame if any member had not received intimation of the time of the Annual Meeting.

Mr. Hunter read and moved the adoption of the following Report of the High School Committee:

That the Provincial Teachers' Association would respectfully urge upon the early attention of the Legislature the complete reconstruction of the Council of Public Instruction upon a representative basis; and that the Association would further urge the importance of the following provisions:—1. That the Council include one or more properly elected Representatives of the following classes: Masters and Teachers of Collegiate Institutes and High Schools, Masters and Teachers of Public Schools, and Inspectors of Public Schools. 2. That the Representatives of the several interests shall return to their constituents for re-election at intervals of time not exceeding three years. 3. That full reports of the Council's proceedings be published in the *Journal of Education* after each meeting, the various resolutions and amendments proposed having appended thereto the names of the movers and seconders, and the yeas and nays in every division properly recorded. 4. That an allowance for attendance and mileage be granted out of the Provincial Treasury to non-resident members of the Council.

After considerable discussion as to the propriety of urging this matter on the Legislature, apart from the Incorporation of this Assoc

ciation, the Report was referred to the Committee on Incorporation. Messrs. Hunter and Alexander were added to that Committee.

Mr. Alexander read the Report of the Public School Committee, the discussion of which was postponed till the evening session.

Mr. Hunter reported, for the Auditing Committee, that the books of the Treasurer were correctly and carefully kept.

The report was adopted, and the meeting adjourned.

EVENING SESSION.

The debate on the Public School Committee's Report was resumed. After considerable discussion, the general tendency of which was to condemn any change at present in the text-books which could be avoided, the 5th and 6th clauses of the Report were adopted. These clauses are as follows:

"That a Standing Committee of this Association be appointed, whose duty it shall be to examine the present authorized text-books, and suggest any improvements in such; and further, that all new text-books be brought under their supervision, funds being placed at their disposal to enable them to carry out in an efficient manner such duty.

"That in the opinion of your Committee, some mode of apportioning the Legislative Grant should be devised, that would influence the increase of the salaries of Teachers."

A vote of thanks was tendered to the Chairman and members of the Committee who prepared the Report.

It was moved by D. J. Johnston, seconded by H. Dickenson,

That Messrs. Hunter, Campbell and the mover be a Committee to wait on the Attorney-General, and represent the views of the Public Schoolmasters regarding the Superannuation Fund, as expressed at this Association.—Carried.

The meeting then adjourned till 10 a. m. to-morrow.

MORNING SESSION.—9th August.

The Association met at 10 a. m., First Vice-President in the chair.

At the request of the Vice-President, Mr. Johnston opened the meeting by reading a portion of Scripture, and prayer.

The minutes of the last day's proceedings were read and approved.

At the request of a member, the Secretary explained the method adopted of intimating to members the time at which the Annual Meeting was to be held.

Moved by Mr. Campbell, seconded by Mr. Somerset,

That notice of the Annual Meeting should be once inserted in the principal daily and weekly papers at least one week before the meeting.—Lost.

Mr. Anderson moved, seconded by Mr. Glashan,

That the following members constitute the Standing Committee on Text-Books for the ensuing year:—Messrs. Kirkland, Hunter, Strang, Brebner, Lewis, McAllister and the mover and seconder.—Carried.

The reception of Delegates from Local Associations then took place. The following are the names of the several Delegates appointed:—Rev. J. D. O'Meara, Brant; Dr. Comfort and J. H. Hunter, M.A., Lincoln; H. Montgomery, East Durham; J. Turnbull, B.A., Huron; H. Dickenson, Galt; G. Moir, St. Mary's; J. Johnston, South Hastings; A. Hay, Shakspeare; E. Scarlett and Mr. McIntosh, Northumberland; Mr. Spotten, Toronto; Mr. Blackwood and Mr. Bell, West Middlesex; Dr. Crowle and G. D. Platt, Prince Edward; W. W. Tamblin, West Durham; Mr. McQueen and A. Macallum, M.A., Wentworth.

As many of these as were present addressed the meeting, giving interesting statistics regarding the numbers and success of the Local Associations, and also their opinions on the various topics discussed by this Association. From the records given, it was concluded that the number of Teachers represented was over one thousand.

Mr. Campbell referred to the increase of the Legislative Grant, and Mr. Lewis gave some statistics regarding the salaries of Teachers in England.

The meeting adjourned till 2.30 p.m.

AFTERNOON SESSION.

The Association met at 2.30, the First Vice-President in the chair.

Mr. Kirkland gave a short address on Normal Schools, in which he brought up for discussion the following important Resolutions:

1. That as teaching is a Profession, its members require professional training; and that no Teacher should receive a certificate who had not received such training.
2. That one or more Normal Schools should be established in the Province as soon as possible.
3. That besides the Normal Schools, there should be in each county or inspectorial district a Model School, where candidates for third-class certificates might receive some training under the supervision of the Inspectors.
4. That Scholarships should be established in each Normal School, as in the Provincial University.

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5. That High School Masters should be compelled to pass an examination on the methods of organization, teaching, &c., in addition to their obtaining a degree; and that therefore a Lectureship should be established in the Provincial University, to assist them in obtaining the necessary knowledge.

These subjects were freely discussed, the majority of the members agreeing with Mr. Kirkland's views on the subject. A voté of thanks was tendered to Mr. Kirkland for his address.

During the discussion on Mr. Kirkland's address, Dr. Ormiston (New York) entered the room, and, at the unanimous request of the members present, briefly addressed the Association. A cordial vote of thanks was tendered to the Rev. Doctor for his interesting address.

As no Report was received from the Inspectors' Committee, Mr Fotheringham moved, seconded by Mr. McAllister,

That in the opinion of this Convention, the School accommodation required by the new School Law and Regulations is under rather than over that demanded by the health and comfort as well as the proper organization and discipline of Schools.—Carried.

It was then moved by Mr. Anderson, seconded by Mr. Brown,

That Messrs. Kirkland, McMurchy, Fotheringham, Lewis and the mover and seconder be a Standing Committee to take into consideration questions directly connected with Normal Schools.—Carried.

A cordial vote of thanks was then tendered to the First Vice-President for the kind and able manner in which he had conducted the meetings.

It was then moved by Mr. Miller, seconded by Mr. Johnston,

That the thanks of this Association are due to the Chief Superintendent of Education for the use of the building on this occasion; to the representatives of the *Globe*, *Leader* and *Mail* for their reports of proceedings; to the Managers of the Grand Trunk, Great Western, Northern, and Toronto and Nipissing Railways, for their kindness in granting return tickets to members at reduced rates; and to the members of the Association residing in Toronto for the great amount of work they have voluntarily performed for the Association.—Carried unanimously.

After a few closing remarks from the Chair, the National Anthem was sung, and the Association adjourned.

ARCHIBALD McMURCHY,

Secretary.

PAPERS READ BEFORE THE ONTARIO TEACHERS' ASSOCIATION.

TECHNICAL EDUCATION.

BY J. HOWARD HUNTER, ST. CATHARINES COLLEGIATE INSTITUTE.

In highly educated communities, it has been well observed, "A man must be capable of doing many things as well as any man, and also some one thing better than most men." The specialized instruction which leads to the latter of these results is now popularly described by the phrase, Technical Education. In our time vast indeed is the area of general knowledge, which every well-informed man is expected to traverse before directing his steps into particular fields of investigation. So prolonged an attention was formerly paid to the acquisition of the simplest instruments of knowledge—Reading, Writing and Arithmetic—that life proved too short, or business too exacting for the acquisition of any more powerful instruments, or even for the higher applications of that rudimentary knowledge. Among the more educated, any further advance generally proved to be mechanical Reading or Writing or Computation in some foreign tongue, and preferably in the Latin. The average youth of the pre-scientific age (which has not yet quite expired) spent his toil in amassing materials for a structure, the very foundations of which were seldom to be laid; for not a few of the wise mistook mere building materials for the building; mistook the mere instruments of knowledge for knowledge itself. The world in which we live is generally conceded to be a more enjoyable one than that of our fathers, and much more so than that of our grandsires. Life is noticeably longer and is less obnoxious to the inroads of disease. Man still earns his bread by toil, but by toil less exhausting and degrading than formerly. How much physical agony has been rendered avoidable, or, where it is still unavoidable, has been alleviated! Instead of regarding himself as the helpless victim of inexorable laws, man has come to recognize the wisdom and beneficence of the established order of the universe. This natural knowledge is surely of transcendent importance. At what age shall we begin to impart it to our children?

