Technical and Bibliographic Notes / Notes techniques et bibliographiques

The Institute has attempted to obtain the best original copy available for scanning. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of scanning are checked below.

L'Institut a numérisé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modification dans la méthode normale de numérisation sont indiqués ci-dessous.

	Coloured covers / Couverture de couleur		Coloured pages / Pages de couleur
	Covers damaged / Couverture endommagée		Pages damaged / Pages endommagées
	Covers restored and/or laminated / Couverture restaurée et/ou pelliculée		Pages restored and/or laminated / Pages restaurées et/ou pelliculées
	Cover title missing / Le titre de couverture manque	\square	Pages discoloured, stained or foxed/ Pages décolorées, tachetées ou piquées
	Coloured maps /		Pages detached / Pages détachées
	Cartes géographiques en couleur	$\overline{\mathbf{A}}$	Showthrough / Transparence
	Coloured ink (i.e. other than blue or black) / Encre de couleur (i.e. autre que bleue ou noire)	\Box	Quality of print varies / Qualité inégale de l'impression
	Coloured plates and/or illustrations / Planches et/ou illustrations en couleur	[]	Includes supplementary materials /
	Bound with other material / Relié avec d'autres documents		Comprend du matériel supplémentaire
	Only edition available / Seule édition disponible Tight binding may cause shadows or distortion along interior margin / La reliure serrée peut causer de l'ombre ou de la distorsion le long de la		Blank leaves added during restorations may appear within the text. Whenever possible, these have been omitted from scanning / II se peut que certaines pages blanches ajoutées lors d'une restauration apparaissent dans le texte, mais, lorsque cela était possible, ces pages n'ont pas été numérisées.
	marge intérieure.		

 \checkmark

Additional comments / Commentaires supplémentaires: Continuous pagination.

PREPAID BY PUBLISHER



EDUCATION.

Ontario.

Vol. XXIX.

TORONTO, APRIL, 1876.

No. 4.

CONTENTS OF THIS NUMBER.

Province of

BOCREDINGS OF THE EDUCATION DEPARTMENT. -(1) Appointment of Members of	
the Central Committee of Examiners ; (2) Proceedings and Regulations re-	
specting the Examination of Candidates for Public School Teachers' Certifi-	1
cates; (3) Proceedings and Regulations respecting the Intermediate Exami-	
nations in Collegiate Institutions and High Schools; (4) Rules and Regula-	
tions of the Education Department respecting the Intermediate High School	
Examption of the Luciation Department respecting the Intermediate Fight School	
Examinations; (5) Publication of the Authorized Text Books on Arithmetic;	
(6) Certain Teachers' Certificates granted at Ottawa; (7) In the matter	1
of the Rev. H. J. Borthwick, M.A., Inspector of Schools, Ottawa, and of Mr.	
Archibald Smirl, Examiner, County of Carleton; (8) Report and Minutes	
Lic Schools, in the City of Ottawa, December, 1875. HIGCELLANBOUS EDUCATIONAL NOTICES.—(1) Collegiate Institutes and High Schools; (2) Examination of Candidates for Certificates as Public School	49
Schools; (2) Examination of Candidates for Certificates as Public School	
 Teachers; (3) Central Committee of Examiners for Centrates as Function School School, School School School, School Schol School School School School School School School School Schoo	55
	1
Remuneration of School Secretary-Treasurer; (3) Coghlan v. The School	
(Instance of School Costion No. 4 in the Training of Main In the training	- 1
N County of Kenton Section No. 4, in the Township of Thibury East, in the PROERDINGS OF CONVENTIONS AND ASSOCIATIONS.—(1) School Convention in Y 10 2017 as Teachers' Meeting	55
ROCERDINGS OF CONVENTIONS AND ASSOCIATIONS -(1) School Convention in	
V. L. Elora; Teachers' Meeting	57
 Elosado de Conventions and Associations(1) School Convention in Local School Administration	57
MISCRLLANROUS COMMUNICATIONS -(1) Township School Boards (2) Working of	°'
Journal; (4) On Mathematics	58
VII Journal; (4) On Mathematics ExtRACTS FROM PERIODICALS.—(1) Resume of recent opinions of American Educators; (2) Village Museums; (3) What to read; (4) Progress of Popular	00
Educators; (2) Viliage Museums; (3) What to read; (4) Progress of Popular	
Science in Schools	
BOORS RECEIVED	60
VIII. BOORS RECEIVED.	64
II BOOKS RECEIVED.	64
Proceedings of the Education Department.	
WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW	

• APPOINTMENT OF MEMBERS OF THE CENTRAL COMMITTEE OF EXAMINERS.

Copy of an Order in Council approved by His Honor the LIEU-TENANT-GOVERNOR, the 17th day of March, A.D. 1876.

Upon the recommendation of the Honourable the Minister of Upon the recommendation of the Honourable the Hindster of Education, dated the 11th day of March, 1876, the Committee of School advise the appointment of Mr. John C. Glashan, Public School Inspector for West Middlesex, and of Mr. John J. Tilley, Public School Inspector for Durham, as members of the Central Public School Inspector for West Middlesex, and of Mr. John J. Liney, Public School Inspector for Durham, as members of the Central Committee of Examiners, as authorized by the Act 37 Victoria, Chapter 27, Section 27, Sub-sections 6 and 22. Certified.

(Signed) J. G. SCOTT, Clerk Executive Council, Ontario.

18th March, 1876.

2. PROCEEDINGS AND REGULATIONS RESPECTING THE

EXAMINATION OF CANDIDATES FOR PUBLIC SCHOOL TEACH-ERS' CERTIFICATES.

The undersigned has had under consideration the Report of the Central Committee of Examiners of the Education Department upon the undersigned, of the arupon the subjects referred to them by the undersigned, of the arand Certificates, and to the examinations of the Normal School; and Certificates, and to the examinations of the Normal School; and Governor in Council do approve of the accompanying Regula-tions respective web subjects tions respecting such subjects.

Respectfully submitted.

ADAM CROOKS. Minister of Education.

April 25th, 187 6.

REGULATIONS OF THE EDUCATION DEPARTMENT RESPECTING THE R. CONF. CERTIFICATES, AND IN THE EXAMINATIONS FOR TEACHERS' CERTIFICATES, AND IN THE NORMAL SCHOOLS.

Council of Public Instruction respecting the examination of candi-dates for certificates as Public School Teachers and Monitors, is PAGE

tion for first and second-class Provincial Certificates, who shall present from the Principals thereof, respectively, their certificates, which shall state, in the case of each student-

(a.) That he has given regular attendance during the session at the Normal School lectures, and performed his work to the satis-faction of the Principal and teachers.

(b.) That he has sufficient aptitude to teach. (c.) That, in the opinion of the Principal, he is qualified to compete for a first or second-class certificate, as the case may be.

(d.) That he is of good moral character.2. The foregoing conditions of eligibility shall stand in lieu of the conditions prescribed in and by the said 7th Regulation for candidates from the Normal Schools.

II. The yearly examination of all candidates for first, second and third-class certificates of every nature shall be held at the same time and during the same week as the said Regulation No. 7 prescribes with respect to the examination for second and third-class certificates, so that the examination for each class of certificates shall take place concurrently. The candidates from the respective Normal Schools are to be examined at the same time and concurrently with the other candidates, but at their respective institutions.

III. These Regulations shall apply to and govern the approaching examinations for Teachers' certificates. (Signed)

ADAM CROOKS, Minister of Education.

Education Department, April 25th, 1876.

26th April, 1876.

Copy of an Order in Council approved by His Honor the Lieutenant-Governor, the 26th day of April, A.D. 1876.

Upon the Report of the Honourable the Minister of Educa-tion, dated 25th April, 1876, the Committee of Council advise that your Honor do approve of the accompanying Regulations respecting the examinations for Teachers' Certificates, and in the Normal Schools.

Certified.

J. G. SCOTT.

Clerk Executive Council, Ontario.

3. PROCEEDINGS AND REGULATIONS RESPECTING THE INTERMEDIATE EXAMINATIONS IN COLLEGIATE INSTITUTES AND HIGH SCHOOLS.

The undersigned having had under consideration the Report of the Central Committee of Examiners of the Education Department upon the subject referred to them, of the Intermediate High School Examinations, which Report contains-

(1.) Recommendations for securing that, as far as possible, the Examiners and Sub-Examiners shall be ignorant of the schools from which the different answer papers come ;

(2.) A list of Sub-Examiners, from which the Minister is to select six ;

(3.) Rules to be observed by candidates and presiding Examiners;
(4.) The proposed programme for the Intermediate Examinations of the year 1877; and
(5.) The issuing of Certificates to successful Candidates—

I. The seventh of the General Regulations prescribed by the respectfully recommends that His Honor the Lieutenant-Governor

in Council do approve of the accompanying Rules and Regulations respecting the Intermediate High School Examinations. Respectfully submitted.

(Signed) ADAM CROOKS,

Minister of Education.

Education Department, April 25th, 1876.

Copy of an Order in Council approved by His Honor'the Lieutenant-Governor the 26th day of April, A.D. 1876.

Upon the Report of the Honourable the Minister of Education, dated the 25th April, 1876, the Committee of Council advise that Your Honor do approve of the accompanying Rules and Regulations respecting the Intermediate High School Examinations. Certified.

J. G. Scott,

Clerk Executive Council, Ontario.

26th April, 1876.

4. RULES AND REGULATIONS OF THE EDUCATION DE-PARTMENT RESPECTING THE INTERMEDIATE HIGH SCHOOL EX-AMINATIONS.

I. MODE OF CONDUCTING THE EXAMINATIONS.

1. Each Head Master shall send to the Education Departments before the 1st June, a list of the names of those who intend to present themselves for examination, and a statement of the optional subjects selected by each candidate. To each name so sent the Department will affix a Number, which must be employed by the candidate instead of his usual signature throughout the entire examination

2. The Department will provide envelopes, of convenient dimensions, to be sent out with the examination papers-one envelope

with each paper. 3. The Public School Inspector of the district in which the High School is situate shall preside, and be responsible for the proper conduct of the Examinations; but in case of any inability to attend, shall send to the Minister of Education for his approval, not later than the 1st June, the name of the person whom he intends to appoint his substitute at those Examinations at which he himself caunot preside.

II. DIRECTIONS TO PRESIDING EXAMINERS.

1. Places must be allotted to the candidates so that they may be at least five feet apart. All diagrams or maps, having reference to the subjects of examination must be removed from the room.

2. All these arrangements must be completed, and the necessary stationery (provided by the High School Board) must be distributed and placed in order on the desks of the candidates at least fifteen minutes before the time appointed for the commencement of the examination.

3. No candidate shall be allowed to leave the room within one hour of the issue of the examination papers in any subject; and if he then leaves, he shall not be permitted to return during the examination of the subject then in hand.

4. Punctually at the time appointed for the commencement of the examination in each subject, the presiding Examiner will, in the examination room, and in the presence of the candidates, break the seal of the envelope containing the examination papers, and give them at once to the candidates. The papers of only one subject shall be opened at one time.

5. Punctually at the expiration of the time allowed, the Examiner will direct the candidates to stop writing, and will cause them to hand in immediately their answer papers, duly fastened in the envelopes.

6. The Examiner, at the close of the examinations, will sign and forward, with the answers of the candidates, a solemn declaration (in a form to be provided by the Department) that the examinations have been conducted in strict conformity with the Regulations, and

fairly and properly in every respect. 7. The Examiner, at the close of the examinations on the 29th of June, will secure in a separate parcel the fastened envelopes of each candidate, and on the same day will forward by express to the Education Office the package containing all the parcels thus separately secured.

III. RULES TO BE OBSERVED BY CANDIDATES.

1. Candidates must be in their allotted places before the hour appointed for the commencement of the examination. If a candidate be not present till after the appointed time, he cannot be allowed any additional time. No candidate will be permitted on any

When the order to from the commencement of the examination. stop writing is given, every candidate must obey it immediately.

2. Any candidate detected in copying from the papers of another, or in improperly obtaining assistance from any person whatever, or in any manner whatever, will be at once dismissed.

3. Every candidate is required to write his number (not his name) very distinctly at the top of each page of his answer papers, in the middle; and is warned that for each page not bearing his number he is liable to receive no credit from the Examiners.

4. If the candidate write his name or initials, or any particular sign or mark on his paper other than the distinguishing number assigned him by the Department, his paper will be cancelled.

5. Candidates, in preparing their answers, will write on one side only of each sheet, placing the number of each page at the top, in the right-hand corner. Having written their distinguishing numbers on each page, and having arranged their answer-papers in the order of the questions, they will fold them once across, place them in the envelopes accompanying the question-papers, and write on the outside of the envelopes their distinguishing numbers and the subjects of examination. They will then securely fasten the enve-lopes and hand them to the presiding Examiner.

IV. PROGRAMME OF EXAMINATION.

The Examinations shall begin on Monday, 26th June, 1876, and shall be conducted as follows :---

Monday, June 26

2 to 2.15, P. M.—Reading the Regulations. 2.15 to 5.15, P. M.—Natural Philosophy and Chemistry, or Latin, or French, or German

Tuesday, June 27. ğ

to 11, A. M.-Algebra.

- 11.15 to 12.15, P. M.—Book-keeping. 2 to 4, P. M.—Grammar and Etymology. 4 to 4.30, P. M.—Dictation.
- Wednesday, June 28.

to 11, A. M.-Arithmetic. 9

- 11.15 to 12.15, P. M.—English Composition. 2 to 4, P. M.—English Literature.

Thursday, June 29.

to 11, A. M.-Euclid. 9

11.15 to 12.30, P. M.—Geography. 2 to 4, P. M.—History.

V. SUB-EXAMINERS.

The following gentlemen are appointed to act as sub-examiners :

1. John C. Glashan,* Public School Inspector, West Middlesex, Mem ber of the Central Committee.

2. John J. Tilley,* Public School Inspector, Durham, Member of the Central Committee.

3. Alfred Baker, M.A., Mathematical Tutor, University of Toronto.

4. J. E. Bryant, Student of the third year, University of Toronto.

5. G. B. Sparling, Candidate for Degree of B. A., University of Victoria College, Cobourg.

6. F. E. Seymour, M. A., Examiner in the University of Toronto.

VI. INTERMEDIATE EXAMINATIONS FOR 1877.

The subjects of the Intermediate Examinations for 1877 are to be the same as in 1876, with the following modifications :-

1. The Fifth Book of Cæsar will be substituted for the First.

2. Candidates will be examined in Roman History, to the end of the second Punic War.

3. In English Literature, the University Examination for 1878 will determine the books to be read for the second Intermediate Examination in 1877.

VII. CERTIFICATES.

Certificates will be granted by the Minister or Deputy to all candidates who succeed in passing the Intermediate Examinations, according to the Report of the Central Committee.

* Messrs. Glashan and Tilley will not preside or be present at the High School Examinations in their Counties, substitutes being appointed for that duty. duty.

5. PUBLICATION OF THE AUTHORIZED TEXT BOOKS ON ARITHMETIC.

Copy of an Order in Council approved by His Honor the LIEU TENANT-GOVERNOR, the 17th day of March, A.D. 1876.

The Committee of Council have had under consideration the an nexed Report of the Honourable the Minister of Education, dated the 1st day of March 1970 pretence whatever to enter the room after the expiration of an hour the 1st day of March, 1876, and advise that permission be granted to 12th April, 1876.

conditions in the said Report contained.

