

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:

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	14X	18X	22X	26X	30X
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12X	16X	20X	24X	28X	32X

# The Canada School Journal.

## AND WEEKLY REVIEW.

VOL. X.

TORONTO, JANUARY 29, 1885.

No. 4.

### Table of Contents.

	PAGE.
<b>EDITORIAL:—</b>	
The World.....	37
The School.....	39
The Week's News.....	41
<b>SPECIAL ARTICLES:—</b>	
Some Wisdom.....	41
<b>EXAMINATION QUESTIONS</b> .....	42
<b>PRACTICAL DEPARTMENT</b> .....	43
<b>EDUCATIONAL NOTES AND NEWS</b> .....	44
<b>PERSONAL</b> .....	45
<b>CORRESPONDENCE</b> .....	46
<b>MISCELLANEOUS</b> .....	47
<b>QUESTION DRAWER</b> .....	47
<b>CONTEMPORARY OPINION</b> .....	48
<b>ALL SORTS</b> .....	48
<b>LITERARY REVIEW</b> .....	48

### The Canada School Journal and Weekly Review.

Edited by J. E. WELLS, M.A.

and a staff of competent Provincial editors.

An Educational Journal devoted to the advancement of Literature, Science, and the teaching profession in Canada.

#### —O—T E R M S.—O—

**THE SUBSCRIPTION** price for THE CANADA SCHOOL JOURNAL is \$2.00 per annum, strictly in advance.

**DISCONTINUANCES.**—THE CANADA SCHOOL JOURNAL will not be sent to any person after the expiration of the time for which payment has been made.

**RENEWALS** of subscriptions should be made promptly.

**ALL BUSINESS** communications should be addressed to the business manager. Articles intended for publication should be addressed to the editor.

**ADVERTISEMENTS** of a suitable nature will be inserted at reasonable terms. See schedule of rates in another column.

CANADA SCHOOL JOURNAL PUB. CO. (Limited),

Publishers.

J. L. ROBERTSON,

Secretary-Treasurer.

JACOB M. KENNEDY,

Business Manager.

### The World

The party papers are just now giving us a pitiful illustration of the workings of partyism in politics. While the one set of organs is exaggerating the symptoms of destitution and distress in the city of Montreal to the last degree, the other set is equally intent on minimizing or disguising the actual facts. As usual the truth no doubt lies midway between the extremes. But it is sad when the energy that should be devoted to devising measures of relief is absorbed in the effort to manufacture political capital out of popular misery.

The latest and deadliest of the series of dynamite explosions has naturally roused intense excitement in London. It will be strange indeed if the origin of this cruel and cowardly crime cannot be traced. The result must almost surely be the adoption of stringent measures by the American Government to put a stop to the villainous trade of men of the O'Donovan Rossa type. No effort or expense will be spared by the British Government to track the treacherous wild beasts to their lair, and every good citizen of the world will earnestly hope for their speedy discovery.

A good illustration of the practical benefits that may result from thorough geological surveys is given by Mr. Selwyn, Director of the survey, in a letter to the *Week* of the 22nd inst. Mr. Selwyn says that the thickness of the Crowfoot seam in the Canada Pacific Railway shaft is nine feet, being one inch more than the thickness assigned to it on Dr. Dawson's map. Mr. Selwyn quotes from a recent letter of Mr. Van Horne, that the results reached by the experimental shaft at Crowfoot "exactly corresponded with the information received from Dr. Geo. M. Dawson before the shaft was commenced."

The latest correspondence between General Grant and Vanderbilt shows both parties to unexpected advantage. Mr. Vanderbilt attempts in various ways and with gentlemanly delicacy to induce the General to accept a release from his indebtedness. Gen. Grant, on the other hand, steadiness and sturdily refuses to accept the favour either personally, or as a gift to Mrs. Grant. But, as an exchange points out, a man in possession of an annual income of \$15,000 and capable of earning \$10,000 more by the use of his pen, need be dependent on no man's generosity.

The first blow has been struck in the Soudan and victory has perched upon the British banner, though not until scores of gallant British soldiers, as well as hundreds of the opposing horde, had bitten the dust. A stern moral necessity alone can justify either such a sacrifice of brave Englishmen or such a slaughter of fanatical Mohammedans. Meanwhile there is an uneasy feeling in the public mind. No one can feel sure that the whole story has been told, while the despatches as we have them indicate that only the indomitable pluck of officers and men saved the affair from proving a catastrophe and converted it into a triumph. Further news is awaited with intense anxiety.

Mr. Chapleau seems in one respect to have exhibited more political prescience than any of his fellow orators at the banquets. He sees what must be patent to every mind that gives the matter attention, that any scheme of Imperial Federation implies as its first corollary the absolute independence of each of the contracting parties. When a father offers his son a partnership in the firm, he, in the very act, implies that that son has attained his majority. Otherwise such an offer would be to the child a command rather than a proposition. There may be senior and junior partners in a firm, but each must enter on terms of freedom and equality. The moment that Great Britain approaches Canada or Australia with a proposal for a federal league, that moment she says in effect: "You are free and independent. Choose or refuse, as you see fit." It seems well to point this out for many favour the Imperial Federation scheme, who are strongly opposed to independence. Full liberty of action cannot be withdrawn after having been once distinctly conceded.

The great, and growing evils connected with the present mode of election to the Presidency of the United States are causing much thought and argument as to the possibility of finding a better way. Discussion is particularly active since the recent election. It seems to be felt on all hands that the time for a change has come. The disturbance of trade, the paralysis of industry, the carnival of corruption and bad feeling which are the quadrennial outgrowth of the present system, are injurious to all interests, business, social and moral. No less than eleven different methods that have at various times been advocated are given in a recent number of the *North American Review*. The plans which seem at present to meet with most favour are, election by the State Legislatures, and election by direct electoral vote. The chances are largely in favour of the adoption of the latter method, which is sure to be popular. Three out of five prominent writers, who discuss the question in the last number of the *North American Review* are in favour of it. How such a mode of election can be kept free from the evils which are so damagingly connected with the present system does not yet clearly appear.

New heat has been added to the discussion which has been so long going on between the vivisectionists and the anti-vivisectionists in England, by a late incident. The advocates of vivisection heralded exultingly a recent operation performed by a surgeon, in removing a tumour from a patient's brain. It was alleged that the ability to localize exactly and so reach the tumour was due entirely to the information gained by Dr. Ferrier's experiments upon the brains of twenty living monkeys. An unexpected turn has since been given to the controversy by the death of the man from whose brain the tumour was removed. The *London Spectator* says that far better guidance to the location of brain tumours is afforded by *post mortem* examinations, and that following this guidance Dr. MacEwan, of Glasgow, has successfully removed several such tumours. The *Spectator* adds that, so far from its being the case that the experiments of Dr. Ferrier were not cruel, it appears that they were very cruel, though anæsthetics were freely used, and that the twenty monkeys were "transformed from gay, intelligent, affectionate creatures into miserable sufferers, robbed by one operation after another of all evidence of mental capacity, sitting in abject melancholy while they lived, with hands clasped upon their heads, and generally dying of meningitis, and the dreadful distress which always attends that disease."