Provided we begin aright, we cannot begin too soon. I am glad to observe that in England the Royal Commission on Scientific Education have, in their recent report, strongly advocated scientific instruction even in the primary schools, not of course by scientific catechisms, but by means of familiar and genial lessons derived from natural objects, and if possible illustrated by experiments. More than this, I fear the vast

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majority of our Public Schools in Ontario, will, under the great pressure of other work be unable to accomplish. And even to take this first and obvious step our teachers must have acquired some practical acquaintance with scientific observation and experiment. In the answers to the questions on Chemistry given at the recent Teachers' Examinations I noticed a strong tendency to mere lifeless verbalism and cramming—the very evils which genuine scientific knowledge is calculated to counteract. This tendency cannot be overcome by any text-book, however excellent; it may be greatly discouraged by a peculiar style of examination; but the true remedy is to place materials and apparatus within the easy purchase of teachers, so that they may thoroughly fortify themselves for the illustrations of the school-room by oft-repeated experiments and probably frequent breakages at home. It is obvious also that marked official encouragement and assistance should be shown to those teachers who persevere in so valuable a system of instruction. Whenever we can secure for our Public Schools, teachers who thus bring to their work good natural powers quickened and exalted by assiduous observation and experiment, we shall see laid broad and deep in the minds of our youth a foundation of intelligence on which more specialized knowledge will afterwards appropriately rest.

When our youth enter the High Schools, it then, if not before, properly becomes their duty to decide on their future occupations; to decide whether they shall hereafter be hand-workers or brain-workers, for fortunately in Canada all men must work. Instruction ought accordingly to become at this stage somewhat specialized. While all should receive a general, but accurate, training in practical science, and while all should likewise receive a general literary culture, the hand-workers ought evidently to be brought into frequent contact with those forms of matter, and those forces of nature which in future years they will have to utilize for industrial purposes. On the other hand, the brain-workers, who will have to mould mind rather than matter, and who will have to guide social rather than physical forces, will properly seek in Literature and History for the springs of human action. To accomplish even so slight a specialization of studies in the High Schools, we shall require to practise the most penurious economy of school-time. The masters must evidently not have their precious hours wasted on capricious and conflicting programmes of study. When the recent School Bill became law; I indulged the hope that the various universities and learned corporations of our Province would gladly adapt themselves to the High School Act, and would reflect the enlightened views of the Legislature regarding modern culture; that the various entrance examinations would be completely harmonized; that classical instruction, which has at present a practical monopoly of school-time, would become less exacting. It cannot be too clearly understood that, before any effective teaching of practical science can be witnessed in our High Schools, the two latter of these conditions must be fulfilled; and I trust that in order to give real effect to the provisions of the High School Act, the Legislature will compel the re-actionists to wheel into line. I am induced to make these observations by a perusal of the new matriculation issued by the Law Society of Ontario. Hereafter, it seems, will be required of intending students-at-law a knowledge of five Latin books, four of which are not at present required, and the fifth is rarely

required for any other examination in this Province. Now, in the larger High Schools there will on the average be found one pupil desirous of studying law. The Law Society then virtually compels a class to be instituted for this student's benefit in each of those Latin books, and by doing so compels the master in so far to neglect the rest of the school. With so wanton a waste of time and energy—both already overtaxed—what hope is there of ever seeing scientific instruction in our High Schools? Let us consider the matter for a moment on its own merits. Do the Benchers of the Law Society desire to secure in legal students a knowledge of the style of particular authors; or do they desire a certain acquaintance with the Latin language? In either case does not the 2nd Book of Virgil's *Æneid* represent the poet's style as faithfully as the 6th? Does not the 1st Book of Horace's Odes exhibit *his* fancy and his foibles as well as the 3rd? Is not Cicero as eloquent and convincing, when speaking for the Bill of Manilius as when defending Milo? Now the former works of these authors are *universally* read in the High Schools; the latter rarely or never. But the question is well worth pursuing still further. The supposition on which this Law Matriculation is based is that at this stage the extra-professional studies of the student terminate; that hereafter technical legal studies must engross his attention. Yet the student is not required to know a modern language, not even a language so rich in legal treatises as the French, the language moreover spoken by nearly one-half of the population of the Dominion. Nor is the student required to have even heard of Chemistry. No inquiry is made at his entrance or subsequently whether, if a scientific industry formed the subject matter of the trial, the future advocate would in any degree understand scientific evidence; it is not thought worth while to inquire whether, as a possible judge, he would be qualified to detect the grossest fallacy in an analysis, which may send to a shameful doom an innocent accused. Better surely a thousandfold that our law students knew something of Chemistry and nothing of Latin, than that they should know everything of Latin and nothing of Chemistry. In truth under this illiberal and purely conventional system of education the professional class would rapidly become the inferiors of those supposed to apply to them for advice.

With such incidental knowledge of Technology as he may have been able to acquire in the schools or universities, the hand-worker has hitherto in this country been compelled to content himself. It is not surprising, therefore, that Canadians are almost mere hewers of wood and drawers of minerals for the nations. Better surely that our lumber went abroad in the form of merchant ships, and that our iron-ores were exported in the form of Bessemer steel. Much has been lately said about "Protection;" but assuredly the best protection of all consists in the superior finish and the intrinsic value of those manufactures which proceed from the hands of trained operatives. A brighter day is now apparently dawning.

The great classes for whom, in Ontario, higher Technological Education is about to be provided, are our Agriculturalists and our Operatives. For the former class the Collège of Agriculture has been projected; for the latter class has been provided the Collège of Technology. The chief questions which here demand consideration are, first, the connection or non-connection of these institutions with existing establishments; secondly, the general administration of these technical institutions.

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As regards the Agricultural College, the foundation of such an institution having been once determined on, it seems to be generally agreed that it should, in its administration, be isolated from all existing establishments. The President of the Agricultural and Arts Association (Ontario) did but express a predominant feeling when, after citing the case of Cornell University, he recently said, "Experience has taught us that it is better to have an Agricultural College quite separate from other educational institutions." Faculties in agriculture have been attached to many institutions, in some cases for very many years, —Edinburgh has had an agricultural chair for eighty years,—but in the great majority of instances the result of the experiment has either been purely negative, or absolutely unfavourable. The Provincial University of Ontario has itself witnessed such an experiment, but the result was certainly not such as to warrant the further maintenance of the agricultural chair. On the other hand, agricultural colleges, when isolated, have, under fair management, frequently yielded most valuable results. As an example worthy of attention, we have in the English county of Gloucester, and almost within the shadow of the Cotswold Hills, the Royal College of Agriculture. Here, about a mile and a half from the small town of Cirencester, some hundred youths practise scientific husbandry on a loamy soil well limed by nature and well fertilized by art. Of late years we have heard much of Cotswold sheep, and of the produce of Gloucester dairies; and this great progress of the county in agricultural pursuits is largely attributed by local authorities to the Agricultural College, which still, in spite of insufficient means, continues its operations. As a type of independent agricultural education on the very largest scale, we have the system of Württemberg, a kingdom possessing almost precisely the same population as Ontario, though not a twentieth of Ontario's area. There, at Hohenheim, a hamlet reposing in the fertile and picturesque valley of the Neckar, and some six miles away from the busy Stuttgart, we find the Central Agricultural College of Württemberg, with a staff of *twenty-one* professors and masters. Subordinate to it are three Agricultural Schools, which are dispersed throughout the kingdom, and by this machinery no less than 12,000 pupils are provided with instruction in agricultural science. Württemberg is, except where it lies in the basin of the Neckar, by no means favored by nature in respect of soil, but applied science has largely made good natural deficiencies, so that there is always available for export a large surplus of agricultural produce. Land still unreclaimed is made to supply innumerable hives of bees with abundant nectar; and where the churlish soil has refused to yield a harvest of even wild-flowers, the Government has provided for clothing with hardy forest trees the bleak hills to their very crests.

