

Technical and Bibliographic Notes / Notes techniques et bibliographiques

The Institute has attempted to obtain the best original copy available for filming. 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 filming, are checked below.

L'Institut a microfilmé 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 filmage sont indiqués ci-dessous.

Coloured covers/  
Couverture de couleur

Covers damaged/  
Couverture endommagée

Covers restored and/or laminated/  
Couverture restaurée et/ou pelliculée

Cover title missing/  
Le titre de couverture manque

Coloured maps/  
Cartes géographiques en couleur

Coloured ink (i.e. other than blue or black)/  
Encre de couleur (i.e. autre que bleue ou noire)

Coloured plates and/or illustrations/  
Planches et/ou illustrations en couleur

Bound with other material/  
Relié avec d'autres documents

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 marge intérieure

Blank leaves added during restoration may appear within the text. Whenever possible, these have been omitted from filming/  
Il 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 filmées.

Additional comments:  
Commentaires supplémentaires:

Pagination is as follows: [i]-ii, [33]-48, iii-iv p.

Coloured pages/  
Pages de couleur

Pages damaged/  
Pages endommagées

Pages restored and/or laminated/  
Pages restaurées et/ou pelliculées

Pages discoloured, stained or foxed/  
Pages décolorées, tachetées ou piquées

Pages detached/  
Pages détachées

Showthrough/  
Transparence

Quality of print varies/  
Qualité inégale de l'impression

Continuous pagination/  
Pagination continue

Includes index(es)/  
Comprend un (des) index

Title on header taken from:/  
Le titre de l'en-tête provient:

Title page of issue/  
Page de titre de la livraison

Caption of issue/  
Titre de départ de la livraison

Masthead/  
Générique (périodiques) de la livraison

This item is filmed at the reduction ratio checked below/  
Ce document est filmé au taux de réduction indiqué ci-dessous.

10X	12X	14X	16X	18X	20X	22X	24X	26X	28X	30X	32X
										✓	

# Educational Weekly

VOL. I.

THURSDAY, JANUARY 15, 1885.

Number 3.

## REDUCTION IN PRICE OF STANDARD BOOKS ON TEACHING.

REDUCED TO \$1.25.

### FITCH'S LECTURES ON TEACHING.

"One of the most important educational treatises of the year."

LECTURES ON TEACHING. Delivered in the University of Cambridge. By J. G. Fitch, M.A. Sixth Edition. 12mo. 436 pp. \$1.25.

"This is eminently the work of a man of wisdom and experience. He takes a broad and comprehensive view of the work of the teacher, and his suggestions on all topics are worthy of the most careful consideration."—*New England Journal of Education*.  
 "This book indeed treats of practical subjects in a practical way.... The book is an excellent one, and no teacher can read it without being profited."—*Penn School Journal*.  
 "Mr. R. H. Quick says in *The Acad My*: 'Young teachers (and old teachers too) may learn much from this volume, but they may gain from it a still greater good—they may get a notion how much there is to learn.' The book is especially valuable to school superintendents, as it was addressed to a class of public masters."—*Illinois School Journal*.  
 "The lectures will be found most interesting, and deserve to be carefully studied not only by persons directly concerned with instruction, but by parents who wish to be able to exercise an intelligent judgment in the choice of schools and teachers for their children. For ourselves, we could almost wish to be of school age again, to learn history and geography from some one who could teach them after the pattern set by Mr. Fitch to his audience.... But perhaps Mr. Fitch's observations on the general conditions of school work are even more important than what he says on this or that branch of study."—*Saturday Review*.  
 "It comprises fifteen lectures, dealing with such subjects as organization, discipline, examining, language, fact knowledge, science and methods of instruction; and though the lectures make no pretension to systematic or exhaustive treatment, yet they leave very little of the ground uncovered, and they combine in an admirable way the exposition of sound principles with practical suggestions and illustrations, which are evidently derived from wide and varied experience, both in teaching and in examining."—*Scotsman*.

REDUCED TO FIFTY CENTS.

### CALDERWOOD ON TEACHING.

ON TEACHING: ITS ENDS AND MEANS. By HENRY CALDERWOOD, LL.D., F.R.S.E., Professor of Moral Philosophy in the University of Edinburgh. New edition, with additional chapter on Home Training. 16mo. 50 cts.

"For young teachers this work is of the highest value..... It is a book every teacher will find helpful in their responsible work."—*N. E. Journal of Education*.  
 "Eminently sensible and suggestive."—*Scotsman*.

### THEORY AND PRACTICE OF TEACHING.

By the REV. EDWARD THRING, M.A. 12mo. \$1.60.

"We hope we have said enough to induce teachers in America to read Mr. Thring's book. They will find it a mine in which they will never dig without some substantial return, either in high inspiration or sound practical advice. Many of the hints and illustrations given are of the greatest value for the ordinary routine work of the class-room. Still more helpful will the book be found in the weapons which it furnishes to the schoolmaster wherewith to guard against his greatest danger, slavery to routine."—*Nation*.

SOME THOUGHTS CONCERNING EDUCATION. By John Locke. With Introduction and Notes by the Rev. R. H. Quick, M.A., author of "Essays on Educational Reformers." 16mo. 90 cents.

"There is no teacher too young to find this book interesting; there is no teacher too old to find it profitable."—*School Bulletin*.

THE ELEMENTS OF THE PSYCHOLOGY OF COGNITION. By Robert Jardine, B.D., D.Sc. 12mo. \$1.50.

MACMILLAN & CO'S Educational Catalogue sent free by mail on application.

MACMILLAN & CO., 112 FOURTH AVE., NEW YORK.

WILL YOU WORK FOR US 2 HOURS a day? If so, send your name and address for our \$5.35 outfit FREE. Men, Women, Boys and Girls can all make \$3 to \$5 a day taking orders for us.

No One Need Want for Money or Work.

Send Quick or your Territory will be taken. PROF. MOODY, TORONTO.

#### AGENTS WANTED

In every town and county in Canada, for the popular and fast-selling New Portrait (in five colors) of SIR JOHN A. MACDONALD, in the full robes and insignia of a G.C.B. This is no caricature, but a fine likeness of the Canadian Premier. Retail Price, 12 x 18, 15 cents; 18 x 24, 25 cents. Terms liberal.

GRIP PUBLISHING CO., TORONTO.

#### BOOKS FOR TEACHERS

WELSH'S DEVELOPMENT OF ENGLISH LITERATURE AND LANGUAGE. Cr. 8vo. 2 vols in 1. 3050 pp. net \$3 00  
 SOULE'S DICTIONARY OF ENGLISH SYNONYMS. Cr. 8vo. 450 pp. net. 2 00  
 SKEATS' ETYMOLOGICAL DICTIONARY OF THE ENGLISH LANGUAGE. 3 00  
 BALDWIN'S ART OF SCHOOL MANAGEMENT. 1 50  
 ABBOTT & SEELEY'S ENGLISH LESSONS FOR ENGLISH PEOPLE. 1 00  
 CHAMBERS' ENCYCLOPEDIA. New Edition, 10 vols. Cloth. 70 00  
 Sent Free on Receipt of Price.

WILLIAMSON & CO (Late Willing and Williamson,) 5 King Street West, Toronto.

#### THE International Detective & Inquiry Agency

No. 55 & 57 Arcade Buildings, Yonge Street, Toronto, Ont.

The only Agency of the kind in Canada.

Missing Friends traced; Suspected Persons watched; Cases worked up by Experienced Detectives in any part of America; Witnesses found; Verbatim Reports of Trials made; Information given as to Reliability of Business Firms, etc. All business conducted with secrecy and dispatch. GEO. H. CANDLER, Manager.

AGENTS IN ALL PARTS OF THE WORLD.

#### SELBY & COMPANY

344 YONGE ST., TORONTO,

Publishers and Importers of Kindergarten Books and Material.

Diploma Awarded at Industrial Exhibition, Toronto 1884.

AGENTS FOR

WILH. HERMES' DRAWING COPIES,

"The Best Yet Published."

GOLD MEDALS:

London, Philadelphia, Sydney & Melbourne.

ELVINS & LEES,

#### ARCADÉ TAILORS

Have on hand a

Choice Selection of Seasonable Goods.

35 SOUTH GALLERY, Yonge Street Arcade, TORONTO.

# The Educational Weekly,

PUBLISHED BY

THE GRIP PRINTING AND PUBLISHING CO.,

SAMUEL J. MOORE, *General Manager.*

C. FRASER, *Business Manager Educational Weekly Dept.*

JOHN E. BRYANT, M.A., *Editor.*

## CONTENTS OF THIS NUMBER.

SHORTER EDITORIALS .....	33
SUMMARY OF NEWS.....	34
NOTES AND COMMENTS.....	34
LITERATURE AND SCIENCE.....	
Winstanley.....	36
The Fairy-land of Science.....	37
CURRENT EDUCATIONAL OPINION:	
Auxiliary Educationists. No. 11. The Right Rev. Bishop Strachan.....	38
Shorthand as a School Study.....	39
LONGER EDITORIALS:	
The Model School System.....	40
TABLE TALK.....	41
MUSIC.....	42
DRAMA.....	42
ART.....	42
PRACTICAL ART:	
Perspective (second paper).....	43
THE HIGH SCHOOL:	
University Studies.....	44
THE PUBLIC SCHOOL:	
Why not do it, Sir, To-day?.....	45
Moral Education the Great Want of the Age.....	45
REV. PETER PRESCOTT.....	45
Method of Teaching Execution in Writing.....	45
THE UNIVERSITY:	
The Basis of the Proposed Scheme of University Confederation.....	46
University of Toronto.....	47
University of Trinity College.....	47
University of Victoria College.....	47
EDUCATIONAL INTELLIGENCE.....	47
CORRESPONDENCE:—	
Grammar.....	48
EXAMINATIONS:	
Papers set at the Late Non-Professional Examinations, Toronto and Ottawa Normal Schools.....	48
Papers set for admission to High Schools.....	48

## TERMS OF SUBSCRIPTION.

Two Dollars per annum, in advance.

Business communications and communications intended for the Editor should be on separate papers.

ADDRESS—

EDUCATIONAL WEEKLY,  
GRIP OFFICE, TORONTO.

## TERMS OF ADVERTISING.

[NO DEVIATION.]

Number of insertions.....	1	5	13	25	50
Per line, each insertion.....	10c	9c	8c	7c	6c
One Column (17 lines).....	\$13 00	\$11 50	\$10 00	\$9 00	\$8 00
Half Page.....	19 00	17 00	15 00	13 00	11 00
Two Columns.....	24 00	22 00	19 00	17 00	15 00
One Page.....	33 00	30 00	27 00	24 00	20 00

Twenty per cent. advance on the above rates for preferred position, when specified.

Advertisements must be acceptable in every respect. Copy received until Tuesday noon.

**BENGOUGH'S SHORTHAND AND BUSINESS INSTITUTE.** Public Library, Building, Toronto. Shorthand, Type-writing, Business Forms, and Correspondence. Experienced and Practical Teachers. Thorough Tuition. Rates reasonable. THOS. BENGOUGH, (Official Reporter, York Co. Courts), Principal. GEO. BENGOUGH, Sec. MARY BENGOUGH, Type-Writing Supt.

## EDUCATIONAL WEEKLY CONTRIBUTORS.

The Editor begs leave to announce in this way to the patrons of the EDUCATIONAL WEEKLY, that they may expect during the year contributions upon educational topics of both general and special interests from many of the leading educators of the province.

Briefly he will state it to be that which he conceives to be best for the entire educational interests of the province. He begs leave to heartily thank all those who have promised to help him in any way, and respectfully solicits advice and contributions of interest from all who are engaged in any way in the work of education.

- T. C. L. Armstrong, M.A., LL.B., Barrister, Toronto.
- Rev. W. D. Ballantyne, M.A., Pembroke.
- W. H. Ballard, M.A., Inspector, Hamilton.
- John W. Bengough, Editor *Grip*, Toronto.
- Thomas Bengough, Shorthand Institute, Toronto.
- J. H. Brown, Professor of Visible Speech, Deaf and Dumb Institute, Belleville.
- P. H. Bryce, M.A., M.D., Secretary Provincial Board of Health.
- James Carlyle, M.D., Normal School, Toronto.
- Thomas Carscadden, M.A., Principal Collegiate Institute Galt.
- Rev. Principal Cameron, D.D., Knox College, Toronto.
- Geo. A. Chase, M.A., Head-master High School Ridgetown.
- Rev. Professor Clarke, Trinity College, Toronto.
- W. Cruikshank, Principal, Ontario School of Art, Toronto.
- J. Dearness, Inspector, East Middlesex, London.
- W. G. Eakins, M.A., *The Mail*, Toronto.
- L. E. Embree, M.A., Principal, Collegiate Institute, Whitby.
- J. H. Farmer, M.A., Classical Master, Woodstock College.
- W. H. Fraser, M.A., Modern Languages Master, Upper Canada College.
- W. B. Geikie, M.D., F.R.C.S., Dea, Trinity College Medical School.
- J. C. Glashan, Inspector, Ottawa.
- Goodwin Gibson, M.A., Barrister, Toronto.
- Rev. Principal Grant, D.D., LL.D., Queen's College, Kingston.
- John Henderson, M.A., Principal, Collegiate Institute, St. Catharines.
- John George Hodgins, LL.D., Deputy Minister of Education, Toronto.
- William Houston, M.A., Librarian to the Legislative Assembly.
- S. Hughes, English Master, Collegiate Institute, Toronto.
- W. H. Huston, M.A., Principal, Pickering College.
- M. J. Kelly, LL.D., Inspector, Brantford.
- Thomas Kirkland, M.A., M.D., Principal, Normal School, Toronto.
- I. M. Levan, M.A., Principal, Collegiate Institute, St. Mary's.
- Robert Little, Inspector, County Halton, Acton.
- Rev. Professor MacLaren, Knox College, Toronto.
- C. F. McGillivray, M.A., Head Master, High School, Fergus.
- T. M. McIntyre, M.A., LL.B., Principal, Ladies' College, Brantford.
- W. Mulock, M.A., Barrister, Vice-Chancellor University of Toronto.
- Rev. Principal Nelles, D.D., LL.D., Victoria College, Cobourg.
- Wm. Oldright, M.A., M.D., Provincial Board of Health, Toronto.
- A. Pirshaw, M.A., LL.D., Head Master, High School, Port Hope.
- W. J. Robertson, M.A., Mathematical Master, Collegiate Institute, St. Catharines.
- Rev. Principal Sheraton, D.D., Wycliffe College, Toronto.
- H. B. Spotton, M.A., Principal, Collegiate Institute, Barrie.
- John Squair, M.A., Lecturer, Modern Languages, University College, Toronto.
- James Turnbull, M.A., Head Master, High School, Clinton.
- W. Tytler, M.A., Head Master, High School, Guelph.
- Homer Watson, A.R.C.A., Member of the Ontario Society of Artists, Doon.
- J. E. Weherell, M.A., Principal, Collegiate Institute, Strathroy.
- W. Williams, M.A., Principal, Collegiate Institute, Collingwood.
- President Wilson, LL.D., University College, Toronto.
- N. Wolverson, M.A., Principal, Woodstock College.
- Samuel Woods, M.A., Principal, Ladies' College, Ottawa.

## "HARTLAND'S" Anti-Typhoid Compound

This preparation is especially prepared for the prevention of attacks of Typhoid, Intermittent Fevers, and Fevers of malarial type. Prompt results will follow its use when taken before the system is reduced. Its action on the stomach is that of a gentle and harmless tonic, exciting into action the organs of digestion, while its principal purpose is to invigorate the organs which are the actual filters of all that is taken into the system. In all cases where certain stimulation is necessary this Compound will be found invaluable. It is put up in 50 cents and \$1.00 bottles. Sent to any address on receipt of price. Call at 19 Adelaide Street East, or address

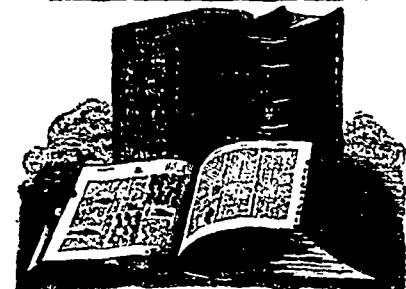
The Hartland Chemical Co.