There seems to be a deepening impression in the minds of thinking Canadians that our country is on the eve of important change of some sort. Else why this constant discussion of the various possibilities of the future—Independence, Imperial Federation, Annexation? A writer in the *Mail* doubts the necessity or wisdom of thinking of immediate change. He sees no reason why we may not go on well enough with the present relations of the provinces to the Dominion, and the Dominion to the Mother Country. But such a view seems to ignore at least two important facts, viz., the strong and growing discontent of some, if not all, the provinces, and especially of

the Maritime Provinces, with the existing union, and the almost utter failure of that union thus far to develop anything worthy of the name of a Canadian national sentiment. We deplore the fact, having hoped for better things, but the people of the different provinces of the Dominion seem as much provincialists, and as little Canadians to-day, as they were twelve or fifteen years ago. The Eastern provinces have never merged their Nova Scotia or New Brunswick patriotism in Canadian patriotism. The people of the great western prairies are already crying out with emphasis, "Northwest first," while to speak as if Ontario and Quebec were bound together by any living bond of sympathy, seems almost like irony. To look difficulties and even failures fairly in the face, is not pessimism but patriotism. In this as in so many other cases it is much easier to point out the malady than to apply the effective remedy. How Imperial Federation or Independence would help to draw the provinces closer has not been made clear by the advocates of the one or the other. Even should the former enable us to obtain better trade relations with our rich neighbours to the south, it is a question whether the increased prosperity might not act rather as a disintegrating and centrifugal force than as a bond of closer union amongst the Provinces. That it would necessarily lead to annexation is often asserted but lacks demonstration.

In view of the prominent part taken by Rev. Henry Ward Beecher and other American divines, in the recent presidential election, considerable interest attaches to a discussion in the February number of the *North American Review* on the question "Should Clergymen be Politicians?" The negative is maintained by Rev. Dr. H. J. Van Dyke, jr., the affirmative by Mr. Beecher himself. Neither paper strikes us as particularly strong. Mr. Van Dyke concedes that all clergymen have the same duties, rights and privileges as other citizens, including the right of free thought and speech; the duties of obedience to law, loyalty to government, and the exercise of their active powers for the highest welfare of their country; and the privilege of voting on all questions of public interest as reason and conscience dictate. He goes on to argue, not very consistently, that the clergyman in politics is superfluous, disloyal and injurious; superfluous, because he has no special training or fitness for this sphere of activity; disloyal, because he is using his influence in a state which should be unsectarian to bind a particular church to the support of a particular party, and consequently that particular party to the support of that particular church; injurious, because when he lowers the pulpit to the level of the stump, and attempts to lead the church as a religious organization into the train of any candidate for office, he is doing a great and irreparable harm to the cause of religion. Mr. Beecher on the other hand contends that any procedure which puts clergymen into a class by themselves and seeks to free them from contact with the ordinary duties of humanity is most pernicious; that no man has a right to be exempt from the political duties of the citizen, least of all the clergyman; that two elements are needed to exalt politics from the low level at which it now exists, the in-

fluence of woman, and of a faithful pulpit. He maintains that such themes as the meaning of citizenship; the sin of bribery; injustice and slander in politics; the sin of withdrawing from all participation in the first duties of the citizen, etc., should at suitable times be discussed as belonging to Christian ethics. Mr. Beecher concedes a main point to his critics when he says that "as a general thing, instruction from the pulpit upon political duty should not be given upon the eve of an election," meaning, we presume, that the preacher should not, at such a time, advocate the claims of any particular candidate or party, for surely his influence in favour of morality and moderation will then be specially needed. Perhaps, after all, the truth in the case is not very deep in the well. Mr. Van Dyke's arguments, if they prove anything, prove too much. If ignorance of political facts and principles should be a disqualification for taking part in politics, there is reason to fear that vast numbers beside the clergymen should be disqualified. If the minister should not take part because the church is opposed to the world and politics is in the sphere of the latter, then, by parity of reasoning, no church member should do so. The fact is, the trouble is first in the degraded character of the politics of the day, and next in the manner in which the average clergyman seeks to elevate them. Few, probably, would deny that it is both the right and the duty of the clergyman to do what he can to urge his people to eschew bribery and corruption in politics, to seek to elect the best and purest men, to devote their energies to the bringing in of a higher political morality in state and nation, to strive, in a word to bring the lofty ethics of the New Testament to bear as an elevating force, in every relation of life, political and social. But that all this can be better and more effectively done by the clergyman who carefully holds aloof from all canvassing for a particular candidate or party, scarcely admits of a doubt. It is his to inculcate the great principles of Christian ethics, and leave it to the judgment and conscience of his hearers to make the application.

---

### The School.

---

Both the Principal of the Normal School and the Minister of Education urged the Normal School students to pay special attention to mental science, which has been added to the curriculum. This is well. The science of mind is at the bottom of all philosophy and all knowledge, while the study of it affords the very best mental discipline.

The question of the confederation or distribution, centralization or decentralization, of Canadian Universities and Colleges is one of great interest to friends of higher education, not only in Ontario but all over the Dominion. The motto of the SCHOOL JOURNAL on all such questions is "Hear both sides." We have accordingly invited a number of representative men, of various shades of opinion to favour us with brief expositions of their views in reference to the proposed confederation of Ontario Colleges. These articles we shall give from week to week as we may receive them, as a kind of *symposia*. The first instalment will appear in next issue.

The American teacher thinks that the tendency of the day is to magnify sense training into improper proportions, and that it is at least equally important that the pupil be taught how to read and reflect upon what is read. Each has, no doubt, its proper sphere in education, and either should be emphasized by the school journals, according to the tendency of the time. Mankind, as Arthur Helps says, is always in extremes. The remark is as true of educational as of other "fads." No sooner does the pendulum reach the highest point in one direction than it begins to recede towards the opposite.

Dr. Todd, of New Haven, is probably correct in thinking that the American Colleges teach the grammar, not the literature, of the classical languages, but he must surely be indulging in hyperbole, when he says, "I do not believe there is a professor in Yale College to-day who can translate at sight and without recourse to thumbed lexicons, a page of Greek or Latin, with which he has had no previous acquaintance." It is, we fear, true of both American and Canadian colleges that reading at sight is not required and insisted on as it should be. Grammar should be taught in the preparatory schools, and the time of the students in University Colleges devoted to reading extensively the Greek and Roman literature, not struggling with grammatical forms and syntactical perplexities.

Some of the American educational papers are vigorously discussing the advisability of abolishing the recess. A writer in the educational *Gazette* gives an array of reasons, formidable at least in point of numbers, in favour of no-recess. Amongst these are the danger of physical injury from sudden cold, and from accident in rush and play, and of moral injury from quarrels, from the tyranny of the older and stronger, and from the contaminating influence of the bad. In favour of the abolition of recess is urged the approval of many parents, the too frequent inadequacy of play-grounds, and the advantages of various kinds resulting from the longer intermission at noon which could thus be gained. The writer speaks strongly also of the recess as a disturbing element in the school and as the occasion of much loss of time in addition to that actually spent in the open air. On the other hand we fancy most teachers will find that the fifteen minutes for recreation and inhaling fresh oxygen, is the means of infusing new energy into the pupils and new life into the school room routine. The question is largely a practical one on which it might be both interesting and profitable for experienced teachers to compare notes. We should be glad to make room for some short articles upon the subject.

The newly appointed Principal of the Toronto Normal School gave some excellent advice to the students on the occasion of the opening exercises on the 21st inst. He urged them to work not simply with a view to passing examinations, but to pursue knowledge for its own sake, an excellent rule, but one which it will be found very difficult to induce the average student to follow so long as license, employment, reputation, all hang upon the results of the competitive examinations looming on the near horizon. The importance of

regularity and system in work, and of self-reliance in the conflict with the difficulties sure to arise both in study and practice was well and wisely insisted on. "To do one thing at a time, and that with all your might and will," is a maxim which unquestionably gives the key to the highest success within the reach of any individual. Nor could the speaker have emphasized a more important truth than when he dwelt upon the prime value of character as distinct from and above all culture, and reminded the young men and women present that they would greatly fail in the discharge of the duties of their profession, if they contented themselves with merely forcing the faculties of youth to their highest acuteness, and left them unguarded against sordid greed for gain, and unschooled in the principles of honour and integrity.