Regarding the administrative isolation of the Ontario College of Technology, some variance of opinion may very naturally exist. Dogmatism would manifestly be most inopportune where no large stock of precedents has yet accumulated. The question was at one time very properly thrown out for discussion, and might, in the earlier stages of the matter, have been very properly discussed, how far the scientific training of our operatives could be met by the establishment of special classes at Toronto University. Here Provincial experience is not available for our guidance, and for precedents and illustrations we must rather have recourse to the British Isles and to the European Continent. In 1855 the English Govern-

ment instituted in Edinburgh University the new chair of Technology, and appointed as professor Dr. George Wilson, who continued, until his lamented death, to illustrate most ably the application of recent chemistry to arts and manufactures. University soil, however, does not appear to have proved more congenial to such studies at Edinburgh than elsewhere; for the chair of Technology has already disappeared from the Calendar; and the vast field of chemical science has been relegated to the single chair of general chemistry which was founded in 1713, when the science was in merest infancy. It is also a most significant circumstance to find, in 1867, after the pitiful appearance of England at the Paris Exhibition, Dr. Lyon Playfair, then the occupant of this very chair of general chemistry at Edinburgh, becoming the apostle in Britain of the Continental doctrine of isolated technical education. Dr. Playfair had, from the time of his official connection with the great Exhibition of 1851, made this question of industrial education the subject of unremitting attention; in 1853 he had accurately predicted* the results afterwards experienced by England in 1867; he had present to his mind the technological experiment recently tried in his own University, and he must be held a competent witness on the capability of universities to grapple with technical education. Hardly less conspicuous in this new educational movement has been the eminent naval architect, Mr. J. Scott Russell, who probably has had better practical opportunities of maturing an opinion on this subject than any other writer of the century. Mr. Russell, as he himself informs us, "has enjoyed the privilege of university education, and the still higher education of the work-shop." He has been distinguished as a lecturer on Natural Philosophy, and, in later years, he has had a chief share in launching the great London Exhibition of 1851, and the "Great Eastern" steamship of 1858. He has been much on the Continent of Europe; has taken minute notes of its educational systems; has had in his employment pupils trained in its technical schools; and he is therefore in the highest sense qualified to grapple with the question we are noticing. The limits of this essay forbid even a condensed view of his arguments, but his strongly expressed conclusion is that technical institutions of all kinds should be independent and new institutions.

Crossing the Strait of Dover in quest of examples, we find the rule of isolation uniformly observed. In France the great technical schools are the *Ecoles Centrales des Arts et Manufactures*, situated at Paris, and the *Ecoles des Arts et Métiers*, situated respectively at Aix, Angers and Chalons. These great schools for the highest strata of the operative class—for future managers and manufacturers—are subject to the direct supervision of the Government, and are quite independent of the universities; indeed they constitute true universities to the inferior trade schools. These latter are plentifully scattered throughout all the centres of industry. Creusot, whose wonderful hive of 10,000 iron-workers has taken from England much of her former prestige, is thickly studded with highly-specialized technical schools, which recognize a subordination to no educational institution except the industrial universities above mentioned.

Passing over the Jura, we have an inland lake-country, like our own Ontario, Switzerland, whose boast it is that of all European states, its

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educational budget alone exceeds its military expenditure; and that, while England spends many times as much on pauperism as on education, Switzerland spends many times as much on education as on pauperism and crime. At Zürich, among a very forest of literary institutions, we find, as the growth of the brief years since the great Exhibition of 1851, the magnificent Polytechnic University, with its staff of *sixty* professors. Hither often resort students from Britain for that education which their native land has hitherto denied them.

I have above noticed how much Würtemberg has done for agricultural education: In no respect less liberal and complete has been its provision for the scientific training of the operative classes. In its Polytechnic University, Stuttgart possesses a pile hardly equalled for architectural magnificence among the educational institutions of Europe. With a liberal hand have there been provided for the Würtemberg youth laboratories, physical and chemical; an observatory; machine shops, museums, botanical gardens. Nor, when recently called away from these delightful haunts of science to the "Watch along the Rhine," did the young Würtembergers prove ungrateful to the Fatherland that had done so much for them. After that awful day of Wörth, it was a proud distinction to carry a rifle in the Würtemberg corps.

And now, returning to Ontario, our first emotion will, perhaps, be one of discouragement that we are so late in beginning, and that we are beginning on so small a scale. Still it is much to be able to say that we are beginning. The great consideration will now be to begin effectively. The number of professors attached to each of these new technical institutions must be at first necessarily small. I suppose, however, that we may take it for granted that, in the Agricultural College, the following subjects will receive distinct recognition: Agriculture, Chemistry, Natural History, the Veterinary Art. It would be exceedingly important to both limit and subdivide the subject of Natural History. The professor of Botany might be understood to discuss his subject from a Canadian point of view; to thoroughly drill his students in our much-neglected native flora; to discuss with some detail the subject of Forestry,—a science which hitherto has been wholly neglected in Ontario. The Zoological professor would in the single subject of Canadian Entomology find ample scope for observation and research. The immense area occupied by Comparative Botany and Comparative Zoology might be much more advantageously traversed in the lectures, and illustrated by the Museum of University College. It is well known to those who have paid any attention to American Botany that certain pestilent exotics are being constantly brought over to this continent in the ballast of sea-going ships and in foreign seeds, and that, year by year, these troublesome weeds are advancing westwards, but our farmers, through ignorance of our native flora, are unable to recognize the intruders. Thus many a crop of dragons' teeth is being stealthily sown. Then, a season ago, our western frontier was unceremoniously invaded by a new insect enemy, the full range of whose destructive power time alone will reveal. The great advantage of enabling skilled naturalists to give special attention to the investigation of such questions will be obvious to all, and the benefit to the agricultural interests of the Province is not for one moment to be weighed against the payment, in the new College, of two salaries instead

of one. As regards the College of Technology, if the amount (\$5,000) set off for salaries in the Estimates be adhered to, certainly not more than two subjects can be thoroughly and *independently* taught. From the extensive application of Chemistry and Mechanics, these would almost necessarily become the first subjects of instruction. To the former chair a laboratory assistant would be indispensable; with the chair of practical Mechanics would be very advantageously associated a teacher of Design and Mechanical Drawing,—the services of the drawing master to be available for evening classes. This would rather more than quite exhaust our \$5,000. Special provision should be added for the training of operatives by means of evening classes in Mathematics, though the increasing efficiency of our schools may be expected soon to render unnecessary such temporary help. These new Technical Institutions ought to be virtually free, so that there may be an unbroken continuity with our School system; for to a large number of our youth these institutions will hereafter become the appropriate universities. If an intelligent young farmer or operative desires to get some insight into applied science, and gives up for the time profitable employment, this is surely on his part a sufficient sacrifice, without diverting his poor savings towards the payment of class-fees. The establishment also of a few exhibitions in Agriculture and Technology would doubtless be found to exert in Ontario the same healthful influence that Sir Joseph Whitworth's thirty exhibitions are now exerting in England. It would even be found an excellent national investment to bestow on technical students of special promise travelling scholarships, and so afford them an opportunity of introducing improvements of foreign manufactures. There are two obvious ways of increasing national wealth: (1) increasing through the agency of immigration the *number* of industrial citizens; (2) enhancing by scientific culture the labor of the *present* industrial population. Switzerland, which of late years has enormously increased her national wealth, depends wholly for her advancement on increased culture; we, on the other hand, have hitherto depended almost wholly on immigration. Evidently the best results are to be obtained from the concurrent operation of the two agencies. Modern science fulfils the dream of the ancient fabulist, and, by its touch, converts all things into gold. To select one example from a thousand, the French potter takes into his hand a rude lump of clay, and by his skill and taste creates national wealth, by creating a thing of beauty which foreigners vie in purchasing, and which no protective tariff will banish from boudoirs and parlors. Now why not enable some of our quick-witted youth to visit Sevres and Limoges, there to catch the artistic inspiration? It is far from improbable that in our extensive gneissoid strata we may find ready to our hand that kaolin which in the hands of the potter may become precious porcelain. We often reproach the Orientals with inertia, but in such matters as I have been discussing we may now profitably take a lesson from even the Japanese. The complaint, too, has often of late been bitterly made that our Ontario youth *will* neglect agricultural and mechanical occupations for the already over-crowded professions. But what have we hitherto done to ennoble or to render attractive those neglected occupations which all acknowledge to be essential to our national existence? Surely the fault has not been *altogether* with our youth. Is it unreasonable in them