Certified. (Signed), J. G. SCOTT, Clerk Executive Council, Ontario.

18th March, 1876.

Mr. William Warwick, Publisher, Toronto, having applied for permission to publish an edition of the authorized Arithmetics (Smith and McMurchy's), of which Messrs. Copp, Clark, & Co., and their predecessors, Messrs. W. C. Chewitt & Co., professed to convey the copyright to the Chief Superintendent, in trust for the Council of Public Instruction, the undersigned has the honour to Make the following recommendation to His Honor the LIEUTEN-ANT-GOVERNOR in Council :

That the desired permission be granted, but subject to Mr. War-wick assuming the risk of any claim for copyright or royalty ad-vanced by Messrs. Macmillan & Co., Messrs. Copp, Clark & Co., or the others, and indemnifying the Department by a proper bond against all such claims; and subject also to the usual regulations, and also to the following condition, recommended by a Committee of the late Council of Public Instruction, viz. : that whereas Messrs. Copp, Clark & Co. alleged that they have, during their publication of the books, haid a royalty to the authors, and the Committee were of one other publication of the publ opinion that the Council might fitly impose upon other publishers of these books, the same condition, to be continued during the place. pleasure of the Council, and the Council having concurred, there-Gre all publishers of the said books shall pay the same royalty as Messrs. Copp, Clark & Co.

(Signed) ADAM CROOKS,

Minister of Education.

Education Office, March 1st, 1876.

An Order in Council to the same effect granting a like permission to Messrs. Adam Miller & Co., was approved 24th March, 1876.

6. CERTAIN TEACHERS' CERTIFICATES GRANTED AT OTTAWA.

Copy of an Order in Council approved by his Honor the LIEU-TENANT-GOVERNOB, the 27th day of March, A.D. 1876.

The Committee of Council advise that the recommendations contained in the annexed Report of the Honourable the Minister of Ottamining and the annexed Report of the Honourable the Minister of Ottamining and the Annexed Report of certain Teachers' certificates granted at Ottawa, be acted upon.

Certified.

(Signed) J. G. Scott, Clerk Executive Council.

27th March, 1876.

The undersigned having had under consideration the Reports of investigations respecting the examinations for Teachers' certificates beld is a second back of the second s beld in the City of Ottawa, in December 1872, July 1874, and July 1875, has the honour to recommend :

That the Certificate of the First Class granted to Miss Anna

Living in January 1873, be cancelled. 2. That the Certificate of the First Class granted to Mr. Joseph Martin at the Certificate of the First Class granted to Mr. Joseph Martin at the Certificate of the regarded as conditional, not only but of his pass-Martin in September 1875, be regarded as conditional, not only upon the fulfilment of the required term of service, but of his passby again the fulfilment of the requires the again the examination for Class II.

3. That the following candidates to whom Second Class Certificates were awarded, be required to undergo the examination in Jul, were awarded, be required to undergo the examination in July 1876, in order to their being allowed to hold their present Certificates, or obtain any standing thereafter, viz. :

Miss Eliza Living, "Catharine Pilson,

Caroline Rothwell, "

" Annie C. Steacey,

Mr. Joseph Martin.

the following candidates should also be re-examined in order to retain their Second Class Certificates; otherwise and in default default of retain their Second Class Certificates; otherwise and in Class Certificates; otherwise and in the condition of the to Third Class, viz. :

Miss Isabella McMaster,

Sarah Stewart.

(Signed)

Minister.

Education Department, Toronto, 22nd March, 1876.

Mr. William Warwick, Publisher, to publish an edition of the 7. IN THE MATTER OF THE REV. H. J. BORL'HWICK, authorized Arithmetics (Smith and McMurchy's), subject to the M.A., INSPECTOR OF SCHOOLS, OTTAWA, AND OF MR. ARCHIBALD M.A., INSPECTOR OF SCHOOLS, OTTAWA, AND OF MR. ARCHIBALD SMIRL, EXAMINER, COUNTY OF CARLETON.

> Copy of an Order in Council approved by his Honor the LIEUTEN-ANT-GOVERNOR, the 11th day of April, A.D. 1876.

> The Committee of Council having had under consideration the annexed Report of the Honourable the Minister of Education, dated the 11th day of April, 1876, and concurring therein, advise that the said Report be acted upon.

Certified. J. G. SCOTT. Clerk Executive Council, Óntario.

Having regard to the evidence taken before the Commission issued by the late Chief Superintendent of Education, in November, 1875, under authority of the Act 37 Victoria, cap. 28, sections 110 and 129, to investigate certain charges preferred against the Rev. H. J. Borthwick, Inspector of Public Schools and Chairman of the Board of Examiners in the City of Ottawa ; which investigation established that the said Inspector, while acting as presiding Examiner, was guilty of violating the regulations respecting the examination of Teachers, on various occasions, by which certain candidates at Ottawa received assistance at those examinations, contrary to such or reduced ; therefore the undersigned recommends that the certificate of qualification granted to the said Rev. H. J. Borthwick, by the late Council of Public Instruction, as such Inspector and Ex-aminer, pursuant to the regulations of such Council, be cancelled and declared to be henceforth void and of none effect.

The undersigned further reports that the part disclosed in the said evidence as taken by Mr. Archibald Smirl, who now holds the office of Examiner, would have rendered his certificate of qualification as a Public School Inspector and Examiner also liable to be cancelled, if it had not been for the circumstance of his not being at the time in such or any position of responsibility, yet that he is amenable to the gravest censure, and that he should be censured accordingly.

ADAM CROOKS, (Signed)

Minister of Education.

Education Department, Toronto, 11th April, 1876.

8. REPORTS AND MINUTES OF EVIDENCE IN THE CASE OF THE REV. H. J. BORTHWICK, M. A. INSPECTOR OF PUBLIC Schools, in the City of Ottawa, December, 1875.

Commissioners: J. GEORGE HODGINS, ESQ., LL.D., Deputy-Superintendent of Education for Ontario.

H. L. SLACK, Esq., M. A., Public School Inspector, County of Lanark.

P. LE SUEUR, Esq., Chairman of the Committee on School management, Ottawa.

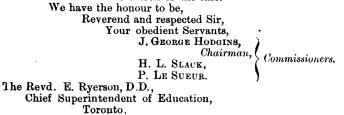
NORMAL SCHOOL, OTTAWA, 7TH DEC'R, 1875.

SIR,-We, the undersigned, Commissioners appointed by you under a sealed instrument dated the 26th November, ultimo, "to inquire into and report in regard to certain complaints made by Mr. J.W.McDowall, a Public School teacher in the City of Ottawa, against the conduct of the Rev. H. J. Borthwick, M. A. Inspector of Public Schools, and a member of the Board of Exam-iners for the said city and Chairman thereof, in regard to the examination of Public School teachers during the years 1871 to 1875 inclusive, and other irregularities;" and directing further, "that the evidence in the case be taken under oath, administered by H. L. Slack, Esq., as provided in the 11th Section of the School Act," beg to report that in virtue of the powers thereby vested in us, we met at the Normal School in this city, on Wednesday, the 1st instant, at 1 o'clock p.m., and after consultation, and with the full concurrence of both complainant and accused, agreed to conduct the investigation with open doors. And knowing that the facts had excited a large measure of interest in Ottawa, and that the Report would be looked for by the Examiners, Inspectors and Teachers generally throughout the Country, decided that it would be most expedient to employ reliable short hand writers to report the evidence. Accordingly Mr. Burgess, of the Times office, and Mr. George Holland, of the *Citizen*, were engaged for that purpose. Two sittings were held on that day, the second lasting till 11 o'clock p.m.,; and three on the next, the third ending near midnight, when the actual work of taking evidence was concluded. The

ADAM CROOKS,

day that it was quite ready. The Commissioners met in the afternoon and again in the evening, until 11.40 when the work was fully completed. Every witness gave attendance and after very unimportant corrections, signed the sheets in the presence of the subscribers.

The terms of the Commission not calling for a judgment, or even for the expression of an opinion on the part of the Commissioners, we have forborne such expression; but if called upon we will be ready to state our convictions, there being, as we believe, no differences between us on the merits of the case.



Ottawa, December 1st, 1875,

The Commission met at the Normal School at 1.30 P.M. Present, Dr. Hodgins, presiding, Mr. Le Sueur and Mr. Slack, As-sistant Commissioners. Mr. Borthwick was represented by Mr. A. Gibb, Barrister.

Dr. Hodgins, the Chairman, opened the enquiry by the following remarks :--- I desire to say before we proceed with this investigation, that it has hitherto been an unusual thing for the Department (beyond entertaining appeals) to take such serious notice as has been taken in this case of objections that have been raised, and complaints made, in regard to the examination of Teachers; but there seemed to be so much circumstantiality about the facts alledged, and other matters connected with this particular case, that it appeared wise on the part of the Chief Superintendent, to issue a Commission to take evidence under oath, and report the result to him. Although the provision of the law under which the Commission was issued, has been in existence since 1850, yet as it contained no clause authorizing the payment of any parties engaged in such investiga-tions, no action was taken under it. This is the first case therefore which has arisen under the statute as amended, and under authority of the Act the Chief Superintendent has issued a commission which had better be read for the satisfaction of all parties here. He (the speaker) deeply regretted the necessity which appeared to exist for the unusual exercise of authority on the part of the Chief Superintendent. He assured all parties concerned that the inquiry would be conducted with the utmost fairness and impartiality. Mr. Slack then read the warrant of the Chief Superintendent appointing the Commissioners, and also the following charges which were appended thereto :--1st. That the Rev. H. J. Borthwick, M.A., Inspector of Public

Schools for the City of Ottawa, and Chairman of the Board of Examiners, did break the seals of envelopes containing examination papers, before the time appointed by law for doing so.

2nd. That some of these examination papers were given to various teachers before the examination, to enable them to prepare answers to the questions.

3rd. That in one case, at least, he wrote on the blackboard the answers to the questions in Natural Philosophy, to aid teachers in the solution of the same.

4th. That in the same examination he passed slips of paper to various teachers with the answers to the questions in Arithmetic written upon some of them, and with the words "you have passed in English grammar" written upon others (one at least).

5th. That, in the same examination, on some of the teachers expressing a wish to know what kind of questions there would be on the Physiology paper for the next day, he volunteered an answer by proceeding to give hints upon the various questions which were on the paper, to her and to other teachers who were present. 6th. That he extended the time allowed by the regulations for

candidates to write upon the subject, to an inordinate degree, in one case to nearly an hour.

7th. That he (the Rev. H. J. Borthwick) has been guilty of several other irregularities which will come out on investigation. Dr. Hodgins continued :---My colleagues and myself have agreed

that the mode of taking evidence shall be as strictly and as nearly as possible according to the rules laid down by legal authorities in regard to the taking of evidence in courts of law. In case any doubt should arise on any question and we do not feel ourselves

Commissioners also met every day and appointed the witnesses to cussion. With regard to the seventh allegation, we shall not enter come and hear their depositions read, but it was not until Mon- into it until Mr. McDowall shall furnish the Commissioners a copy of what he alleges under this head, and also a copy to Mr. Borthwick. We shall confine ourselves strictly to the allegations in these several charges from No. 1 to No. 6. In the examination of a witness, all other witnesses will be excluded from the room. The utmost fairness and impartiality shall be observed.

Mr. McDowall, complainant, stated that he was ready to proceed with the investigation of the 3rd, 4th, 5th and 6th charges, and it having been decided to take up these, Mr. Rathwell (one of the city examiners) was called and sworn :

By Mr. Slack, Commissioner :

Q.-Do you know anything of this third charge, that Mr. Borth wick wrote the answers to questions in Natural Philosophy on the blackboard? A.—I do not recollect any time he did that. I may say that I saw some answers a good while after the examination was over.

Q.-Were they in Natural Philosophy? A.-No.

By Mr. McDowall, Complainant (through the Chairman):

Q.-Do you remember the day on which the Natural Philosophy paper came up in the July examination of 1874? A.-I cannot tell you the date.

Q.-Do you remember, at the time the candidates were writing that paper, observing any figuring on the board ? A.-I saw a lot of writing usually on the board.

By Dr. Hodgins, Chairman :

Q.-Where did this examination take place? A.-In Central School West.

Q.-Did you observe, when you went into the room, anything at all written on the blackboard? A.-The blackboards are usually full of writing.

Q.-Was the blackboard full on this particular day? A.-I do not remember having seen anything with regard to that particular subject.

Q.-Did you observe anything at all written on the blackboard on that specific day? A.—I did not to my recollection. By Mr. McDowall, Complainant:

Q.-You are positive there was nothing at all with reference to the questions ? A.-I am not positive.

Q.—Was your attention during that day in no way directed to answers written on the board ? A.—I cannot specify on the day that Natural Philosophy was the subject, but I may say that one ime I saw questions relating to arithmetic on the board.

Q.-What day ? A.-I do not know the day.

Q.-Would you be positive they were arithmetic ? A.-To the best of my knowledge they were, but I saw no other answers to other questions, to my knowledge, during the whole examination. Q.—Have you any knowledge of slips of paper being passed to the teachers ? A. – No.

Q.-Did you hear any teacher express a desire to know what would be on the physiology paper next day ? A.-I do not rement ber just now.

Q.-Try and be positive ? A.-I don't remember. Q.-You have no recollection whatever of anything of the kind occurring ? A.-I don't think so. I have often heard the teachers in the hall laughing and asking Mr. Borthwick what they would have next day, but heard no reply.

Q.-Did you hear him give any hints on physiology ? A.-De cidedly not.

-Did you ever hear him say "count your teeth"? A.-De Q.cidedly not.

Q.-Did you ever hear him say "feel your bones !" or words to that effect? A.—Decidedly not.

Q.-Did you never hear anything of the kind ? A.-I have heard others speak of it, but never heard it myself.

By Dr. Hodgins, Chairman:

Q.-Have you any personal knowledge of the circumstance ? A. I know nothing of it personally. It did not happen in my prosence.

By Mr. McDowall, Complainant:

The sixth charge having been read :

Q.—Will you please, Mr. Rathwell, to state the facts within your knowledge on this point. Have you any knowledge that the time was extended ? A.—I have no remembrance of this having been done on any particular day. There were, I know, one or two occa-sions upon which this was done, but I do not remember what they were. were.

By Dr. Hodgins, Chairman:

Q. — Was that extension granted by consent of the Examiners and hull Board? A.-I think it was. In fact, very probably it was, but do not remember the occasion.

Rev. Mr. May.-I do not recollect the paper, but I do recollect the competent to decide it on the spot, we shall reserve it without dis-circumstance. Some of my teachers wanted to get away, and some of us suggested—whether Mr. Borthwick or myself I cannot say— that a change in the programme might be made to accommodate them. At any rate, Mr. Borthwick consented. I could not state whether in the might have come in two or three times during the what the paper was, but I know it was insignificant. A candidate objected to the proposition, and we did not go on with it.

SAML. RATHWELL. (Signed)

Signed in my presence, P. LE SUEUR,

Commissioner. Mr. Joseph Martin, (Teacher, New Edinburgh), sworn, and examined by Mr McDowall, Complainant.

Q.-Are you aware that the answers in Natural Philosophy were written on the blackboard in the July examination of 1874? A.-Yes.