The last brief paragraph in the College Confederation report contains some valuable memoranda. The need of ample provision for the higher education of women is specially imperative. Any Confederation of Colleges for University work which should fail to afford equally as good educational facilities for women as for men, would be radically defective as well as lamentably one-sided. No people, as such, can reach its maximum intellectual or moral elevation so long as the avenues to the highest attainments are virtually closed to a moiety of the whole population. Social inequality; the failure to develop the most powerful of all educative forces, that represented by mother, wife, sister, daughter, lady friend, teacher,—in a word, that of woman in all the relations of life; and the less tangible, but perhaps not less real and potent influences transmitted by heredity—these are but some of the losses to the community which adopts a policy so unjust and purblind. The colleges will no doubt all be open to women. This is but fair and right. But so long as the great majority both of parents and of young ladies decline, as they are likely to do until the millenium, to avail themselves of the privileges of co-education, so long this will fail to solve the problem. Thoroughly equipped colleges for ladies alone will meet the demands of the time and of simple justice. To what extent the same professional staff and apparatus may be available is a matter for consideration, but one or more colleges for women should be made a fundamental part of the scheme from the outset.

There is an evil which we have seen under the sun in Canada. We see it, in fact, almost every day if we happen to glance over the advertising columns of the newspapers. It generally appears in about this form—"Wanted a teacher for such a district. Applications stating salary expected, etc., will be received, etc." What would be thought of the father who should advertise thus, "Wanted, medical advice for my child. Applications, stating lowest terms received from physicians, etc.," or of the business firm which should say, "Wanted, a lawyer to take charge of a very important case in the courts. Apply, stating lowest fee, etc." Is the physical health of a child, or the settlement of a question of property of so much greater importance than the training of the mental and moral faculties of the soul, that which nothing short of the best pro-

fessional skill will be accepted for the former, the cheapest is good enough for the latter? Or does the profession of doctor or lawyer possess so much more inherent dignity than that of the teacher, that a process of cheapening which would be considered insulting to the former is justifiable in the case of the latter? This method of inviting competition, and beating down salaries to the lowest figure, is unworthy of any educational board. Many of them are, perhaps, unable to pay a really adequate salary to a competent teacher. But the least they can do, in justice to a profession which should be amongst the first in dignity, is to fix the highest salary the resources of the district will allow, and state the amount frankly and above board. Many, we are happy to see, do so.

We are by no means sure that modern science has demonstrated its pet thesis of "survival of the fittest," as the supreme law of nature in the development of animal and intellectual life. But it is pre-eminently the only safe and sound maxim in all educational work. When a few months ago the new Minister of Education conceived the design of doing away with the slow old methods of competition and comparison in the selection of text books, and determined to rely upon his own perceptions or intuitions to enable him to choose the right men to produce the best for school purposes, his new departure was not only unique in its originality, but startling in its boldness. He must indeed be possessed of singular self-reliance, who can thus rush in where the ripest scholar and most experienced educationist might well fear to tread and say, "I will sweep away at a stroke all these old books, which have kept their places in the schools by the law of survival after the keenest competition, and will replace them with a new series chosen by myself or made to order by such writers as I may choose." To say nothing of possible defects in the productions of amateurs, surely no one astute enough to inaugurate so radical a change, could have failed to foresee the shock to publishing houses, the disturbance of the great school book trade, the discouragement of authors and publishers, the embarrassment of school boards, and the wrath of poor or penurious parents, which were sure to be among the first fruits of the new policy. Of course when the brewing storm bursts upon the walls of the Education Department, it should have no power to ruffle the serenity of a man *justum et tenacem propositi*. If the Minister feels sure that he is right; that a cast iron one-book system is the very best for the educational interest of Ontario; that the men he has chosen, or may choose, in the exercise of his official insight, are the very best men to produce the very best books; that the Public and High School teachers, as well as trustees and school boards, are but parts of a great machine, and are best used as such; in a word, if he is convinced that his scheme is *the* scheme and wisdom will die with it; then he has only to stand up proudly and withstand the storm, or be broken by it. But if he has any lingering doubts on any or all these points, he will perhaps do well to follow the example of many a great and wise man, and ask himself before it is quite too late whether, after all, second thoughts may not be wiser, and the old principle of competition and survival of the fittest the best to be applied, both in the selection of authors and text-books, and in the mechanical production of the latter. To make haste slowly is often to make haste surely.

## The Week's News.

Edmund About, the distinguished French author is dead.

Hon. Mr. Norquay was presented with a congratulatory address on his recent arrival in Winnipeg, from Ottawa.

Russia, Austria and Prussia have concluded a treaty for the extradition of Socialists.

The German Reichstag on the 23rd inst., voted 37,000 marks to be used in exploring Central Africa.

Two deaths from cholera are reported from St. Louis. The Health Commissioner is investigating the history of the cases.

Germany is negotiating for a treaty of commerce with the Transvaal.

Toronto Baptist College Board approves of the confederation scheme, but suggests amendments.

It is reported that the Italian Government is organizing a force of 20,000 men to occupy Tripoli.

The Scott Act was carried in Guelph on Thursday last by a majority of 169.

The grocers of Montreal have resolved to advance the price of sugar.

Hon. Messrs. Church and Morrison, of Nova Scotia, are at Ottawa, interviewing the Dominion Government in reference to Provincial matters.

A meeting of graduates and benefactors of Queen's University, Kingston, has passed resolutions disapproving of the College confederation scheme. The centralizing tendency is objected to.

Sir Stafford Northcote has come out unreservedly in favour of Colonial Federation, and the establishment of a Central Colonial Council.

Towns and villages in Piedmont and the mountain districts of France have been buried beneath avalanches of snow. Many lives are reported lost.

London *Truth* says Carlyle's niece, Mrs. Aitken, is about to publish a life of Carlyle controverting Froude's blunders and erroneous impressions.

A disgraceful slugging match is reported as having taken place in the parlour of a mansion on Madison Avenue, N. Y., between two rowdy denizens of that aristocratic quarter. One hailed from Oxford, Eng., and the other from Harvard.

English papers say that the sale of revolvers in England is enormous and that the practice of carrying them concealed is becoming as common as in the United States. Shooting affrays are frequent and restrictive legislation is talked of.

A despatch from Capetown, of the 23rd inst., says that negotiations between the commander of the Bechuana expedition and the President of the Transvaal Republic have failed. The British troops have started for Bechuana land to drive out the alleged filibusters.

Simultaneous examinations were held last week in the Toronto School of Art, and some affiliated institutions. There are about fifty Mechanics' Institutes, and other institutions now conducting drawing classes, and it is expected that over one thousand candidates will be examined in the spring.

An organized assassination society is said to have been discovered at Sarasota, Florida. The society is composed of sixteen or eighteen members, at least two of them physicians, and others being of high standing. The object of the society is simply the removal by death of persons objectionable to the members. Eight arrests have been made.

The first battle of the Egyptian campaign was fought near Metemna on the 17th inst. Gen. Stewart's small force was attacked by some 8,000 or 10,000 of the rebels. These made their customary rush in overwhelming numbers on the British square, and succeeded in breaking it for a moment. It was however quickly reformed, and the rebels driven back with the loss of 800 left on the field, and a very large number of wounded. The British loss was 65, including several officers, and amongst them Col. Burnaby, the hero of the famous "Ride to Khiva." Further particulars are anxiously looked for.

## Special Articles.

## SOME WISDOM.

We read the *New York School Journal*. We often find excellent things in it; but sometimes we find things in it that are not so good. We think an editorial in a recent number contains about as much untruth and bad logic as could by any possibility be compressed into the same number of lines. We propose to give the readers of the *Illinois School Journal* the whole of this precious morsel, with a few running comments on the same.