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to rate certain favored professions at the same standard as the Legislature does? Education has by various enactments been in this Province most advantageously specialized for the intending divine, lawyer, physician, teacher, military officer,—and students are forthcoming at our Theological Colleges, at Osgoode Hall, at our Medical, Normal, and Military Schools. What if we now attempt to do the same justice to our agricultural and operative classes? Even granting, however, that these new institutions are thrown freely open to all who have received a tolerable elementary education, and granting that Exhibitions and Travelling Scholarships are established, can we induce our young men to attend? I answer that, if the teaching be of the proper quality, students will be readily found. But here we have by far the most difficult condition to satisfy. To get enough officers of the proper quality to man these two new adventures will occasion greater difficulty than may be anticipated. It would be comparatively easy to secure the services of men possessing the requisite knowledge; but how great a gulf separates the possession of knowledge from the communication of knowledge most of us who have attended either school or college can painfully testify. "I remember," says Mr. Scott Russell, "to have studied Mathematics under a professor who was a profound mathematician, and a practical idiot." Even in England science teaching is so impeded by difficulties of this nature that at a late meeting of the British Association it was proposed to insist in England as in Germany, on every newly-appointed professor serving a probationary year.

Now, to make our Technical teaching a real success, we shall require a dozen men or more who can divest themselves of all the pedantry and formalism of book-knowledge, descend to the level of an unscientific audience, and honestly grapple with the difficulties that beset the threshold of every science. Reading scientific lectures *ex cathedra*, to a cultured auditory is justifiable enough, though certainly not the better mode of teaching, but I greatly apprehend that an operative who can already in his broken English give a tolerably consecutive account of a machine or of a manufacturing process would hardly respect or thank a lecturer for reading to him in a monotone a desiccated description that is to be found in any late encyclopædia. Nor ought speculative science to be permitted to usurp the appropriate domain of applied science. The main function of Technical teaching is to place the students in immediate possession of the most valuable results hitherto attained; to describe lucidly the most expeditions, and at the same time the *cheapest* processes by which these results may be attained; to indicate where improvement may be expected or desired; to interweave throughout a felicitous exposition of the principles on which the described processes depend. In ordinary lecture-room experiments the cost of materials is not essential or relevant to the purpose of the lecturer; but where chemical science is to be applied commercially, the case is vastly different; here the cost of the process enters into the calculation as the principal factor. Where we want but a few cubic feet of oxygen for laboratory work, we resort to potassic chlorate, or manganic dioxide; but, to bring oxygen within the reach of the manufacturer, we must resort to DeMottay's or some similar process, and obtain our supplies from the atmosphere itself. So the ordinary laboratory process for the evolution of chlorine, will hereafter be super-

sessed in bleaching works by the valuable invention of Mr. Deacon. If the technical student is to be a miner or metallurgist he must be shown not only the micro-chemical reduction of ores by means of blow-pipe fluxes, but he must have practically exemplified before his eyes the smelting of metals by agents which, if less effective, are vastly cheaper and more abundant. In short, the circumstances and the difficulties under which our future agriculturists and operatives will be compelled to labor ought as far as possible to be precisely reproduced in the experiments of our Technical institutions. All this discussion of cost and all this elaboration of detail would to the *general* student be needlessly discursive and insufferably wearisome; for his aim is simply to master the *properties*, not the applications of chemical agents. And even in the mode of chemical analysis there exists, I conceive, a very appreciable difference between the requirements of the technical and of the university student. Where the object is to arrive at the percentage composition of a substance under examination, the ordinary quantitative analysis requires frequent precipitations, weighings, filtrations, which even with the assistance of recent improvements are sufficiently tedious and require much skill in manipulation. But what our technical students require is some expeditious system of analysis, which even in unpractised hands will yield reasonably accurate results. These conditions we find satisfied in the newer or *volumetric* system of analysis. Many years ago the exigencies of French and English alkali dealers compelled a partial solution of this problem; and so originated the alkalimeters of M. Descroizille and Dr. Ura. By the labors of recent chemists, volumetric analysis has been so extended as now to cover nearly the whole area of ordinary manufactures. The older or *gravimetric* system must still be resorted to for the full analysis of complex mixtures; and its refined methods would be more advantageously studied and practised in the well-equipped laboratory of University College.

A word more. In the reformed Provincial University it is to be hoped that the Faculties of Law and Medicine will be restored to the position from which they have been most wrongfully deposed. Then in the work of general literary and scientific culture, and in the special training of students for the Legal and Medical professions, the University will have an immense domain to worthily occupy and cultivate. Let it not therefore from its palace walls cast wistful eyes towards the humble vineyard of Naboth; let it not grudge to the sons of toil their College of Technology.

INSPECTION OF SCHOOLS.

Professor Robins, Inspector of Schools for the City of Montreal, read a paper on Inspection of Schools, proposing such modes of conducting and recording examinations in Reading, Writing, Arithmetic, and Spelling, as should make it possible to compare schools with each other, though examined by different persons. In the introduction it was insisted that, where possible, examinations should be in writing for the sake of permanence and exactness; that the examination papers should have a defined character, so that in all essentials the examinations could be reproduced at any time with different examination papers, and that the results should be recorded by ages and sexes and not by classes, because systems of

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classification differ, are not understood everywhere, and are but of local and temporary importance, while results by ages are of universal and lasting interest, and are intelligible to all, while results by sexes would help to settle some vexed questions respecting mixed and separated schools, at present argued, not on the ground of generally accepted facts, but of prejudice, or prepossession, or limited experience. The essayist continued thus:—The subject of Spelling is one of the least difficult properly to examine in. A dictation exercise must be provided. A passage from a book is necessary to test accuracy in the use of apostrophes, quotation marks, and capital letters; but no passage from a book, unless of inordinate length, could afford a sufficient variety of words to test the capability of advanced scholars. There should be also a number of selected words, mingling duly those of greater and less difficulty. The exercises I use are thus defined. First, a short narrative of one hundred familiar words, followed by fifty selected words, twenty being of one syllable, fifteen of two syllables, and fifteen of more than two syllables, half the selected words offering some special difficulty, the rest being of an ordinary character. The whole exercise to be read to the children without repetition, and so deliberately as to be completed in one half-hour. Every child that can write at all should have the opportunity of doing what he can; the very slow writers will consequently be obliged to skip some words, but this they should understand they are at liberty to do. Each paper should be signed by the writer, and his age at the last birthday recorded. In making up the results, every word correctly written is to be counted, but words containing indistinct letters are not to be taken as correct. The mode of deducing from these results the percentage of words that the average boy and girl of each age can write correctly is obvious.

Examinations in Writing are easily made: the relative proficiency of two children in the same school can be determined without much difficulty, but results cannot be recorded for want of recognized standards which, like those of weight and measure, could be appealed to, and by means of which results in writing could be definitely stated numerically. Good writing is: 1st, legible; 2nd, rapid; 3rd, beautiful. By common and by wise consent we drop rapidly out in estimating school writing. Now the beauty of writing can scarcely be estimated by minute examination. The general effect is of so great importance that the character of writing is determined almost at a glance, if standards for comparison be at hand. I propose then the preparation, by competent authority, of a set of standards in writing, about ten in number, rising by equal gradations from the poorest scrawl of beginners up to the best attainable writing. Let these be numbered from one to ten and distributed to all engaged in the examination of schools. Such a set of standards, facsimiles of actual writing, I have filed for the examination of the schools in Montreal; but desiring to compare our schools with others, I could wish to see a general set of standards arranged and published. Let each boy in a school copy a piece of print, attach to his copy his name and age and return to the examiner. The copy of any particular boy might be found not inferior to No. 7 of the standards but inferior to No. 8; that copy should be marked 7, and from the aggregate of copies so marked it would be easy to calculate the character of the average writing of a school or class, or of boys or girls of any age.