Q —Will you state what you know took place at that time? A. When we were writing on Natural Philosophy papers some time during the time that was allotted for this paper, the Inspector Wrote the answers on the board. I remember this distinctly, and the remembrance is enforced by the fact that one of the answers written on the board was incorrect. If I remember correctly, I had some questions worked. One of them did not coincide with my own. I mentioned the fact to the Inspector, pointing out that the answer was not a reasonable one, and he immediately changed the answer to mine.

By Dr. Hodgins, Chairman :

Q.-Was this during the time of the examination of the paper ? A-Yes, during the time we were writing on the Natural Philosophy paper.

By Mr. McDowall, Complainant :

Q.-You saw these answers written by Mr. Borthwick's own hand? A,-Yes.

By Mr. Gibb (Counsel for Mr. Borthwick) :

Q.-When did this occur? A.-In the July examination, 1874. $\dot{\mathbf{Q}}$ —Do you recollect whether when this was done you had worked out your answers? A.-I had at least worked one.

Q.—Had you them all worked out ? A.—I cannot recollect clearly. Q.—You do not know, so far as you are concerned, that this that was written on the board was written after you had finished. A.— No.

Q.—Can you say whether the others had finished ? A.—I cannot. As the examinations are conducted, it is totally impossible for one candidate to know what the others are doing.

Q.—Then you do not know what the others were doing ? A.—No. Can say this, however, they remained for some time writing with the papers in front of them.

Q-Name some who remained ? A.-Eliza Living, Caroline Rathwell, Annie Stacey and Miss Pilson (Caudidates).

Q.—Then you take upon yourself to swear all these had not their answers written before you saw the writing on the board ? A.-I can swear, to the best of my knowledge, they continued writing on through the room. He left one with me. By Dr. Hodgins, Chairman : the paper.

Q -Can you say whether the persons you name had finished their

answers at the time? A.—As far as I could possibly know, I can. Q.—Do you know they had? A.—They were writing on papers that that were in front of them, and the answers were put on the board sometime before the allotted time was up.

By Dr. Hodgins, Chairman: Q.—What time did the examination on this particular paper commence? A.-At 9 o'clock. Q.-What time was allotted to it? A.-Three hours.

Q.—How long after the opening of the examination did this writ-ing on the blackboard take place? A.—I could not say positively.

Is on the blackboard take place : A.—I could how any place : A.—I could how any place : A.—I could have any place : A.—I could have any place : A.—I should say more. Q.—Was it half an hour before it closed ? A.—I should say more. than the set of the set

than that. Q Was it possible to conclude the answers to that paper within two hours ? A. - I don't know.

Q.—Had any left before the writing on the board ? A.—As far as I can recollect, no person left until the time was fully up.

This information was written before they closed their papers handed them to their examiners ? A.-Yes.

Q.—And it was written in time to correct any answer that might be incorrect. A.-Yes.

By Mr Gibb, (Counsel for Mr. Borthwick):

the room.

whether he did or not. He did not sit there at all. The Inspector I think he said "Think of what you eat," but I would not be The only one who presided. The other examiners were in an positive.

writing of the papers. Q.—Was the writing on the board during any time that he came

in? A.-I could not say.

By Mr. Slack, Commissioner :

Q.—Do you know any one instance where a candidate re-wrote a paper and corrected an answer? A.-I could not say.

Q.—I thought you knew an instance where papers were changed ? A.-I do not know of my own knowledge of a single instance. I heard of one.

By Mr. Le Sueur, Commissioner :

Q.—Would not the writing of these answers on the blackboard be equally advantageous to all the candidates? A.-In all probability it would. It would depend of course, upon their knowledge of the subject. I cannot say they were very advantageous to me, because the paper was a subject with which I had no trouble, and I could work the questions anyway. Of course if anyone could reap benefit from the answers, they all could.

Q.-Did you avail yourself at all, of the benefit? A.-I could not say. I might have done so. I certainly looked at the answers and compared them with my own, and found one of them on the board incorrect.

By Mr. McDowall, Complainant :

Q.-You say all benefited alike. Would it not depend upon their advancement? A.-I meant that. It did not benefit me very much.

By Mr. Le Sueur, Commissioner : Q.—What was the object so far as you could discern of Mr. Borthwick writing on the board? A.—In order that the candidates should put in good papers, I suppose, I cannot tell you the Inspector's motives.

Q.-The candidates were all there when the answers were written on the board ? A.-Yes.

Q.-And in a position where they could all see them ? A.-Yes. $\tilde{\mathbf{Q}}$.—But would not that very act excite the indignation of those

who were perfect ? A.-I agree with you, it would.

By Mr. McDowall, Complainant : Q.- You were examined before the City Board ? A.-Yes.

Q.-How long did the answers remain on the board ? A.-I do not remember seeing them rubbed off.

Q.-What time did you stop writing? A.-As far as I can remember, about noon.

Q.-When you returned after noon, did you see answers still on the board ? A. - I cannot say.

Q.—Have you any knowledge of slips of paper having been handed by the Inspector to the candidates while they were writing ? A .--- Yes. He passed them to a number of candidates as he passed

Q.—Have you got that slip ? A.—No. Q.—What were the words on it ? A.—"You have passed in English Grammar, H. J. B."

 \bar{Q} .—That was on the one given to you ? A.—Yes.

Q. - Are you aware of anything that was written on other slips ? A.-Not personally.

Q.-What did you suppose was his object? A.-I thought he wanted to encourage me.

Q.-Would it be of any use to you? A.--Gentlemen of the Commission know that English Grammar is a test subject, and that the knowledge of having passed it would encourage me.

Q.-Had the examination ended in that branch? A.-Yes.

Q.—Have you a distinct recollection that anything occurred with regard to the Physiology and Botany paper the day before it was written ? A.-I have.

Q.-Did you hear the Inspector give any hints to the candidates ? A.-–I did.

Q -What did he say ? A. - The previous day to that on which the Physiology paper was to come up, the Inspector in reply to a question asking him for information (something like this : "What are we to read up in Physiology ?") made remarks which embodied most of the Physiology paper.

Q.-Who asked this question ? A.-Some of the lady candidates. I was a stranger then and did not know them apart.

O³ - What examiners were present? A.—The Inspector. None, but Mr. Rathwell, (Examiner) at different times came into the norm

 $Q_{\rm course}$ it is some time since, and I will not swear positively [Physiology questions, being hints similar to those I have mentioned.

Q .- What would you be positive of ? A.-That a statement was made which bore the same relations to the other questions as "Count your teeth" did to the teeth question.

By Mr. Le Sueur, Commissioner :

Q.—How many questions were there ? A.—I could not say positively, but I think three.

A paper on Physiology was here submitted to the witness. By Mr. McDowall, Complainant:

Q.—How many questions are there in Physiology? A.—Four. There appears to be no question here with regard to the teeth. However, I positively affirm that the Inspector, in reply to a question, gave such an answer as embodied the question in Physiology. My memory has served me wrong in supposing that that reference to the teeth was any part of the question.

Q.-The next morning, when you came to the school and saw the A.—Yes.

Q.-Did it strike you at once that the Inspector had given information ? A.-Yes.

Q.—Did it strike you that if you had gone home and consulted your text books on these particular questions you could have floored the paper? A.-I had that impression next morning, and mentioned it to Mr. Smirle.

By Dr. Hodgins, Chairman :

Q.—This was given in reply to a question what the paper would be? A.—Yes, we were going out of the hall, and being a stranger I remember what I heard.

By Mr. Slack, Commissioner :

Q.-What hints do you decidedly swear to ? A.-I swear positively that the hints were such as would answer the questions.

Q.—What were the hints? A.—I could not swear positively. Ŧ know when I saw the paper it came to my mind that if I had availed myself of the Inspector's hints I could have answered them, but this examination was one 1 had no hesitation about. 1 felt confident I could pass it.

Q.-You are sure that is the paper which has been shown you ? A.-Yes; I never was at any except second and third class examinations.

Q.-When did you write for your first certificate? A.-This year. I find the paper that has been shown me is a first class paper, and not the one I wrote on in July, 1874.

By Dr. Hodgins, Chairman :

Q.—You applied for the second class certificate before Mr. Borth-wick ? A.—Yes.

Q.-And for the first before whom ? A.-Before Mr. May, this summer.

Q .-- You did not avail yourself of the information given by the Inspector? A.-No.

Q.-Are you sure? A.-I would not like to make a positive statement.

By Mr. McDowall, Complainant:

Q.-Is this the second class paper in the 1874 examination (paper handed to witness)? A.-Yes.

Mr. McDowall.-I ask to have these put in in evidence :-7th -Enumerate the bones of the trunk ; 8th—Describe the process of digestion; 9th-Classify the teeth of an adult.

Q.-You have a distinct recollection of that hint about the teeth? A.-I have a most distinct recollection.

Q.-And when you saw the paper, what did you say to yourself ? A.-I thought to myself the answer given to the young lady or young ladies just covered those questions in the same way that "count your teeth" would lead a person to read up the information on that subject.

Q.-Was this information given to one candidate ? A.-No, to nearly all the candidates.

Q.—How many? A.—Six or seven. Q.—Do you know any of the candidates? A.—Yes, those I mentioned before :—Miss Rathwell, Miss Living, Miss Stacey and Miss Pilson (candidates).

Q.-During that examination in July, 1874, have you any recollection of the time being extended ? A.-I have.

Q.-Will you state exactly on what paper it was, and what was the extent of the time as far as you know? A.-I cannot say positively what paper, but it was one the time for which was the morn-ing. It was not English Grammar, and it must have been Natural Philosophy, Arithmetic or Algebra. By Mr. Slack, Commissioner:

Q.—The charge does not specify whether it was morning or afternoon : A.-It was in the torenoon. On that paper-I think it was Arithmetic-I got through at the usual time, 12 o'clock, perhaps a little before. I put in my papers, went home, and got my dinner. obligation to Mr. Borthwick and again. I am under a feeling of little before. I put in my papers, went home, and got my dinner. obligation to Mr. Borthwick, and willing to acknowledge it at and I took dinner with Mr. Smirle (teacher), and came back with him. I took dinner with Mr. Smirle (teacher), and came back with him. time. I had not, at the time, experience enough for teaching, by When I came back, the young ladies were still writing on that paper. Mr. Borthwick very kindly gave me an Inspector's certificate,

By Dr. Hodgins, Chairman :

Q.-You did not enter the room ? A.-Yes.

A.-Yes, after the Q.-After you had closed your examination ? time when the papers should have been closed up. I came in at about 20 minutes to one. The paper was very difficult and I felt satisfied when I went away that it was not done.

Q.-Your own paper had been handed in ? A.-Yes ; they were writing when I went away, and when I came back.

Q.-Did you take your seat again ? A.-Not until my time was called.

Q.—Are you positive they were writing on the same subject that they had been when you left ? A.—They had not put in their me papers, and I was led to suppose they were writing on the same subject.

Q.-How do you know it was the same class you left yourself some time before you went to dinner ? A .-- My powers of vision saw them

By Mr. Slack, Commissioner :

Q -Do you know they were answering the same questions A.—To the best of my knowledge. I saw them writing in the same places, and with everything around them the same. I mentioned the matter to Mr. Smirle ; said I, "That is strange."

By Mr. Le Sueur, Commissioner :

Q.-Was there any exercise for that interval of time, between when you left and when you returned ? A.-No. That time was given us for dinner.

Q.—Who was presiding when you returned ? A.—The Inspector. Q.—And he was there when you left ? A.—Yes.

Q.-And they were writing in the same place? A.-I and thoroughly satisfied they were writing on the same paper, whatever

it was. I am almost positive it was arithmetic. Q.—Was any objection made to the extension of time ? A.—No-

Q.-And you did not take advantage of it? A.-No. Q.-Was any proposition made to extend the time? A.-Not to

my knowledge. Q.—Can you remember whether you began punctually that day? .—Yes, to the minute, or almost so.

Α.

By Mr. McDowall, Complainant : Q.—You think the time was three-quarters of an hour? A.-Yes, from 40 to 45 minutes; a little more if anything. By Mr. Gibb, Counsel for Mr. Borthwick:

Q.-It was the day before the examination took place you heard about the Physiology paper? A.-Yes.

Q.-Were you amongst the party that made the inquiry ? A.-I was.

Q.-Who else were there ? A.-A good many of the candidates. Q.—Were you coming out of any room where an examination had taken place ? Q.—I am not positive. I think we were in the hall.

Q.—Were all that had been examined in the hall at that time? -l could not tell you. A.-

Q.-Can you tell who were there ? A.-I could not.

Q.—Do you recollect any parties who were there except yourself? -Most of the candidates were there. Α.

Q.-Could you name any ? A.-I could not, because I might name some who were not there.

C.--You cannot name any that were there ? A.--I cannot. am satisfied there was nobody in the building except the est aminers and the candidates.

Q.-I want you to mention some who were not there? A.-I would not mention any particular one.

Q.—You don't recollect who put the question ? A.—No. Q.—You do not recollect the exact words of the question ? A.-No.

Q.—Do you recollect the exact words of the answer ? A.—I re

collect part of it—"Count your teeth." Q.—Can you give any other hint that Mr. Borthwick made, positively ? A.-I cannot give the exact words.

Q.—Did you make any observations at the time ? A.—I might have.

Q.—Did you as a matter of fact ? A.—I don't recollect anything about that.

Q.—Is he the person engaged in getting up this prosecution A.-No.

Q.—How do you come to be a witness? Have you anything against the Inspector? A.—No. I am very sorry to be here. He has done me many favours. These matters I know about the examination I never water to

which I was enabled to get a school that I would not have secured otherwise. The irregularities were commonly talked about, and Mr. McDowall (complainant), I suppose, heard of them and came to me.

By Dr. Hodgins, Chairman: Q.—You and those persons you speak of were in a room at an examination together-were you coming out of a room together ? A. I could not say. After the examination was over, we were in the building together. I think it was in the hall, and there might have been candidates absent.

Q.-There were candidates present? A.-Yes, I am certain a majority of the candidates were there.

By Mr. Gibb, Counsel for Mr. Borthwick :

Q.—Were any other examiners there ? A.—As far as I can re-collect, there were not. There might have been.

Q.-When you spoke of the extension of time, do you know if any other examiner was present except Mr. Borthwick? A.-I don't remember. (Signed) JOSEPH MARTIN.

Signed in presence of

J. G. HODGINS, Commissioners.

(To be continued.)

II. Miscellaneous Departmental Potices.

1. COLLEGIATE INSTITUTES AND HIGH SCHOOLS.

The next Entrance Examinations will be held on Tuesday and Wednesday, the 27th and 28th days of June, 1876.

2. EXAMINATION OF CANDIDATES FOR CERTIFI-CATES AS PUBLIC SHOOL TEACHERS.

23 Under the regulations for the examinations, Monday, the 10th day of July, has been appointed by the Minister of Education for the commencement of the examinations of teachers for the current year, for certificates of the first, second and third 6 class.

3. CENTRAL COMMITTEE OF EXAMINERS.

The Chairman of the Central Committee of Examiners desires that an intimation may be given in the Journal, that communications or certificates, examinations and other matters relating to the work of the Committee, should be addressed to the Education Office, and not to individual members of the Committee, as the Committee does not desire to receive any letters except such as may be referred to it by the Department.