"Somebody says, 'If moral suasion don't succeed, use a shingle!'" To which we say *amen*; that is sound doctrine for any one in authority, anywhere. "We should be disposed to use a shingle on him who failed to make moral suasion succeed." Then, there is no true government but moral suasion, which is just no government at all. No government ever existed, or ever can exist, without both the power and the disposition to enforce its demands when necessary.

"If a shingle is the worst thing possible for a stubborn horse, why is it not equally bad for an unruly boy?" It is by no means to be granted that a shingle is always the worst thing for an unruly horse; but, if it were, the conclusion supposed does not necessarily follow. "Is a boy worse than a horse?" A boy isn't a horse, and sometimes he is worse; it is a good thing, however, for horse or boy to know that he has a master. "The doctrine of the old education is, 'If a child don't behave, make him!'" And it is sound doctrine for old education or now, either; there are myriads of boys to-day going straight to destruction for the lack of just such a discipline at school or at home, or in both places.

Says the writer, "This is neither divine or humane." We assert that it is both divine and humane. We have two ways of knowing what is divine law; one is found in Nature and the other in Revelation. If one disbelieves that nature enforces her laws, let him violate them, and he will learn. If he disbelieves that revelation teaches the same doctrine, we are ready to be cited to chapter and verse. He says, "This only makes might right." On the other hand, it only asserts that might will come to the support of right, as it always will in the long run. Otherwise, the universe is not governed at all.

"Is the teacher always right? Are his commands always to be obeyed?" Answering the last question, first, we say *yes*, emphatically. Otherwise, his commands are nothing more than advice, or exhortation; they are not words of law in any sense. Of course, the teacher is human, and all human beings are fallible,—nevertheless, when human beings are placed in a position to govern, it is their business to govern; and we repeat that there is no government which cannot or will not enforce its demands. "What is the theory of government except that law is based on the consent of the governed?" There is no government under the sun, nor above it, whose theory is that all its subjects must consent to its laws before they are amenable to them or subject to their penalties. A more preposterous idea cannot be advanced.

"School government is like any other government." This is true in so far as the essentials of government, including punishment, are concerned. But, in some respects, a proper government in school or in the family is very unlike government in the State. "The unruly or incorrigible are to be separated from the rest. But, suppose they don't consent to be separated, what then? O suppose that circumstances are such that separation is impracticable? Are they by this means to escape all control? And is it certain that in all cases separation is the best thing? Is it not often better to retain the unruly with the others, and compel them to

conform to proper regulations? We have no doubt about the true answer. "The majority obey because it is for their interest to obey." That is, we suppose, because they want to do so. Very well, this is best; but it is for their interest to be made to obey, if they don't want to.

"The school-room is opened for the assistance of those who want to learn." And for no others, we suppose, by fair inference. This is fine, "new" doctrine. Ask each little rebellious gamin if he wants to learn; if he says he does not, excuse him,—the school-room is not opened for him. "When it appears that a pupil does not want to study, and his conduct is an impediment, he should be excluded until he can become loyal." That is comforting doctrine for lazy, wilful young rebels,—set yourself up against the restraints of the school-room, and you can go and follow your course to destruction at your own sweet will. We think we see him "becoming loyal" in just this way! This is the "Gospel of go-as-you-please" run to seed!

"We haven't much confidence in shingles or whips, or the everlasting 'must.'" There, reader, you have the whole of it. Perhaps "the game was not worth the candle," but there is much similar foolishness all that it seems necessary to pay some attention to it, occasionally. There is false doctrine enough here to form a foundation for a whole structure of socialism or anarchy. The sooner young rebels and old, and we would not exclude our editor—learn that it is best to come into harmony with the "overlasting must," the better it will be for them and for us all. If they can be brought into this harmony by gentle means, "moral suasion," it is well; but if they cannot, it is wise and kind and "humane" to compel them to conform by force.—B. C. Hewitt in *Illinois School Journal*.

Examination Questions.

UNIVERSITY OF TORONTO.—ANNUAL EXAMINATIONS, 1884.

JUNIOR MATRICULATION.

ALGEBRA.—HONORS.

Examiner: EDGAR FRISBY, M.A.

- Find the continued product of  $(x^2+xy+y^2)(x^2-xy+y^2)(x^4-x^2y^2+y^4)(x^6-x^4y^2+y^6)$
- State and prove Horner's method of Synthetic Division. Apply this method to find the value of  $x^3-7x^2+16x-3$  when  $x=3$ .
- Find the Highest Common Divisor of  $2x^4+x^3-20x^2-7x+24$  and  $2x^4+3x^3-13x^2-7x+15$ .
- Find the continued product of the following quantities:  
 $x-a\sqrt{-1}; x+a\sqrt{-1}; x+\frac{a}{2}(\sqrt{3}+\sqrt{-1});$   
 $x+\frac{a}{2}(\sqrt{3}-\sqrt{-1});$   
 $x-\frac{a}{2}(\sqrt{3}+\sqrt{-1})$  and  $x-\frac{a}{2}(\sqrt{3}-\sqrt{-1})$   
 and prove that  $\sqrt{4+3\sqrt{-20}}+\sqrt{4-3\sqrt{-20}}=6$ .
- Solve the equations  
 (1)  $x^2-7=\sqrt{x^2-42x+89}$   
 (2)  $x^2+xy+\frac{xy^2}{x^2}=208$   
 $y^2+y^2\frac{xy^2}{x^2}=1053$ .
- State the laws governing the reduction of inequalities and prove that  
 $abc > (a+b-c)(b+c-a)(c+a-b) < \left(\frac{a+b+c}{3}\right)^3$   
 $a, b$  and  $c$  being any positive numbers whatever.

- Find the limiting values of  $\frac{x^2+ax+b}{x^2+cx+d}$ .
- Find the limit of the sum of a geometrical series whose first term is given, the common ratio being less than unity.  
 The first term of a geometrical series is  $\frac{3}{4}$ , and the common ratio is  $\frac{7}{8}$ , find the limit of the sum of the series
- Find the number of permutations of  $n$  letters, of which  $p$  are  $a$ 's;  $q$  are  $b$ 's;  $r$  are  $c$ 's, &c.  
 How many different permutations can be made of the letters in the word mammalia taken all together?
- Write down the expansion of  $(1+x)^n$  and deduce that of  $\frac{1}{\sqrt{1-x^2}}$  and prove that  
 $1+3\binom{2n+1}{2n-1}+5\binom{2n+1}{2n-3}+\dots+(2n-1)\binom{2n+1}{2n-1}^{n-1}=n(2n-1)$   
 $n$  being an integer.
- Find the greatest term in the expansion of  $(1+x)^n$  when-ever possible.  
 What is the number and magnitude of the greatest term in the expansion of  $(1-x)^{-6}$  when  $x=\frac{1}{2}$ .

SOLUTIONS.

- ANS.  $x^{16}+x^8y^8+y^8$ . The product of the first pair of factors is seen to be  $x^4+x^2y^2+y^4$ . Thus the final product is reached by inspection alone.
- (a) For the neatest method see *Teachers' Handbook*, p. 4.  