An examination in Arithmetic respects four points,—accuracy, rapidity, acquaintance with modes of procedure, and ingenuity in the invention and application of processes. If desired to estimate rapidity of work, a special examination must be arranged for. The remaining points have been met in my practice by preparing four sets of examination papers, with room for working the examples on the papers. The first contains one question each in notation, numeration, addition, subtraction, multiplication by one figure, multiplication by more than one figure, short division, and long division. The second paper embraces one question each in reduction descending, reduction ascending, compound addition, compound subtraction, compound multiplication, compound division, and one specially designed to test the ingenuity of the pupils. The third paper, on fractions, contains two in reduction, one in addition, one in subtraction, one in multiplication, one in division, and two in decimals, one being in some sort a puzzle. The fourth paper is on proportion and interest, and gives two questions in simple and one in compound proportion, two in simple and one in compound interest, and one of which the mode of solution must be discovered by the pupils. To these four papers I would, in some instances, add one upon the theory of Arithmetic. To each of them one half-hour is allowed, and every child who can solve any one of the questions on a paper is furnished with one. As these examinations are intended not to settle the position of individual scholars, but to compare schools with each other, only those which are correct are counted, most of the questions being made so simple that any child having knowledge of the subjects could solve the majority. No allowance is made for answers partially correct, because the just estimation of grades of error is a matter of extreme not to say insurmountable difficulty, and because returns made by different persons on any plan of allowance for errors cannot be compared. All answers are valued alike, because it is impracticable to assign values to examples varying proportionately to their difficulty, and even if practicable, he who missed a simple question ought to lose, at least, as many marks as he who is bewildered by a difficult one. This scheme of marking discourages the unfortunate practice of some students of wasting time over difficult problems until they have no opportunity of attempting the easy ones, and is the course to which an experience of many years, during which I have conducted some hundreds of examinations, and read many thousands of answers, has led me.

I come now to the most difficult subject of all—Reading. In reading two things are to be considered, acquaintance with words, and the ability to use aright pauses, emphasis, and intonation. The first point is readily estimated and recorded in various ways. I would recommend the furnishing to each child, apart from the rest, a printed list of words to be read from for one minute, recording the number correctly pronounced in that time. A suitable list for this purpose would contain one hundred words of one syllable, fifty of two syllables, fifty of three syllables, and fifty of more than three syllables. The mechanical reading of children could thus be accurately recorded. In respect to the second point I feel, after many attempts, that I must confess myself baffled in the attempt to record intelligibly to others, or even to myself after the lapse of time, with the precision which I desire, the intellectual character of any reading I may hear; chiefly for this reason, that intellectual power does not admit of measurement and tabulation.

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By methods, such as are suggested above, the following facts, culled from the Report of the Montreal Schools for 1871, have been ascertained, and with the explanations given above can be distinctly apprehended. "In the Panet Street School the average girl of fourteen can write correctly ninety-three words in a hundred." "The average boy of fourteen in the British and Canadian Schools attains in writing the standard 7'3." "In the Royal Arthur School the average girl of fourteen, out of eight examples in the simple rules solves 7'5, in the compound rules 5'2, out of seven, in fractions five out of eight, and in proportion and interest 2'6 out of seven." "The average boy of fourteen in the Montreal Schools, in reading one hundred words will stumble over two or three, and mispronounce three or four." The paper concluded by alluding to some of the difficulties in the way of carrying into effect generally such a scheme, and briefly answering some objections to it.

ON THE GENERAL REGULATIONS AND LIMIT TABLE,
PRESCRIBED FOR PUBLIC SCHOOLS BY THE COUNCIL OF PUBLIC
INSTRUCTION.

BY SAMUEL M'ALLISTER.

I cannot say that I approached the preparation of this paper with unmixed pleasure. I knew that, to treat the subject properly, I would have a good deal to say that was unfavourable; and it is not pleasant to have to do this about the acts of the Power to which we have all to bow in educational matters. Indeed I wish we could imitate the pleasant fiction every loyal subject entertains about the infallibility of the ruling Power, and have some individual responsible for the acts of the Council, who might serve as a scape-goat. If we had our representatives in that body—and I hope the day is not far distant when we shall have them—we would have less difficulty in discussing its proceedings; for, besides being personally responsible to ourselves, it is to be presumed they would be men practically acquainted with the requirements of our schools, and at the same time of such wide culture that they could act on general principles.

The term, "General Regulations," is quite a misnomer, for in several instances they are ludicrously minute: take for example those referring to the duties of Inspectors. Indeed, towards this officer the Council assumes the character of a nursing mother, and he is carefully instructed in the way he should go from the moment he enters the school premises until he leaves them. A good many of his instructions would be very valuable as hints, but are quite out of place in a system of General Regulations. And what must be said of the way he is instructed to conduct himself to the teachers? Are all our Inspectors bores, that they have to be drilled in good manners by those in authority over them? One would think the standard of qualification for an Inspector would be a sufficient guarantee that he knew, not only how to examine a school, but also how to conduct himself in a school-room.

These Regulations certainly display a mastery knowledge of detail, and the drafter of them can at least claim the credit of viewing things with a microscopic eye; but I question the wisdom of impeding the action and fettering the judgment of Inspectors by so many petty injunctions.

There is a note on ventilation in the instructions to Inspectors that is unique in the profundity of ignorance it displays. It runs thus: "Ventilation becomes easy as soon as it is known that it is embraced in these two essential operations, viz.: 1st, to supply fresh air; 2nd, to expel foul air." Well! I am safe in saying that everybody knows this; therefore, to everybody ventilation is easy. I wonder how many, with this and much more knowledge, have found it so! I, for one, have not. But mark the sage observation that follows: "It is evident that fresh air cannot be crowded into a room unless the foul air is permitted to pass freely out; and certainly the foul air will not go out unless fresh air comes in to fill its place. It is useless to open ventilating flues when there is no means provided to admit a constant supply of fresh air from without." And thus the great problem that up to this time has puzzled intelligent architects is solved in a footnote. A person who can satisfy himself with such conclusions, based on such reasoning, will certainly not shorten his life by intense application of mind.

The ratepayers and Trustees are not forgotten; for they are thoroughly instructed in the mode of procedure at their school meetings. This, however, is a work of supererogation, so far as regards trustees; for they, as a body, have a weakness for doing that which is right in their own eyes.

I come now to the regulations bearing upon Teachers and their duties, and I am glad to say they conform more to the character of general regulations than any of the others. There is much in them that is good: for example, the statement of the causes for which scholars may be suspended or expelled; though the penalty for truancy—that of suspension for the remainder of the term—is open to several objections. Their arrangement, however, is faulty. Those prescribing the duties of teachers in general should stand first; then those peculiar to masters; and, finally, those bearing upon assistant teachers. As they stand, some unnecessary repetition is inevitable. For example, the instructions to teachers in general prescribe a certain course of discipline; those to assistant teachers prescribe another course.

It is to be regretted that the Council did not see fit to abolish the so-called half-yearly examinations altogether, rather than to make them quarterly. As examinations they are a mere farce, in spite of the precautions adopted in the Regulations. It would be much better that a quarterly examination should be conducted in the course of ordinary school work, and each half-year or year be closed by an exhibition consisting of recitations, singing, &c., as is at present done in the Model School.