III. Begal Decisions on Educational Loints.

1. THE RIGHTS OF TEACHERS.

On Saturday Judge Chadwick gave his decision in the case brought gainst the Board of Education, by Fergus Black, formerly teacher, in the second seco in the High School here, claiming salary for the summer holidays, he having sent in his resignation and accepted a situation in Lis-towel previous to the commencement of the holidays. The follow-ing is the judgment delivered by Judge Chadwick. "The plaintiff ing is the judgment delivered by Judge Chadwick. engaged with the defendants for a period of one year, beginning with January, 1873, at a salary payable quarterly, and rendered his service for two quarters, for which he received payment. About the expiration of the second quarter he entered a resignation, which was not a supervised the months afterwards, and he now was not accepted till nearly two months afterwards, and he now claim claims payment pro rata, up to the time of the acceptance of his retignation. The case Lambury vs. Cruden, 2 M. & G., 253, seems fatal to the plaintiff's case. The facts were there precisely similar to the plaintiff's case. imilar to those in the present action, and it was held that there was no implied contract, to pay for services performed after the expiration of the last quarter, and that such services could not be re-Covered for unless there was a stipulation to that effect at the time of the dissolution of the contract. The case of Grimman vs. Legge, ³⁴ the dissolution of the contract. The case of orminate the second s

part of the quarter. It was also contended by the plaintiff's counsel that the official regulations entitle him to recover, the time for which he seeks payment being for a vacation which began after the expiration of the second quarter of the year for which he was engaged. I do not think this case comes within the meaning or lan-guage of the regulations relied on. The words are, 'Masters and teachers shall be entitled to the holidays and vacations immediately following the close of their period of service.' The period of service for which the parties had stipulated was a year, which did not end until December, and consequently had not elapsed, the plaintiff by his own act having shortened the period and obtained the consent of the defendants thereto, thereby depriving himself, in my opinion, of any benefit the regulation in question might have given him." Judgment for the defendants wth costs.—Guelph Mercury.

2. REMUNERATION OF SCHOOL SECRETARY-TREASURER.

JUDGES' CHAMBERS, COURT HOUSE, WHITBY.

In re S. S. No. 3, Rama, vs. D. Guthrie.

This is an application under Sections 171, 172 and 173 of the Public School Act of 1874 against David Guthrie, their former Secretary-Treasurer.

Mr. Guthrie was elected Trustee of the Section for the year 1872, and on the 15th of July of that year was appointed by the Trustees Secretary-Treasurer, his remuneration being fixed at "5 per cent. each office on all moneys and bills that pass through his hands." He was re-appointed in July, 1873. In January, 1874, a new Secretary-Treasurer was appointed by the Annual Meeting, but Guthrie continued to act, and did act for that year, he refusing to give up the books, &c.

The particulars of the sums claimed by the applicants as being wrongfully withheld, are as follows :

2. 3. 4. 5. 6.	1872. " 1873. 1874.	Over paid collector " treasurer Hugh Chisholm's taxes Illegal overcharge, lawyer's fees Treasurer overcharge Taxes refused to pay on account for Treasurer's fees after refusing to deliver Paid Allen McDonald without Trustees' order	7 5 11 9 5	00 25 00 86 73
8.	"	Paid Allen McDonald without Trustees' order	4	50

\$56 86

JUDGMENT : The present Trustees claim that the Treasurer's re-nuneration is 5 per cent and not 10, as charged for.

It is true that there is only one office, but I think the intention was to give 10 per cent., and the auditors appear to have been of the same opinion, for they have passed it at this rate in their audits for the years 1872, 1873 and 1874. This disposes of items 2, 5, 6 and 7. Items 4 and 8 have also been passed and allowed by the auditors, and cannot now be opened up by these proceedings, which are in the nature of a oriminal proceeding. This leaves only items 1 and 3 to consider. As to item 1, the respondent states that he paid this by the written order of the Trustees, which is produced.

As to item 3. It had been returned as uncollected from Hugh Chisholm. Guthrie agreed to give a receipt, and did do so, and it is marked paid in the Collector's Roll. I think he is liable to the S. S: for this sum.

I make no order against Guthrie, as I cannot hold that there has been such a wrongful refusal to pay over as would justify me in enforcing the penal clauses of the Act. Suit could have been brought in the nearest Division for all or any of these sums (see Sect. 176), and the parties saved the expense of attendance of themselves and witnesses at the county town. In taking these proceedings, how-ever, the Trustees appeared to have acted in good faith under the advice of the County Inspector.

I dismiss this application. The Act makes no provision for costs against the Trustees, in case they should be unsuccessful. There will therefore be no order as to costs.

GEO. H. DARTNELL, J.

March 22nd, 1876.

3. COGHLAN v. THE SCHOOL TRUSTEES OF SCHOOL SEC-TION NO. 4, IN THE TOWNSHIP OF TILBURY EAST, IN THE COUNTY OF KENT.

Agreement under scal-Parties-Building-Contract-Performance.

The agreement sued on was headed "Specification of school-house in School Section No. 4, Tilbury East." Then followed in detail the size of the building, and the work and material to be employed, and it concluded:

"The whole to be of good material, and to be finished in a good workman-like manner, and to be finished on the 1st July, 1873. In consideration the parties of the first part agree to pay the party of the second part the sum of \$708, one-half on the 15th May, and the other halfi when the said school-house is completed." Then followed the signatures of the three school trustees, with their corporate seal, and the signature of the plain-tiff. It bore no date, but was proved to have been executed by the parties about the 1st March, 1873. It referred to no plan, but the trustees fur-nished the plaintiff with a plan to work by, and they paid to him \$400 on account. They refused to pay the balance, or to accept the building, al-leging that it was not properly constructed, but the learned Queen's Coun-sel, who tried the case without a jury, found for the plaintiff for the ba-lance of the \$708. lance of the \$708.

Held, that it was sufficiently clear from the instrument itself, and the acts of the parties, that defendants were the parties covenanting with the plaintiff, and that the instrument was intended so to operate; and the verdict was upheld.

DECLARATION, on a covenant in an agreement for the building of a school-house, and on the common counts.

Pleas : 1st. Did not covenant as alleged.

2nd. That the plaintiff did not erect and finish the school-house in a workmanlike manner, and of good material, and according to the specifications furnished him as alleged.

To the common counts, never indebted, and payment.

The case was tried at the Spring Assizes, at Chatham, before S. Richards, Q. C. sitting for GWYNNE, J. On the trial the plaintiff put in an instrument signed by the trus-

tees individually, and with the seal of the defendants' corporation. This instrument was headed, "Specification of school-house in school section No. 4, Tilbury East;" and then followed detailed school section No. 4, Tibury East;" and then followed detailed specifications of the building, &c.; concluding, "The whole to be of good material, and to be finished in a good workmanlike manner, and to be finished on the 1st of July, 1873. In consideration the parties of the first part agree to pay the party of the second part the sum of \$708 of lawful money of Canada, one half on the 15th day of May, and the other half when the said school-house is com-pleted." Then below were the signatures of the three trustees, and the seal of the comportion with the contrast agree agreed and below that the signature of the plaintiff.

The plaintiff stated in his evidence that that was the agreement between the defendants and himself, and that under that agreement he proceeded to build the school-house : that it was built on a lot belonging to the defendants, and a plan, which was produced at the trial, was by the trustees given to him, by which he was to work : that the contract, which bore no date, was signed by the trustees about the 1st March, 1873, and the seal of the defendants put to it: that he was asked by one of the trustees to tender for the work; that he did so and his tender was accepted : that he built the house according to the specifications and the plan, and that he completed it about the middle of July : that it was built of good material and in a workmanlike manner : that no objection was made to the work not being done by the 1st of July : that he was paid \$400 on account of the contract, \$200 in the beginning of June, and \$200 on 4th July : that he demanded payment of the amount due : that the defendants told him that if he would throw off \$58, and put in four more abutments under the building, they would pay the balance \$250: that he put in all the abutments shewn in the plan, the reason assigned for the deduction by the defendants being on account of their being no collar beams in the roof, and that the building was twisted at one end : that the collar beams were not called for by the specifications, and the twist complained of was from onehalf to three-quarters of an inch, and no injury to the building, and that it could not be noticed unless examined closely : that he put in the building things not called for by the specifications, and that he changed the size of some of the timbers by order of the defend-ants : that one of the trustees worked at the building for the plaintiff, and that he heard of no complaint until the day for payment.

Several witnesses, among them two carpenters who worked on the building, and two others who examined the work, were called and testified generally to the good character of the work and materials.

One other witness said that after the work was done, except the painting, he had a conversation with one of the trustees, who made no complaint, but said that he thought they were going to have a pretty good school-house; he said he did not think it a very good job or finished in a good workmanlike manner; he said, however,

that he never inspected the building. At the close of the plaintiff's case the defendants' counsel objected that the plaintiff could not recover on the first count, as the instrument produced could not be treated as the covenant of the defendants; and that the plaintiff failed on the common counts, as there was no acceptance of the work.

On the defence the three trustees gave evidence, who testified manner : that it was defective, and not built of proper material : | corporation, and celivered by them to the plaintiff as such.

"The whole to be of good material, and to be finished in a good workman- | that they had made the plaintiff a conditional offer, that if he would put in additional abutments and put on another coat of whitewash they would pay him \$650. It appeared from their testimony that the plaintiff had put in all the abutments shewn in the plan.

Three carpenters were called, who said they had examined the building, and they stated in general terms that it was not built as it ought to have been done, nor of the proper kind of material, and that it was not done in a workmanlike manner, pointing out what they considered defects; and they were of opinion that \$100 ought to be deducted from the to be deducted from the contract price.

The learned judge, on the evidence, found for the plaintiff, for the full amount claimed, \$311

During Michaelmas Term (21 November, 1873,) Robinson, Q.C., obtained a rule nisi to enter a verdict for defendants, or for a new trial on the ground that the verdict was against law and evidence that the covenant declared on was not proved, and that the build ing was not finished in accordance with the covenant : and that there was no evidence of acceptance of the school-house by defendants, or any evidence sufficient to render them liable.

During Easter term (30th May, 1874,) M. C. Cameron, Q. C., shewed cause. The case of McDonald v. Clarke, 30 U. C. R. 307, is an authority for the plaintiff succeeding here. The contract sufficiently shews who the parties were. It appears to be signed by the school trustees, and it relates to building a school-house. verdict can also be supported on the count for work and labour. The house was built, and no complaints were made during its erec Two instalments, \$400, were paid. tion.

C Robinson, Q. C. contra. As to the construction of the instru-ment, McDonald v. Clarke, 30 U. C. R. 307, does not apply. In that case, by looking at the document one could see the two parties. This is simply the case of a deed purporting to be inter partes with no parties mentioned in it, and they cannot become parties to it either by their signatures alone or by their conduct : Addison on Contracts oy their signatures alone or by their conduct: Addison on Contracts 7th ed., 31; Dicey on Parties to Actions, 103; Chesterfield and Mid-land Silkstone Colliery Co. (Limited) v. Hawkins, 3 H. & C. 677 Reeves v. Watts, L. R. 1 Q. B. 412; Sunderland Marine Insurance Co. v. Kearney, 16 Q. B. 925, 928. On the merits the defendants should succeed. They have refused to take the key, and have never used the school-house. They would not have hear instified at instances. the school-house. They would not have been justified as trustees, in accepting the building or paying the contract price. The disinter ested witnesses all said the work was not well done, and the plaintiff witnesses who said otherwise, were interested. With regard to acceptance, the school-house is on defendants' land, who have done nothing to accept, and the common counts, therefore, do not apply. Payment cannot make a contract under seal, nor imply acceptance under the facts proved here. He cited Hamilton v. Myles, 23 C. P. 293; Behn v. Burness, 3 B & S. 751, and notes; Munro v. Butt, 8 E. 230; Benn v. Burness, 5 D & S. (5], and notes; Munro v. Butt, 5 L, & B. 738; Smith v. Brady, 17 N. Y. 173; Shaw v. Lewiston and Kishacoquillas Turnpike Road Co, 3 Penn. 444. December 22, 1874, MORRISON, J., delivered the judgment of the Count

Court

The instrument produced at the trial, and upon which the plain tiff relied to support the first count in his declaration, and which was in fact the contract between the parties, is certainly inartificially drawn, although no doubt at the time well understood by the parties who put their names and seals of the defendants to it.

It is headed, "Specification of a school-house in school section, No. 4, Tilbury East." Then follows in detail the size of the build ing, and the details of the work and materials to be employed, and the fitting up of the interior of the school-house.

It did not refer to any plan, but the defendants furnished the plaintiff with a plan, which was produced at the trial, and after stating how it was to be painted, the instrument ended as follows: "The whole to be of good material, and to be finished in a good workmanlike manner, and to be finished on the 1st July, 1873. consideration, the parties of the first part agree to pay the part of the second part the sum of seven hundred and eight dollars of lawful money of Canada; one half on the 15th day of May, and the other half when the said school-house is completed. Underneath is the seal of the defendants with impression on it : "Tilbury East S. S. No. 4" with the new of the defendants of the defendants of the defendants of the defendants of the defendance S. S. No. 4," with the names of the three trustees opposite it, and

below that again the signature of the plaintiff. It bore no date, but from the evidence it was executed by the parties about the 1st March, 1873.

It seems to us very clear upon the face of the instrument itself, its terms, the position of the seal of the defendants affixed to it and the other signatures, who are meant and who are designated as the parties of the first part, and the party of the second part it, the defendents as the form and the party of the second part viz., the defendants as the former and the plaintiff as the latter. is quite apparent from the whole instrument that it was intended to operate as a covenant on the part of the defendants, whose generally that the building was not completed in a workmanlike was affixed to it, as well as the signatures of the members of the

þ

「「「「「「「「」」」」」

But independent of all this, the parties subsequently acted upon it and recognised it as their contract, paying to the plaintiff \$400 of the amount mentioned in the agreement; and upon the authority of McDonald v. Clarke, in this Court, 30 U. C. R. 307, and the principles upon which that case was decided, it is sufficiently clear from the instrument itself, the acts of the parties and the facts appearing at the trial, that the defendants are the parties covenanting with the plaintiff, and that it was the intention of both parties that the instrument should so operate.

That being so, the evidence given at the trial supports the finding of the learned Queen's Counsel who tried the cause. The conact price was \$708; \$400 was paid by defendants, leaving a balance of \$308 due to the contractor, for which the learned Judge entered a verdict.

We assume that he found that the plaintiff had fulfilled his con-We assume that he found that the plaintin had furning his con-tract. We cannot say but that there was evidence to support the verdict. If the learned Judge believed the plaintiff and his wit-neases, there certainly was, for they testified in effect that the builds. building was completed according to the specifications and plan ex-cept where varied by the defendants, and that the work was done in a workmanlike manner and of the proper materials, in fact that the plaintiff performed more work than he was required to do, and any defects were of a trifling character. On the other hand, the trustees testified, as well as some carpenters who examined the building, that the work on it was not done in a good workmanlike manner, and that the materials were not of the kind that ought to have been used, and they referred to what they considered various def defects, and in their opinion \$100 ought to be deducted from the contract price.

It did appear that after the work was finished the trustees complained of defects, and they offered to settle with the plaintiff if he would consent to a deduction of \$58, (i. e., paying him \$250), the plaintiff putting in some additional abutments which were not shewn on the plan. This the plaintiff declined to do.

It is just one of those loose, defectively drawn contracts, open to kinds of objections and disputes, and if the parties are of a litigious spirit necessarily leads to useless litigation.