+3	1-7+16-3-9+13+4-7 -1800
	+3-12+12+27+54+201+615 +1824
	1-4+4+9+18+67+205+608 +24
	Value=24 when $x=3$ .
- |   |               |
|---|---------------|
| A | = 2+1-20-7+24 |
| B | = 2+3-13-7+15 |
| C | = 2+7+0-9     |

 Again  $5A = 10+5-100-35+120$   
 $8B = 16+24-104-56+120$   
 $D = 6+19-4-21$   
 $3C = 6+21+0-27$   

E	= 2+4-6. Strike out C. F. 2 and 1+2-3
---	---------------------------------------

 Again  $3D = 18+57-12-63$   
 $7C = 14+49+0-63$   

F	= 4+8-12 1+2-3 = E
---	-----------------------

 Hence,  $x^2+2x-3$  is the H. C. F. required. See *Handbook*, page 105.
- (a) Product of 1st and 2nd factors =  $x^2+a^2$  (A.)  
 " " 3rd and 5th " =  $x^2-\frac{a^2}{2}(1+\sqrt{-3})$  (B.)  
 " " 4th and 6th " =  $x^2-\frac{a^2}{2}(1-\sqrt{-3})$  (C.)  
 Product of B and C = product of  $(x^2-\frac{a^2}{2})-\sqrt{-3}$  and  $(x^2-\frac{a^2}{2})+\sqrt{-3}$   
 $=x^4+\frac{a^4}{4}-a^2x^2+3$   
 $=\frac{1}{4}(4x^4-4a^2x^2+a^4+12)$ . Multiply this by A  
 and product =  $x^6+3x^2+3a^2+\frac{a^6}{4}$ .  
 (b) Put  $\sqrt{4+3\sqrt{-20}}=x+y$   
 $\therefore \sqrt{4-3\sqrt{-20}}=x-y$ . See text-books.  
 Multiplying  $\sqrt{(16+180)}=x^2-y^2=14$ . Again squaring I and equating rational parts,  $x^2+y^2=4$ .  $\therefore x^2=9, x=\pm 3$ .  
 But given expression =  $(x+y)+(x-y)=2x=\pm 6$ . Q.E.D.
- (a) Squaring  $x^4-14x^2+49=x^2-42x+89$ . Add to both sides  $8x^2-40$ , and  $x^4-6x^2+9=9x^2-42x+49$   
 $\therefore x^2-3=\pm(3x-7)$   
 $\therefore x^2-3x+4=0$ , or  $x^2+3x-10=0$   
 $\therefore x=\frac{1}{2}(4\pm\sqrt{-7})$ , or  $x=2, -5$ .



N. B.—It is necessary to find by trial whether any or all of these roots apply to the given equation. They may belong only to the conjunct equation introduced by squaring or some to one and some to the other. See *Handbook*, p. 260.

(b) Given  $x^3 + (x^2y)^3 = 208$   
 and  $y^3 + (x^2y)^3 = 1053$ . Put  $y = vx$ .  
 $\therefore x^3 + (x^2vx)^3 = 208 = x^3(1 + v^3)$

and  $v^3x^3 + (x^2v)^3 = 1053 = x^3(v^3 + v^3)$

$\therefore \frac{v^3(1 + v^3)}{1 + v^3} = \frac{1053}{208} = v^3 = \frac{81}{16} \therefore v = \frac{27}{8}$

$\therefore x^3 = 208 \div (1 + v^3) = 64 \therefore x = \pm 8$

Substituting, &c., on the whole we get

$x = 8, -4, \text{ or } 8(19 \pm 8\sqrt{6})$

$y = 4, 1, \text{ or } 8(5 \pm 2\sqrt{6})$ .

6. (a) Book work.

(b)  $(a+b-c)(a+c-b) = a^2 - (b-c)^2 \therefore < a^2$

$(b+a-c)(b+c-a) = b^2 - (a-c)^2 \therefore < b^2$

$(c+a-b)(c+b-a) = c^2 - (a-b)^2 \therefore < c^2$

$\therefore (a+b-c)^2 \cdot (b+c-a)^2 \cdot (c+a-b)^2 < a^2b^2c^2$   
 or  $abc > (a+b-c)(b+c-a)(c+a-b)$ , which is the first part.

2ND PART.  $a^2 + b^2 > 2ab$ , (A)  $\therefore a^3 + ab^2 > 2a^2b$

and also,  $b^3 + a^2b > 2ab^2$ ,

$\therefore a^3 + b^3 > a^2b + ab^2$

and by symmetry  $a^3 + c^3 > a^2c + ac^2$   
 $b^3 + c^3 > b^2c + bc^2$

whence by addition,

$a^3 + b^3 + c^3 > \frac{1}{2}(a^2b + b^2c + c^2a + \&c.)$  B.

But  $a^2c + b^2c > 2abc$  from (A)

$ab^2 + ac^2 > 2abc$

$bc^2 + a^2b > 2abc$ ,  $\therefore$  by addition

$(a^2b + b^2c + c^2a + \&c.) > 6abc$  (C)

$\therefore$  from (B),  $a^3 + b^3 + c^3 > 3abc$

But  $(a+b+c)^3 = (a^3 + b^3 + c^3) + 3(a^2b + b^2c + \&c.) + 6abc$

$\therefore (a+b+c)^3 > 3abc + 18abc + 6abc$

or  $(\text{ " " })^3 > 27abc$

$\therefore \left(\frac{a+b+c}{3}\right)^3 > abc$ .

N.B.—The theorem is not true when  $a, b, c$  are any +ve Nos. whatever. If  $a=b=c$ , the inequalities become equalities;  $a, b, c$  must be unequal.

7. Put  $\frac{x^2+ax+b}{x^2+cx+d} = m$

$\therefore x^2 + ax + b = mx^2 + mcx + md$

$\therefore x^2(1-m) + x(a-mc) + (b-md) = 0$

or  $kx^2 + rx + q = 0$  if we write  $k$  for  $(1-m)$ ,  $r = a-mc$ , and carry  $q = b-md$ .

Now in order that  $x$  may possible  $r^2$  must be  $> 4kq$ , see textbooks: or  $(a-mc)^2 > 4(1-m)(b-md)$

i.e.,  $a^2 - 2amc + m^2c^2 > 4b - 4md - 4bm + 4m^2d$

or,  $m^2(c^2 - 4d) + m(4b + 4d - 2ac) + (a^2 - 4b) > 0$

i.e., (A)  $pm^2 + sm + w > 0$ , if we put

$c^2 - 4d = p, 4b + 4d - 2c = s$ , and  $a^2 - 4b = w$

$\therefore$  Hence all values of  $m$  lie between  $\alpha$  and  $\beta$ , the equation carry  $pm^2 + sm + w = 0$ .

$\therefore \alpha$  and  $\beta$  are the LIMITS of the possible values of the fraction. See Colenso, Pt. II., p. 206.

8. (a) Bookwork. Limit =  $a \div (1-r)$ .

(b) Ans. =  $\frac{1}{4} + (1 - \frac{1}{4}) = 6$ .

9. (a) Bookwork.  $\lfloor n \div \lfloor p \cdot \lfloor q \cdot \lfloor r$ .

(b)  $n=8$ , three  $a$ 's, three  $m$ 's

$\therefore$  Ans. =  $\lfloor 8 + \lfloor 3 \cdot \lfloor 3 = 1120$ .

10.  $(1+x)^n = 1 + nx + \frac{n(n-1)}{1 \cdot 2}x^2 + \frac{n(n-1)(n-2)}{1 \cdot 2 \cdot 3}x^3 + \&c.$

$\therefore (1-x)^n = 1 - nx + \frac{n(n-1)}{1 \cdot 2}x^2 - \frac{n(n-1)(n-2)}{1 \cdot 2 \cdot 3}x^3 + \&c.$

$\therefore (1-x^2)^n = 1 - nx^2 + \frac{n(n-1)}{1 \cdot 2}x^4 - \frac{n(n-1)(n-2)}{1 \cdot 2 \cdot 3}x^6 + \&c.$

$\therefore (1-x^2)^{-n} = 1 + nx^2 + \frac{n(n+1)}{1 \cdot 2}x^4 + \frac{n(n+1)(n+2)}{1 \cdot 2 \cdot 3}x^6 + \&c.$

$\therefore (1-x^2)^{-2} = 1 + \frac{1}{2}x^2 + \frac{3}{2}x^4 + \frac{15}{8}x^6 + \frac{105}{128}x^8 + \&c.$

3rd part.