The regulation having reference to the granting of certificates to Normal School students, makes no provision for sufficient professional training on the part of those that may secure them. It has happened that a student, at the end of one session, has secured the highest grade of certificate; but will any one say that one session's practice in the Model School, or even two, combined with as much theoretical knowledge as it is possible to acquire, is at all equal to the five years' work in school? I may be told, teachers are born, not made. I am willing to admit the first part

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of this statement, but I have had too much evidence that they are "made," to accept the second; and I decidedly think that an attendance of at least two years at the Normal School for first-class certificates, and one for second-class, should be required from all students who have not taught before. It is only by experience in the school-room, and with many only by a long experience, that a teacher can learn to keep himself as well as his scholars under perfect control, and to exercise that tact in their management by which corporal punishment is reduced to a minimum or abolished altogether. It is only by actual experience that he can learn to economize the time in school so as to employ every minute to the best advantage,—a very important matter, now that there is so much more to do.

The change made in the vacations is quite an improvement for both teachers and scholars—particularly for the latter—as it should be. A resting time is now given at reasonable intervals, and of sufficient length, except in the summer vacation, to prevent any child, however delicate, from suffering on account of confinement or application in the school-room. "Jack" needs not be "a dull boy" now for want of play. The "long half," as they call it in England, is very judiciously divided by the week at Easter. But, in regard to the summer vacation, if the Council had been present in many schools, to see the spasmodic and often futile attempts at work during the sweltering days of last July, they would have been convinced of the wisdom of granting the same holidays to the Public as to the High Schools.

In concluding my remarks upon this part of my subject, I would just say that should the drafter of these Regulations have any similar duty to perform in future, he would do well to keep Lord Bacon's advice before him: "Preserve likewise the rights of inferior places, and think it more honour to direct in chief, than to be busy in all."

If the Limit Table I have to speak about were permissive, or recommendatory, I would ask leave to be silent about it as a scheme utterly impracticable for the majority of our schools; but, as it is intended to be obligatory, it requires serious notice. In a paragraph preceding the Table the following words occur: "In all cases the *order of subjects* in the programme must be followed, and the time prescribed for teaching each subject per week must be observed." However impracticable it may be, it is evident the writer of this had the most serious intention of introducing it into every public school. I would like to know how far his purpose has been accomplished. To me it seems utterly out of the question. Take, for example, the table for the first class, in which the week's work occupies twenty-one and a half hours. If the time prescribed for teaching each subject must be observed, what is to be done with the remaining six or eight and a half hours? Again: the work of the fourth class is intended to occupy twenty-eight and a half hours. Now, if the time of attendance is less than this—as in many schools it is—the work cannot be done. There are very few schools in the Province so favourably situated as to be able to carry out this Limit Table in its entirety. I confess that even in Toronto, where we have a fair organization, it would be impossible to do it;—how much more, then, is this so in schools having only one teacher. Take for instance the most important subject, Reading. The time a teacher is required to devote to it in the first five classes is

twenty-eight hours, just about the available time for work in a week. Then what becomes of the other R's, not to speak of the remaining subjects, which we are told must not be omitted? I may be told this Limit Table does not apply to such schools. Then where is the one that does? There is not the most distant hint given in the Regulations, nor in the remarks preceding the Table, that it does not. The truth seems to be, that whoever drew the Table up took the Model School as a guide, and forgot or ignored the country schools altogether.

With regard to the arrangement of the subjects, and the time devoted to each, precedence, and I may say prominence, is wisely given to Reading, Writing and Arithmetic; but the time given to Spelling in the lower classes is not at all equal to what is required. My experience has been that it takes little less time than Reading itself to teach it thoroughly. The Arithmetic for the lowest class does not go far enough. I think the tables as far as the Multiplication table should be taught here, and leave those of Weights and Measures for the second class. I question the wisdom of requiring children of the lowest class to write on paper; for, apart from the fact that many of them have not yet learned to hold a book, or a slate, or a pencil correctly, much less a pen—the holding of which, for the purpose of writing, requires considerable skill—it would entail a great additional expense on School Boards to introduce proper means for writing on paper by children so young. The Grammar is well arranged. In Geography a little more should be given to the lowest class, unless the term, "map notation," comprises what is required. The third class, too, should have the Geography of Europe added to that of America, to make the work proportionate. History is begun very judiciously with the fourth class; for it is a subject in which you cannot secure the interest of scholars, until they have attained to a certain degree of intelligence, as shown by their interest in the relations of people in a community. The arrangement of the Mathematical subjects is fair; but the limit in Geometry for the fifth class is quite artificial; if the first book is to be divided at all, it would be better to let the sixth class begin with the study of parallelograms at the 34th proposition. With regard to the remaining subjects, they could be more effectually taught if a little more time were given, which could be done by taking some from the Reading and Arithmetic in the two highest classes; and in the highest class, the work in Book-keeping might fairly take the place of Writing. We find in these that reading frequently leads to indifference as to expression and articulation; and the scholars are so familiar with the various rules in Arithmetic, that it requires a great variation of the work to keep their interest up.

But in looking at these remaining subjects, I am strongly reminded of the old adage referred to by Longfellow:

"Art is long and time is fleeting."

And I fear greatly that with the present imperfect organization of our Schools, we may be attempting too much, and may be tempted to give our scholars a smattering of all the subjects, but make them reasonably proficient in none. I have no doubt a great many of us would like to take them up with eagerness and spirit; but we must not forget that this cannot be done without great detriment to the majority of scholars, to whom we owe the prime duty of grounding them well in those

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subjects necessary to their welfare in life. The framer of this Limit Table is at one with us in this, that he gives greatest prominence to these. Let us not forget, however, that it is not the mere instructing, but the training of those under us that we have to attend to; and this can be best furthered by availing ourselves of every occasion to plant in their minds germs of thought in reference to the earth, air and sky, and to themselves as responsible beings, that may grow and bear good fruit when they are beyond our influence and care.

A dreamer dropp'd a random thought--
'Twas old, and yet 'twas new;
A simple fancy of the brain,
But strong in being true.

It shone upon a genial mind,
Until its light became
A lamp of light, a beacon ray,
A monitory flame.

The thought was small, its issue great--
A watch-fire on a hill;
It sheds its radiance far adown,
And cheers the valley still.

THE HIGHER EDUCATION OF WOMEN.*

BY RICHARD LEWIS.

The Higher Education of Women is an appropriate subject for consideration in this Conference; for it is the right and the duty of the school teachers of every grade to discuss all subjects connected with educational improvements. The material upon which they are daily operating is *Mind*. They have the best opportunity for watching the development and contrasting the characteristics of the mental faculties of their pupils, and of comparing the mental powers, as manifested in the distinctions of sex; and these advantages justify them to take a leading position in suggesting both what shall be taught, and who shall be taught.

But the subject of the higher education of women has become one of deep inquiry and earnest agitation. In the ranks of its advocates are found not only women of eminent talent and virtues, but some of the profoundest male thinkers of the age—believers in the necessity as well as the justice of the claim—are labouring in its behalf. Some attempts have been made to satisfy this demand by the delivery of popular lectures on a few subjects; and in some instances colleges have offered to women the full advantage of their entire curriculum of studies. While these efforts are an admission of the right of women to a higher culture, their best result

* After reading Mr. Stuart Mill's admirable essay on "*The Subjection of Women*," it is impossible to discuss the subject of this paper without being influenced by his views and form of argument.

has been to show that when women are allowed to compete with men in mental pursuits, the distinctions of sex have vanished, and they have won the highest scholastic honors, not as women, but as students.

But the true question at issue is, not that of capacity, but of justice and right. Women ask for this higher culture as a right, and because they desire it. The incapacity of women for the highest culture granted to men has been urged by ignorance and prejudice, but never proved by experience. If the objection could be established by experience—and all experience is against it—that women have inferior mental faculties to men, that does not sanction the injustice of refusing to women the highest education they can receive and universities can give. They claim it as human beings—not as women—on whose culture, as on their mental development, there can be placed no limits. The highest argument for the culture of the man is derived from the fact that he is an immortal being; that his intellectual faculties are capable of unlimited development; and that, as his culture is high, his character is exalted and his usefulness and happiness increased. But the argument holds for woman; for mental discipline and knowledge have the same influence, and lead to the same issues in her case as in that of man. The ignorant woman suffers as deeply in her personal degradation, and the loss of power, moral and intellectual, derived from education, as the ignorant man; and, as a consequence, she inflicts as heavy penalties on society, by her actions and example, as the ignorant man. In both cases ignorance is more costly than education, and the injustice, by whomsoever exercised, recoils on the oppressor.