27 Wellington St. East, Toronto.

Please mention this paper.

## WEBSTER

In Sheep, Russia and Turkey Bindings.



Supplied at small extra cost with DENISON'S PATENT REFERENCE INDEX.

The latest edition has 3000 more words in its vocabulary than are found in any other Am. Dict'y and nearly 3 times the number of Engravings. An invaluable companion in every library and at every fireside.—*Toronto Globe.*

Should be in every school in the Dominion.—*Ontario Educational Monthly, Toronto.* Best Dictionary of the language.—*London Times.*

THE STANDARD.

GET THE BEST Webster—it has 118,000 words, 3000 Engravings, and a New Biographical Dictionary. Standard in Gov't Printing Office. 32,000 copies in Public Schools. Sale 20 to 1 of any other series. Said to make a Family Intelligent. Best help for SCHOLARS, TEACHERS and SCHOOLS.

Standard Authority with the U. S. Supreme Court. Recommended by the State Super'ts of schools in 30 States, & by 50 College Pres'ts. G. & C. MERRIAM & CO., Publ'rs, Springfield, Mass.

## CARSKELL & CO. BINDING

Neatly and Promptly done.

HARPER'S, CENTURY, LONG-MAN'S, LONDON SOCIETY, QUEEN, LITTLE'S LIVING AGE, THE WEEK, FRANK LESLIE, EDINBORO' FORTNIGHTLY, ST. JAMES AND WESTMINSTER REVIEWS, BELGRAVIA, ETC.

## BINDERS & CO.

26 & 28 ADELAIDE E.,

And St. Giles St., Edinburgh.

A great chance for Agents, Farmers' Sons, School Teachers, and others to make money. Ten dollars a day paid. We stand ahead, and take the lead on all other tea houses in Canada, and offer agents the best chance ever known to make money. Our system is entirely new. For full particulars address the Canada Pacific Trading and Importing Company, (wholesale tea and coffee Importers) 120 Bay Street, Toronto. (Enclose 3c. stamp for reply.)

## NORMAL SCHOOLS.

The Normal Schools, Toronto and Ottawa, will re-open Tuesday, 20th January. Education Dept., January 7th, 1885.

# The Educational Weekly.

TORONTO, JANUARY 15, 1885.

THE MEMORANDUM of the Minister of Education to the governing bodies of the different universities and colleges that are included in the proposed scheme of university confederation, which we give in another column, is the most important educational document that has appeared in our times. It is the agreement which has been arrived at by the Minister of Education representing the Government of Ontario, and the accredited representatives of the University of Toronto, University College, Queen's University, Victoria University, Trinity University, Knox College, St. Michael's College, Wycliffe College, and McMaster Hall—a *basis of confederation*, or agreement contemplating the establishment of one grand Provincial University, with a cluster of magnificent colleges around it, providing for the completest academic training, the highest type of collegiate influence, the granting of scholastic honors of indubitable value, and the training of the flower of the youth of our country within halls, and amid associations that will guarantee, as far as human contrivances can guarantee, the establishing of principle, and the development of character in the best possible way. We confess to an enthusiasm which can hardly be kept in check;—it *would not* be kept in check were it not for the fear—a fear that dashes the ardor of every thought,—that, through the prejudice, or mistaken conscientiousness, or caprice, or selfishness of *some one*, this grand scheme, so big with possibility, may even yet fail.

AN excellent feature of the scheme is its extreme adaptableness and practicableness. Each denomination may go on devoting its money as it pleases:—this one to the maintenance of a theological institution alone; another, more wealthy, to the maintenance not only of a theological school, but of a complete faculty of arts also. But there it will be—close beside the central institution; and if at any time it prefers to avail itself of the resources of the Provincial University, and use the saving for any other purpose, it may do so.

BUT the central beauty of the scheme is that it preserves the autonomy of each federating institution, and therefore, perfectly does away with the danger of divorcing higher education from training of the moral faculties, and an inculcation upon the minds of students of the truths of Christianity. Each college may lay down what

course of moral instruction and Christian teaching it pleases, and demand from its students whatever examination in the subjects of this course it pleases; and, moreover, it may derive from the Provincial Senate that such examination shall be accepted by the Senate as an equivalent for examination in some purely secular subject, thus securing religious and moral instruction as an integral part of higher education. And in addition, each college can maintain over its students what discipline it pleases, and throw around them what influences of life and character it may possess.

THERE can be little doubt that the scheme, if adopted, will be followed by an increase of college residences. The residence system, is in our belief, necessary to the full attainment of the benefits of college life. It, as nothing else can, develops and strengthens character: but rightly or wrongly, according to the residential government, Knox College has always maintained its residence, and the result is that the Knox students have a character unmistakably loyal to their church, and to the principles of their church. Of St. Michael's the same may be said. Of McMaster and Wycliffe, though newer institutions, as far as we have had opportunity of judging, it can be said that their founders were wise in including residences within them. Trinity, if it joins the confederation, will retain its residence system also; not merely as a convenient appendage, but as the very life and heart of itself. If Victoria comes in, it must in self preservation, erect and maintain a residence. The Methodist students at the present University of Toronto have never had the same loyalty to their church institutions, the same *esprit du corps*, as the students attached to other churches. The reason has been not from insufficient numbers, but from a lack of anchorage, and from that sense of homelessness, that feeling of being adrift from authority, which the want of a residence of their own certainly inspired in them. Queen's, if it comes, will also establish a residence. An alumnus of Queen's would feel that his *Alma Mater* were no more if her resident system were abandoned. University College residence will have to be enlarged. To destroy it would be to deprive students who can not find entrance into some one of the denominational colleges, of the influences and training that resident life gives. It is so small that to make it pay its own way, causes it to be very expensive, while so large is the whole number of students attending that its influence is limited, and

it provokes a party feeling which neutralizes the good it otherwise might do.

AN important feature in the basis is the virtual promise of the Government to enlarge its support of higher education, now languishing for lack of funds. The basis makes a more liberal provision for the teaching of subjects to be taken in University College than ever yet has been made, and the University College Staff with the University Professoriat will constitute a teaching body quite worthy of the Province. The confederating colleges can each furnish a staff the equivalent of that in University College, and the University Professoriat will as much form the complement of their staffs, as of the staff of University College.

THE Senate of the University of Toronto has with perfect unanimity accepted the basis, and has pledged itself to do "everything in its power to make it a success." The words are simple but their meaning is full.

THE Board of Regents of Victoria University have not adopted the scheme in its entirety, but have accepted it with amendments. The principal feature of the amendments is that the confederating colleges shall receive compensation for their losses incident to removal to Toronto. This refers particularly to Queen's and Victoria. These institutions must remember that if the Government should compensate them for their losses by buying their present buildings, or otherwise, they could no longer expect to enter Confederation as partners-at-will, having the right to retire and exercise once more their degree-conferring powers, which, for a while, they hold in abeyance.

BUT logically the position taken by Victoria is correct. There were reasons for the establishment of Victoria and of Queen's, which rose from the unfair legislation of the day. Victoria and Queen's have each a moral claim on the Government for compensation; but if they once accept it they ought not to be allowed to retire, at their own motion, from the proposed Confederation, which cannot be accomplished unless with great expense on the part of the Government. On the other hand, the authorities of Queen's and Victoria are morally bound to restore to the donors, the sums paid by them for the erection of their buildings, in every case where the donation was conditional upon the University site being unchanged.

KNOX COLLEGE and Wycliffe College have each accepted the basis.

## Summary of News.

ON the seventh it was reported that Germany wished to exchange Angra Pequena, and the rest of the territory Germany claims on the east coast of Africa, in exchange for Heligoland.

FRANCE claims the left bank of Stanley Pool, in Africa, and demands that the African Association shall cede all its stations on the Upper and Middle Niari.

THE *Neue, Prussische Zeitung*, in an officially inspired article, says the day is now near at hand when the Panama and Nicaragua questions, which are essentially of international interest, should be regulated by an international conference like that now regulating Congo. In all that concerns Panama and Nicaragua Germany has quite as important interests at stake as England or France.

THE Cabinet Council on the 7th decided to extend Bechuana frontier to the north-east and west, to include both banks of the Fish river. This cuts the Transvaal off from the chance of German connection. The Transvaal Government is preparing to protest against English annexations in Zululand.

THE framework of the new Congo State Constitution is declared to be based upon the principles of English Colonial administration—there being a governor and three deputy governors, one for each of the proposed districts. The seat of Government will be Brussels. King Leopold has already expended five millions in forwarding the work of the African International Association, and promises to bestow upon it a yearly endowment of \$200,000. During the sitting of the Conference to-day Kisson repeatedly expressed the desire of America, that the rights of the aborigines should be respected.

THE dispute as to the ownership of St. Lucia Bay has dropped out of sight. Bismarck does not encourage Luderitz, who claims to have purchased the bay, to expect other than British protection.

A BRITISH Congo company has been formed with a capital of £2,500,000.

BISMARCK's request to the Reichstag for money to support his colonial policy has been refused, notwithstanding his success in acquiring Angra Pequena. He wishes a dissolution, but the emperor is unwilling to grant it.

BISMARCK, in his address to the Reichstag on the 10th, said:—"There is nothing on the tapis that can lead to a dissension with England. I cannot see why England should ever threaten war with Germany. Our little differences with England can always be settled peaceably with a little good will."

THE news from Korti on Jan. 6th was that the troops had accomplished the march from Korti to Gakdul wells, a distance of 97 miles, in 65 hours. The wells on the road had been deserted. The natives reported that the Mahdi was terrified at the English advance.

LORD BERESFORD's naval brigade had arrived, and were to go across the desert with the troops, and on arrival at Metamneh well would man Gordon's steamers. Prison-

ers said that the Soudanese had held Gakdul well till they heard of the near approach Gen. Stewart, but that the Mahdi would to make a stand at Metamneh well.

OSMAN DIGMA has been ordered by the Mahdi to remain near the coast to prevent a British advance from Suakim.

THE following telegram has been received in London from Gen. Wolseley, dated Korti, Jan. 7:—"A strong convoy is leaving camp for Gakdul. Gen. Stewart will take another to-morrow for Metamneh, which we expect to occupy by the 15th. If a steamer is found there we shall communicate with Gen. Gordon without delay."

ON the 8th a telegram from Gen. Wolseley stated that Gen. Stewart and his force had started for Metamneh, hoping to reach it by the 16th. Metamneh is on the west bank of the Nile, above Shendi.

GENERAL WOLSELEY telegraphed to the war office on the 11th that he had heard from Gen. Gordon so late as the 28th. At that time Gordon was well and confident.

GEN. WOLSELEY telegraphs the Prince of Wales that he will reach Khartoum on Jan. 24. He also telegraphs to the Government for 3,000 troops to be sent to Suakim to operate against Osman Digma and open the Berber route. Wolseley expects hard fighting at Khartoum.

GEN. STEWART will start from Gakdul on Monday, the 17th, with 2,000 men to march to Metamneh, near Shendi. The Mahdi's lieutenant opposed to Gen. Stewart has been reinforced by tribes sent by Osman Digma from the Eastern Soudan, raising the number of his followers to 8,000. The odds are not considered formidable.

A DISPATCH on Tuesday says that when Gen. Stewart's force reaches Metamneh several officers will be sent to Khartoum to consult with Gen. Gordon on the plan of action to be pursued.

SIX thousand French troops leave for Tonquin this week, 6000 more in February. Gen. Courcy joins Gen. De Lisle at Tonquin to act in concert with him.

LATE telegrams from China state the Chinese are hopeful of tiring out the French, and of ultimately winning.

ON Thursday the 8th, it was reported that Mr. Donald Cameron, of Lochiel, the great Highland landowner and member of Parliament, had called a conference of landlords to consider the demands of the crofters. A number of landlords favour concessions.

PRINCE BISMARCK, who had intended going to Italy for a rest, has been asked by the Emperor to remain at his post. The Emperor deems his death possible at any moment, and is certain he cannot live a year. As immense preparations have been made all along the proposed route to honour the Prince, great disappointment is felt.

THE Marquis of Salisbury, the Conservative leader, has written a letter, in which he condemns the Government for vacillating foreign and colonial policy. The nation, he says, finds itself opposed by a European coalition, and the colonies are justly dissatisfied at the Government's failure to prevent Germany from annexing contiguous territory.

## Notes and Comments.

OUR Kindergarten department has been crowded out this number.

WE understand that Mr. Robinson, whom many of our readers will remember as the Principal of Whitby Collegiate Institute, is not only manager, but editor-in-chief of the new *Presbyterian Review*. Mr. Robinson assures us that the success of the *Review* is undoubtedly assured.

MISS JEAN INGELOW, the author of *Winstanley*, was born at Ipswich about 1830. She has written many tales for children highly poetical in their composition. She has also published several volumes of poems. Her poetry, which is pure and tender, deals with the affections and with nature, especially the moods and influences of the sea. Her *Songs of Seven* are widely known.

WE have received the January number of the *V. P. Journal*, conducted, we believe by a committee of the Science Association of Victoria College, an association composed of graduates and undergraduates of Victoria University. It is manly and outspoken in its utterances. Its tonic effect is excellent. It is largely devoted to science, but we have read with pleasure its critical articles, and especially its article, *The University Problem*, with much of which we agree.

WE should like to have for insertion a few good examination papers in English, especially such as would tend to make the study of English of a practical, experimental kind, and to promote personal effort. That teaching is best which induces the pupil to think for himself; to compare, judge, discriminate and invent for himself; that which stimulates his imagination and arouses his curiosity. Will some of our teachers send us such papers? we wish a few for every grade of class.

WITH this number we conclude the series of articles on *Moral Education*, fearing they may tire our readers, but with great regret; for we believe the book from which the articles were taken to be of the most practical kind possible; and its method such as any teacher can use with most valuable results. We may make another extract from it in the future to illustrate its method, but in the meantime we commend it most heartily to all teachers. The name is *Moral Education for Schools*, by the Rev. Peter Prescott. The book and its method have received endorsement from no less an authority than John Bright, the celebrated English orator and parliamentarian.

WE have received the latest issue of the *School Supplement*, which in appearance surpasses any paper of its kind that we know of. No journalistic enterprise in Canada has

ever had such a pronounced success in so short a time. The subscribers of the *Supplement* come from every State in the Union, from England, Ireland, Scotland and Wales, as well as from all the provinces of Canada. Messrs Eaton & Gibson, who, by the way, are young, plucky Canadians, and not an old firm of American capitalists as some have supposed, are thinking somewhat of moving their head-quarters to New York, to be more nearly in the centre of their territory; but we hope that they will remain in Toronto.

WE especially request all who can contribute items of educational news to send them to us. What we want to get and what our readers desire is information concerning schools and colleges, and teachers of every rank. Short, crisp, fresh items of *general* interest. And so, readers, please send them in,—on separate pieces of paper, if possible,—with all names of places and persons plainly written. Or if you do not care to write items yourselves, clip out of your local papers any educational items of general interest that may be in them and send them to us. Any thing that will tend to bring the members of the profession into a closer acquaintance with each other, accounts of the erection of new school-buildings, the promotion or changes of teachers, presentations made by pupils, &c., &c.—these are the things our readers want. But be brief, send only the essential facts.

THIS paper, this week, will be sent to every educator in the Province, whose name can be secured, a total number of many thousands. If all the members of this vast host could be brought to use their influence in favour of university confederation, what a mighty power it would be! But from the highest to the lowest, every man and every woman whose life is given to education has an influence that *can* be exerted. Public opinion is to be formed, public feeling is to be aroused. Then, too, it may be that prejudices are to be explained away. The Government and Legislature will not act unless the people will sustain them. Let then each educator do something towards convincing our legislators that public conviction and sentiment will sustain them in making the basis, or some reasonable modification of it, a substantial thing, a veritable act of the Legislature.