Put  $\frac{2n+1}{2n-1} = x, \therefore \frac{1+x}{1-x} = -2n$

$\therefore -n = \frac{1+x}{2} + 2(1-x)$

Also  $\frac{2}{1-x} = -(2n-1)$

$\therefore n(2n-1) = \frac{1+x}{(1-x)^2}$ , and by division, or by expansion this

$= 1 + 3x + 5x^2 + \&c. + x(2n-1)x^{n-1}$

Restore the value of  $x$  and the theorem is established.

11. Bookwork. 5th term = 6th term = 7 $\frac{1}{2}$ .

Practical Department.

A REMARKABLE MOSAIC.

LAUGHABLE ERRORS.

One pupil when asked to describe the "Missouri Compromise" said: "It is a muddy stream that flows into the Mississippi."

Another said: "An assessor is a man appointed by the government to appropriate the taxes." He builded wiser than he knew.

Still another said in reply to the question about "Salem Witchcraft:" Salem Witchcraft and Roger Williams were missionaries to the Indians.

These will do to go with the teachers who thought that Horace Greely commanded the Greely Expedition, that the Cotton Gin was a kind of whisky made of Cotton, that squatter sovereign took its name from John Squatter, an early settler in Kansas. Bring in some more.—*The Moderator*.

THREE INCIDENTS.

I.

A teacher was examining the slates of a class of beginners in writing, after some dictation exercises. When nearly through, one whispered as her slate was being examined. "We are doing ever so much better; aren't we, Mrs. B—?"

"Why do you think so?"

"Because so far, you have hardly had to tell one that they forgot to begin the sentence with a capital, and end with a period. And you read them ever so much faster, too."

How very carefully a teacher is watched.

II.

Some girls of thirteen, when told of the writer's intention of visiting them at school; eagerly said: "Oh please don't, please don't come. You are not used to seeing scholars act as we do. You could not stay. We would not have you see us there for anything."

"Why do you act in this way? Do you study?" was asked.

"We did study at first, and behaved real well, but the teacher never said a word, and did not seem to care, and some were having fun all the time, so now we all act alike. There is no use of trying to study, or anything."

How many pupils in every school are discouraged and give up trying, because the teacher "does not seem to care?"

III.

A teacher was troubled by the overcrowded condition of his school-room. Appeals for additional seats were disregarded by the directors. One day, when all the available seating facilities were in use, and a boy was ensconced in the teacher's chair and a few more on the floor, he sent for his Board. Mr. A. came in, and was warmly received. He looked about somewhat hesitatingly, and said. "Well, Mr. A. I should be glad to give a chair if I had one, but I am just out. Make yourself at home; sit down on the stove." Mr. A., to the amusement of the pupils, did so—the weather being warm, there was no fire. Shortly after, director number two appeared. He was received with equal cordiality by the teacher, and, from necessity, took his position with number one. Number three put in an appearance a little later, and was offered a place by the side of his official colleagues. But about that time it began to draw upon the minds of the triumvirate that the teacher was less innocent than his "childlike and bland" countenance indicated. The president called him to one side with, "Mr. R., I am a little busy, and will call again. How many do you need?" It is needless to say that an adequate supply of desks, with all the modern improvements, were on hand in the shortest possible time.—*Teacher's Institute*.



## Educational Notes and News.

The Strathroy High School has been created a Collegiate Institute.

At the recent examinations in Milton for admission to the High School nine candidates out of fourteen were successful.

It speaks well for the teachers in the town of Lindsay that out of 17 all were re-engaged at the new year. Such a record is a credit to not only the teachers themselves, but the wisdom of the Lindsay School Board in recognizing the merits of their teachers and rewarding them accordingly.

Washington University believes in making her students work. The method of teaching English literature is certainly novel. The method usually pursued in other colleges is that the students study a text-book, or listen to lectures from a professor. In Washington University it is otherwise. The professor, while he reserves to himself the right of dictation and general superintendence, allows to the individual members of the class great liberty in the preparation of the exercises. Each member of the class respectively prepares and delivers a study or lecture upon a topic connected with the subject. The advantages of such a method at once present themselves. — *Student Life.*

The deputation appointed at the annual meeting of the Western School of Art, London, to confer with the Minister of Education, held an interview with that gentleman a few days since, and endeavoured to impress very strongly upon him the claims of the school, and asking to have a representative upon the Board of Examiners. Mr. Ross thought that it would be of more advantage for the schools to have a representative on the Council than on the Board of Examiners, and after his explanation of the matter the deputation arrived at a similar conclusion. It was stated that under this new programme the Council of Arts will have power to arrange for a course of study to be pursued, and to make all arrangements in connection with the art schools of Ontario. It is believed that the result of the conference will be to give London a representative on the Council.

From the annual report of the Secretary-Treasurer of the Western Ontario School of Art, it appears that the school opened for the first term in January with 70 pupils for the evening, and 47 pupils for the afternoon classes. The second or summer term commenced in April with 89 pupils for the evening, and 36 for afternoon classes, each term comprising 24 lessons for the evening, and 12 lessons for the afternoon classes. The winter term commenced Oct. 13th, the number of pupils being 90 for the evening, and 30 for the afternoon classes, the latter being principally devoted to painting and modelling in clay. The following were the numbers of pupils studying in the Primary, or Grade B — Freehand drawing, 63; practical geometry, 74; senior perspective, 69; model drawing, 68; memory drawing, 30. Number in the Advanced, or Grade A — Shading from flat examples, 10; outline from the round, 5; machine drawing, 6; building construction, 6; industrial design, 3; modelling in clay, 21.

The number of pupils in the porcelain painting classes during the year, 32.

Many of the members considered themselves aggrieved by the failure of the Department to give them a representative on the Council, and an examiner on the Examining Board, and it was suggested that a deputation should be appointed to interview the Minister of Education in regard to the matter.

### MANITOBA.

The Council of the University of Manitoba, has recently made arrangements for the distribution of the annual income from the Isbister Bequest in accordance with the will of the testator, as follows:

I. The proceeds of the Isbister Bequest shall, after the payment of necessary expenses, be apportioned to three classes of pupils. The first class shall consist of pupils of any school in the Province, learning the ordinary branches of an English or French education such as English, French, Arithmetic, History, Geography. The second class shall consist of pupils of any school in the Province who have been reading, in addition to the preceding branches, the subject of higher education, as classics and mathematics. The third class shall consist of pupils either entering or at the University.

2. The available income of the fund, after payment of all expenses shall, be thus apportioned: one eighth for prizes for pupils of the first class; one sixteenth for prizes for pupils of the second class, and the balance for scholarships for pupils of the third class.

### PRIZES FOR PRIMARY AND SECONDARY SCHOOLS.

3. The sum apportioned for prizes for pupils of the first class shall be divided between the two sections of the Board of Education in the same ratio as the Legislative grant for common school purposes for the year according to the present school law, and each section of the Board of Education shall be requested to furnish the council of the University with a plan upon which the prizes may be granted, for the approval of the University.

No pupil shall be admitted as a competitor for such prize who shall not have attended a public or private school within the Province of Manitoba for the greater part of the school year immediately preceding the examination.

4. The papers for scholarships in the Preliminary Examination of the University shall determine the prizes for pupils of the second class, as hereinafter provided.