But the question is, in reality, not whether women are qualified for the highest culture, or desire it; but, is it agreeable to men's interests and opinions? It is not a question of capacity, but of expediency; and the expediency does not affect the general interests of the race, but only of one half of it.

The highest ground on which woman claims this culture is a personal one; that is, as affecting her own advancement and happiness. It is, however, manifest that other results would follow.

The reform will affect the social relations of the sexes. Women are now placed in such subjection to men, that their condition is unquestionably that of serfdom. Custom and law make the man not only the superior, but as the husband, the master of the woman. He cannot buy nor sell her as a slave; he is bound to observe certain forms of fidelity, and perhaps certain moral obligations towards her. But his control is so large and constant, and her dependence is so absolutely on his goodwill, that in countless ways he can evade the civil and the moral law, and exercise over her actions all the tyranny and practise all the cruelty of the master over the slave. Now all this irresponsible power is given to men by themselves, on the old doctrine that men are the natural superiors of women; and no doubt this belief originated when brute force ruled the world. But among civilized nations brute force has succumbed to mental force, and the multitude, strong in physical power, everywhere submit to mental force, although inferior in physical qualities. The men of mind rule the men of muscle. Women, however, have not been permitted to share in the advantages which intellect has secured to men. Men do not now claim the right to govern women and refuse them the numerous civil advantages monopolized by their own sex because they possess

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superior brute force, for that principle would implicate the rights of intellect; but they still claim the right to monopolize every occupation by which wealth, or honor, or power can be won, and to refuse to women the training and culture by which they could compete with men, on the plea that women are unfit for such offices, or that they do not possess the intellectual qualities to fill them. The sphere of the woman, men maintain, and this is most agreeable with their comforts, is home. Her destiny is that of the wife and the mother. It is true that amongst the wealthier classes the household drudgery is deputed to servants and officials; but no woman in the position of a wife and a mother can escape or can depute to another the moral and intellectual duties and influences of her position. Amongst all classes the education of women is inferior to that of men. But when this prevails amongst those classes who enjoy the advantages of the higher education, and where often the highest culture forms a necessary condition of the man's success and public usefulness, it spreads its evil influence deeper and wider over society. The husband in such circumstance is educated up to the necessities of his profession or his rank in society; while as the education of women in that class, is simply ornamental, ostentatious, and always superficial, the wife in mental culture and power is in every respect inferior to the husband. Such a union acts as a serious check to further advancement. The spirit of emulation, which constant companionship with a cultivated mind would sustain, is damped and discouraged in the husband. He may have professional or social inducements to continue what probably he began with, the resolution to pursue to its highest issues; but even spurred by the strongest ambition, he has not the same motive and constant support to advance, that he would have had if he had been associated for life with a partner of like tastes and culture with his own. In that degree that the wife is inferior to the husband, the family and society are the losers. The offspring of such a union loses because there is only one pattern and one influence on the side of culture where there should be two; and when the wife, wielding the mighty agency of maternal love, inspires and directs the tastes and pursuits of her children, she is tempted to exalt personal attractions and showy accomplishments above the higher education, and to foster a dislike and a contempt for what sinks her so much below her husband. The spirit of the family moulds and animates that of society. The children of such a mother will not cherish the same high respect and desire for mental culture that animate the father, especially in a trading community, where success in business often wins higher honors than moral excellence and mental gifts, and the father incessantly dragged down to the level of his wife rather than urged higher, has no home inducements to give to society the advantages of that constant effort after a nobler intellectual condition that would have prevailed had this partner been a woman of intellectual tastes and culture.

I attach the greater force to this view of the question, because while a ruling class is inevitable, and is necessary to every community, it is of the first importance that such a class should hold its supremacy by right of its intelligence and its virtues. In the past, that class was an aristocracy of birth and landed possessions, won either by valour in war or wisdom of statesmanship; and however oppressively it exercised its power, in many respects, it compensated for its tyranny by its public

usefulness—by a high sense of honor and a chivalrous devotedness to the glory of the country. Its sentiments and its spirit were reflected in the character of the people and pervaded the whole national life. The supremacy of an aristocracy of birth is passing away in old countries, and does not exist in the democratical communities of the western world. The aristocracy that rules here is one of mere wealth, into the ranks of which any man may be admitted with no other credentials than those of money and no higher morality than the pliable and doubtful morality of trade. But it is well for communities to have a high pattern before them; and an aristocracy free to all, but whose conditions of admission to its ranks are those of the highest culture, talents for counsel and government, and public and private virtues, is the best for guiding and moulding the public mind. To realize this high conception of a ruling power, women must be co-workers with men—sitting with them in colleges and universities—and receiving all the advantage of that mental discipline which prepare men for the highest functions of society and the state. Their influence then will pervade the family, and inspire it with the highest conception of public virtue and duty to the state; and their minds, enlarged and exalted by the best education, will offer to men new motives for public integrity and new sources of wisdom and counsel for the public good.

But I urge this culture on other grounds than that of making women equal to men in their maternal relations. We do not educate men that they may be better husbands, but better men; and I maintain that the destiny of woman is no more that of a wife than of a man that of a husband. The next important design then of this highest culture is to fit woman for any office of usefulness and honor in the community for which she possesses the right qualifications. There is no office, no occupation from which custom and prejudice now exclude her, for which she does not possess all the necessary mental gifts which entitle men to such offices. If there be any such office, which men monopolize on the plea that certain occupations are "unsuitable to women"—for that is the form the objection takes as advanced by men—then let women be the judges; give them the trial. Give them first the training and the education; and whether the occupation be one of the mechanical arts—from all of which women are excluded, and for many of which they are specially adapted—or the pursuits of commerce, or what are distinctively called the professions; if any such occupations prove unsuitable to woman, surely she would be the best judge of what is equal to her powers and her character, and the first to retire from a contest which imposed new duties and difficulties on her, and which brought no profit nor honour. But we judge after custom and habit, and under the influence of long established prejudices. Why should women not be as capable of usefulness and distinction in the study and practice of science as they have been able to make themselves illustrious in the study and practice of literature. We object to woman occupying the professor's chair; yet in physical science and history and political economy, she has many times been our instructor in books, which, written under every disadvantage, without any of the previous training and culture which men receive, lose nothing by comparison with the best productions of some of the most illustrious men, and often far surpass the average productions of common

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men. If women desire to sit in theological halls, and receive instruction in all the subjects that qualify for clerical duties, what have we to oppose to that desire but our prejudices and denominational and orthodox views? If women after receiving such instruction add their productions to the divinity literature of Christianity, we have no reason to fear that they will teach false doctrines more than men, and every reason to believe that the deep moral instincts and the fervent religious spirit which have ever exalted women above men in practical life, in the world and in the church, will lose none of their force and their beauty, when expressed in the thoughts and the language of a cultivated mind. Religion and morality have had the noblest advocacy and interpretation in the poetry which women of genius have given to the world; and if a woman—to take the extreme case which conflicts the most with men's preconceived views of what is proper to a woman—thinks fit to take the platform or the pulpit, and deliver in oral speech what we all have received with delight and edification in their written productions, the impropriety, or the sin, if you dare give it that harsh term, is hers. If woman demand that office, and choose to give to Scripture her own interpretation of its teachings on the sphere and work of woman, it is alike unjust and opposed to the charitable spirit of Christian liberty to deny to one-half the human race privileges and rights which are accorded to the smallest fraction of the male portion of that race. If we look on the world's terrible harvest of sin, we cannot say that the workers for God and humanity are enough. We need a new army of earnest, ardent, devoted labourers to battle with the powers of darkness and of evil, that by their constantly growing numbers and unity of forces perplex, discourage, and too often overwhelm the legions that fight on the side of virtue, and truth, and God. We admit the power of woman for good; we know also her power for evil. But the power of women over their own fallen sex, to redeem, to purify, to cheer, to strengthen in good purposes, to lead back to virtue from vice, is beyond all measure greater than that of men. To the wretched, broken-hearted, degraded woman, the lessons of virtue fall from the lips of man too often with the harsh censure of the judge. But the woman is the best minister of peace and hope to her own sex; and whatever form her ministrations may take, whether as the comforter in the despair of sin, or the instructor and counsellor in wisdom and virtue, there is yet work, there is yet a sphere of saintly ministrations in aid of the degraded and fallen of her sex which has never been occupied by men, and which, if women, educated as men are for these holy offices, were to undertake with deeper emotional nature, with their intuitive perception of the feelings of their own sex, and with the natural sympathy with the woman's nature on the one hand, and confidence in the purity of motives on the other hand, would do more for the regeneration of the world which women occupy and influence, than has ever been done by the best effort of men. And, if I am to be told that all this can be done without that culture so essential to the man in such an office, I must reply by asserting that all that can be said in behalf of high culture for man as the moral instructor, applies with equal force to woman.