If the learned Judge had reduced the amount of the claim by **75**, to \$100, I might, from reading the evidence, be better satis-fied to \$100, I might, from reading the evidence, be better satissed ; but if the Judge who heard the witnesses was satisfied that the plaintiff substantially performed his contract, we can see no Bround upon which we ought to interfere with his finding.

Rule discharged.

Queen's Bench Reports, Vol. XXXV.

V. Froceedings of Conventions and Associations.

1. SCHOOL CONVENTION IN ELORA.

At a convention of Public School Teachers of the County of Reducation, and Professor Goldwin Smith delivered addresses to a large account of the second statement of the secon

Large assemblage of teachers and others interested in education. Hon. Mr. Crooks was first introduced by the chairman. He which he would only offer for their consideration some of those topics Which would only offer for their consideration. which it is important that all should understand. They were all Autor it is important that all should understand. They were an anistration, and that the grave responsibilities of the Minister of Reducation, and that the grave responsibilities of the position, and Education had devolved upon him. The duties of the position, and thoroughly understanding the subject, were such as would oppress by one, no matter how well qualified he might be. All he would ventre. wy one, no matter how well qualified he might be. All he would obtain the to affirm was, that he would put forth the greatest effort to ment that which the people looked for at the hands of any Government, who have a duty so important to perform. The step taken upon this occasion was not so much a change as the development of $H_{e \text{ and}}$ system. That system had been one of gradual growth. He existing system. That system had been one or granual given of education in their early days. There had been remarkable changes ince the intermediate the considered, was a step in the tince then, and the last change, he considered, was a step in the right direction. the action of the Government in abolishing the Council of Public states of the dovernment in abolishing the Council of Public states of the dovernment the management themselves. The substance of his remarks on this point has been given before, in reporting the discussions which took place in the Legislature. He concluded by by referring to the fact of ignorance being a cause of crime, and the important to the fact of ignorance being a cause of such, and conby referring to the fact of ignorance being a cause of third, and importance of education as a preventative of such, and con-buded by expressing the hope that all the people would seek to that ether the expressing the hope of their own, and which is to have by expressing the hope that an the people and which is to be he system now introduced, one of their own, and which is to be to as the foundation of that success and prosperity for which they hoped.

subject there was none more interesting to a free people. This was one of the best educational centres in Ontario. There were in the one of the best educational centres in Ontario. neighbourhood many emigrants, and the sons of emigrants, from Scotland—a country which had always taken a prominent place in education, and which had been the parent of the success achieved by her sons in all parts of the globe. The people of that country were early trained in those principles of commerce, or of life. Education in Ontario is supported by the spontaneous enthusiasm of the people. He referred to the fact that in England the old freehold yeomanry were dying out, and the land was becoming aggregated in the hands of the great landlords. The English yeomanry were dying out, but they had not perished, for they found them here, cultivating their own farms and showing a vigorous interest in education. To a free country education is the breath of life. In a free country the people have to govern, and if they are ignorant, what hope is there for the State. He had watched the system that but for that system the country could not go on. He wished that religion could be included in education. We must, however, deal with circumstances as we find them, but he hoped the time would yet come when Christendom would be united. People are apt to think that religion can only be found in churches, but every teacher who shows forth the Christian character in his dealings with the children placed under his charge in school is a teacher of Christianity. He looked anxiously forward to the time when all dissensions could be at an end, when they would be able to teach every Christian child. Every now and then we hear of a teacher inflicting undue chastisement upon a child ; but he feared he was often provoked by the doings of the child, who had not been properly trained at home. Ontario had not been unmindful of her duty, and had produced what may truly be called an excellent system of education. He was one of the Commissioners appointed by the British Parliament to prepare a system of education for England. They sent out deputies to gather information upon which to base their report. Bishop Fraser was sent to Canada, and reported most favourably upon the system in use. The course here had been much facilitated by having drawn what he believed to be the right line between Church and State. An important crisis had now been reached in the history of education in Ontario. Government had seen fit. and he acquiesced in their decision, to abolish the Council and to place he educational interests under the supervision of a Minister of the Government ; and had he been allowed to choose a Minister for that position, of all our public men, he would have selected Mr. Crooks. He regretted, for some reasons, the abolishment of the Council. It was composed of men of experience, unbiassed, and who were out of politics, and it was impossible to bring such influence to bear upon them. By the change education would be brought into the political sphere, and become like any other political subject. He trusted that, if in party conflict such a thing as forbearance is known, it would be on the matter of education, lest in their struggle it became a wreck. He then referred to the question of separate schools ; which he saw again looming angrily up. The system was somewhat illiberal, though he recognised the reasons for adopting it and bowed to the decision of the Government in establishing them. In his intercourse with Archbishop Lynch in the Council of Public Instruction, he had found him in favour of moderation. He concluded by expressing the hope that the people of Ontario would continue to take a deep interest in the important question of education and thus help to build up our country.

TEACHERS' MEETING.—At the monthly "Teachers' Meeting" held in Ottawa 4th inst., the Rev. Inspector Borthwick in the chair, a very interesting and instructive paper on the "kindergarten System," by a lady teacher, was read, showing thorough acquaint-ance with the subject of "infant school training," a desideratum in our present school system. The Inspector read a paper on "Milton and Il Penseroso," which was well received. A discussion on the system of "marking" and "pupils' monthly reports" was then held, and much valuable experience brought out. Altogether it was a very pleasant and profitable gathering.—Free Press. TEACHERS' MEETING .- At the monthly "Teachers' Meeting"

V. Local School Administration.

REV. DR. RYERSON'S RETIREMENT.-At a meeting of the Public School Board of the City of Ottawa, Mr. Barber moved the fol-lowing resolution, seconded by Mr. Bronson: — "That this Board cannot allow the occasion of the retirement of the Rev. Dr. Ryerson from the position of Chief Superintendent of Education, to pass without expressing their high sense of the earnest services ren-dered by him in the cause of education during the past 32 years, dered by him in the cause of education during the pare of yours, for they hoped. for the common interest all had in education, than which well-earned rest. The Board also desires to express their satisfa tion at the liberal action of the Government in granting Dr. Ryerson his full salary, as a retiring allowance-an act at once graceful and just, as Dr. Ryerson has, by his long and faithful services, not only earned such recognition; but the country by availing itself of the many improvements introduced into our school system by the Rev. Dr. Ryerson, must not only receive value for the amount paid, but will feel that justice has been done to an old and faithful servant. That a copy of this resolution be suitably engrossed and forwarded to Dr. Ryerson."

To this Address the Rev. Dr. Ryerson has returned the following

reply:--'Absence from the city prevented me from making an im-mediate acknowledgment of the receipt of your letter of the 20th instant, transmitting two resolutions of the Ottawa City Board of Public School Trustees, beautifully engrossed, in which they express their generous sense of my long services as Chief Superintendent of Education, and their gratification at the liberal allowance made by the Legislature for my support in old age-I having applied, in some form, in the service of the country, whatever the country has allowed me, as well as my time and strength. I have ever had faith in my country, that if I devoted my all to its service it would not leave me with diminished means of support and usefulness when age should compel me to retire from my official I thank, in my inmost heart, the Ottawa City Board of duties. School Trustees for their very kind expressions of feeling in regard to my past labours, and the circumstances under which I have been permitted to retire from them.

"The Ottawa City Board was the first City Board of School Trustees of the Province which nobly resolved not to employ any other than regularly trained teachers in the schools under their charge, and I hope they will continue to be a Model School Board to their country, and be completely successful in their Christian and patriotic work.'

The annual closing exercises of the Ontario School of Agriculture took place on the 30th ult. The classes were put through a course of examination in different branches of study by the Professors of of examination in different branches of study by the Libraria of the College and Mr. Smith, who conducted the examination in the veterinary department. At the close, prizes were distributed to the successful candidates in each branch. The examination was very satisfactory, and all present spoke in the highest terms of the very satisfactory, and all present spoke in the nignest terms of the efficiency of the staff in connection with the institution. Hon. S. C. Wood presided, and Mr. McKellar distributed the prizes. Ad-dresses were made by Messrs. Wood, McKellar, White, Melvin, Smith, Swinford, Murton, Tytler, Rev. W. S. Ball, and others. At the close a substantial cold collation was partaken of by all present. The whole affair passed off most pleasantly.

SCHOOLS IN ALGOMA.—A correspondent of the Algoma Pioneer, writing from the Township of McDonald, says :—" We have made pretty fair progress this winter in making clearings ; our new settlers are pushing ahead manfully ; and we hope the day is not far distant when our children will enjoy the benefits of schools, which are very much required. We are anxiously looking for the opening up of the Township of Laird, as there are a large number of intending settlers anxious to settle in it.'

VI. Miscellaneous Communications.

1. TOWNSHIP SCHOOL BOARDS.

To the Editor of the Brantford Courier:

DEAR SIR.-The Provincial Legislature has been engaged at different intervals during the last few years in the amendment of the School Law, and it is generally conceded that they have been successful in promoting the interests of education by the judicious alterations they have made. But, for some reasons not easily understood, no improvement has been made in law so far as relates to the election of Trustees. If it is necessary to have competent teachers to conduct our schools, it is also necessary to have competent persons to superintend and inspect these schools. It is not sufficient to have inspectors of high qualifications appointed, whose duty it is to inspect each school twice a year. The efficiency and advancement of our schools depend as much upon local inspection and supervision as upon the semi-annual visits of the county in-

titute of the literary qualifications which are so essential to a proper understanding and discharge of their responsible duties, cannot be expected to do much for the advancement of the cause of education tion in the schools over which they preside. The only qualifications needful under the present regulations are friendship and relation If an individual aspiring to the office of trustee has only ship. sufficient number of relations and intimate acquaintances, he has all that is deemed essential to enable him to preside over the edu cational affairs of his community. That a great number of those filling positions of great responsibility are wanting in literary at tainments cannot be denied. Though all this and much more may be conceded and even deplored by the intelligent and educated portion of the community, yet it is acknowledged that almost in superable difficulties are in the way of appointing men having the necessary literary attainment. In rural districts, however, much good might be done by the formation of Township Boards. With a Township Board composed of five members and elected by the whole township there is a far greater probability that men of some literary qualification would be elected as trustees, for petty family influence would not be likely to secure the election of some relation tive or favourite. If the establishment of a Township Board in the Township of Brantford would secure the election of more competing ent trustees, a commendable step in advance would have been taken.

OBSERVER.

2. WORKING OF TOWNSHIP SCHOOL BOARDS.

To the Editor of the Huron Expositor.

SIR,—In your issue of the 4th inst., a correspondent asks for some information respecting the working of Township School Boards and the manner in which they are conducted. Tuckersmith being the only municipality within this Conducted. the only municipality within this County in which the system has been tested, other townships are, no doubt, eagerly watching is success or failure with eagerly watching is success or failure with some degree of anxiety, and as the information your correspondent asks for will, 1 think, prove interesting of a number of the readers of The Expositor, I may perhaps be allowed sufficient space in your columns to review the matter as briefly possible.

There is no question so prominently pressed on the attention of the people in which a greater diversity or greater animosity exist than that of education-unanimity as to its value and importance and diversity as to the best mode of its application to the varie wants of the people. This feeling existed, at least, in Tuckersmin for many years, and notwithstanding the successive efforts of Com cil Boards at different periods to reconstruct old sections and form new ones, dissatisfaction and new difficulties would spring up inexpectedly as the construct of the section of the se unexpectedly as the eruptions of a volcano. Whether this resulted from the peculiar construction of the from the peculiar construction of the township, or from caused in herent in the system of school sections, or from both, is a question which few people undertake which few people undertake positively to answer. It is no wonder, therefore, if people sought a remedy for this state of things and welcomed any scheme docting the state of things and welcomed any scheme destined to set at rest an evil which became almost intolerable. A township school board appeared to be only legal remedy, and the question was finally submitted to and approved of by the people approved of by the people. According to the School Act, and township council has authority to abolish local sections, and new establish township school-boards, providing a majority of the elec-tors in two-thirds of the sections. tors in two-thirds of the sections express a desire that such sections shall be abolished, and the trustees of the sections or the County inspector is authorized to call meetings for that purpose. provides for the election of five trustees, and invests them with at the powers and subject to all the duty the powers and subject to all the duties and obligations as truster in cities and torman in the duties and obligations as truster in cities and towns. It makes no provision for the payment function of the payment of the paymen Provision is also made for the valuation of all the property of each section, and the Act defines the duty of the Council in this respect, who are to decide the duty of the Council trustees. in this respect, who are to decide upon the report of the valuator in such manner as they may decide upon the report of the valuator in such manner as they may deem just and equitable. For further information I must refer your readers to the School Act, as above is but merely an outline of its present. Township coun above is but merely an outline of its provisions. cils having to decide questions of this intricate nature in which pe haps a dozen of sections are concerned, require some degree assurance, if not of ability, if they expect to give entire satisfaction The responsibility attached to the equalization of school property and the variety of interests involved downards and school property and the variety of interests involved demand a thorough knowledge of the question in all its barning the question in all its bearings, so that no injustice is done which prudence and forethought can avoit in the first state of the state prudence and forethought can avert. Some scheme must be adopt ted as a basis of advert spector. Dut it is a notorious fact that a very large proportion of those who are specially charged with the duty of looking after the management of our schools are totally unfit to examine a single class, and therefore unfit to fill the office of trustees. Men so des-no other has as yet been ever suggested and method and the no other has as yet been ever suggested, and very few even of the

1876.]