THE county teachers' associations in some of the States are breaking in upon their ordinary unintellectual routine of work in a most praiseworthy way. The association lays out a course of reading, for three months, for six months, or for a year, according to the frequency of their meetings. Each person taking the course is provided with a set of blanks, one for each book to be read, containing a set of questions, one set for each book, and the blanks are filled in, and the answers are either read and valued by a committee ap-

pointed for that purpose, or selections from them are made and read and criticised in open session. The course comprises sometimes two, sometimes three years. The following course has been adopted by Belmont County in Ohio:—First Year—Page's *Theory and Practice of Teaching*, Ohio School Laws, Green's *History of England*, Trench on *Word*, *The Merchant of Venice*, and *Evangeline*. Second Year—Hewitt's *Pedagogy*, Ancient History, *Hamlet*, Pope's *Essay on Man*, selections from Bacon and Locke, and Andrew on the United States Constitution.

THE great importance of the University question, and the room which we have given to the reports of the meetings of university authorities, have necessarily excluded from this issue important matters relating to the public schools, which we hope to insert next week. Just as we go to press we learn, with no surprise, however, that Queen's University has rejected the basis. To the reason assigned, viz.: that it is not good to centralize all the institutions for higher education, we do not attach much importance. In fact, we believe it not only an insufficient reason, but a wrong and untenable ground altogether. We think, however, that unless the Government can in some way compensate Queen's for the loss of her buildings should she come to Toronto, her plain duty is to remain in Kingston. We should be very sorry, however, if Queen's would not enter the confederation, even remaining where she is. Her representation in the senate, by reason of their number, dignity, and influence, would secure for her every necessary protection. An arrangement could be made by which the University examinations could be held in her own halls. The University curriculum can, without trouble, be made sufficiently flexible to meet all just demands of an outlying college. But we confess that we cannot see how Queen's can save herself from loss, both of money and position, if she does not join her sister colleges in building up one undoubtedly superior institution for higher education,—that is from loss ultimately.

The January number of the *Ohio Educational Monthly*, is to hand. Its leading article is on *The County Institute of the Future*, by Superintendent Duff. This Institute of the Future, he states, will be a session of four weeks in vacation, devoted entirely to the discussion and exemplification of methods in elementary instruction, and conducted entirely by the teachers of the county. He instances certain counties where the attendance (voluntary) has included nearly all the teachers of the county. We quote his concluding sentences, which not only give the gist of his opinions, but also illustrate his style, which is of that prevalent American sort which we cannot say

we should like to see common in Canada, but which at any rate has the merit of being thoroughly readable:—

To my mind these figures are significant. An institute lasting half the summer, and involving extraordinary expense and time, enrolling ten per cent. more members than one as free as the milk and honey of old Canaan, and under the especial patronage of the powers that make and unmake county teachers, must represent solid worth. Such an institute, fellow-teachers, so arranged as to give the largest amount of personal instruction in the common branches; with enough of the old lecture method ingrafted to furnish ample methods of government, and to present the most improved plans of teaching—such an institute, I believe, will be the institute of the future. That this future may be speedily realized is the wish of a large body of earnest teachers who, Tantalus like, ever thirsty, make the annual pilgrimage up to the institute waters, only to find those waters recede from them with every attempt to quench their thirst.

THE remainder of Mr. Watson's article on *The Value of Drawing to the Public School Pupil* is unavoidably held over till the next number. We may say that in it Mr. Watson is taking the most utilitarian view of the value of drawing; certainly not from choice, but because he deems its value can be proven even to those who take the lowest ground in judging of any mental accomplishment. Mr. Watson would rather have discussed the question of drawing as related to art, and therefore as being a necessary part of that higher culture by which alone man gains a knowledge of the meaning of the spiritual side of nature. Mr. Watson is one of our most effective landscape painters. His work has received the praise of the highest critical authorities that have seen it. He is to be congratulated, too, on his more material success, having received several commissions of great worth. He is now making arrangements for leaving Canada for a time to study amid the masterpieces of the old world.

WE are very thankful indeed, both to the press and to private individuals for the very many kind words in favor of the EDUCATIONAL WEEKLY which have been sent to us. We are no less thankful for advice tendered to us both from personal friends, and from people quite unknown to us. It is our desire to make the paper useful to every branch of the profession and we shall be glad to receive thoughts, hints, views, statements, etc., of which we can make use to help attaining this end. We subjoin one of the notices which the WEEKLY has received:—

THE EDUCATIONAL WEEKLY.—We have received the first number of this paper, published in Toronto, and edited by Mr. J. E. Bryant, late Principal of the Galt Collegiate Institute. It presents a very handsome and attractive appearance. The matter is well arranged and the contributions, both original and selected, are by well-known and able writers on the subject of education. The editor is frank and outspoken in defining his position, which is to make the whole educational work of the Province, without regard to sectional or any other interests, the subject of his observation and criticism. Judging by this first number we are pretty safe in saying that the EDUCATIONAL WEEKLY is likely to become the leading authority and censor on all matters affecting education in Ontario. We wish it every success.—*Guelph Mercury*.



## Literature and Science.

### WINSTANLEY.

JRAN INGBLOW.

THE Eddystone rocks are situated fourteen miles south-west of Plymouth. They are daily submerged by the tide, but the water is very deep around them—hence they formerly were the cause of many shipwrecks. Mr. Winstanley commenced the erection of his lighthouse (which was of wood) in 1696, and in 1698 it was built to the height of 80 feet, and the first light was shown. In 1700 the height was raised to 120 feet. In a great storm on 20th Nov., 1701, it was completely washed away and Winstanley with it. Subsequently a Mr. Rudger erected another tower also of wood, with a stone base. This erection was burned in 1755. In 1759 Mr. Smeaton, a celebrated architect, completed what was for more than a century known as *the Eddystone lighthouse*. It was built upon the model of an oak tree. In 1878 it had become somewhat unstable, so as to crumble with the concussion of the waves. In 1882 the present tower was completed by Mr. Douglass.

WINSTANLEY'S deed, you kindly folk,

With it I fill my lay,

And a nobler man ne'er walked the world,

Let his name be what it may.

The good ship Snowdrop tarried long ;

Up at the vane looked he ;

"Belike," he said, for the wind had dropped,

"She lieth becalmed at sea."

The lovely ladies flocked within,

And still would each one say,

"Good mercer, be the ships come up?"—

But still he answered, "Nay."

Then stepped two mariners, down the street,

With looks of grief and fear ;

"Now, if Winstanley be your name,

We bring you evil cheer !

"For the good ship Snowdrop struck—she struck

On the rock—the Eddystone,

And down she went with threescore men,

We two being left alone.

"Down in the deep with freight and crew,

Past any help she lies,

And never a bale has come to shore

Of all thy merchandise.

"For cloth o' gold and comely friere,"

Winstanley said and sighed,

"For velvet coif, or costly coat,

They fathoms deep may hide.

"O thou brave skipper, blithe and kind,

O mariners, bold and true,

Sorry at heart, right sorry am I,

A-thinking of yours and you.

"Many long days Winstanley's breast

Shall feel a weight within,

For a waft of wind he shall be feared,

And trading count but sin.

"To him no more it shall be joy

To pace the cheerful town,

And see the lovely ladies gay

Step on in velvet gown."

The Snowdrop sank at Lammas tide,

All under the yeasty spray ;

On Christmas Eve the brig Content

Was also cast away.

He little thought o' New Year's night,

So jolly as he sat then,

While drank the toast and praised the roast

The round-faced Aldermen,—

He little thought on Plymouth Hoe,

With every rising tide,

How the waves washed in his sailor lads

And laid them side by side.

There stepped a stranger to the board ;

"Now, stranger, who be ye?"

He looked to right, he looked to left,

And "Rest you merry," quoth he.

"For you did not see the brig go down,

Or ever a storm had blown,

For you did not see the white wave rear

At the rock—the Eddystone.

"She drave at the rock with sternsails set,

Crash went the masts in twain ;

She staggered back with her mortal blow,

Then leaped at it again.

"There rose a great cry, bitter and strong ;

The misty moon looked out !

And the water swarmed with seamen's heads,

And the wreck was strewed about.

"I saw her mainsail lash the sea,

As I clung to the rock alone ;

Then she heeled over, and down she went,

And sank like any stone.

"She was a fair ship, but all's one !

For naught could bide the shock."—

"I will take horse," Winstanley said,

"And see this deadly rock.

"For never again shall bark o' mine

Sail o'er the windy sea,

Unless, by the blessing of God, for this

Be found a remedy."

Winstanley rode to Plymouth town

All in the sleet and snow ;

And he looked around on shore and sound,

As he stood on Plymouth Hoe.

Till a pillar of spray rose far away,

And shot up its stately head,

Reared, and fell over, and reared again ;

"'Tis the rock ! the rock !" he said.

Straight to the Mayor he took his way ;

"Good Master Mayor," quoth he,

"I am a mercer of London town,

And owner of vessels three.

"But for your rock of dark renown,

I had five to track the main."—

"You are one of many," the old Mayor said,

"That of the rock complain,

"An ill rock, mercer ! your words ring right,

Well with my thoughts they chime,

For my two sons to the world to come,

It sent before their time."

"Lend me a lighter, good Master Mayor,

And a score of shipwrights free ;

For I think to raise a lantern tower

On this rock o' destiny."

The old Mayor laughed, but sighed also ;

"Ah, youth," quoth he, "is rash,

Sooner, young man, thou'll root it out

From the sea that doth it lash.

"Who sails too near its jagged teeth,

He shall have evil lot ;

For the calmest seas that tumble there

Froth like a boiling pot.

"And the heavier seas few look on nigh,

But straight they lay him dead ;

A seventy-gun ship, sir !—they'll shoot

Higher than her mast-head.

"Oh, beacons sighted in the dark,

They are right welcome things,

And pitch-pots flaming on the shore

Show fair as angel wings.

"Hast gold in hand ? then light the land,

It 'longs to thee and me ;

But let alone the deadly rock

In God Almighty's sea."

Yet said he, "Nay,—I must away,

On the rock to set my feet ;

My debts are paid, my will I made,

Or ever I did thee greet.

If I must die, then let me die

By the rock, and not elsewhere ;

If I may live, oh let me live

To mount my lighthouse stair."

The old Mayor looked him in the face,

And answered, "Have thy way ;

Thy heart is stout, as if round about

It was braced with an iron stay.

"Have thy will, mercer ! choose thy men,

Put off from the storm-rid shore ;

God with thee be, or I shall see

Thy face and theirs no more."

Heavily plunged the breaking wave.

And foam flew up the lea ;

Morning and even the drifted snow

Fell into the dark grey sea.

Winstanley chose him men and gear ;

He said "My time I waste,"

For the seas ran seething up the shore,

And the wrack drave on in haste.

But twenty days he waited and more,

Pacing the strand alone,

Or ever he set his manly foot

On the rock,—the Eddystone.

Then he and the sea began their strife,

And worked with power and might ;

Whatever the man reared up by day

The sea broke down by night.

He wrought at ebb with bar and beam,

He sailed to shore at flow ;

And at his side by that same tide,

Came bar and beam also.

"Give in, give in," the old Mayor cried,

"Or thou wilt rue the day"—

"Yonder he goes," the townfolk sighed,

But the rock will have its way.

"For all his looks that are so stout,

And his speeches brave and fair,

He may wait on the wind, wait on the wave,

But he'll build no lighthouse there."

In fine weather and foul weather

The rock his arts did flout,

Through the long days and the short days,

Till all that year ran out.

With fine weather and foul weather

Another year came in ;

"To take his wage," the workmen said,

"We almost count a sin."

Now March was gone, came April in,  
 And a sea-fog settled down,  
 And forth sailed he on a glassy sea,  
 He sailed from Plymouth town.

With men and stores he put to sea,  
 As he was wont to do :  
 They showed in the fog like ghosts full faint,—  
 A ghostly craft and crew.

And the sea-fog lay and waxed away,  
 For a long eight days and more ;  
 " God help our men," quoth the women then ;  
 " For they hide long from shore."

They paced the Hoe in doubt and dread ;  
 " Where may our mariners be !"  
 But the brooding fog lay soft as down  
 Over the quiet sea.

A Scottish schooner made the port,  
 The thirteenth day at e'en ;  
 " As I am a man," the captain cried,  
 " A strange sight I have seen :

" And a strange sound heard, my masters all,  
 At sea, in the fog and the rain,  
 Like shipwrights' hammers tapping low,  
 Then loud, then low again.

" And a stately house one instant showed,  
 Through a rift on the vessel's lea ;  
 What manner of creatures may be those  
 That build upon the sea ?"

Then sighed the folk, " The Lord be praised !"  
 And they flocked to the shore again :  
 All over the Hoe that livelong night,  
 Many stood out in the rain.

It ceased ; and the red sun reared his head,  
 And the rolling fog did flee ;  
 And, lo ! in the offing faint and far  
 Winstanley's house at sea !

In fair weather with mirth and cheer  
 The stately tower uprose ;  
 In foul weather with hunger and cold  
 They were content to close ;

Till up the stair Winstanley went,  
 To fire the wick afar ;  
 And Plymouth in the silent night  
 Looked out and saw her star.

Winstanley set his foot ashore ;  
 Said he, " My work is done ;  
 I hold it strong to last as long  
 As aught beneath the sun.

" But if it fail, as fail it may,  
 Borne down with ruin and rout,  
 Another than I shall rear it high,  
 And brace the girders stout.

" A better than I shall rear it high,  
 For now the way is plain ;  
 And though I were dead," Winstanley said,  
 " The light would shine again.

" Yet were I fain still to remain,  
 Watching my tower to keep,  
 And tend my light in the stormiest night  
 That ever did move the deep ;

" And if it stood, why then 'twere good,  
 Amid their tremulous stirs,  
 To count each stroke when the mad waves broke,  
 For cheers of mariners.

" But if it fell, then this were well,  
 That I should with it fall ;  
 Since, for my part, I have built my heart  
 In the courses of its wall.

" Ay ! I were fain, long to remain,  
 Watch in my tower to keep,  
 And tend my light in the stormiest night  
 That ever did move the deep."

With that Winstanley went his way,  
 And left the rock renowned,  
 And summer and winter his pilot star  
 Hung bright o'er Plymouth Sound.

But it fell out, fell out at last,  
 That he would put to sea,  
 To scan once more his lighthouse tower  
 On the rock o' destiny.

And the winds broke, and the storm broke,  
 And wrecks came plunging in ;  
 None in the town that night lay down  
 Or sleep or rest to win.

The great mad waves were rolling graves,  
 And each flung up its dead ;  
 The seething flow was white below,  
 And black the sky o'erhead.

And when the dawn, the dull, gray dawn,  
 Broke on the trembling town,  
 And men looked south to the harbor mouth,  
 The lighthouse tower was down ;

Down in the deep where he doth sleep,  
 Who made it shine afar,  
 And then in the night that drowned its light,  
 Set, with his pilot star,

Many fair tombs in the glorious glooms  
 At Westminster they show ;  
 The brave and the great lie there in state ;  
 Winstanley lieth low.

THE FAIRY LAND OF SCIENCE.

MISS A. B. BUCKLEY.

(Continued from last issue.)

THEN, again, you must learn something of the language of science. If you travel in a country with no knowledge of its language, you can learn very little about it ; and in the same way if you are to go to books to find answers to your questions, you must know something of the language they speak. You need not learn hard scientific names, for the best books have the fewest of these, but you must really understand what is meant by ordinary words.

For example, how few people can really explain the difference between a *solid*, such as the wood of the table ; a *liquid*, as water ; and a *gas*, such as I can let off from this gas-jet by turning the tap. And yet any child can make a picture of this in his mind, if only it has been properly put before him.

All matter in the world is made up of minute parts or particles ; and in a *solid* these particles are locked together so tightly that you must tear them forcibly apart if you wish to alter the shape of the solid

piece. If I break or bend this wood I have to force the particles to move round each other, and I have great difficulty in doing it. But in a *liquid*, though the particles are still held together, they do not cling so tightly, but are able to roll or glide round each other, so that when you pour water out of a cup on to a table, it loses its cup-like shape and spreads itself out flat. Lastly, in a *gas*, the particles are no longer held together at all, but they try to fly away from each other ; and unless you shut a gas in tightly and safely, it will soon have spread all over the room.