Any candidate for these prizes or for scholarships for pupils entering the University, must send in to the Registrar of the University a certificate of his having been at a public or private school in the Province of Manitoba, for the greater part of the preceding school year.

There shall be awarded twenty-four prizes of which eight shall be determined by the classical papers; eight by Mathematical; four by the English and French papers of English pupils, and four by the English and French papers of French pupils.

### SCHOLARSHIPS.

5. Scholarships shall be awarded to students of the University as follows:

- A. At entrance.
- B. At the Previous Examination.
- C. At the Junior B. A. Examination.
- D. At B. A. Graduation.
- E. At the Examinations for M. D.

(a) Scholarships shall be awarded at entrance by the classical and mathematical papers of the Preliminary Examination; the classical papers having, in addition to the ordinary questions of the examination one or more passages in English or French to be turned into Latin prose, and more difficult questions; and the mathematical, in addition to the ordinary questions of the examination, more difficult questions.

(b) At the Previous Examination one scholarship shall be awarded by the English and French papers taken by English students, and one by the English and French papers taken by French students—more difficult questions, including an additional short passage for translation into French and English respectively being added for the scholarship; and the other scholarships shall be determined by the classical, mathematical, and Botany papers. These papers shall, as in the case of the Preliminary Examination, contain more difficult questions in addition to the ordinary questions, including in the classical papers one or more passages in English or French, to be translated into Greek prose as well as into Latin prose.

(c) Scholarships shall be awarded to students at the Junior B. A. Examination by the Honor papers.

(d) Scholarships shall be awarded at B. A. Graduation by the Honor papers.

(e) Scholarships shall be awarded at the Primary and Final M. D. Examinations, by the papers of those examinations, more difficult questions being set in the several papers in addition to the ordinary questions.

(f) The several scholarships shall be paid by the Bursar of the University to the Bursar or Treasurer of each College, including the Manitoba Medical College in moieties, on the second Wednesday of December and May on certificates being sent by the Head or Dean of the College certifying that the students have by their conduct and diligence satisfied the authorities of the College.

(g) The following scholarships shall be given:

(1) Two scholarships of one hundred dollars each and two scholarships of sixty dollars each for students entering the University.

(2) Two scholarships of eighty dollars each to be determined by the English and French papers, and three scholarships of one hundred dollars each, and three of sixty dollars each to be decided by

the combined classical, mathematical and Botany papers for students of the Previous Examination.

(3.) One scholarship of one hundred dollars and one of sixty dollars for students at the Junior B. A. Examination in each of the following subjects:—classics, mathematics, natural science, mental and moral philosophy, and English and Latin course; and in case there are no qualified students in any one or more of the Honor courses, the scholarship or scholarships shall be divided amongst the most deserving students in the first-class in the other Honor courses, but no such student shall in this case receive more than sixty dollars.

(4.) The same number of scholarships to be similarly awarded, for students at B. A. Graduation.

(5.) One scholarship of one hundred dollars and one of sixty dollars for students at each of the Primary and Final Medical Examinations for the degree of M. D.

(h.) A student shall not be qualified to hold a scholarship if not placed in the first-class in the aggregate of the subjects for which the scholarship is given, unless he has passed in all the subjects in which he was examined.

(i.) The values stated for the scholarships are the maximum values which the scholarships shall not exceed. If the funds do not allow of the scholarships being of such maximum value, then they shall be proportionally of such value as the funds will allow.

(j.) No student shall hold more than one scholarship or prize. If the Board of Studies on receiving the reports of the examination, finds that a student has gained more than one scholarship it shall, if possible, consult him as to the scholarship he would wish to select, and he shall be appointed to such scholarship; but if such consultation is not found practicable the Board of Studies shall determine which scholarship he shall hold, such scholarship being one of the highest value gained by him.

#### BOARD OF EDUCATION.

The Protestant Section of the Board of Education, held a special meeting on January 5th, to consider a proposed revision of the Regulations regarding (1) The size and arrangement of school grounds, houses and furniture. (2) The examination of teachers and the graduation of their certificate. (3) The authorization of text-books. (4) The providing of suitable Scripture Extracts for systematic reading and study in the schools. (5) Normal School training for teachers. (6) The duties of inspectors and teachers, and (7) The programme of studies in the public schools.

The results of the labors of the Superintendent and the committees of the Board upon these subjects was received and ordered to be printed for final consideration and adoption at an early date. In addition to the changes in existing regulations made by this revision for the purpose of adapting the departmental machinery to a rapidly developing system, the following matters received special attention:

1. All school houses, with their grounds and furnishings must be approved by the Board of Education as to size and arrangement before school money may be spent for providing; and while the fullest liberty is accorded to every district to economize its resources, and they are encouraged and required to avoid unnecessary cost, the necessary provisions for the health and comfort of the pupils are insisted on.

2. In the certification of teachers, provision is now made for every person who passes the annual examination either receiving within a year the training deemed necessary to fit him for school room duties or retiring from the profession. The fluctuations in the ratio of demand and supply, caused by the closing of many of the rural schools during the severe winter months and their re-opening in spring, are a hindrance to the systematic certification of teachers; but under the efficient management of Mr. Goggin, the training of the teachers has not only been successful in reaching a large number, but has popularized the institution to a very gratifying extent.

3. In the authorization of text books, two important steps have been taken, viz.: to confine the authorization to one good book in each subject, and to provide for the cultivation of literary taste in scholars by authorizing certain works of such standard authors as Longfellow, Bryant, Dickens, Scott, Hughes, Shakespeare, &c., for supplementary reading in the schools.

4. The providing of proper and suitable Bible readings in schools is less a subject of embarrassment than in Ontario. Protestant denominations are all agreed upon the desirability of Scripture reading; but the real difficulty lies in insuring this reading being

done attentively and intelligently without the dangerous expedient of permitting teachers to engage in theological exposition.

The Board has endeavored to meet the necessity while avoiding the danger referred to by authorizing two little volumes containing questions and notes dealing only with matters necessary to the understanding of the plain meaning of the text. These volumes are issued under the direction of the Commissioners of National Education in Ireland, and have been accepted by the denominations here as perfectly unobjectionable.

#### Personal.

Mr. J. McCarthy is Principal, and Misses Stobbs, Black, and Murray, assistants in the Hagersville Public School.

A new teacher, Mr. Gray, has been engaged as third teacher in the Orangeville High School.

Miss Kate Thomas, formerly of Sarnia, has gone to Minneapolis, Minn. to teach in the public school there.

Two of St. Mary's lady teachers, Misses J. L. Barbour and L. Herrington, have been engaged as teachers in Middlesex county.

Mr. Thos. Pearce is now Head Master of the Public School in Salford.

W. A. Rothwell, son of Mr. B. Rothwell of Listowell, has been engaged as assistant teacher in the Britton Public School.

Mr. John Vaughn has taken charge of the Dougall Public School. He taught last year in Hillsdale.

Mr. W. Knox, (late Head Master of the Donegal Public School), has been appointed to a position in the Stratford Collegiate Institute. He is well qualified.

Mr. J. Irwin, of Donegal, has been re-elected for the 12th year to the position of school trustee.

Mr. James Brebner, son of John Brebner, Esq., P. S. I., has been engaged as second assistant teacher at the High School, Petrolia.

The Georgetown (P. E. I.), correspondent of the *Weekly Examiner*, says:—The Public School in that town is doing well under the able management of E. Stewart.

The *Weekly Examiner and Island Argus*, (P. E. I.), says the people of Bedford are well pleased with their teacher, Miss J. McDonald.

Miss Theresa M. Duffy, teacher of the school in Newton, (P. E. I.), is said by the *Examiner and Argus*, to have effected considerable improvement during the last six months.