who dislike a township school board question the correctness of the 3. SOLUTIONS OF PROBLEMS IN FEBRUARY NUMBER OF principle of equalization carried out in this township. I may, perhaps, explain the manner in which the equalization was made more clearly by supposing a case as an example. And if we suppose a township to consist only of three school sections our illustration will be less difficult to understand. If we presume that sections Nos. 1, 2 and 3 are assessed respectively at \$100,000, \$80,000 and \$70,000, and that their school property is valued in the same order at \$1,000, \$640 and \$490, the school property of each is therefore equal to 10, 8 and 7 mills in the dollar of their respective asseasments. Now, in order to equalize those sections, and place Nos. 2 and 3 on the same footing as No. 1, it is evident that a cash payment has to be imposed, which will bring the minimum value of Nos. 2 and 3 up to the maximum value of No. 1. It is therefore becessary to impose a rate of 2 mills on No. 2, and 3 mills on No. thus the rate and the property together are equal to the property of No. 1. of No. 1. The amount, in this way, contributed by Nos. 2 and 3 will be \$160 and \$210 respectively—in all \$370. If we again pre-mise that the cost of maintenance of each school is about the same, it. the evident that each will get one-third returned, or say \$123, thus a set of the evident that each will get one-third returned, $a = N_0$ diminishing the actual amount of the rate imposed on No. 2 to \$47, and on No. 3 to about \$87. This may appear at first sight to favour No. 1, but not necessarily so, as the general rate levied on the whole of the township for school expenditure, under the new systen, may possibly equal on the higher assessment of No. 1 the special and general rate on the lower assessment of Nos. 2 and 3. From the above, which is only illustrative of the principle of equalization. ization adopted in Tuckersmith, your McKillop correspondent and others interested will perhaps find sufficient data on which to base a calculation of how it would affect the school sections of their own nunicipalities. Equal taxation is certainly not the least recommendation in favour of a township school board, and all able writers such as McCulloch, John Stuart Mill and others, who have devoted their attention to questions of political economy, maintain this view the correct theory of taxation. The disparity which often exists in the rates necessary to be levied by section trustees to meet curtent expenses are considered so unjust that nothing but the power and prejudices of the majorities could prevent their removal. In Tuckersmith, under the system of local sections, the rates imposed by trustees frequently varied from 3 9-10 mills on some to 8 mills in the dollar on other sections; whereas, 4 1-20 mills on the assessment of the same year, if levied on the whole of the township, would have raised an amount equal to the aggregate of that imposed by the section trustees. As to the expenses of the two systems I cannot see where any material difference can exist, and is indeed a mat matter of secondary consideration where efficiency is the end to be desired. The township clerk is not necessarily the secretary-treaarer of the school board, but has been elected in Tuckersmith as one of the school board, but has been block and that position. The school-houses and other property are directly under the ontrol of the board of trustees. Each trustee, however, exercises special supervision over one or two schools in the locality in which he resides. The engagement of teachers, the amount of their salrest and indeed all on a transaction of the set of an transaction at the set of a set of the set of a set transaction at the set of a se questions affecting the government of the schools are transacted at stated meetings of the board. At the time the township school board was adopted, a considerable amount of opposition existed in some some sections, and in justice to those parties who opposed it, it is The fair to suppose that their objections were honestly entertained. The laudable feeling which has ever existed in Tuckersmith to gracefully submit to the decision of the majority, and contest all quart questions of a public nature upon their merits, contributes not a little to the order and harmony which exists. All matters affecting progress in schemes of education are necessarily of slow growth. It is not so much by observing present indications as by a retro-proctive and the progress accompliance. pective review that we discover the real progress accomplished. t is probable that the best educational minds of the County antieipated the expansion of our school system into township, if not into County boards, but very wisely refrained from urging these reforms, which are only now beginning to attract attention, at a time only now beginning to attract attention, at a time when the County was not prepared for their introduction. Success in education, as in other things, cannot, however, be achieved in a day, but gradually, as the intelligence it diffuses pre-pares the number of proceedings. Any system at the Pares the people for greater improvements. Any system at the present, however good, which remains stationary, the length of its existence may safely be predicted. Progress is the best indication vitality and there to making which cling to the unchangeable, whence may safely be predicted. Progress is the over an approximately with their unchangeable, have the predicted with their unalterable laws, be hay, like the Medes and Persians, with their unalterable laws, be remembered but not initiated.

Tuckersmith, Feb. 14th, 1876.

JAMES MACDONALD.

1.
$$(1+r)^{10} = 3$$
, $\therefore 1+r = {}^{10}\sqrt{3}$, and $1+r=1.116137$, and the rate per cent. = 11.6137.
2. $x^2 + x^{\frac{4}{3}}y^{\frac{2}{3}} = a$; and $y^2 + x^{\frac{2}{3}}y^{\frac{4}{3}} = b$.
From 1st E., $(x^{\frac{2}{3}} + y^{\frac{2}{3}}) = \frac{a}{a^{\frac{4}{3}}}$ (1).
From 2nd E., $(x^{\frac{2}{3}} + y^{\frac{2}{3}}) = \frac{b}{y^{\frac{4}{3}}}$ (2).
 $\therefore \frac{a}{x^{\frac{4}{3}}} = \frac{b}{y^{\frac{4}{3}}}$, and $x^{\frac{4}{3}} = \frac{a}{b}y^{\frac{4}{3}}$; and $y^{\frac{4}{3}} = \frac{b}{a}x^{\frac{4}{3}}$;

Substitute these values in (1) and (2), and $x^2 + \sqrt{\frac{b}{a}}x^2 = a$;

$$\therefore x = \sqrt{\frac{a}{1+\sqrt{\frac{b}{a}}}} \quad \text{From (2), } y = \sqrt{\frac{b}{1+\sqrt{\frac{a}{b}}}}$$

3. $x^4 - 2ax^3 + (a^2 - 2)x^2 + 2ax - a^2$

Add 1 to each side, extract $\sqrt{-}$, and $x^2 - ax - 1 = \sqrt{a^2 + 1}$; hence $x = \frac{a}{2} + \sqrt{\frac{a^2}{4} + \sqrt{a^2 + 1} + 1}$.

4. The diff. of squares of B A and A C=diff. of squares of A D and AE; ... we have the sum and diff. of squares of BA and AC to find each.

5. In fig. II. 14, make B E = the given number of units, and E F = unity; then G H represents the required square root.

6. Cubic content of the vessel = 8 feet. Then $62.5 \times 8 = 500$; $7854 \times 72 \times 0.03617 = 2.04537$, weight of water in the tube; total weight of water = 502.04537 lbs.

Again, the whole height of column = 96 inches; then $.7854 \times 96$ $\times 03617 = 2.7271 =$ pressure on area of the pipe's, section; but there are 3456 square inches in the whole surface; then $3456 \div$ 7854 = 4400'3 times the pipe's section in the whole surface; \therefore 4400'3 \times 2.7271 = 12000 lbs; pressure tending to burst the vessel.

CORRECT SOLUTIONS RECEIVED.

J. W. Henstridge, Collins Bay; Moore Armstrong, Blanchard; and Michael Wallace, West Osgoode, solved all. John Ireland, and Michael Wallace, West Osgoode, solved all. John Ireland, East Garafraxa, 1, 2, 5 and 6; Robert J. Walsh, Lloydtown, 1, 3, 4 and 5; Duncan McEachran, Ashgrove, 1, 4 and 6; Daniel Drim-mie, H. M. Flesherton, P. Schools, 1, 2 and 3; John Anderson, Clarendon, P.Q., 1, 2 and 3; Daniel Tyfe, Stewartville; Daniel Grier, Bunessan P. O.; and William Waddell, Shakespeare, solved G. F. F. France West Free Land 5 6; E. E. Fraser, West Essa, 1 and 5.

Send solutions of the following questions to A. Doyle, Ottawa :

1. In a triangle A B C, B at the vertex, the angle $A = 54^{\circ}$, B =61°, and C = 65°. From a point P within the triangle, A P = 37, C P = 54, and B P = 63; determine the sides of the triangle.

2. The three sides of a triangle, the perpendicular from the vertical angle on the base, and the segments of the base, must be all whole numbers, and perimeter of the triangle a minimum ; required the sides.

3. A BC is an equilateral triangle containing 1 acre; how far must the vertex be widened so as to contain 240 perches? also, allowing A B and BC to cross each other, intersecting in O; required the distance BB when the triangle OAC contains 85 perches.

4. A building is 160 feet long, and two lines drawn from a point to its extremities contain an angle of 10 minutes; find the distance of the point from the building. 5. $x^4 = mx + ny$, and $y^4 = nx + my$; find x and y. The following question was first proposed by Professor Porson,

of Cambridge : 6

$$\begin{array}{c} xy + zw = 444 \\ xz + yw = 180 \\ xw + yz = 156 \\ xyzw = 5184 \end{array} \right\}$$
 Fin

of p shillings as high as that of q sovereigns, compare the values of equal bulks of gold and silver.

8. A rectangular parallelogram 26 feet long and 14 feet wide is immersed in a fluid, its shorter end coinciding with the horizontal surface, and its plane inclined to the surface in an angle of 56° 35'; find the pressure on each of the triangles formed by the diagonal. 9. Proposed by William Waddell, Shakespeare :

A uniform rod A B is 40 feet long, and weighs 50 lbs.; it has a weight of 80 lbs. attached at A, and a weight of 10 lbs. at B; at what distance from A should a fulcrum be placed to produce equilibrium ?

4. ON MATHEMATICS.

In the fewness and simplicity of its elements ; in the abstruseness and infinity of its endings; and, in the usefulness and extensiveness of its applications; this science has no equal. It begins on our fingers and ends on the sands of the ocean. All magnitudes from a molecule to a mountain are alike to it; all magnitudes real or imaginary, from nothing and less to infinity, are calculated by it with unerring precision. No other science so severely tries, and none so thoroughly purifies the mind. Its immutability is remarkable : we can conceive gravity diminished one-half ; we can conceive chemical affinities varied or reversed ; but we cannot conceive how the three interior angles of a plane triangle could be more or less than two right angles. We have yet another attribute to nameperfection; one that renders the science far more like a celestial science than an earthly one. All its references are to perfect forms; but, we have no such things : our points are patches; our All its references are to perfect lines are lanes, differentials of areas and no lines at all; our circles are round ruffles, and our spheres and cones are covered with pits and points. I am convinced that neither Art nor Nature has made a perfect sphere : the rotundity of the discs on soup, are disturbed by the unequal lateral attractions consequent to the imperfectly formed vessel. Notwithstanding all this, there are motions far more exact than any formulæ we can make to represent these mo-tions; hence we do not know the exact length of a natural year. Canada, like all other new countries, has hitherto been unfavourable for the prosecution of this beautiful science-the extraction of pine and hemlock roots needing more attention than the extraction of the square and cube roots ; and, indeed, with all classes, the prosecution has been limited by professional necessity. The introduction of the science of mechanics among teachers was a cogent movement on the part of the Government; it affords teachers an amusing and useful application of formulæ whose use before was ents in this journal affords them opportunities rarely to be had elsewhere; and the kind of problems appearing in it, from time to time, are extremely well selected; they are just hard enough to tempt trial, but not so hard as to discourage it.

JOHN IBELAND

Teacher, S. S. No. 12, E. Garafaxa.

VII. Extracts from Periodicals.

1. RESUME OF RECENT OPINIONS OF AMERICAN EDU-CATORS.

The Western superintendents discuss the most important questions in American public school education with great vigour.

Moral Culture.—Scarcely any one, for example, has spoken so strenuously for moral training as Mr. Hopkins, of Indiana. According to him, "The leading object in the organization of any school system should be the moral culture of the children. . . . Did not the advocates of the free-school system promise the people that if they would take upon their shoulders the additional burden of taxation for its support, the same would be lightened by the diminu-tion of crime ? Is there any perceptible decrease of crime in Indi-ana ? Is there any reasonable probability that there will be ? It is becoming a grave question among those who take comprehen-sive views of the subject of education, whether this intellectual culture without moral is not rather an injury than a benefit. it not giving teeth to the lion and fangs to the serpent? That is the true system of training which adapts itself to the entire complex nature of the child. No free government can safely ignore this grave subject, for nations that lose their virtue soon lose their freedom.'

7. If m shillings in a row reach as far as n sovereigns, and a pile ers of unsullied character is all that is requisite to make the y_{0}^{n+1} of our schools honest, industrious, law-abiding, patriotic, able to discern clearly the exact boundary between right and wrong Most certainly not. Our youth must receive direct, positive in a struction in morel science struction in moral science, and be trained to make the demands of moral rules govern them in the conduct of their lives. The lips of our teachers must not be sealed, even if they do now and then allude to the existence of other truths than those upon which, by the universal essent of the similar the universal assent of the civilized world, a science of morals be founded. . . . The child may be taught to respect the rights and feelings of others; to obey its parents and those placed in authority over it; to be kind, truthful, frank, unselfish, chaste, courteous, respectful. As its education advances it may be in the in the respectful. As its education advances, it may be instructed in the truth of that morality which concerns the family, society, and state. It may be taught to love the true and the genuine, to be all shams and humbugs, to have faith in whatever is right, to f honest in business transactions, to respect those principles and honour upon which all good citizenship rests, and to cherish and practise those virtues which are the glory and beauty of character. Such instruction as this is not sectarian, and every true patriot and philanthropist will rejoice when it shall be required to be given in every school in the land " every school in the land.'

Spirit and Deportment.—The Hon. Newton Bateman, of Illinois, would have children trained to be "gentle and refined in speed and manner, docile in spirit and modest in deportment, truthful ingenuous and manly, obedient, respectful and affectionate toward their parents and teachers, and reverential toward God and to whatsoever things are sacred and holy. These things, it is true, are not so immediately within the control of teachers, but the in-fluence, example and present of the sale. fluence, example and precept of the school-room should all tend the way." Finally, from distant and problematical Utah comes same or even stronger admonition; "Are we not apt to be narrow in our educational ideas, and to give us due not apt to be narrow in our educational ideas, and to give undue weight to intellectual culture ? It has been truthfully said that the exaltation of talent, are as it is called, above virtue and religion is the curse of the Education is now chiefly a stimulus to learning, and thus men me quire power without the principles which alone make it good. lent is worshipped; but if divorced from rectitude it will prove more of a demon than a god. . . . In teachers' institutes the importance of moral training should receive special attention."

Apropos of these teachers' institutes, which are held all over in country, and which our school authorities so steadfastly believe in what the superintendent of Utah says on the subject will stand for what they all say : "An institute is a potent auxiliary in the aid of educational interests. It should decay a the auxiliary in the aid educational interests. It should develop the best methods of organ izing, governing, and teaching the school, and elucidate the true order of mental development. It is needed to secure and main tain uniformity in school management and the conduct of school exercises, and is a current calendar by which the teachers throughout the Territory may be posted in relation to educational improv the Territory may be posted in relation to educational InF (a) ments. In one of the California school reports it is stated, is some counties the first real impulse to the cause of education do from the first institutes held in them.'" The superintendent Missouri thus refers to them: "I shall not be guilty of throwing false colour on the report if I assert that the teachers' institute is the first institute of the first that the teachers' institute of the first institute of the first that the teachers' institute of the first the first that the teachers' institute of the false colour on the report of I assert that the teachers' institute of the first the first that the first that the teachers' institute of the first the first that the first that the first th second to no instrumentality used in the State to promote the in provement of the teachers. Even in its lowest estate it is good. It is good as a social power. It is good as an intellectual stimulus. is good as a cultivator of earnest, liberal thought and discussion or in other and still plainer language, we may say that, considered as a teachers' debating society, the institute has its value; whether it does the work so fondly hoped for it, *i.e.*, puts much real knowledge or many ideas that are most for containing into the real knowledge or many ideas that are good for anything into be empty heads of the young school-mistresses who attend it for a days yearly is another question days yearly, is another question. Quite as often they are treated to a temperance exhortation, or to a third class elocutionary regist tion as to anything really relating to their profession.