A solid, therefore, will retain the same bulk and shape unless you forcibly alter it ; a liquid will retain the same bulk, but not the same shape if it be left free ; a gas will not retain either the same bulk or the same shape, but will spread over as large a space as it can find wherever it can penetrate. Such simple things as these you must learn from books and by experiment.

Then you must understand what is meant by *chemical attraction* ; and though I can explain this roughly here, you will have to make many interesting experiments before you will really learn to know this wonderful fairy power. If I dissolve sugar in water, though it disappears it still remains sugar, and does not join itself to the water. I have only to let the cup stand till the water dries, and the sugar will remain at the bottom. There has been no chemical attraction here.

But now I will put something else in the water which will call up the fairy power.



Piece of Potassium in a basin of water.

Here is a little piece of the metal potassium, one of the simple substances of the earth ; that is to say, we cannot split it up into

other substances ; wherever we find it, it is always the same. Now, if I put this piece of potassium on the water it does not disappear quietly like the sugar. See how it rolls round and round, fizzing violently, with a blue flame burning round it, and at last goes off with a pop.

What has been happening here ?

You must first know that water is made of two substances, hydrogen and oxygen, and these are not merely held together, but are joined so completely that they have lost themselves and have become water ; and each atom of water is made of two atoms of hydrogen and one of oxygen.

Now the metal potassium is devotedly fond of oxygen, and the moment I threw it on the water it called the fairy "chemical attraction" to help it, and dragged the atoms of oxygen out of the water and joined them to itself. In doing this it also caught part of the hydrogen, but only half, and so the rest



was left out in the cold. No, not in the cold; for the potassium and oxygen made such a great heat in clashing together that the rest of the hydrogen became very hot indeed, and sprang into the air to find some other companion to make up for what it had lost. Here it found some free oxygen floating about, and it seized upon it so violently, that they made a burning flame, while the potassium, with its newly found oxygen and hydrogen, sank down quietly into the water as *potash*. And so you see we have got quite a new substance *potash* in the basin; made with a great deal of fuss by *chemical attraction* drawing different atoms together.

When you can really picture this power to yourself it will help you very much to understand what you read and observe about nature.

Next, as plants grow around you on every side, and are of so much importance in the world, you must also learn something of the names of the different parts of a flower, so that you may understand those books which explain how a plant grows, and lives, and forms its seeds. You must also know the common names of the parts of an animal, and of your own body, so that you may be interested in understanding the use of the different organs; how you breathe, and how your blood flows; how one animal walks, another flies, and another swims. Then you must learn something of the various parts of the world, so that you may know what is meant by a river, a plain, a valley, or a delta. All these things are not difficult, you can learn them pleasantly from simple books on physics, chemistry, botany, physiology, and physical geography; and when you understand a few plain scientific terms, then all by yourself, if you will open your eyes and ears, you may wander happily in the fairy land of science. Then wherever you go you will find:

"Tongues in trees, books in the running brooks,  
Sermons in stones, and good in everything."

(To be continued.)

## Educational Opinion.

### NOTED AUXILIARY EDUCATIONISTS.

II.—HON. AND RIGHT REV. BISHOP STRACHAN, D.D.

1.—*Bishop Strachan as an Educator.*

BISHOP Strachan, though not a versatile man, was in many respects a many-sided one. In his day he had to do with all of one great public questions which came before the country. On many of them (and in their settlement), he has left the impress of his active mind and persistent will. This was particularly the case in regard to those questions which more deeply touched the best interests of Canadian life, in its religious and social aspects.

And it was a singular yet characteristic fact, that the more he was opposed by those who differed *in toto* from the policy of his acts, the more strenuously he persevered in his purpose—even against the wiser counsels and calmer judgment of many leading public men of his time. But this opens up a question which it is not my purpose to discuss.

Dr. Strachan, as I have said,—although not versatile,—was a many-sided man. And this was quite true in regard to that department of his career which it is the purpose of this paper to illustrate. He was both an educator and an educationist. In the former capacity he was successively the parish schoolmaster, near St. Andrew's, and at Kettle, (Scotland). He had there as a pupil the afterwards celebrated Sir David Wilkie. In Canada, he was first a tutor in the family of the Hon. Richard Cartwright, at Kingston; then master of the Cornwall Grammar School, at which most of the distinguished public men of the Bishop's later years were educated. Subsequently he was Chairman of the Provincial Board of Education at York. He was named by the late Hon. Peter McGill as first Principal of McGill College, Montreal—although he never was in a position to undertake its duties. He was afterwards President of King's College, Toronto, and subsequently President of Trinity College University.

In his capacity as an educator, Dr. Strachan was considered one of the most successful teachers which this Province had yet produced. His aim was to call into active play the varied mental powers of his pupils, and to stimulate any desire which they had to excel in knowledge and virtue. One of his earliest *brochures* is a *Letter to his Pupils*, and was in the nature of an appeal on behalf of the Christian religion. This, he inscribed, "as a mark of esteem to Mr. Andrew Stuart and Mr. James Cartwright, students-at-law." This letter was printed at Montreal, in 1807, in the quaint old type of the time. It is evidently a warning appeal against the infidelity and excesses of the French revolutionists. In the opening portion of his letter he uses this emphatic language, (I make the quotation not only to show the character of the warning, against extravagant and irreligious zeal, given to his pupils, but also to exhibit a characteristic specimen of Dr. Strachan's vigorous style of writing in his younger days):

"The enemies of the Gospel by applying to the vanity of men and renouging in religion fashionable, have lately gained thousands of proselytes, who, with the zeal of new converts, are perpetually obtruding upon you their blasphemy and their doubts. . . . With shallow men the fashion is everything. . . . On this principle we account for those furious enthusiasts of the present day for undefined liberty and unrestrained licentiousness; a few centuries ago they would have been murderers of the Albigenses, and the promoters of the crusades. It was reserved for them to exhibit in this enlightened age the astonishing Phenomenon (*sic*) of men preaching humanity, liberality and toleration, while they are per-

secuting with violence; . . . these enthusiasts have not only rejected the doctrines [of Christianity] but the moderation, the charity, the piety it enjoins; . . . they dare to sneer and laugh at serious things, and utter terrible blasphemies without understanding them."

With a view to aid his pupils in the study of Arithmetic, Dr. Strachan prepared and published in 1809, "*A Concise Introduction to Practical Arithmetic, for the use of Schools.*" extending to 214 pages. In the introductory preface to the book, he said:—

"On my arrival in Kingston about ten years ago to superintend the education of a select number of pupils, I experienced much inconvenience from the want of school books. To supply this defect, I was under the necessity of compiling several treatises on different subjects, and among the rest, the following on Arithmetic." &c.

We thus learn incidentally that Dr. Strachan was amongst the first, if not the very first compiler of school text books in this Province.

It may be of interest to teachers of the present day to learn something of Dr. Strachan's method of teaching arithmetic. He explains it in the following words:—

"In a new country like this, a variety of branches must be taught in every respectable school. Young men . . . are anxious to get forward as fast as possible, and even those destined for the learned professions are seldom allowed the time requisite for acquiring the knowledge previously necessary. These considerations induced me to turn my thoughts to the discovery of some sure, and, at the same time, expeditious method of teaching arithmetic. This object I have accomplished with a much greater degree of success than I dared to promise myself:—

"I divide my pupils into separate classes according to their progress. Each class has one or more sums to produce every day, neatly wrought upon their slates. The work is carefully examined, after which I command every figure to be blotted out, and the sums to be wrought under my eye. The one whom I happen to pitch upon first gives, with an audible voice, the rule and reasons for every step, and as he proceeds the rest silently work along with him figure for figure, but ready to correct him if he blunder that they may get his place. As soon as this one is finished, the work is again blotted out and another called upon to work the question aloud as before, while the rest proceed along with him in silence, and so on round the whole class. . . . This method of teaching arithmetic possesses this important advantage, that it may be pursued without interrupting the pupils' progress in any other useful study. The same method of teaching Algebra has been used with equal success. Such a plan is certainly very laborious but it will be found successful, and he that is anxious to spare labour ought not to be a public teacher."

Desiring to give a local interest to the exercises in his book, Dr. Strachan gives several examples from Canadian subjects. Thus a question in addition reads:—

"From Quebec to Montreal is 180 miles—from thence to Kingston 200—from thence to York 149—from thence to Niagara 78 miles—from thence to Detroit 210. Required the distance from Quebec to Detroit. *Answer*—817 miles."

Again, a question in multiplication reads:—

"The distance from Quebec to Montreal is 180 miles; supposing the road 17 yards broad, how many square yards does it contain? *Answer*—5,385,600 yards."

After Dr. Strachan removed to York, forty-two of his old pupils united in present-

ing him in 1833 with a silver epergne valued at \$1,150, and an address of great warmth and affection. It was designed, as the donors stated, as "a memorial of their grateful recollection of his anxious and unwearied efforts to improve their minds, and to impress upon them sound moral and religious principles, and of the sincere and steady friendship which he has manifested for his pupils in their progress through life."

It was to the truth of this latter statement that the Bishop owed his unbounded influence over the leading men (chiefly his own pupils), by whom he was surrounded during the most important period of his life, and through whose aid he was enabled to carry out many of his projects—some of them distasteful to those not connected with his church, and even to many who were.

The principal signers of the address were Sir J. B. Robinson, Sir J. B. Macaulay, Very Rev. Dean Bethune, Right Rev. Bishop Bethune, Hon. Chief Justice McLean, Hon. Justice Jones, Hon. W. B. Robinson, Hon. G. S. Boulton, Rev. W. Macaulay, Judge (George) Ridout, Surveyor General Chewitt, Col. Gagy, Capt. Macaulay, R.A., Inspector General Markland, Sheriff McLean, Messrs. T. G. Ridout, P. Vankoughnet, S. P. Jarvis, J. Radenhurst, R. G. Anderson, R. Stanton, and others.

I shall refer to Bishop Strachan in his capacity as an educationist in my next paper.



**SHORTHAND AS A SCHOOL STUDY.**

SECOND PAPER.

In my first paper (Jan. 1) I used the term Shorthand as defining the method of representing the *sounds* of English words. This is another way of saying that the *letters* do not, as a rule, represent the sounds. The statement implies, however, that we must carefully ascertain the precise sounds to be represented: and with this point—phonetic analysis—I propose to deal in the present paper.

In order to ascertain the sounds in a word, the word must be pronounced slowly, and each element noted as sounded—the silent letters being lost entirely to the ear, as they should be to the eye. But these redundant letters being present to the eye of the pupil, that unsophisticated individual naturally infers that they mean something; and until he be taught that they do not, he will be confused and confounded in his endeavor to ascertain their precise significance. Therefore, every pupil should be taught at the very beginning of his studies that the present A B C alphabet of 26 presumptive, but of only

23 actual working, letters is defective, and consequently that there are many things that are contradictory and absurd in our orthography. If I had my way, I would give the pupil something in place of the three letters I take away, *c, q, x*, and add to his stock a sufficient number of new letters to thoroughly furnish him for what should be the simple task of representing on paper what he so easily sounds with the organs of speech. But if this radical work be not attempted, let the teacher at least be candid with the pupil in stating the deficiency in the alphabet; and let him also point out to the pupil the important fact that the deficiency being chiefly in the unobstructed or vowel elements, the present insufficient series—*a, e, i, o, u*, with sometimes *w* and *y*—are overburdened with work, and must double up and help each other in such various ways that the reader is bewildered.

I have been not a little amused at the answers given by pupils of common schools, by pupils of high schools and collegiate institutes, and by adults who had left school, to the questions, "What is a vowel?" and "What is a consonant?" I have heard a consonant defined as, "A sound that cannot be sounded alone," and as "A sound that cannot be sounded aloud." These definitions are both contradicted by sounding, first as a single word, then as phonetic elements of the word, the following:—

*fetch*  
*f-etch*  
*f-e-tch*

Or, to reverse the process, take this example:—

*t*  
*at*  
*rat*  
*rats*

Pupils will be able, after such an exercise on simple words, to make up for themselves better definitions of the vowel and consonant, than they can learn from the book merely; for in the one case they know the reason for the definition, while in the other they learn it as a dead definition only, without its living subject.

I think it is better to begin without books or definitions, and teach the pupils to observe the motions of the vocal organs in producing the sounds of simple words. Dr. Forrest, of Bradford, terms this the *tonic* method. Let me give a simple illustrative lesson on phonetic analysis, for I presume that some who read these papers are not teachers, and some teachers who read them have not had the advantage of having been trained in the phonic method of reading, which is now, happily, becoming general.

I write on the boards the letters CAT, and ask, How many and what sounds are here represented? The answers will be various, if the pupils have had no previous training. The first letter—*See*—will not

suggest the hard sound it represents. But at last some pupil more brilliant than the rest gives the correct sound—the guttural *k*, an *obstructed* sound. The next is a free sound, *a*—not *aa*. The third sound is the dental *t*, an *obstructed* sound. We have thus the two classes of sounds—*free* and *obstructed*; and these terms would, I think, convey to the pupil a much more accurate idea, be much more easily remembered, and much more suggestive, than the abstruse terms *vowels* and *consonants*. The pupils who gave the answers I have quoted had commenced at the wrong end—they had learned the definition before understanding the thing defined.

Phonetic analysis is hard on the present spelling; but so much the worse for the spelling. Encourage your pupils to analyse,—explaining to them, as best you can, the inconsistencies between the sounds and the lexicographer's method of representing them, and your pupils will become observant, and will take a lively interest in learning to read, to spell, and to compose. This interest, I take it, is the foundation of education.

My own boys—the elder a little over five years, the younger not yet four—have been greatly delighted in learning, in my odd moments, the elementary sounds used in speaking English. Having mastered these without seeing a book or knowing anything about letters, I introduced the Phonetic Primer, compiled by Benn Pitman, and they very readily and rapidly learned to associate the signs with the sounds; so that during the past four months, with no regular lessons, and scarcely any opportunity of seeing the book except during the brief period of instruction, they can read sentences, giving the precise sounds of the words; and better still than that, they have such a keen appetite that they are continually asking for "more." They are analysing, comparing, pronouncing all the letters they see, and are practically teaching themselves to read.

I am aware that educationists have various methods for teaching to read; I mention this case as an argument for the analytic method, and as an illustration of what all students of phonetic shorthand must do if they would learn the coveted art. If the children in our common schools were taught the sounds of their language, the way would be very easy to the introduction of simple strokes and curves, dots and dashes, for the representation of those sounds. Then phonography as a school study would so strongly commend itself to both pupils and teachers that we might hope for its general acceptance as an educational medium and method.



TORONTO:

THURSDAY, JANUARY 8, 1885.

*THE MODEL SCHOOL SYSTEM.*

WHEN Mr. Crooks became Minister of Education in 1876, he determined to make provision for giving a certain amount of professional training to all who wished to become teachers. As about one thousand candidates for the teaching profession offer themselves each year, to have provided sufficient Normal School accommodation for this large number would have necessitated the building and equipment of two or three additional Normal Schools, which would have involved a cost much greater than the country was ready to provide for. Again, the bringing of the students from all parts of the Province to four or five centres would have laid a heavier burden upon them than many of them could conveniently bear. The alternative was to provide for the training of teachers of the Third Class in each county. To do this he had either to erect separate schools for this purpose or to utilize those in existence. The latter plan was the most feasible one, and had the additional merit of being far more economical. Accordingly, in 1877, one of the leading public schools in each inspectorial district was constituted a Model School. An annual grant of one hundred dollars was given to each of these schools by the Government and the same amount by the county council in which the school was situated. Boards of trustees were asked to provide a separate room for model school purposes and in some cases an assistant also was provided to relieve the principal for a portion of each day. In most cases, however, no assistant was furnished, and the principal was obliged to deliver his lectures between eight and nine o'clock in the morning and four and five o'clock in the afternoon, and to have the general oversight of the work of the teachers-in-training during the day in addition to his ordinary school work. When we consider the large amount of extra labour performed by the model school principals, and the spirited and faithful manner in which they discharged the duties of their new position we cannot award them too much praise, for their efficient service in making the new scheme a success. In many cases the remuneration received by them was not at all adequate to the labour performed. For five or six

years the work went on in this way though oftentimes occasioning considerable interference with the regular work of the school; but on the whole, Mr. Crooks' model school system was a great and admitted success. The public school inspectors throughout the country thoroughly endorsed the system, and by their co-operation helped to make it effective; while the working of the schools was made uniformly efficient by the visits, inspections and lectures of the present Minister of Education, the Hon. Mr. Ross, and Mr. Tilley, the present Inspector of Model Schools, who were, from year to year, appointed by Mr. Crooks to act as inspectors of the model schools, although they were never permanently appointed. These gentlemen did much to popularize the system and to remove any friction that could be discovered in its working, by conferring with county councils and boards of trustees and bringing these important corporations into sympathy with the schools within their jurisdiction.