Women are now making a special effort for admission to the medical profession. They justify their claim on moral grounds. They maintain that the duties of the medical professor, when practised by men, often

violate every feeling of womanly modesty. It is true that women submit to the custom, because they have been trained to it, and taught to believe that it is necessary; and of course, that women are not intellectually qualified for the office. But the intellectual fitness of woman for the duties of the physician has been so fully demonstrated that none but the ignorant, or the prejudiced, or the interested continue to urge this argument against the claim. Then, strange to say, men have opposed the claim on the very plea that makes women demand it. Men have grown suddenly delicate and unusually anxious for the modesty of women; and you may hear the libertine, who would not scruple to trample on every law of modesty and chastity, when the question is raised of admitting women to the profession, which in their hands would shield the sanctity of womanly purity from all violation, express an amiable and exemplary horror of an innovation so contrary to his views of female propriety. The opposition which this innovation has met with from medical men can only be accounted for in the fear of the competition with which it threatens them. It is an invasion on the privilege of trade; and the rancorous hostility with which the efforts of women to get the highest scientific culture necessary for this profession have been assailed by young men supposed by position and culture to be gentlemen, has never been surpassed in its coarseness, vulgarity and cowardice, even in the conspiracies of trades' unions. *They never assail women.*

But the resistance is vain. Women have bravely fought their way into Medical Colleges; and, suffering persecution with a noble fortitude that could only be sustained by a high sense of duty, they have successfully competed with men in winning the scholastic distinctions necessary to practice their profession. They have already established their right to that practice by manifesting the necessary skill and knowledge; they only need now the support, the sympathy and respect of their own sex, in whose behalf they have made such gallant efforts, and suffered so much, to make the profession of medicine as much their own as it has hitherto been that of men.

It is impossible, in discussing this question, to evade the claims of woman to the education of the statesman. The politics of a country degraded by factions and placemen, are pronounced to be too corrupt and repulsive to the habits and character of women. But this is an interpretation of politics as they are and not as they should be. Political science supposes the highest wisdom applied to the public good; and the highest wisdom infers the highest morality, calmness in judgment, prudence in council, and political integrity. We have no reason for believing that women are less endowed with these moral and intellectual qualities for politics than men. If we take history into evidence we have many reasons for believing that she possesses these qualities in the highest degree. In England, when women have ruled, the government has always been distinguished, not only for its vigor and efficiency, but also for the purity of its politics; and Mr. Mill, in his work on the *Subjection of Women*, has produced a mass of historical evidence to show that the government of women in states has been marked for its eminent vigilance, economy and practical wisdom. On broad principles of justice it is not a question of privilege or expediency but right. The interests and happiness of women are as much involved in good or bad government as those of men. But viewing

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the question only from the low stand point of a selfish expediency, there is every reason for believing that the influence of cultivated women brought to bear upon the politics of a country would not degrade them, but would refine and purify the spirit of partizanship. Who will deny that her influence purifies and exalts the church? and if that influence, guided by superior culture were thrown into the arena of politics, aided the counsel of statesmen, and pervaded the legislation and the administration of justice, while the state would have the advantage of her sympathies and her distinctive wisdom, politics would be elevated in tone, and a measure of justice in securing to her sex more righteous protective laws established, which in its moral and social results would be of incalculable good to the community. I do not say the Senate and the Legislative functions of the state should be thrown open to women; but if one woman, in vindication of the intellectual fitness of her sex for such office, has written ably and profoundly on politics, or history, or political economy, she gives you evidence that her sex is no just barrier to political usefulness or distinction.

Who can shut his eyes to the inevitable results of these struggles of women to secure for themselves the culture by which they may become less the dependents and household serfs, and more the equals of men? Let them be endowed with the qualifications for filling offices now entirely monopolized by men, and they will be, not the rivals, but the helpers of men. If wives and daughters of all ranks, were trained to practice any art or profession now followed by men only, is it not clear that husbands and sons would have lighter burdens to sustain? Is not the worldly welfare of daughters—how they shall subsist, what they shall do for a living—a source of painful anxiety to parents? Marriage is the common solution of the difficulty. But while the principle, that a woman must marry that she may live, is in every sense degrading, and followed by countless miseries and sorrows, it is not a solution. All women do not marry. Many of noble and sensitive minds shrink from marriage on such conditions. It may all be very satisfactory to the vanity of wealthy men that they can afford to keep their daughters in luxurious and useless indolence; but there are thousands of women, high minded and sensitive to the degradation of dependence, yet compelled to live almost on charity, because public opinion denies to them the advantages for self support, which it freely offers to men. I need not picture the social and moral evils that arise from this system of unwise and selfish monopoly. We know them too well; and when families are bowed to the dust by vices which cover them with sorrow and infamy, and society struggles in vain to suppress the terrible moral disease that evades every effort of legislation and frustrates every effort of Christian philanthropy; we learn then how women avenge themselves on public opinion for its injustice. While justice should be the motive for these concessions to women, the public good is the end and the fruit. We need the largest amount of cultivated talent for the public service and the interests of society. The higher the service, and the more important it is to the interests of the common weal, the rarer the talents to discharge its functions. We cannot have too much wisdom to serve the community. Give women the culture and advantages for serving the world you offer to men, then let your elections depend on merit not on sex, on fitness not on favour, and you not only double your

resources; but you secure in behalf of human progress, energies and capacities, that in the past have been lost to the race. We now prefer inferior men to superior women, and we thus not only confound and destroy the faith of women in the justice of men; but the whole community is wronged by losing the advantage of having the best workers to do the best work. The claim is so righteous; the interests involved so great and important to the welfare of society that the final issue can neither be uncertain nor far distant. In the measure that the reform is protracted, will human progress be delayed; for the higher education of women, is the highest education of men; and when men shall learn to concede to women the entire and largest culture they claim for themselves, in the accession of new aids, and sympathies awakened in behalf of human interests, they will understand how much they have lost by injustice, and how the best education we give to women is the best policy for men.

"The woman's cause is man's: they rise or sink
 Together, dwarfed or godlike, bond or free;
 For she that out of Lethe, scales with man,
 The shining steps of Nature, shares with man,
 His nights, his days, moves with him to one goal,
 Stays all the fair young planet in her hands,—
 If she be small, slight-natured, miserable,
 How shall men grow? But work no more alone!

For in the long years liker must they grow,
 The man be more of woman, she of man;
 He gain in sweetness and in moral height,
 Nor lose the wrestling thews that throw the world;
 She, mental breadth, nor fail in childward care,
 Nor lose the childlike in the larger mind,
 Till—at the last, she sets herself to man,
 Like perfect music unto noble words;
 And so these twain, upon the skirts of Time,
 Sit side by side full summed in all their powers,
 Dispensing harvest, sowing the To-be,
 Self-reverent each, and reverencing each,
 Distinct in individualities;
 But like each other, even as those who love.
 Then comes the statelier Eden, back to men;
 Then reign the world's great bridal, chaste and calm;
 Then springs the crowning race of humankind.
 May these things be!"

TENNISON.