Trained Teachers. —Of course the want of trained teachers is as crying want of the West as it is of the rest of the country, and must be until male and female principals from our colleges are assistants from the high schools can be furrich. assistants from the high schools can be furnished in numbers and in the high schools can be furnished in numbers and cient to supply the majority of the schools. It is thought by mouth that severe systems of examinations will lighten the difficulty Cali-let us listen to the evergetic protect of the severe severe severe systems of the severe seve let us listen to the energetic protest of the superintendent of Gameric automatic and the superintendent of the problem. "California," the superintendent of the superintendent "is justly held up as a bright example in first inaugurating the sympletem of state examinations." Yet he admits that "it is not possible of or the instruction of the sympletem to insure even a modicum of literary culture on this system of Not amining teachers. Examinations are frequently dishonest. intendents themselves have been known to give candidates a for days' preliminary examinations when the give candidates a for of Ohio on the same subject, "Is it reasonable to suppose that the days' preliminary examinations upon the questions upon which the days' preliminary examinations upon the questions upon which the days' preliminary examinations upon the questions upon which the days' preliminary examinations upon the questions upon which the days' preliminary examinations upon the questions upon which the days' preliminary examinations upon the questions upon which the days' preliminary examinations upon the questions upon which the days' preliminary examinations upon the questions upon which the days' preliminary examinations upon the questions upon which the days' preliminary examinations upon the questions upon which the days' preliminary examinations upon the questions upon which the days' preliminary examinations upon the questions upon which the days' preliminary examinations upon the questions upon which the days' preliminary examinations upon the questions upon which the days' preliminary examinations upon the questions upon which the days' preliminary examinations upon the questions upon which the days' preliminary examinations upon the questions upon which the days' preliminary examinations upon the questions upon which the days' preliminary examinations upon the questions upon which the days' preliminary examinations upon the questions upon which the days' preliminary examinations upon the questions upon the days' preliminary examinations upon the days' preliminary ex silent example, or 'unconscious tuition,' of men and women teach- | are required to pass. Indeed, the evil became so notorious, so

and the examination questions securely sealed, and to insist that county superintendents do not open them until the regular meeting of the county board, and then in the presence of at least one member of the board !" This sounds disgraceful, but the truth is that... that where a State requires many thousands of teachers, and must take those who offer or none, all the examinations in the world will ever put into the heads of those teachers what is not there. In-ever put into the heads of those teachers what is not there. In-evitably hundreds who cannot really "pass" will get certificates from the sheer necessity of the case. The only conclusion, then, is that the State must supply training agencies for its teachers, and there is not there the case but the township high there is no agency that can meet the case but the township high whool system. In the immense majority of cases the teachers of a dist. district are and must be from the inhabitants of that district. The therefore their training must be brought home to them. They can therefore their training must be brought home to them. Aot afford to go to it.

Scope of the Public Schools.—Finally, the Hon. Newton Bateman, of <u>Illinois</u>, in the ablest report we have reviewed, excepting those of Bt. Louis and New York city, discourses in a manner after our own beart upon the great subjects of what the common schools should do for the masses of their pupils, and what should be their course of study to this end. Respecting the latter he thus delivers him-telf: "Look at the facts as they have existed in this State from the beginning of the free school system and for years before. have been the studies prescribed by law? Spelling, reading, writ-ing, arithmetic, grammar, geography, and United States history. Who first marked out this course of study, or what considerations led. What led to its original adoption and subsequent tenacious retention does not appear. But if the author of this common school curriculum is still living, a contemplation of its results will hardly induce him to come forth and claim the honour of his achievement. . . . If it was a standard of the standard of th were distinctly proposed to devise a scheme whereby the schools hight be rendered the least profitable, that which compels the youth of the State to spend the least profitable, that which compete the your upon the State to spend the whole period of their school-going life tical exclusion of everything else, must be regarded as a reasonably uccess. It is not to be denied that auccessful solution of the problem. . . . It is not to be denied that the the confidence of our people in that great American institution, the Public school, is in some danger of being disturbed, nor is this state of this with the public school is in some danger of being disturbed and the school is a substantially common to all the of things peculiar to Illinois, but is substantially common to all the States and to the whole country. Doubts, questionings, murmurs of direct opposition or appeals of discontent, mingled with voices of direct opposition or appeals for reconstruction and improvement, are coming up from every Bater of the Union." And in illustration of his position Mr. Bateman gives extracts from an extensive correspondence with parents of the Union. parents of different classes and occupations, in which are described the miserable failures of the public schooling as regards the indiridual children of the individual writers.

Causes of Failure—Mr. Bateman firds the causes of these failures hot alone, like so many others, in the incompetence of the teachers, but also in the inadequate public school curriculum and in the textbooks in which this course of study is pursued. He endeavours to impress upon the citizens of Illinois the great fundamental truth : freess upon the citizens of Hinois the great function of by that the childish mind can take in the elements of every kind of by take in more than the eleof knowledge; and second that it can not take in more than the elewents of anything. The belief in the converse of these two propo $h_{\rm Hong}^{\rm aus}$ is the great rock upon which public-school education in $h_{\rm Hong}^{\rm aus}$ is the great rock upon which public-school education in $h_{\rm Hong}^{\rm aus}$ America has hitherto split in every successive generation. public schools must attempt only the elements of knowledge," has been the cry. "Very good; but what are the elements of know-ledge?" To this question the New England pedagogue replied, and the cry for the second followed upon and the whole country has listened to his voice and followed upon in footsteps, that "the elements of knowledge are contained in month, and in withmetic, geography, and in perfect reading and writing, and in arithmetic, geography, and Rammar carried to the farthest and most complicated forms.

What the Public Schools should do.—But Mr. Bateman, in comwork at the Public Schools should do.—But Mr. Bateman, in com-the with all the enlightened educators of Europe, demands that the public schools give the elements, and the elements only of all vocal music and along with the rudiments of drawing and Vocal music, and of the physical and natural sciences, together with sufficient knowledge of physicology and hygiene "to enable the of American bit is formation about their own neighbourof American history and of information about their own neighbourto make them good citizens, local as well as national. bugh and exhaustive grounding in the elements was the very foundefine stand exhaustive grounding in the elements was used and the elements was in all the elements that could be beaut, or the hand." the could educate "the head, the heart, or the hand."

Blements of Natural Science.—Nearly all the Western superinten-tents agree with these views of Mr. Bateman, and in ten years the School, Frovidence, Knode Island, on 2000, so the second by law and on botany, by Dr. W. G. Farlow. It was essential to the plan that specimens should be used and It was essential to the plan that specimens should be used and it was essential to the plan that specimens should be used and it was essential to the plan that specimens should be used and distributed in all of these courses, and therefore the number of

ing, that the state board of examinations saw itself compelled to to be gained for the elements of natural science?" And he an-the examination questions securely sealed, and to insist that swers, "By discarding all superfluous matter from the text-book and thereby saving wasted time, and also by adopting improved methods of teaching. . . . With proper instruction every child of good health and fair natural abilities can and should, in four years or less, of six school months each, beginning in utter ignorance of the alphabet, acquire such a practical knowledge of reading and spelling in his native English, that he may thereafter lay aside and dispense with both of those studies, so far as formal lessons and recitations are concerned, and devote his time to other things. . . Much precious time is also wasted upon arithmetic. The average common-school text-book in that science contains double the amount of matter necessary or advisable, and hence half of the time spent thereon could be much more profitably devoted to other studies. . It is not by any means necessary that a text-book should be perfect, nor that it should contain everything belonging to the subject of which it treats. There are innumerable things appertaining to arithmetic, reading, grammar, natural philosophy, hygiene, etc., of much intrinsic interest and value, which nevertheless are wholly out of place in a book of rudimentary principles, and yet most text-books

are burdened with these extraneous matters." School of Science.—The series of yearly lectures called "The Teachers' School of Science" originated from a donation made by Mr. John Cummings, at present second vice-president of the Boston Society of Natural History, to the Council of that Society in 1871. The gift, amounting at first to \$500 per annum, and subsequently much enlarged to meet the requirements of the lessons, was to be applied directly to the instruction of teachers in natural history. For the administration of this fund a committee was formed, of which Mr. John Cummings, Professor W. H. Niles, and Alpheus Hyatt, were members, with full power to attend to all businessymbich might arise. The committee decided that no lecturing, in the ordinary sense of the word, should be permitted, but that in all cases lessons should be given illustrated by specimens, which specimens should remain, if desired, in possession of the student or teacher after the close of the lesson. Before publicly stating their intentions, the committee consulted with the leading teachers of the public schools, and submitted their plan to them. This course was adopted in order to avoid the too common failure of similar efforts, a want of discrimination or due regard to suitability in the means of in-They also most distinctly stated that there struction employed. was no desire on their part to bring about any sudden revolution in the present school system; but that all their efforts would be directed towards the instruction of the teachers themselves, with the ultimate object of influencing the pupils of the common schools through their voluntary labours. This idea was responded to with such enthusiasm that after the committee's circular was issued, over seven hundred applications were received, compelling a petition to the Institute of Technology for the use of its large hall, then just completed. This was most courteously granted, and the audience assembled there, numbering six hundred at the first meeting. This enormous influx was largely due to the energy with which several of the masters of the public schools of Boston had seconded the movement, especially Mr. Page, master of the Dwight school, and the personal encouragement of Mr. Philbrick, then superintendent of the public schools of Boston. The first experiment was made by Professor Niles, whose system of teaching had been adopted by the committee, with no preliminary formalities except a slight sketch of the intentions of the committee, and a few remarks upon the value of natural history in the schools, not only as an aid in disciplining the mind, but as a means of assisting in the comprehensive study of other subjects. He then proceeded immediately to show by a prac-tical lesson how much could be taught of the fundamental principles of physical geography without maps or charts, other than could be readily made on the blackboard ; and without specimens other than samples of earth, stone, or water, and the natural features of any country landscape.

Physical Geography and Mineralogy.—In the last three of his six lessons Professor Niles taught the physical geography of Massachusetts in a masterly manner, and showed conclusively how this might not only be made the basis of a general knowledge of physical geography, but also be used to throw a strong light upon, and greatly facilitate, the future studies of the pupils in political geo-graphy and history. These lessons were enthusiastically received, and exercised a wide-spread influence, besides causing an entire revolution in the modes of teaching geography in at least one of our public schools. The first year was devoted to short experimental courses, and therefore physical geography was followed by lessons on mineralogy, by W. C. Greenough, master of the State Normal School, Providence, Rhode Island; on zoölogy, by Alpheus Hyatt;

students was limited to those who could be comfortably seated in the lecture-room of the Boston Society of Natural History, and properly supplied with materials.

The instruments used in these courses were of the simplest character : in mineralogy, for instance a small paper tray containing the scale of hardness, another to hold the half-dozen specimens illustrating that lesson, a pen-knife, a hammer, a file, and a small horseshoe magnet. The materials were laid in numbered compartments before the lesson began, and each person was requested to follow the instructor as he described any special part or characteristic or made any particular experiment. Frequent questions were also asked of the audience, and permitted in return.

Statistics of the second year's work showed an increase in the average attendance to eighty-four; that the specimens distributed had been in as many as fifty instances kept together, and were being actively used in the instruction of pupils. It was ascertained during the present year, through written questions addressed to the teachers, that fully seventy-five per cent. of those who applied for tickets to the lithological course had also been through the mineralogical course, and fully thirty per cent. had attended the preliminary courses of the first year.

Mr. Burbank has undertaken some excursions, in which rocks were examined in the field, and observations made as to their mode of occurrence and characteristics in mass which could not be shown in the lecture-room.

Value of the Study of Natural History.—The reasons for the unexpected success of these experiments are many, but a few of the most prominent will be sufficient for the limits of this brief review. Personal contact with the things described creates an eager desire to know something about them on the part of the audience, and the consciousness of this stimulates the lecturer to put forth his utmost strength. This attention is held throughout with unflagging interest by the necessity of continually searching for the characteristics treated of by the lecturer, and of occasionally answering the questions asked by him.

The acquirement of a collection which could be immediately used in the school-room was, however, found to be of the greatest importance. Teachers were prepared to admit the necessity of the study of natural history, but neither proper text-books nor materials were obtainable, and they could not therefore see clearly the way in which another study could be introduced into their schools without seriously overloading the minds of their pupils.

Although we cannot claim to have solved the practical side of this question, we have endeavoured, as far as the time would permit, to show that the difficulties were not unconquerable, and that natural history not only could be made useful in disciplining the powers of observation and minds of the pupils, but that it was really the proper ground-work for the intelligent comprehension of a large proportion of other subjects.—Atlantic Monthly.

2. VILLAGE MUSEUMS.

It is always refreshing to take up White's Selborne, to enjoy through his eyes the "innocent brightness of a new-born day," let him discourse to us about the pansy at our feet, and teach us to sympathize with each common sight. Three generations have now delighted in his pleasant gossip, yet the book is as fresh as ever. One edition after another replaces the well-thumbed copies in country libraries; only this year, in fact, a really beautiful illus-trated one has been brought out. It can never become obsolete any more than Pepys's *Diary*. Gilbert White in his country re-tirement, and Samuel Pepys immersed in all the bustle of London business and frivolity, alike kept a diary; and although the one may chronicle the doings of a Court, and the other the variations of the weather, each book is valuable for the same quality. Both these men were keen observers of what was going on around them, both tell us with simple accuracy of what they saw. The courtier collected materials which have become history, the parson made observations which have materially assisted the study of natural history. White's Selborne is valuable, partly because it is not written to support any theories, and there is no attempt to twist facts so as to make them dovetail into some pet hypothesis. No doubt a few assumptions made by the author have not been borne out when further light was thrown on the subject, but he never fell into the same sort of mistakes as Audubon. His vanity never carried him away, and there is no straining after fine writing. The most apparently trivial circumstances are introduced in so charmingly simple a manner that we cannot wish the least of them omit-ted. Why is it that nowadays we find so few observers of this simple but reflective sort? It would now certainly be impossible

that he might find Lord Breadalbane's seat and "beautiful policy" recognised by the map-maker as "too curious and extraordinary to be omitted." But the higher education of to-day keeps the brain so busy that it has no time to use its eyes. Many a brilliant and cultivated man is full of astonishment when, as he sits on the bank of a quiet stream, ruralizing for a day's holiday, a scientific friend points out to him all the wonders that are to be seen within the space of a few square inches; dozens of different water plants, all with their distinct classes and habits; hundreds of living organisms dancing along the stream; mosses in endless variety clothing the banks, pebbles showing the geological formation of the district. He is delighted, and gets twice the pleasure out of everything from knowing a little of what it all means.