More recently several important changes have been made in the regulations. The grant to each school has been increased to one hundred and fifty dollars from the Government and one hundred and fifty from the county. The teachers-in-training are required to pay fees. A separate room for model school work not previously in all cases provided has been made imperative. The principal is to be relieved two hours a day from his ordinary work. In some schools a more liberal policy is obtaining; an assistant is provided to relieve the principal during the whole of the model school term. The plan should be adopted in all schools; for where it is adopted the principal can give to the teachers-in-training what time and attention are necessary. He can be present in the room while they are teaching, and assign to them their marks for their work, thus, probably, being able to give a fairer estimate of its value than could be possibly done by his less experienced assistants; he can also, where this plan is adopted, reduce the disturbance of the ordinary school work to a minimum, and give necessary attention to the general oversight of the whole school. In fact he can still be the principal of his own school as well as principal of the model school. Of course the revenue derived from the model school should be amply sufficient to provide for this, and if it be

not large enough at present it should be increased, either by raising the fees of the teachers-in-training, or the grants to the schools from the government and county.

Our model schools are doing a most important work. The rural schools, many of which cannot afford to pay for second-class teachers, that is, teachers trained at the normal schools, must continue to be largely supplied by third-class teachers, who would be without any professional training whatever were it not for the model schools. The benefit to the entire community conferred by the model schools is so great and so evident that we feel sure that an increased grant to make them still more efficient would meet with general approval. Not only should boards of trustees provide an assistant but they should also be enabled to add to the ordinary salary of the principal a reasonable sum for his extra services in performing the higher work of his model school principalship.

We believe some boards have not as yet made any provision for the relief of the principal. This should be no longer allowed. The Government in compelling teachers-in-training to attend these schools, forcing them to pay fees, and putting them to other expenses is morally bound to see that the schools are efficient. The good that they do is sufficient excuse for incurring any greater expense in their favour if it be necessary. While if the authorities of the model school do not comply with the regulations on the ground that the expense of them is greater than the income received, and at the same time the school gains nothing from the addition of a model school department to it, then the Government should see that the ground for this complaint is removed.

When these schools were established the course of instruction was begun with lectures on the theory of education and school management, and the teachers-in-training began to teach at once under the direction of the assistants of the schools. This caused parents to complain that the progress of the children was retarded, and, considering the inexperience of the students, the complaint must have been a just one. By the new syllabus issued last year we see the work begins with teaching by the principal, who illustrates his theory by actual practice; and the teaching by the students is limited to the teaching of small selected classes in presence of the

principal for the first five or six weeks of the term. By this means the students are pretty well prepared to do satisfactory work before they assume the duty of teaching a division. This is a wise change, and will meet much of the criticism heretofore passed upon the model school system.

The examination at the close of the term is placed in the hands of the county boards as formerly, but it is to be conducted in accordance with departmental regulations. Papers upon the theory and practice of education, upon hygiene, and upon school law are to be prepared by the Education Department, but the answers of the candidates are to be read and valued by the county boards of examiners. Each student-teacher must satisfy the Board of his knowledge of the subjects laid down in the syllabus and, in addition, must satisfy the board of his ability to teach. In coming to a conclusion on this matter the board will be aided in their judgment by the report of the model school principal.

Satisfactory as the model school system would be were its provisions carried out, and the efficiency of every school secured by the slight increase of grants mentioned above, there is one defect in it. The term of thirteen weeks occurs but once in the year. A student-teacher who at the end of the term fails to pass the examination, has to wait a whole year for an opportunity to attend again. The knowledge of this hardship has probably caused many county boards to deal very leniently with candidates who were insufficiently prepared to receive a license to teach. As a matter of fact very few candidates are rejected at the terminal examinations. To institute a second term for the few rejected ones would be an expense and trouble disproportionate to the good to be secured. But if the Department, upon the reception of the reports of the different county boards, and having reference to rejected candidates and the counties in which they resided, would appoint for a certain centrally situated model school a *second term*, to commence in the following January, at which the rejected student-teachers from the various surrounding counties might attend, allowing to that school the usual grant, and collecting from the counties concerned proportional parts of an equal grant, then these rejected students could attend with

no more than a just inconvenience considering their previous failure, and have a second opportunity of reaching the required standard. A candidate rejected twice should not be allowed to try again.

In this way the local board of examiners would have no excuse for undue leniency, the candidates would suffer no hardship, and the additional expense would be trifling.

In our opinion there is no more important constituent of our educational system than the model school; and Mr. Crooks will long be held in honour for the sagacity which led him to conceive it, and the skill which enabled him to put it into actual being.

### Table Talk.

PAUL H. HAYNE is called the "Long-fellow of the South."

GREEN'S *History of the English People* is being translated into Swedish.

THE proposed expedition of Prof. Nordenskjöld to the south pole has been postponed until 1887.

THE *Century's* "war articles" have caused its circulation to mount up near to the second hundred thousand.

HARPER BROS. will publish this present month the biography of George Eliot, written by her husband, Mr. J. W. Cross.

A TRI-WEEKLY newspaper, the *Continental Express*, has appeared at Dresden. It is the only English newspaper in Germany.

MR. AUSTIN DOBSON, has completed a volume of selections from the essays of Steele. The *Clarendon Press* will issue it.

J. DALLIN PAUL, R. N., has edited the *First Book of Euclid* for the use of junior pupils, in a volume of 182 pages, each as large as those of the EDUCATIONAL WEEKLY.

ROBERT J. BURDETTE, the humorist, has ceased to write for the *Burlington Hawk-Eye*. He will contribute paragraphs and verses to various newspapers, and lecture.

It is announced that the Governments of Belgium and Holland are about to form a literary academy, to consist of forty members, half of whom will be Belgian and half Dutch.

THE BLACKWOODS publish *The Golden Primer*, by Professor Meiklejohn, with illustrations by Walter Crane. Words are taught instead of letters, and the artist's part of the work is a principal feature.

MR. H. M. STANLEY, the African explorer, is about to issue a new book. In it he says that Gen. Gordon is not and never has been in any danger at Khartoum, and that he has three available avenues of escape.

THE books printed in the South during the war are now in demand among collectors. One of these was a spelling-book printed on common wall paper. Another, more ambitious, was illustrated with the old trade cuts found in newspaper offices,

producing a comical effect. Upon the title page is the legend, "Printed in the fourth year of the war of Independence."

NEXT to Mr. Froude, Mr. Mallock is the finest master of the colder style of English. His worst literary enemy cannot help admiring the grace, the distinction, the consummate power of selection which marks his prose. As a writer he stands high among the highest; as a thinker he is—well, he is Mr. Mallock.—*Vanity Fair*.

MR. GLADSTONE'S oratory is—as for that matter all oratory is—the reflection of the intellectual being of the orator. It is labored and lengthy, because the mind and brain, which furnish the tongue with language, are so keenly appreciative of the difficulties which may suggest themselves to hearers. If Mr. Gladstone seldom touches a theme without adorning it he never touches a theme which he does not for the immediate purpose in hand exhaust. His oratory is didactic, homiletic, beseeching, commentarial, and microscopically minute, because he does not forget how tardy the process of conviction is, and how many obstacles must be disposed of before the desired result is obtained. It is not long since one of his colleagues gave an account of the difference between his own oratorical method and that of the Prime Minister. "When," he said, "I speak I strike across from headland to headland. But Mr. Gladstone coasts along, and whenever he comes to a navigable river he cannot resist the temptation to explore its source." All the dissertations on rhetoric since the world began, from Aristotle to Cicero, Tacitus, and Quintilian, down to Whately, Alison, and Arnold, may be searched before so happy and terse an illustration is encountered. For the reason embodied in this figurative definition of two oratorical schools, some of Mr. Bright's single speeches are better than anything of Mr. Gladstone. Yet it may be doubted whether there is anything finer in nineteenth-century oratory than Mr. Gladstone's impromptu speech on Mr. Disraeli's budget of 1853, or than his peroration before the division on the second reading of Lord Russell's reform bill was taken in 1866. In the same way his tribute to the memory of Lord Beaconsfield in 1881 was not only a masterpiece of taste and judgment, but of that peculiar class of oratorical composition to which it belonged. It also furnished a remarkable illustration of Mr. Gladstone's felicity in quotations, an ornament of debate now practically obsolete. On the whole Mr. Hayward's estimate of Mr. Gladstone as a speaker leaves nothing unsaid:—"It is *Eclipse* first, and all the rest nowhere. He may lack Mr. Bright's impressive diction—impressive by its simplicity—or Mr. Disraeli's humor and sarcasm. But he has made ten eminently successful speeches to Mr. Bright's or Mr. Disraeli's one. His foot is ever in the stirrup; his lance is ever in the rest. He throws down the gauntlet to all comers. Right or wrong, he is always real, natural, earnest, unaffected, and unforced. He is a great debater, a great parliamentary speaker." He is also an eminently persuasive speaker, and that explains why he is less condensed than Mr. Bright. There is no writer the tones of whose voice is easier to hear than Mr. Gladstone. There are few speakers whose speeches it is less satisfactory to read. Yet nothing is more certain than that if Mr. Gladstone's oratory were better literature it would have been less fruitful of results. The style is the man.—*Fortnightly Review*.

## Music.

MDME. PATTI'S appearance in "Semiramide" at the New York Academy of music no: long ago drew one of the largest audiences of the season, hundreds of people being turned away from the doors. Colonel Mapleson in reply to some critics who complain that he never gave an opera of Wagner's, and "did nothing to educate the people and elevate the standard of taste" is reported to have said. "This is a fine phrase; but it means fat notices and lean houses, happiness to the long-haired amateur musical enthusiasts, and misery to unpaid artists. It means a halo of glory round the manager's head, and an aching void in his pocket-book." The Americans are a practical, sensible people. After they have worked hard all day they don't want to go to a musical night school. They want to be pleased, and they prefer the melodies of the Italian composers. I have given all Wagner's operas in London, under the direction of Wagner himself, and with Herr Richter as conductor. My share of loss on the Wagner season was over £5,000, which was only half the loss, as I had a partner. That experience cured me of my desire to elevate the public taste.

IN regard to woman's sphere and work in music, interpretation rather than composition should be your aim. Anything remarkable in the way of creative art has not emanated from lady-composers. Your work is rather to expound. I need not try to recount to you the names of illustrious female exponents of song and of instrumental music, for I should detain you here a long time in the attempt, but I may remind you of three of the greatest *artistes* in this, or any other age, Mdme Goldschmidt (the illustrious Jenny Lind), Mdme Schumann and Mdme Norman-Néruda. You ought to play well, or perhaps only to yourselves. And listen well, listen to every point; try to follow the modulations, the form, to solve the composer's meaning. If you fail to understand music of the best masters, rest assured the fault is yours and not theirs. As in music, so in other matters, humility is generally to be found in proportion to the amount of matter possessed. \* \* \* Another way to aid the great advance of which I speak, rests in great measure with those who may be pianists or vocalists; I mean in the selection of music. In this respect there is still a very great difference in the British and German standard. The amount of trash played and sung in the home circle here, and in America is incalculable, and this alone is a great hindrance to the spread of pure art. This low level is not reached by our public in any art but music, which still attracts the many for its weakness rather than for its strength. And it is very much in the power of lady instrumentalists and vocalists to improve a state of things so discreditable to national taste by more advised and judicious selection. One cause that has frequently prevented men from perceiving pure and intellectual beauty in music may be traced to their hearing, evening after evening, poor compositions, indifferently performed. No wonder that in such circumstances many men of intellect are driven to a conclusion that the highest virtue in domestic music is to promote conversation.—*Sir Herbert Colvile's address to the Edinburgh Association for University Education of Women.*

## Drama.

A LONDON correspondent in the *New York Nation* thus criticises the elaborate realistic scene-making, now so much in fashion, partly it must be said, however, on account of Mr. Henry Irving's undoubted success in this respect. The occasion of the criticism was the first appearance of Miss Mary Anderson in *Juliet* at the Lyceum in London lately:—As a spectacle, merely, the recent revival tell short of Mr. Irving's presentation of the play. It was impossible to help feeling that the efforts at accuracy had hindered the artists more than that they were likely to help the public. Or perhaps it would be truer to say that the great attention conspicuously given to minute details, whether of architecture, of costume, or of stage arrangement, did more harm by drawing off the attention of the public from the real and permanent interests of the play, than they did good by giving in the spectator's imagination a local habitation to the story which, of all Shakespeare has left us, stands perhaps least in need of such assistance to reach men's hearts. The force of archeology can probably go no further than in this revival: if it makes the attempt, the playgoers who go to the theatre to see acting will be incited to beg for a judicial separation between the display of scenery and the display of dramatic art. The former has now reached such a point of elaboration as to deserve a representation by itself: the scenes might be exhibited one by one, while a gentleman with a wand pointed out their merits, extolled their ingenuity, and defended their innovations. Subsequently the play might be acted before a plain curtain. Possibly the stage-carpenter, far more than the artists, is to be blamed for the irritation which prompts such suggestions as the above, for other revivals, not much less elaborate, have roused no such feelings. During the present performance where "sets" suddenly turn inside out, solid masonry dissolves in all directions, and furniture glides mysteriously across the stage, until, instead of the atmosphere of Verona, one comes to believe one's self in a city of the Arabian Nights, where palaces spring up and vanish like mushrooms. It is simply impossible to preserve the spirit of the play under such unsteady surroundings. For instance, after the impressive scene (Act IV., scene 3) in the Friar's cell, which is brought to a close by *Romeo's* words—

"But that a joy past joy calls out on me,  
It were a grief, so brief to part with thee"—

the "Farewell" is almost taken out of his mouth by the scene-shifter's whistle, and the whole structure of masonry, stone steps, iron gates, and all, revolves and twists and wriggles until, just as the spectator is compelled to turn away for giddiness, lo! there emerges *Juliet's* chamber and balcony. A minute later, after the exquisite and thrilling scene between the lovers, all whose

"—woes shall serve

For sweet discourses in our time to come," the whistle shrieks again, and the balcony carries *Juliet* bodily out of sight. Little opportunity is there for what Coleridge calls the "spiritual vision," where "the mere external senses of seeing and hearing" are so fully occupied; and little hope of it will there be until the stage managers realize once more the absolute truth of his words, that "the principal and only genuine excitement ought to come from within."

## Art.

THE University of Leipsic has conferred the degree of "Dr. Ph." on the well-known *Capellmeister*, Carl Reinecke.

THE Royal Conservatory, Leipsic, has been presented by a donor who desires to remain unknown with the sum of 300,000 marks for the erection of new premises.

THE portrait of the Marquis of Lorne, painted by Millais, and presented by the Marquis to the National Gallery at Ottawa, has arrived. The painting is valued at \$5,000.

PRINCE TORLONIA is forming at Rome a splendid museum of arts from the masterpieces of Greek statuary scattered throughout the world, and will present the collection to the city.

THE International Exhibition at Antwerp, to be opened in May next, will include five sections:—(1) Education, School and Industrial Art; (2) Industries; (3) Navigation and Commerce, Fisheries and Pisciculture; (4) Electricity; (5) Agriculture, Forestry and Horticulture. This will be separate from the exhibition of painting, sculpture, architecture, and engraving, to which artists of all countries will be invited to contribute.

THE valuable paintings belonging to the estate of Mr. Thomas G. Appleton will not be sold, although his furniture and bric-a-brac will. He bought some noble examples of Jean François Millet's brush-work when Millet was so little appreciated as to be compelled to beg bread for his children. The taste for Millet's pictures was first awakened in this country by the examples imported by Mr. Appleton and the late Mr. William M. Hunt.