It is strange that, in country parishes at any rate, naturalists of the type of the Vicar of Selborne are not oftener met with. clergyman's duties oblige him to spend so large a portion of his time in the open air that with a little trouble he can soon learn When going his round of visits from hamlet to a great deal. farm, through the squire's park and along the quiet hedgerows, h_{A}^{θ} has abundant opportunity for studying his furred and feathered parishioners, as well as those whom he has to supply with blan kets and flannel petticoats. A knowledge of grasses and the soils suitable to them does not injure him in the opinion of the farmers, however bovine they may be. Old Betty will be much more likely to listen to his exhortations if he can tell her all about her favourite herbs and where they grow. She makes wonderful decoctions, to the wrath of the dispensary doctor and the delight of her patients, who invariably form their opinion of the merits of a medicine in proportion to the vileness of its taste. Her respect for the parson becomes worship if he will partake of some of her simples and say they have done him good. Then, too, the choir would not sing worse because they were taught to distinguish the different keys in which owls hoot, or to observe how painfully discordant it is to hear two cuckoos discoursing, one in D and the other in D sharp, while perhaps a rival suitor proposes from a neighbouring wood in C natural. Above all, by interesting the children of the parish in the markelous machanism of all limits and the parish in the parish in the marvellous mechanism of all living organizations, he might do much to check that cruelty to animals which arises more from importance and them that the second ignorance and thoughtlessness than from an actual desire to inflict pain. A child could scarcely wish to kill a fly after having seen it feet magnified, or to put out the eyes of a bird when it understood the beauty of their formation. The parson can often, like Water ton, clear the character of some of the animals which are destroyed unconvicted of the crimes of which ignorance accuses them. may show that nature can so beautifully balance things that she may sometimes be left to select for herself what is to live and what to die, that to destroy little birds is to encourage the ravages of insects, that crows amply pay for all the corn they eat, and that barn-door owls do not suck pigeons' eggs, but help the cats to protect the stack-yard from the attacks of field-mice. There is carcely anything which argues a main the difference is the scarcely anything which arouses a more healthy curiosity in chil dren, or cultivates their intelligence in a better way, than teaching them to examine into the out-of-door things which they generally pass without notice. A late famous naturalist, on going to a new parish, found the school in a deplorable state. The pupils seemed so dull and stolid that it was impossible to teach them anything. He made all sorts of plans for their improvement, but the bright idea struck him one day that he would take them out botanizing on their Saturday half-holidays. The results of the experiments were miraculous, and from learning to take an interest in the number of netale encoded in the sector of petals appertaining to each flower, they soon began to understand their multiplication table, and reading came of itself after they had been taught to use their eyes. Pious people would no doubt be shocked if their pastor neglected Balaam's ass or Elisha's bears, and told the children of the Sundar's later the shift of th told the children of the Sunday School something about the robin redbreast that hopped round the door. The destruction of Philistines' corn by Sampson may be more improving, but the little ones, we fear, would prefer to hear how the oak grows from the acorn, or what gives its colour to the violet. It is sad to think that an acquaintance with the anatomy of a pigeon's wing is not religious knowledge, although sound views about the plagues of Egypt are essential to orthodoxy.

facts so as to make them dovetail into some pet hypothesis. No doubt a few assumptions made by the author have not been borne out when further light was thrown on the subject, but he never fell into the same sort of mistakes as Audubon. His vanity never carried him away, and there is no straining after fine writing. The most apparently trivial circumstances are introduced in so charmingly simple a manner that we cannot wish the least of them omitted. Why is it that nowadays we find so few observers of this simple but reflective sort? It would now certainly be impossible to find a man of education who, like Gilbert White, had never seen a modern map of Scotland, and who hoped when he did grasses. Some good-natured young lady would paint for them pictures of any remarkable fungi they found, and it is easy to get for a very small sum drawings of all common kinds with which to compare any specimens brought for inspection. Some of the boys will probably have already made a fair collection of birds' eggs, which the they can present; and during haytime and harvest curious nests will be found in the standing grass and corn which can be preserved instead of being destroyed. The village mason may contribute fosand even the poor old man who breaks stones on the road will become almost animated when he thinks he has found an ammonite worth presenting to "our museum." The collection, whatever it is, must belong as much to the smallest ragged urchin in the parish as to the smallest ragged urchin in the parish as to the largest contributor, and in this way it would be truly prized and kept up. A village genius is pretty sure to arise who, with the assistance of Waterton's complete and minute directions, will toon acquire sufficient dexterity to stuff birds better than many a professional. An old gamekeeper learns to preserve the fish of the ocality, and is able to give much curious and interesting informaabout the different flies which frequent different pools, and rethe observations of many hours spent in waiting for a bite. There should be specimens shown of every sort of seed sown in the the parish, and records kept of the biggest turnip, the longest cartot, the heaviest potato, the monster gooseberry, the most prolific outsiders, is interesting to the little community who know each other there is interesting to the little community who who there other there is and much knowledge upon farming, gardening and poultry being will be acquired. There should be a large map of the marked hung up in the museum, and on it every change should be marked, as when two fields are thrown into one, when the millthe is altered, a new house built, or an old one pulled down, a fall, and is altered, a new house built, or an one proves the state of their see the state of their topt of the large trees taken down, their age, the state of their timber, how much wood or bark was sold. When a new plantation is made it should be chronicled, and what sort of trees it is composed of mentioned, so that information may be gathered as to what plants thrive under certain conditions. It would soon beto the a source of pride to see how many different species of forest added be cultivated successfully, and a new beauty would be dded to the landscape.

A loan collection must not be omitted, for that is often the most interesting part of such an institution. It is astonishing how many green there is some rare old book which proves to be almost unique. A thoice is some rare old book which proves to be annow and the book which proves to be annow annow and the book which proves to be annow and the book which proves to be annow anno anahouse, who has seen better days. The carpenter has bought a biogo of finely-carved oak for a few pence at an auction. One of a design fire-dogs which are of a design. design so beautiful that they are sent to Birmingham to be copied tor the squire's new fire-place. A beautiful processional cross on the squire's new fire-place. A beautiful processional cross on the squire's new fire-place. A beautiful processional cross of the squire's new fire-place. A second plane of the state of the squire's new fire-place of the state of the squire's new fire-place. A second plane of the squire's new fire-place of the state of the squire's new fire-place of the squire's new fire-place. A second plane of the squire's new fire-place of old samples will be lent from the walls of farmhouse parlours, and be haps the brocaded wedding-gown of a long-mouldering ancestor. Pole soldier home on furlough, the sailor returned from the North bolder home on furlough, the sallor returned from the successful gold-digno, is sure to have something to show; and the successful golddiscover, is sure to have something to show; and the successful discover, or the young fellow who tried his luck in the diamond-fields, contribute his quota towards the miscellaneous display of contribute his quota towards the miscenantous and the instantous the instantous of t the industries of the parish, whether lace-making, straw-plaiting or the industries of the parish, whether lace-making, straw-plaiting or the boat knitted pair of stockings; the prize work the the girls' school; the parish, whether lace maxing, since prize work is the girls' school; the piece of carving done in winter even-which made after his own design—all these are sure to bring visitors who will be interview. with made after his own design—all these are sure to bring visitorial be will be interested in them; and in later days young men will work from the day they contributed something to the village

3. WHAT TO READ.

In view of the great dangers besetting young people of the pre-tion day, in the form of bad newspapers, illustrated juvenile month-ticulated and weeklies of a vile character, surreptitiously and extensively and the dimension their secret way into the best homes and and weeklies of a vile character, surreptitiously and the best homes a the balance of the land, the dullest managers of a pure periodical the balance of the land, the dullest managers of the land, the dullest managers of the land of the balance with a holv fire. If they can tor the young can hardly fail to burn with a holy fire. If they can hardly fail to burn with a holy fire. If they can hardly fail to burn with a holy fire. the young can hardly fail to burn with a holy tre. If they can be a negative good in crowding bad reading to the wall, in bed a negative good in crowding bad reading to the wall, in the up children's attention, so that foul publications are un-one, a great work is accomplished. Their mission is a blessed the and good sitisons everywhere should rally to their assis-

Every child is in danger for whom good, well-selected, enjoyable reading is not provided by those most directly having its best interests at heart. All dangerous publications do not betray their character at a glance. Often they wear the mask of graceful in-formation, and even piety. Do not force your child to spend time in reading, but look to it that all his or her reading time be properly filled. While you blindly congratulate yourself that your character at a glance. boy or girl, through a fondness for books or periodicals, must necessarily be learning something, it would be well to know what that something is.

Undue intellectual stimulus for children is bad enough, but emotional stimulus is worse by far. In the hands of unprincipled purveyors, it opens the way to moral errors of every kind, and protessing to quicken a slow growth to what is holy, develops only precocity and vice. The point of the wedge is easily inserted, and at first, as easily thrust back, but beware of the silent force, that having once gained an entrance, may split the purity and peace of your home.

4. PROGRESS OF POPULAR SCIENCE IN SCHOOLS.

The study of science is at last beginning to make progress in the English schools. At the close of a series of lectures lately delivered in London on Electricity, Professor Tyndall remarked that five of them had been made with apparatus which any teacher could make of the commonest material at scarcely any cost. He hoped the ex-ample thus set would be followed, as the future of science depended to some extent on teachers in the public schools. The masters of schools, he said, should look the problem of scientific education straight in the face, for science was growing day by day, hour by hour, and although he would deprecate any change from without in the public school system, he would advise masters to make the change from within before outside pressure became too strong,-Free Press.

In an address on "Self Culture," delivered at a recent session of the Vermont State Teachers' Association occur the following pertinent thoughts : "Teaching is not a trick to be learned in a few hours at an educational convention, or a trade to be gained in three months at a Normal School. It is rather a profession-the work of a lifetime. It is good to compare ourselves with heroic men and women, and to be in the presence of genius, either in men To secure the means of culture often requires money; or books. and teachers are often themselves to blame that they do not have more of it. They should make their services worth better prices, and should get better prices."

"It is coming to be understood," says the New England Journal of Education, " that the attempt to crowd the full contents of our elaborate text-books into the memory of the pupil is equivalent to teaching the dictionary, in course, as a training for an orator." In other words, that " cramming," as an experiment, is a total failure. What makes these words from the Journal significant is the fact that they reflect the opinion of the Massachusetts Teachers' Convention, lately held in Boston. If these somewhat famous educators are moving towards "more natural methods of instruction," we may be sure that experience has proved the need of them,-Christian Union.

Lord Brougham wrote that, "Under God," he "trusted every thing to habit, upon which in all ages the lawgiver as well as the schoolmaster has mainly placed his reliance-habit, which makes every thing easy, and casts all difficulties upon the deviation from a wonted course. Make sobriety a habit, and intemperance will be hateful : make prudence a habit, and reckless profligacy will be as contrary to the nature of the child, grown or adult, as the most atrocious crimes are to any of your lordships. Give a child the habit of sacredly regarding the truth, of carefully respecting the property of others, of scrupulously abstaining from all acts of improvidence which can involve him in distress, and he will just as likely think of rushing into an element in which he cannot breathe as of lying, cheating, or swearing."

VALUE OF TIME.- I suppose all children residing in the country, though belonging to families in the narrowest circumstances, might, he, and good citizens everywhere should rally to their assis- logy, mineralogy, and zoology, and know a great deal of botany, entomology, and agricultural chemistry without ever abstracting one entomology, and agricultural chemistry without ever abstracting one hour from their customary labours, or from the course of common bud dangerous juvenile publications, to ply their unholy trade.

1876.]

Do

conditions to be performed for the attainment of such results are. that their parents, older associates and teachers, shall be so full of Gray's Odes and Elegy, with Life and Notes, paper (Chambers). 0 these kinds of knowledge as constantly to exhale them, filling the air with their fragrance, so that the children shall breathe them, in as they now inhale the common air.-Horace Mann.

VIII. Books Beccived.

From Messrs. DAWSON BROS., Montreal; Messrs. WILLING & WIL-LIAMSON, Toronto.

Dominion Phrase Book; or the Student's Companion for practically acquiring the French and English Languages. By Professor P. J. Darey, M.A.

Cours de Lectures Francaises. By P. J. Darey, M.A., B.C.L. (second edition).

Juvenile French Course, First Year. Comprising a collection of words and phrases for acquiring the rudiments of the French Language. Compiled by N. Duval, B.A.

Juvenile French Course, Second Year.

Juvenile French Course, New and Revised Edition.

Elementary French Grammar. Containing a selection of General Rules from the most approved French Grammars, with Exercises in French and English. By N. Duval, B.A.

Lectures Choisies pour la Jeunesse, contenant une foule d'Anecdotes Amusantes, d'Historiettes, de Contes et de Fables, etc., avec un Dic-tionnaire. Par N. Duval, B.A.

From Messrs. MACMILLAN & Co., London ; Messrs. WILLING & WIL-LIAMSON, Toronto.

English Literature. By Rev. S. Brooke, M.A. Literature Primers. Edited by J. R. Green, M.A.

From the RELIGIOUS TRACT SOCIETY, London.

Homes and Haunts of Luther. By Rev. John Stoughton, D.D. The Great Salterne. By Sarah Doudney.

Sonnets of the Sacred Year. By Rev. S. J. Stone, M.A.

The Nearest Neighbor. By Frances Browne,

My Brother Paul; or A Real Hero. By the author of "Tales of Northern Seas," &c.

- From Messrs. HARPER BROTHERS, New York. The Mutineers of the Bounty. By Lady Belcher. Tertullian, Select Works of. By T. A. March, LL.D.
- From Messrs. ROBERT CARTER & BROS., New York. The Well in the Desert. By E. Sarah Holt.
- From Messrs. Sower, Porrs & Co., Philadelphia. How to Write Letters. By J. Willis Westlake, A.M. Literature for Little Folks. By Elizabeth Lloyd.

From Messrs. S. C. GRIGGS & Co., Chicago. Pocket Manual: Rules of Order for Deliberative Assemblies. Major H. M. Robert.

From Messrs. ROBERTS BROS., Boston. Outlines and Philosophy of Religion of Swedenborg. By Theopolis Parsons.

From Mr. C. W. MITCHELL, Ottawa.

Canadian Parliamentary Companion for 1876. Edited by Henry J. Morgan, Barrister-at-Law.

IX. Advertisements.

BOOKS FOR THE STUDY OF HIGHER ENGLISH IN THE SCHOOLS OF ONTARIO.

Supplied from the Educational Depository, Toronto, free of postage, at the following rates, viz.;-

Shakespeare's Macbeth, with Notes by Hunter (Longman)... 22 Milton's Select Poems, including "Il Penseroso," with Notes by Huckin (Seeley's edition) 0 15

Scott's Lady of the Lake, with Life and Notes (Chambers). Addison's Spectator, with Notes, &c., by Morley (Routledge). 0 68 Johnson's Lives of the Poets (Chandos Classics), paper...... 0 40

Natural Philosophy Books for First-Class Certificates.

Hamblyn Smith's Elementary Statics (Rivington)...... 0 65 Hydrostatics (do)..... 0 65 Do do

Vere Foster's Authorized Drawing-Books.

Single Numbers, 7 cents; per dozen, 75 cents, free of postage.

Series A-Elementary

- "
- C¹, C²—Familiar Objects. D¹, D²—Leaves and Simple Flowers.
- E¹, E², E³-Wild Flowers. F¹, F², F³-Wild Flowers. " "
- " G1'--Garden Flowers. "
 - H¹, H², H³-Garden Flowers. I¹, I³-Freehand Ornament.
- "
- "
- " "
- "
- 11, 1°--Freenand Ornament. J, J¹, J², J³--Trees. K¹, K², K³, K⁴--Landscape. L¹, L⁵, L¹²--Landscape in Water-Colours. M, M², M³, M⁴--Marine Subjects. O, O¹, O², O³, O⁴, O⁶, O⁷, O⁹, O⁹, O¹⁰--Animals. " "
- "
- "
- "
- \mathbf{Z}_{-} -Blank Exercise Book.

Also the Popular Edition.

Single Numbers, 3 cents ; per dozen, 25 cents, free of postage :

C², D², G, I³, M³, O, O³, Q.

"GUIDE TO ELEGANT WRITING."

JUST PUBLISHED.

COMBINATION in four parts, for self-instruction in F A manship, consisting of a series of OVER 100 COPIES, be ginning with the first principles and gradually advancing to elegant writing; a 50 page BOOK OF INSTRUCTION, fully explaining the sub-inst and analyzing all the constant of the subject and analyzing all the capital and small letters; an ORNAMENTAL SHEET containing German Text and Old English alphabets, Orne mental Lettering, Flourished Birds G mental Lettering, Flourished Birds, Scrolls, &c., and a CASE to con tain them.

It is a perfect self-instructor in the latest and most approved style of writing, particularly adapted to teachers.

Price, Post Paid, by Mail, \$1.00.

Address :

Bv

S. G. BEATTY & CO.,

Belleville, Ont.

TO SCHOOL TRUSTEES.

"How to Build a School-House Cheaply and Well" will be sent free to any address. Send for a copy to Box 719, Toronto Post Office.

PRINTED FOR THE EDUCATION DEPARTMENT BY HUNTER, ROBE & CA.

cloth..... (Chandos Library Series), cloth. 0 66 do