It is a well-known fact that during the later years of his life Turner was unable to sell a large number of his pictures, although he seldom asked for them a higher price than the modest 200 guineas, which was considered in those days a sum of money considerably beyond the market value of the artist's work. A certain Scotch gentleman named Monroe, a famous collector of pictures, enjoying an income of from £25,000 to £30,000 a year, greatly admired Turner's genius, and finding him one day sitting solitary in his gallery, surrounded by some of his finest works, for which he had tried in vain to find purchasers, Monroe suddenly determined to make the artist an offer of a certain sum for the whole collection. "Let me have all these," he said, "and I will write you at once a draft for £25,000. Will you agree to that?" Turner appeared not altogether displeased at this offer, but told his friend to go and walk about the streets for half an hour or so, and at the end of that time come back for his decision. This Monroe accordingly did, but at the end of the half hour, greatly to his disappointment, Turner answered him in the negative, refusing to part with the pictures even for a sum which at that time would be considered a very large one. Eight or nine of Turner's finest works were among those which Mr. Monroe would gladly have purchased with his £25,000, but as these identical pictures have since become the property of the National Gallery, the admirers of Turner will no doubt rejoice that the Scotch collector was so unsuccessful in his generous bid.—*Pail Mall Budget.*



*Practical Art.*

*PERSPECTIVE.*

SECOND PAPER

THERE is perhaps not one of all who may read this, but has at some time stood in the centre of a railway track looking straight ahead in the direction of the rails, or at the end of a street looking down it, and noticed how all lines running in the direction of the street or track appeared to approach one another, even to meeting or vanishing on the horizon. This apparent convergence of lines is the important fact upon which the Art of Perspective is based. It may be simply stated thus: that lines, according as they are distant from the spectator, seem to become smaller. Were it not for this, everything would appear as large at two hundred feet from the eye, as at ten feet, and our only idea of distance would be obtained by the interposition of the atmosphere which, not being a perfectly transparent medium, because of the vapor and smoke held by it in suspension, would render objects more or less indistinct in proportion to their distance.

In the following illustrations the first (figure 2) is an elevation of three upright poles equal in length and at different distances from E; the other (figure 3) is a plan of three ties of a railway track, and the relative lengths of the lines that would represent the objects, are shown in both cases on P. P.

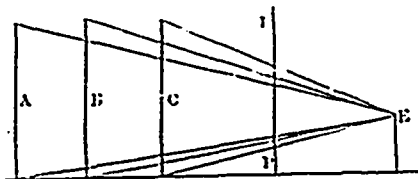


Fig 2

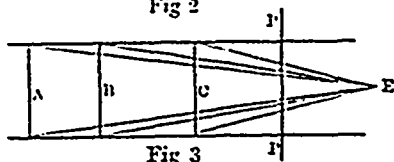


Fig 3

It will be seen that the pole and tie at the greatest distance is represented by the shortest line.

By way of explanation it may be stated that an *elevation* of any object is a drawing of the side, showing it as it really is, while a *plan* is a drawing of the top, made in the same way, and the eye of the spectator is supposed to be over every portion of visible surface at one time. In perspective the eye is supposed to be stationary, and the drawing shows the object as it *appears*, not as it *is*.

Now in the case of the railway, it is seen that the lines of the track running in the direction in which we look, appear to vanish

at a point on the horizon. This point is called their *vanishing point* (V. P.). If we turn and look towards a new point a little to the left of the former one, the direction of the retiring lines is not changed, only their vanishing point is to the right of our new position, instead of being directly in front.

As the vanishing points for all horizontal retiring lines are on the horizon, it is necessary to have a line to represent it.

In figure 4, a. b. c. d. represents the base of the cone of light referred to in figure 1 in last paper. It is called the *picture plane* (P. P.) It also limits the extent of the field of vision. In the centre is a point, very appropriately called the *centre of vision* (C.V.) Through this point a line is drawn to represent the horizon; it is the *horizontal line* (H. L.) (S. P.) is the *station point* or position of eye of spectator; S. P.-C.V. is the distance of spectator from picture plane, and also indicates the direction in which he is looking, hence its name, *line of direction* (L.D.)

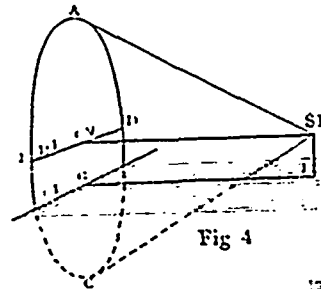


Fig 4

The size of the picture plane increases with its distance from the spectator, and as the centre is always as high above the ground as his eye, when the diameter of the picture plane is more than twice this height, a portion of it will be cut off and rendered invisible by the ground. The line where the two planes intersect is called the *ground line*, marked G. L. in figure 4, and, assuming that a line from the eye to the horizon through the centre of vision is always level and parallel with the ground, a line from the feet of spectator drawn parallel with it, to cut the picture plane, would find a point through which the ground line would pass. This means that if the height of the eye be measured on P. P. below H. L. it will give the position of G. L.

These points and lines are on different planes and before they can be used for practical work we must contrive to represent them all on one surface, that is, the paper on which our drawing is to be made. Reference to figure 5 will show how this is accomplished. The P.P. is supposed to be rotated away from S. P. on the line G. L. until it is lying on the ground, the points C. V. and S. P. and the line H. L. tracing in their descent circular curves and finding new positions on the ground plane. It will be seen

that the relation existing between these new positions is the same as before.

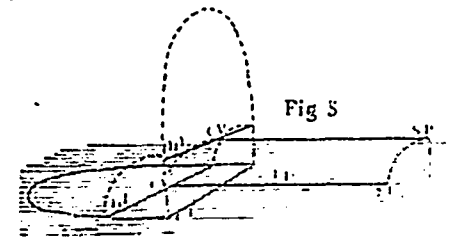


Fig 5

Two more points are necessary, viz., Measuring points, the use of which will be explained in the proper place. They are obtained by setting off on H. L. on each side of C. V. the length of L. D. As they are as far from C. V. on each side as is S. P. they are often called *Distance Points*.

It will be remembered that the angle of vision includes the greatest amount of surface visible at one time, but it is somewhat painful to the eye to be so near to the objects to be represented that they occupy the whole of the field of vision. Taking this into consideration, perspective problems are arranged in such a way as to make the angle formed by the rays from the extreme limits of objects to the eye, much less than 60°. A simple experiment will illustrate this. Look at the centre of a lead pencil held upright at a distance equal to its length, from the eye. Although it can all be seen, it is difficult to make out details. Now hold it at arm's length and the improvement will at once be manifest. Figures 2 and 3 may also be referred to.

In the next paper the rules of perspective will be given, and explained where practicable.

*Arthur J. Reading*

PROFESSOR S. P. LANGLEY announces that he has been brought to the conclusion that the loss of sunlight and sunheat through absorption by the atmosphere is forty per cent. or double the percentage formerly accepted.

THE *Macmillans* have brought out good editions of three standard and valuable manuals for teachers at greatly reduced prices:—Fitch's *Lectures on Teaching*, at \$1.25; Professor Calderwood's *On Teaching*, at 50 cents; and Mr. Thring's *Theory and Practice of Teaching*, at \$1.60.

PNEUMATIC post tubes have been in use for some time past for the conveyance of mail matter from the district offices to St. Martin's-le-Grand. They have proved a great success both as regards economy of money and time, and now a more daring scheme is broached. It is suggested that a pneumatic tube should be laid between London and Edinburgh, and if it worked successfully that the immense correspondence of London should be distributed in a similar manner to all the postal centres of England. It is only a dream; but in the nineteenth century the dream of one decade frequently becomes the reality of the next.—*Mail*.



## The High School.

### UNIVERSITY STUDIES.

JOHN STUART MILL.

#### PROCESSES BY WHICH TRUTH IS ATTAINED.

THE processes by which truth is attained, reasoning and observation, have been carried to their greatest known perfection in the physical sciences. As classical literature furnishes the most perfect types of the art of expression, so do the physical sciences those of the art of thinking. Mathematics, and its application to astronomy and natural philosophy, are the most complete example of the discovery of truths, by reasoning; experimental science, of their discovery by direct observation. In all these cases we know that we can trust the operation, because the conclusions to which it has led have been found true by subsequent trial. It is by the study of these, then, that we may hope to qualify ourselves for distinguishing truth, in cases where there do not exist the same ready means of verification.

In what consists the principal and most characteristic difference between one human intellect and another? In their ability to judge correctly of evidence. Our direct perceptions of truth are so limited; we know so few things by immediate intuition, or, as it used to be called, by simple apprehension—that we depend for almost all our valuable knowledge on evidence external to itself; and most of us are very unsafe hands at estimating evidence, where an appeal cannot be made to actual eyesight. The intellectual part of our education has nothing more important to do, than to correct or mitigate this almost universal infirmity—this summary and substance of nearly all purely intellectual weakness. To do this with effect needs all the resources which the most perfect system of intellectual training can command. Those resources, as every teacher knows, are but of three kinds: first, models; secondly, rules; thirdly, appropriate practice. The modes of the art of estimating evidence are furnished by science; the rules are suggested by science; and the study of science is the most fundamental portion of the practice.

#### MATHEMATICS—PURE AND APPLIED.

It is chiefly from mathematics we realize the fact that there actually is a road to truth by means of reasoning; that anything real, and which will be found true when tried, can be arrived at by a mere operation of the mind. The flagrant abuse of mere reasoning in the days of the schoolmen, when men argued confidently to supposed facts of outward nature without properly establishing their premises, or checking the conclusions by observation, created a prejudice in the modern, and especially in the English, mind,

against deductive reasoning altogether as a mode of investigation. The prejudice lasted long, and was upheld by the misunderstood authority of Lord Bacon, until the prodigious applications of mathematics to physical science—to the discovery of the laws of external nature—slowly and tardily restored the reasoning process to the place which belongs to it as a source of real knowledge. Mathematics, pure and applied, are still the great conclusive example of what can be done by reasoning. Mathematics also habituates us to several of the principal precautions for the safety of the process. Our first studies in geometry teach us two invaluable lessons. One is—to lay down at the beginning, in express and clear terms, all the premises from which we intend to reason. The other is, to keep every step in the reasoning distinct and separate from all the other steps, and to make each step safe before proceeding to another, expressly stating to ourselves, at every joint in the reasoning, what new premise we there introduce. It is not necessary that we should do this at all times, in all our reasonings. But we must be always able and ready to do it. If the validity of our argument is denied, or, if we doubt it ourselves, that is the way to check it. In this way we are often enabled to detect at once the exact place where paralogism or confusion gets in; and after sufficient practice we may be able to keep them out from the beginning. It is to mathematics, again, that we owe our first notion of a connected body of truth, truths which grow out of one another, and hang together so that each implies all the rest, without contradicting another or others, until in the end it appears that no part of the system can be false unless the whole is so. Pure mathematics first gave us this conception; applied mathematics extends to it the realm of physical nature.

Applied mathematics shows us that not only the truths of abstract number and extension, but the external facts of the universe, which we apprehend by our senses, form, at least in a large part of all nature, a web similarly held together. We are able, by reasoning from a few fundamental truths, to explain and predict the phenomena of material objects; and, what is still more remarkable, the fundamental truths were themselves found out by reasoning, for they are not such as are obvious to the senses, but had to be inferred by a mathematical process from a mass of minute details, which alone came within the direct reach of human observation. When Newton, in this manner, discovered the laws of the solar system, he created, for all posterity, the true idea of science. He gave the most perfect example we are ever likely to have, of that union of reasoning and observation which, by means of facts that can be directly observed, ascends to laws which govern multitudes of

other facts—laws which not only explain and account for what we see, but give us assurance beforehand of much that we do not see, much that we never could have found out by observation, though, having been found out, it is always verified by the result.

#### DISCIPLINE OF THE EXPERIMENTAL SCIENCES.

While mathematics and the mathematical sciences supply us with a typical example of the ascertainment of truth by reasoning, those physical sciences which are not mathematical—such as chemistry and purely experimental physics—show us in equal perfection the other mode of arriving at certain truth, by observation, in its most accurate form—that of experiment. The value of mathematics in a logical point of view is an old topic with mathematicians, and has been insisted on so exclusively as to provoke a counter exaggeration, of which a well-known essay by Sir William Hamilton is an example: but the logical value of experimental science is comparatively a new subject, yet there is no intellectual discipline more important than that which the experimental sciences afford. Their whole occupation consists in doing well, what all of us, during the whole of life, are engaged in doing, for the most part badly. All men do not affect to be reasoners, but all profess, and really attempt, to draw inferences from experience, yet, hardly any one who has not been a student of the physical sciences sets out with any just idea of what the process of interpreting experience really is. If a fact has occurred once or oftener, and another fact has followed it,—people think they have got an experiment, and are well on the road towards showing that the one fact is the cause of the other. If they did but know the immense amount of precaution necessary to a scientific experiment, with what sedulous care the accompanying circumstances are contrived and varied, so as to exclude every agency but that which is the subject of the experiment, or, when disturbing agencies can not be excluded, the minute accuracy with which their influence is calculated and allowed for, in order that the residue may contain nothing but what is due to the one agency under examination; if these things were attended to, people would be much less easily satisfied that their opinions have the evidence of experience; many popular notions and generalizations which are in all mouths, would be thought a great deal less certain than they are supposed to be; but we should begin to lay the foundation of really experimental knowledge, on things which are now the subjects of mere vague discussion, where one side finds as much to say—and says it as confidently as another, and each person's opinion is less determined by evidence than by his accidental interest or prepossession.

## The Public School.

### WHY NOT DO IT, SIR, TO-DAY?

CHARLES AND MARY LAMB.

"WHY, so I will, you noisy bird,  
This very day I'll advertise you,  
Perhaps some busy ones may prize you.  
A fine tongued parrot as was ever heard,  
I'll word it thus—set forth all charms about you,  
And say no family should be without you."

Thus far a gentleman addressed a bird ;  
Then to his friend . "An old procrastinator,  
Sir, I am : do you wonder that I hate her ?  
Though she but seven words can say,  
Twenty and twenty times a day  
She interferes with all my dreams,  
My projects, plans, and airy schemes,  
Mocking my foible to my sorrow :  
I'll advertise this bird to-morrow."

To this the bird seven words did say :  
"Why not do it, sir, to-day?"

### MORAL EDUCATION THE GREAT WANT OF THE AGE.

#### II. MORAL EDUCATION--ITS NATURE.

REV. PETER PRESCOTT.

(Concluded from last issue.)

JOHN LOCKE has expressed the opinion that it is possible to place morality on a "scientific basis." This, however, is what he has not achieved ; although, from that expression of opinion, we may very well suppose that an attempt was made. The scientific basis, for which he made search in the realm of philosophy, is to be found not there, but in a different region. In the region of inspired truth it is set forth to us with Divine simplicity, from the lips of Him Who "spake as never man spake." Nor can philosophy refuse its concurrence as to the correctness of the basis laid down in Holy Scripture. What can be more plain and convincing than that the two main principles of morality are Honesty and Kindness? And what is more certain than that Honesty and Kindness are enabled, by means of Patience, to bring forth "fruit to perfection?" And what is the Golden Rule but the beauty and glory of honesty and kindness in their conjunction with each other; what is it but their consummation and crown?

This is a statement which, very possibly, may fail to carry immediate conviction to the mind of the reader. In that case, let us call to our aid the fundamental rule of logic, which directs us to suspend our judgment, in any given case, till the whole of the case is before us; and to have the whole of the case before us will be impossible until our investigation of the qualities specified has been actually made, and the results compared with the facts of human life. This, of course, is the business of the manual. Still, it may be useful, at this preliminary stage, to

take what may be termed "a bird's eye view," which will prepare us for the more detailed view to be taken in the text-book.

HONESTY: what is that? Honesty in thought is sincerity; honesty in speech is truthfulness; honesty in action is justice or equity. Sincerity, "truth in the inward parts," is the root. Truthfulness is essential to mutual trust, and mutual trust is essential to friendship. If you cannot believe a man you cannot trust him; and if you cannot trust him, what is friendship but an empty name? And honesty in action is not less important than honesty in speech. Truthfulness and justice will, in fact, be found to go together. The following incident will serve to show the need of spreading right views on this point throughout certain portions, at least, of the community. A short time ago I was in conversation with a respectable tradesman on the the subject of moral education, who said that he could not see that it was at all necessary. His idea was that if parents told their children that they ought to be honest, that was all the moral education that was needed. Nor did anything that was said appear to produce any effect, until the following appeal was made: "Are you not aware that commercial operations are, to a great extent, honeycombed with dishonesty?" This touched a chord that vibrated instantly and powerfully. "Yes," said he, "I do know it. This week I have a bad debt of £160. A man owes me £200, and offers a composition of four shillings in the pound; and this man is a professor of religion, and it is not the first time that he has compounded with his creditors." On conversing further with the tradesman, it became manifest that the horizon of his ideas on the subject of morality was very limited. With him morality meant nothing more than that a man ought to pay his debts. This may serve as a specimen to show how little moral education on broad principles is understood, and how greatly it is needed. It may serve to indicate also the nature of the obstacles with which its general introduction into the schools and colleges of the country must contend.

GOODNESS: what is that? It is that disposition which causes the mind to find its happiness in promoting the happiness of others. As Bishop Porteus says: "The joy resulting from the diffusion of blessings to all around us is the purest and sublimest that can ever enter the human mind, and can be conceived only by those who have experienced it. Next to the consolations of Divine grace, it is the most sovereign balm to the miseries of life, both in him who is the object of it and in him who exercises it; and it will not only soothe and tranquillize a troubled spirit, but inspire a constant flow of good humour, content and gaiety of heart." Let us select one of the most important manifestations of goodness or kindness—

gratitude to parents. Gratitude arises from true affection. This exists in the heart of every child, and may be trained and cultivated, or it may be neglected and suffered to wither. Training consists of more than mere instruction, but without instruction training is impossible. Children are not expected to understand the multiplication table without instruction, yet vast multitudes of children are expected to be grateful to their parents, although no pains are taken to show them *why* they ought to be grateful. If the same pains were taken to train the affection of gratitude, which in many cases is bestowed on the training of a rose or a tulip, many parents whose old age is rendered joyless and comfortless by the ingratitude of their children, would be placed amidst very different surroundings, and experience very different feelings.

PATIENCE: what is that? Every Englishman, of course, supposes that he knows very well what it is; for is it not an English word in common use? But the English word, in its common use, expresses only one-half of the meaning of the Greek word which is used by St. Luke, and only one-half of the meaning assigned to it in the dictionary compiled by Dr. Johnson. In its ordinary use it simply denotes endurance; but its full signification has two branches,—it is active as well as passive. Taken actively, it denotes perseverance, patient continuance in well-doing, the power that conquers difficulties. Taken passively, it denotes endurance, the power to wait and to suffer. These two branches are vitally connected; they spring from one trunk; they afford each other strength, and neither of them can live without the other. The full meaning of the word patience is seen only in this twofold signification. Again, patience develops honesty and kindness; and these, in their full development, are seen in the Golden Rule, which is their consummation and crown.

### METHODS OF TEACHING EXECUTION IN WRITING.

1. LET the teacher determine that he will have correct execution; that the precise forms of the copy shall be accurately made, not merely by the few who have natural aptitude, but by all. This can be achieved; for it has been again and again.

2. It will be well also to settle in the mind that correctness of form is preferable to mere rapidity of execution. Therefore, let the pupils proceed slowly at first. As soon as the forms are correctly made, they may then advance more rapidly, but not faster than is consistent with accuracy.

3. While they are writing, let their attention be frequently called to position, pen-holding, rests and movements.

NOTE.—It is very important that pupils should understand the elements of which the letters are composed. They should be early impressed with the fact that the modern style is based upon the oblique straight line and

very short turns formed by an up and down, or forward-and-backward movement of the pen, whether this is produced by the fingers or by the forearm. This movement should be dwelt upon to overcome rounded down strokes and "scooping" turns.—*The Teachers' Guide to Writing.*

## The University.

### THE BASIS OF THE PROPOSED SCHEME OF UNIVERSITY CONFEDERATION.

Arrived at by the Minister of Education and the Representatives of the Confederating Institutions.

1. It is proposed to form a Confederation of Colleges, carrying on, in Toronto, work embraced in the Arts curriculum of the Provincial University, and in connection therewith the following institutions, namely, Queen's University, Victoria University, and Trinity University, Knox College, St. Michael's College, Wycliffe College, and Toronto Baptist College, shall have the right to enter into the proposed confederation, provided always that each of such institutions shall, so long as it remains in the confederation, keep in abeyance any powers it may possess of conferring degrees other than degrees in Divinity; such powers remaining intact though not exercised. It shall be lawful for the Senate, from time to time, to provide by Statute for the admission of other institutions into the confederation under the limitations above prescribed. Nothing herein contained shall be held to repeal any of the provisions for affiliation of Institutions as contained in R. S. O., cap. 210, sec. 61.

2. The head of each confederating college shall be *ex-officio* a member of the Senate of the Provincial University, and in addition thereto the governing body of each confederating college shall be entitled to appoint one other member of the Senate. The University Professoriate shall be represented by two of their members on the Senate, and the council of University College by one of its members in addition to the President.

3. The Undergraduates of any confederating university shall be admitted *ad eundem statum*, and the Graduates in Law and Arts of any confederating university shall be admitted *ad eundem gradum* in the Provincial University. Such of the graduates in medicine of any confederating university as shall have actually passed their examinations within the limits of the Province of Ontario shall be admitted *ad eundem gradum* in the Provincial University.

4. During the continuance of such confederation, but no longer, all graduates in Medicine and Law so admitted shall have the same rights, powers, and privileges, as are at present enjoyed by the like graduates of the Provincial University, except as herein otherwise provided.

5. All graduates in Medicine, including such admitted graduates, shall vote as one body, and be entitled to elect four members of senate. All graduates in Law, including such admitted graduates, shall vote as one body, and be entitled to elect two members of senate. All graduates in law, including such admitted graduates, shall vote as one body, and be entitled to elect two members of senate.

6. The graduates in Arts of the several universities entering into the confederation shall, for the period of six years after the requisite legislation shall have been obtained, be entitled to the following representation on the Senate, namely: those of Queen's University to elect four members; those of Victoria University to elect four members; and those of Trinity University to elect four members. The graduates in Arts of the Provincial University, other than those admitted *ad eundem gradum* under this scheme, shall be entitled to elect twelve members of senate. After the said period of six years, separate representation shall cease and the entire body of graduates shall unite in electing a number of representatives equal

to those previously elected by the several universities in confederation.

7. (a) University College shall afford to all students who desire to avail themselves thereof the requisite facilities for obtaining adequate instruction in the following subjects in the curriculum of the Provincial University, viz: Latin, Greek, Ancient History, French, German, English, Oriental Languages and Moral Philosophy; provided that it shall be competent to the governing body of University College to institute additional chairs which do not exist in the university.

(b) Attendance on instruction provided in any of the confederating colleges, including University College, shall be accorded equal value as a condition of proceeding to any degree with attendance on the work of the University Professoriate.

8. There shall be established another teaching faculty in connection with the Provincial University, to be called the University Professoriate, which shall afford to all students of the Provincial University, who desire to avail themselves thereof, the requisite facilities for obtaining adequate instruction in the following subjects, in accordance with the curriculum of such University, namely: Pure Mathematics, Physics, Astronomy, Geology, Mineralogy, Chemistry, Zoology, Botany, Physiology, Ethnology, (including Comparative Philology), History, Logic and Metaphysics, History of Philosophy, Italian and Spanish, Political Economy and Civil Polity, Jurisprudence, Constitutional Law, Engineering, and such other Sciences, Arts, and branches of knowledge as the Senate of the Provincial University may, from time to time, determine, except such subjects as are prohibited from being taught by Revised Statutes of Ontario, Cap. 269, sec. 9.

9. The professors in such University Faculty shall be a corporation presided over by a chairman. The same person shall be President of University College and Chairman of the Faculty of the University Professoriate. University College and the Faculty of the University Professoriate shall be complementary the one to the other, and afford to all university students the requisite facilities for obtaining adequate instruction in all subjects prescribed in the curriculum of the Provincial University. If in the interests of the general objects of the confederation, it shall at any future time be found advantageous to have any subject transferred from University College to the University, or from the University to University College, it shall be competent to the governing bodies of the College and the University to arrange for such transfer.

10. Every graduate's or student's diploma or certificate of standing, issued by the Provincial University, in addition to being signed by the proper university authorities in that behalf, shall indicate the college or colleges in which such student attended lectures, and shall be signed by such professors, teachers and officers of such college or colleges, as its or their governing body or bodies may from time to time determine.

11. With a view to the advantageous working out of this scheme, representatives of the various colleges and the University Faculty shall from time to time meet in committee, and arrange time-tables for lectures and other college and university work.

12. The Senate of the Provincial University may, of its own motion, enquire into the conduct, teaching and efficiency of any professor or teacher in the University Faculty, and report to the Lieutenant-Governor the result of such enquiry, and may make such recommendations as the senate may think the circumstances of the case require.

13. All students, except in cases specially provided for by the Senate, shall enroll themselves in one of the colleges and place themselves under its discipline. The authority of the several colleges over their students shall remain intact. The University Professoriate shall have entire responsibility of discipline in regard to students, if any, enrolled in the university alone; in regard to students entered in one or other of the colleges its power of discipline shall be limited to the conduct of students in relation to university work and duties. All other matters of discipline affecting the university standing of students shall be dealt with by the Senate of the Provincial University.

14. The university endowment and all additions thereto shall be applied to the maintenance of the Provincial University, the University Faculty, and University College.

15. There shall be the following staff in University College:—

1	Professor of Greek.
"	" Latin.
"	" French.
"	" German.
"	" English.
"	" Oriental Languages.
"	" Moral Philosophy.
"	Lecturer Ancient History.
1	Tutor in Greek.
1	" Latin.
1	" French.
1	" German.
1	" Oriental Languages.
1	" English.
1	Fellow in Greek.
"	" Latin.
"	" French.
"	" German.
"	" English.

Additional assistance in above subjects to be provided so that no Honor Class shall exceed 12, or Pass Class 30.

16. There shall be a University Professoriate adequate to give instruction in each of the following subjects, namely: Pure Mathematics, Physics, Astronomy, Geology, Mineralogy, Chemistry, Applied Chemistry, Zoology, Botany, Physiology, Ethnology, History, Italian and Spanish, Logic and Metaphysics, History of Philosophy, Political Economy and Civil Polity, Constitutional Law, Jurisprudence, Engineering. As regards Tutors and Fellows, assistance shall be provided to the University Faculty similar to that mentioned above or the College, as may be required.

17. The university professorial lectures shall be free of charge to all students matriculated in the University, who are members of a confederating college, but in the case of students (if any) who do not belong to any college the Senate shall determine the fees which shall be charged for the several courses of lectures in the University. But such Laboratory fees, as may be used from time to time by the Senate, shall be paid by all students.

18. The various colleges which are at present affiliated to any of the universities entering into the confederation shall have the right to be affiliated to the Provincial University.

19. The curriculum in Arts of the Provincial University shall include the subjects of Biblical Greek, Biblical Literature, Christian Ethics, Apologetics or the Evidences of Natural and Revealed Religion and Church History, but provision shall be made by a system of options to prevent such subjects being made compulsory by the University upon any candidate for a degree.

20. No college student shall be allowed to present himself for any University examination subsequent to matriculation without producing a certificate, under the hand and seal of his college, that he has complied with all the requirements of his college affecting his admission to such examination.

21. The University College work shall continue to be carried on as at present, in the college buildings, in the School of Practical Science, and in such other buildings as may hereafter be erected on the present University grounds, in the City of Toronto.

A building suitable for a University Examination Hall, Senate rooms, Registrar's and other offices shall be erected on said grounds.

Additions to be made to School of Science sufficient to afford proper accommodation for students in Mineralogy, Botany, and other subjects, and for the accommodation of the Museum which should be removed from its present quarters in order to be more serviceable for science students.

22. The following also to be considered: Completion of the Collection of Physical Apparatus,

Physiological Laboratory and Apparatus, Astronomical Observatory and Instruments, and Provision for the Education of Women.

UNIVERSITY OF TORONTO.

At a meeting of the Senate of Toronto University held on Friday last, Vice-Chancellor Mulock gave notice of the following motion for next meeting:—"That the Senate of the University of Toronto, understanding from those of its members who took part in the late conference on university confederation, that the plan now laid before it is the result of the deliberations of the conference, and embodies the only practical terms and conditions to which the assent of any of the other universities can be expected, and is submitted for acceptance or rejection as a whole, accepts the said plan as a whole, agrees to do every thing in its power to make it a success, and recommends that the necessary legislation in order to give effect to the plan, be promoted by the Government."

Prof. Loudon gave notice of the following motion:—"That the Senate feels it its duty to call the attention of the Government to the necessity of increasing the financial resources of the university in order to carry out the confederation plan laid before it, and requests that the requisite steps be taken to that end."

The Senate of the University of Toronto, have determined that in future there shall be but *five* examinations in all in the Arts' course. Of these the University shall hold three, the matriculation examination, the examination of the first year, and the examination for graduation. The examinations for the second and third years shall be held by the affiliated colleges to which the undergraduates are attached.

UNIVERSITY OF TRINITY COLLEGE.

The appointment of competent and experienced examiners is one of the most important functions of a university corporation. It will be noticed in the following list of examiners for the University of Trinity College, for 1885, that the authorities of this institution, in order to secure excellence, have made their choice irrespective of the university or denominational attachments of the appointees.

*Faculty of Divinity*—Right Rev. the Bishop of Toronto, the Provost of Trinity College, Rev. John Carry, D.D.

*Faculty of Arts*—Divinity—Rev. C. H. Mockridge, D.D. Classics—Wm. Dale, M. A. Mathematics—Rev. C. L. Worrell, M. A. Physical Science—Dr. Sheard. Natural Science—Dr. Coleman. Mental and Moral Philosophy—Rev. Principal Nelles, LL. D. Hebrew—Rev. W. E. Cooper, M. A. English and History—Rev. C. L. Worrell, M. A. Modern Languages—F. Krauss, M.D., C.M. Honour Classics—Wm. Dale, M.A.; Rev. Prof. Boys, M.A. Honour Mathematics—Professor N. F. Dupuis, M.A.; Rev. Prof. Jones, M. A. Honours in Theology—Rev. Prof. Schneider, M.A.; Rev. Professor Clark, M.A.

*Faculty of Medicine*—Matriculation examination—Rev. G. J. Taylor, M.A.; T. Kirkland, M.A.

*Faculty of Law*—Constitutional History, Political Economy, and Roman Law—Professor Goldwin Smith, M.A. Common Law, Equity, and Real Property. J. F. Smith, LL.B.

*Faculty of Music*—Professor F. L. Ritter, Vassar College.

*Invigilators in Examinations*—Rev. G. J. Taylor, M.A.; Rev. C. L. Ingles, B.A.

UNIVERSITY OF VICTORIA COLLEGE.

At a meeting of the Board of Regents of the University of Victoria College, held on Friday the 9th, at which the attendance was almost a maximum, the following resolution referring to the proposed basis of university consolidation, was passed with substantial unanimity:

"Inasmuch as a proposition is made to this Board of Regents, with the sanction of the Minister of Education of the Province of Ontario, to form a confederation of colleges in one provincial university; and inasmuch as the Methodist people of this country in all branches of our Methodism have always declared themselves willing to accept and maintain a system of university education that would secure on the one hand a higher culture in the sciences and arts, under proper religious influences and safeguards, and on the other the equality in privileges and advantages and academic standing of the youth of the country, and inasmuch as the general principle of confederation as embodied in the present memorandum forwarded to this Board under the approbation of the Minister of Education is in harmony with the principles we have so long cherished, we express our readiness as a board, on educational and patriotic grounds, to join in such a confederation, and move the proper authorities of our Church thereto as they may determine, provided the following conditions are made:—

(1) Equitable compensation to all college-uniting in the confederation for their losses incident to their entering the confederation.

(2) The perfect equality of all the colleges, University College included, in their relations to, and rights in, the Provincial University.

(3) Such an arrangement as shall secure to the *alumni* of all the Colleges an equitable representation in perpetuity.

(4) That the Chairman of the University Professoriat be appointed by the Government.

(5) That transfer of subjects from University College course to the course in the University Professoriat, or *vice versa*, shall be made only by a three-fourth majority of the Senate.

Educational Intelligence.

THE new American Catholic University will have an endowment of \$3,000,000.

MR. J. C. SMITH, of Cavan, has resigned his school, to take charge of a London & Lancashire Insurance Agency in Lindsay.

PETER HOUSE, Cambridge, celebrated the six hundredth anniversary of its foundation, on Monday, 22nd December last. It is the oldest collegiate institution in the University.

We regret to learn of the sad death, caused by inflammation of the brain, of Mr. Joseph Pickering, late Principal of Arkona Public School. Those who knew Mr. Pickering, speak of him as an excellent teacher, highly respected by all who knew him.

THE new building for the High School at Smith's Falls was opened on Wednesday, the 7th inst., with simple but impressive ceremonies.—a dedicatory prayer, by the Rev. Mr. Mylne, of the town, and speeches

by members of the board, and by the newly appointed masters of the school, Messrs. Robertson and Little.

THE regular half-yearly meeting of the North York Teachers' Association will be held at the Model School, Newmarket, on the 22nd and 23rd of January inst. J. A. McLellan, LL.D., Conductor of Institutes, will be present and will deliver a public address on the evening of the 22nd.

MR. FRANK WOOD, who for seven years past has been Principal of the Model School, Bradford, was on New Year's Day presented by the people of the town with an address, and some very valuable books, on the occasion of his resignation. The address spoke very favourably of Mr. Wood's efficiency and value as a citizen.

A SHORT time ago it was stated that the Hon. D. A. Smith had given \$50,000 to McGill College, Montreal, for the purpose of encouraging the higher education of women. It seems the same gentleman is now willing to grant another \$50,000 on condition that provision be made for the separate education of women in that institution.

THE second lecture of the Peterborough Y. M. C. A. course, will be given on the evening of Thursday, 15th January, in the Association Hall. The lecturer is Mr. J. H. Long, M.A., LL.B., and the subject is "English Writing Reform," a topic of considerable interest, in view of the many schemes proposed for simplifying our orthography. We understand that Mr. Long will, in connection with this subject, take up the origin and development of shorthand.—*Peterborough Examiner*.

THE inauguration of Strathroy Collegiate Institute was celebrated in Albert Hall, Strathroy, on Monday, January 12th, with appropriate ceremonies. The Hon. G. W. Ross, Minister of Education, made an address in the afternoon, and a banquet was given to him in the evening by the teachers and pupils of the institute. The Minister declared that the consolidation of the different branches of the educational system of the Province, should be his principal aim. Strathroy High School has, for some time, deserved the honor to which it has but just now attained.

OWING to the enormous increase of work connected with the education system and the large expenditures involved, it has been decided by the Government to create a Minister of Education. It is understood that the portfolio will be given to Sir Lyon Playfair, a gentleman eminently fitted to fill the position by reason of his scholarship, the deep interest he takes in all education matters, and his large Parliamentary experience. Sir Lyon, who is sixty-six years of age, was born in Meerut, Bengal, and was partly educated at St. Andrew's, North Britain. He made chemistry his special study, and was at one time manager of large calico print works in Clitheroe, near Manchester. In the general election of 1868 he was elected member of Parliament for the Universities of Edinburgh and St. Andrews, which seat he still retains. He was Postmaster-General for a short time prior to the fall of the Gladstone Administration in 1874. After the general elections of 1880 he was appointed Chairman of Ways and Means, which is almost a Ministerial position. His appointment will prove very popular.—*Mail, Jan. 12th*.

## Correspondence.

## GRAMMAR.

To the Editor of the EDUCATIONAL WEEKLY.

SIR,—Permit me to state my experience. I was trained to the strict use of the plan laid down by Samuel Kirkham in his little work on English grammar. In the parsing exercises, the *why* was stated for each step of the work. This (the *why*) I soon learned to give habitually, though rationally. As a preparation for the correction of false syntax that followed, this drill was most effectual, and especially, I think, because the grammatical principles ("rules of syntax") were always to be stated in each case. I do know that, relying upon my knowledge thus acquired, I was able, while yet a boy to break the fetters of habit in the use of incorrect forms acquired as the result of imitation. Till long after I could parse with certainty and skill, I knew nothing of analysis of sentences; but I found it extremely easy to take in the whole matter so soon as I once got the idea that, phrases, clauses, and even sentences are used in the same relations as the individual words I had hitherto been parsing.

Now, sir, I am not arguing a case, but stating my own experience. I wish now to state my observations. A large majority of students fail when set to point out the errors and the principles involved in examples of false syntax. The cases of failure are so numerous, and the failures so complete that I confess to a longing for something more like that which formed the guide of my youth in this matter.

AN OLD TEACHER WHO HAS TRIED TO BE ALWAYS ABREAST OF THE TIMES.

## Examination Papers.

## SECOND CLASS PROFESSIONAL EXAMINATIONS.

Papers set at the Examinations held in Toronto and Ottawa Normal Schools, December, 1884.

## V. MENTAL ARITHMETIC—Examiner: J. C. GLASHAN.

1. Bought 500 lbs. sugar, part at the rate of 10 cts. per lb., the remainder at the rate of 8 cts. per lb.; the whole costing \$47. How many pounds were there at 8 cts. per lb.?

2. A clock standing near a stove loses at the rate of .57" per hour when the fire in the stove is alight but gains at the rate of .95" per hour when the fire is not burning. One day at noon the clock was set right and the next day at noon it was observed to be right again. How long was the fire in the stove alight during those twenty-four hours?

3. If the telegraph poles by the side of a railway be 60 yards apart, what fraction of the true speed will the error be in reckoning the speed of the train to be twice as many miles per hour as the train passes poles per minute?

4. A man has a pint measure empty, a quart measure full of water and a gallon measure full of milk. He fills the pint measure from the quart measure, the quart measure from the gallon measure, and then empties the pint measure into the gallon measure; this he does three times. How much water is there then remaining in the quart measure?

5. Bought goods for \$150; sold  $\frac{1}{2}$  of them at a profit of 20 per cent.,  $\frac{1}{4}$  of them at a profit of 10 per cent., and the remainder for \$20. What was my profit on the whole?

6. A man who has a certain sum of money to invest finds that if he buy at 144, Building Company stock paying 6 per cent., his income will be \$50 more than it would be were he to buy  $3\frac{1}{2}$  per cent. Government bonds at 91. What sum has he to invest?

7. The engine of an express train is making 180 strokes per minute. If the driving-wheels be 7 ft. in diameter, at how many miles per hour is the train running?

8. How many square feet in the surface of a cylindrical pipe 420 ft. long and  $1\frac{1}{4}$  inches in diameter?

## VI. DRAWING—Examiner: J. A. McLELLAN, LL.D.

1. Draw an upright view of a cone, with base above the line of sight. The altitude of the cone is  $1\frac{1}{2}$  inches, diameter of base at pleasure.

2. There is a cylinder  $1\frac{1}{2}$  inches long and  $\frac{1}{2}$  inch in diameter lying on the ground, with its axis parallel with the picture plane. Draw a view of the cylinder as seen by a person standing (a) directly in front of it, (b) to the right of it, (c) to the left of it.

3. Draw the top view, the end view, and a perspective view (freehand) of a square block of steps, having four risers and four threads, each  $\frac{1}{4}$  inch. Connect the top and end views by dotted lines.

4. Three feet to the left of the spectator and touching the ground line, is a square plinth 4 feet to a side and 1 foot thick, having one surface parallel with the picture plane. On its place centrally a square column 2 feet to a side and 4 feet high and 12 feet distant. Scale  $\frac{1}{4}$  inch to a foot.

5. Draw a right-angled triangle with base about 2 inches long and altitude 1 inch. Within the triangle inscribe a circle and on the longest side of the triangle construct a square. Give construction lines, in both cases.

6. Draw a square two inches to a side, divide it into four smaller squares, and cover the surface with an ornamental form repeated once in each square. The unit of design to be based upon the quadrisection of the sides of the smaller squares.

7. Distinguish between (a) light, (b) shade, (c) shadow. Give illustrations, with letters of reference. Assume the illuminating body to be at the left, and a little above the object on which the light falls.

N.B.—Work to be done with pencil.

## ADMISSION TO HIGH SCHOOLS.

Papers set at the late December Examinations.

## I. DICTATION—Examiner: J. E. HODGSON, M.A.

After several days' journey, the army reaches a country where slaves may be caught, and disperses itself to the several cities and villages. Sometimes the people defend themselves heroically with their bows and arrows: flying to the summits of rocks, and selling their liberty dearly. Often, however, they are surprised while they are preparing their meals, or dancing, or celebrating a bridal-feast; and then the enemy rush in, seize them, chain, and bear them unresistingly away. If the hamlet be girt with stockades, a garrison of expert archers may occasionally drive back the forlorn-hope of the slave-hunters; but a second assault is victorious, and the dwellings are left level with the earth.

## II. COMPOSITION—Examiner: J. E. HODGSON, M.A.

1. Give in your own words the substance of the following fable:—

A rustic saw an eagle in the snare,  
And, as he much admired its beauty rare,  
He loosed it from its fetters forth to roam

Thence did the eagle a warm friend become  
To its preserver. For, to avoid the heat  
And catch the breeze, it saw him take his seat  
Beneath a wall. It snatched, as o'er it flew,  
A burden from his head, and this it threw  
Far off. The rustic, eager to pursue  
His pack, made for it. Down the walling fell,  
And thus the rustic was requited well.

2. Write a short note to a cousin, or friend, in Toronto, inviting him to spend a day with you.

3. Combine the following sentences so as to form a connected story:—

There was once a sculptor. The sculptor's name was Bacon. Bacon, when a boy of five years, fell into a pit. The pit was the pit of a soap-boiler. A workman entered the yard. The workman observed the top of Bacon's head. The workman immediately rescued Bacon.

4. Contract each of the following complex sentences into a simple sentence:

(a). When Cæsar had crossed the Rubicon, Pompey prepared for battle.

(b). As I had nothing else to do, I went away.

(c). If you remain here, you will suffer from cold.

5. Correct the following:—

(a). It is equally as good as the other.

(b). There are but a few other similar places.

(c). Whenever he sees me he always enquires after my health.

(d). He does not know you better than John.

## III. ENGLISH GRAMMAR—Examiner: JOHN SEATH, B.A.

1. Having seen fallen under the King's displeasure for refusing to comply with his desire, the aged chancellor at once resigned his office and its many emoluments.

(a). Analyze the above sentence.

(b). Parse the words printed in italics.

2. Explain and illustrate the meaning of the following terms:—Part of speech, conjugation, phrase, clause.

3. Construct sentences to show that each of the following words may be used as different parts of speech:—

*dream, Canadian, what, more.*

4. Give all the inflected forms of each of the following words:—

*man, he, this, love.*

5. Change, when possible, the form of each of the following adjectives, so as to express different degrees of the quality:—

*cruel, white, dry, proper, gay, admirable.*

6. Define "Transitive Verb," and show that, according to your definition, the verb in each of the following is transitive:—*James struck John, John was struck by James, and The tree was struck*

7. Give the other principal parts of *spell, burst, froze, spread, lay.*

Why are they called "principal"?

8. Distinguish the meanings of—*I wrote the letter, I have written the letter, and I had written the letter, I will go to-morrow, and I shall go to-morrow, He came late, and He came lately.*

9. Correct, when necessary, the following, giving the reason in each case:—

(a). It is long since I have spoke my mind.

(b). I heard the man and woman's voice.

(c). James is taller than me and you.

(d). Dont he look the ugliest of his three brothers?

(e). Safety-matches will only take fire upon the box.

(f). Can I go to-morrow?

(g). Sit quiet in your seats.

(h). The school-board was in the room.

(i). Neither of us was there.

(j). The river has overflown its banks.

(k). He hadn't ought to do it.

(l). He feels some better.

# THE EDUCATIONAL WEEKLY,

PUBLISHED BY

THE GRIP PRINTING AND PUBLISHING CO.,

SAMUEL J. MOORE, *General Manager.*

C. FRASER, *Business Manager,*  
*Educational Weekly Department.*

JOHN E. BRYANT, M.A.,  
*Editor.*

## *What the Educational Weekly proposes to be :*

An independent and thoroughly upright journal, devoted to the entire educational interests of the Province.

A medium for the expression of every shade of open, straightforward educational criticism.

A medium for the disseminating of educational thought and opinion throughout the Province—open to all who choose to make use of it.

A means by which all practically engaged in the work of education shall know all of importance that is going on in the educational world.

A means by which all practically engaged in the work of education shall obtain the latest and most advanced opinions concerning the theory of education.

A means by which all practically engaged in the work of education shall obtain examples of the latest and best methods of practising their art.

A means by which all who are directly or indirectly engaged in educational work shall have access to the latest official regulations, changes in the school law, results of examinations, etc., etc.

## *What the Educational Weekly promises to give its readers from week to week :*

Concise accounts of methods of teaching, useful hints to teachers, brief discussions of educational topics.

A specially prepared summary of important foreign and domestic news.

Notes and comments on current topics, educational movements, prominent authors and educationists both home and foreign.

Literary and scientific selections of educational value; poetry for school readings and recitations; sketches and brief biographies of authors and artists; instructive and popularly written chapters in modern science; the choicest gems of modern poetry; bright and readable selections from the most modern literature.

Literary and Scientific Table Talk, condensed from the best English and American periodicals.

Historical, critical, and instructive articles from all our best and most active educationists.

Editorial articles on all the important educational questions of the day.

The brightest and most interesting news relating to Music, the Drama, and Art, prepared expressly for the EDUCATIONAL WEEKLY.

Selected and original articles relating to High School work, and from time to time papers practically illustrating methods required in High School teaching.

Selected and original articles relating to Public School work, with special reference to the practical work of the school room.

A series of articles giving the history of the Kindergarten System, to be followed by a series of articles giving in consecutive order an account of the methods and practices of the Kindergarten schools.

The freshest educational intelligence that can be obtained—both home and foreign.

The freshest personal items that can be obtained—especially educational—both home and foreign.

A series of articles on Practical Art, commencing with Linear Perspective, by A. J. Reading, Esq., Teacher of Perspective in the Ontario School of Art.

A series of articles on Phonetics and on Phonography, the latter to be eminently practical, by Thomas Bengough, Esq., Principal of the Ontario Shorthand Institute.

All the important Regulations issued by the Educational Department.

All the useful and important Examination Papers set at the Departmental and University Examinations.

**TEACHERS:** If you want to help to sustain such a paper as this, send in your subscriptions **AT ONCE.**

**PRICE:—\$2.00 a year; \$1.00 for six months; 50 cents for three months.**

As soon as possible the size of the paper will be increased to 24 pages. Our numerous departments will make this enlargement necessary.



## *Important Notice to Teachers.*

In order to put the EDUCATIONAL WEEKLY in the hands of every teacher of the Province we make the following

### EXTRAORDINARY OFFER.

To every teacher who will secure for us four Subscriptions at the full rate of \$2.00 per annum, we will send one copy of the EDUCATIONAL WEEKLY for one year FREE.

OR, any Club of five may secure the EDUCATIONAL WEEKLY for one year for \$8.00 *i.e.*, at \$1.60 per annum, to each member of the club.

For every teacher who will act as our agent we will send the EDUCATIONAL WEEKLY at the rate of \$1.50 per annum, to all Subscribers whom he may secure: provided he secures at least twenty Subscribers. This will net him fifty cents each for every subscriber that he secures.

OR, the EDUCATIONAL WEEKLY will be sent to clubs of twenty or more at \$1.50 per annum each. Single subscriptions will not be received at less than \$2.00 each.

From these rates there will be no deviation whatever.

ADDRESS—

*EDUCATIONAL WEEKLY,*

GRIP PRINTING AND PUBLISHING CO.,

TORONTO.