James Gray M. A., formerly of Port Dover High School, has been appointed Mathematical and Science Master, in the Walkerton High School.

Mr. Alex. Queres has been appointed Head Master of Alliston Public School, in place of Mr. N. W. Campbell, who has gone to Perth Collegiate Institute.

Mr. J. J. Rooney, who recently passed a very creditable examination at the Normal School Toronto, has been appointed Principal of Ashburnham P. S.

The class of Mr. W. E. Groves, Principal of Wingham Public School, has the honor of carrying off the highest mark at the late entrance examination for the county of Huron. Mr. Groves is a live man and his school shows it.

We are sorry to learn that Mr. A. F. McLean, Principal of one of the St. Thomas Public Schools, has been ill for the last three or four weeks, from the effects of a severe cold. It is hoped he will soon be able to resume his duties.

A correspondent of the *Examiner and Argus*, writing from New Perth, (P. E. I.), says that the school in that place is prospering favourably under the skilful management of its young and popular teacher, W. C. West.

Mr. R. Henderson, Principal of Blrth Public School, has been re-engaged for the seventh year. This is a good showing and speaks volumes for Mr. Henderson. The village is to be congratulated upon securing so competent a teacher. His assistants, Miss Sayers and Miss Reinhart, are also doing good work.

Mr. J. H. Sheppard, Head Master of Omamee Public School, has been re-engaged for the fourth year; Miss Mary Blenott is

assistant. The attendance at this school is so large that the services of an extra teacher will be required as soon as proper accommodation can be procured.

Mr. Edward McCrone has recently been re-elected Chairman of the Board of Education in the city of St. Thomas for the sixteenth time. Mr. McCrone has been an energetic and conscientious worker for the educational interests of St. Thomas and the citizens recognize his true value.

St. Thom's Central School boasts of a highly qualified staff of teachers, no one of the nine holding less than a second class certificate. Mr. Campbell, the able Principal, may well feel proud of the position taken by the "Central" among the schools of the county.

Mr. Wilson Taylor has accepted a position in the staff of the Ingersoll High School. It will be remembered that as principal of the Model School, he won golden opinions. This second engagement is a deserved recognition on the part of the board. Mr. Taylor is the right man in the right place.

Mr. Wm. O'Conner M.A. is head Master of the High School; Mr. R. Lees, of the Model School; Mr. W. H. Hallett, of the Public School; and Mr. M. O'Brien, of the Separate School in the town of Lindsay. A better array of teaching talent it would be hard to find.

The *Victoria Warbler* says, that Miss McRae, who so successfully taught in the junior department of the Public School of that place during a period of two years, has gone to attend the Uxbridge High School. As a teacher she gave universal satisfaction. Also that Miss McNevin, of Ingersoll, has taken charge of the junior department of the public school, and comes well recommended.

The services of an additional teacher, Miss Lynch, have been secured for Peterboro Separate Schools. The staff now consists of Mr. J. D. McHuroyle who has just entered upon his third year as Head Master; Miss Leonard, who has charge of the 2nd Division, Miss Lynch of the 3rd, and Miss Hurley of the 4th. The school is in excellent order and reflects much credit on Mr. McHuroyle and his able staff of assistants.

## Correspondence.

A correspondent asks:—

1. Can a person who has held a third-class certificate have it renewed, under the new regulations, by passing another examination, without attending the Model School a second time? Is the Inspector's recommendation necessary?

2. Is it customary at the Normal School to give additional marks in some subjects to candidates who, having studied those subjects, are entitled to higher marks than they obtained at the non-professional examination?

REPLY.

1. Extension of certificates may be granted on application of the Trustees, and recommendation of the Inspector. Blank forms for such application, containing a number of questions to be answered are furnished to Trustees on application.

2. Students attending the Normal School holding Second Class Grade B, may on the recommendation of the Principal and Masters have the B raised to an A; and students holding Second Class Grade A, may be "honoured by mention."

In order to have the certificate raised both scholarship and teaching must be good.

Following is an

### EXTRACT FROM REGULATIONS OF SEPTEMBER, 1884.

Third-class Certificates may be renewed on re-examination, and the County Inspector may award marks for efficiency and aptitude in teaching, not to exceed 20, to be added as a bonus to the aggregate number of marks obtained in non-professional subjects.

In case of emergency, such as a scarcity of teachers, or for any other special cause, Third-Class Certificates may be extended by the Education Department, on the joint request of any Board of Trustees and the County Inspector.

## Miscellaneous

### WHERE WHITTIER LIVES.

Mr. Whittier's dwelling in Amesbury is exceedingly simple and exquisitely neat, the exterior of a pale cream color, with many trees and shrubs about it, while within one room opens into another till you reach the study that should be haunted by the echoes of all sweet sounds, for here have been written the most of those verses full of the fitful music

*Of winds that out of dreamland blow.*

Here, in the proper season, the flames of a cheerful fire dance upon the brass and irons of the open hearth, in the centre of a wall hung with books, water-colors by Harry Fenn and Lucy Larcom and Celia Thaxter, together with interesting prints hung on the other walls, rivalled, it may be, by the window that looks down on a sunny little orchard, and by the glass-topped door through which you see the green dome of Powow Hill. What worthies have been entertained in this enticing place! Garrison and Philips and Higginson and Wason and Emerson and Fields and Bayard Taylor and Alice and Phebe Cary and Gail Hamilton and Anna Dickinson are only a few of the names that one first remembers, to say nothing of countless sweet souls unknown to any other roll of fame than heaven's, who have found the atmosphere there kindred to their own.

The people of Amesbury and of the adjoining villages and towns feel a peculiar ownership of their poet; there is scarcely a legend of all this country round which he has not woven into his song, and the neighborhood feel not only as if Whittier were their poet, but in some way the guardian spirit, the genius of the place. Perhaps in his stern and sweet life he has been so, even as much as his song. "There is no charge to Mr. Whittier," once said a shopman of whom he had made a small purchase, and there is no doubt that the example would have been contagious if the independent spirit of the poet would ever have permitted it.

These Indian-summer days of the poet's life are spent not all in the places that knew him of old. The greater part of the winter is passed in Boston; a share of the summer always goes to the White hills, of which he is passionately fond, and the remainder of the time finds him in the house of his cousins at Oak Knoll, in Danvers, still in his native county of Essex. There is a mansion, with its porches and porticoes and surrounding lawns and groves, which seems meet for a poet's home. It stands in spacious and secluded grounds, shadowed by mighty oaks, and with that woodland character which buds and squirrels and rabbits darting in the checkered sunshine must always give.

It is the home of culture and refinement, too, and as full of beauty within as without. Here many of the later poems have been sent forth, and here fledglings have the unwarrantable impertinence to intrude with their callow manuscripts, and here those pests of prominence, the autograph-seekers, send their requests by the thousands. But in the early fall the poet steals quietly back to Amesbury, and there awaits election day, a period in which he religiously believes no man has a right to avoid his duty, and of which he still thinks as when he saw—

Along the street  
The shadows meet  
Of destiny, whose hands conceal,  
The mists of fate,  
That shape the state,  
And make or mar the common weal.

What a life he has to look back upon as he sits with his fame about him—what storms and what delights, what struggle and what victory! With all the deep and wonderful humility of spirit that

he bears before God and man, yet it is doubtful if he could find one day in it that he would change, so far as his own acts are concerned. It is certain that no one else could find it. In appearance, Mr. Whittier is as upright in bearing as ever. His eye is as black and burns with as keen a fire as when it flashed over the Concord mob, and sees beauty everywhere as freshly as when he cried with the "Voices of Freedom" and sang the "Songs of Labor"; and his smile is the same smile that has won the worship of men, and of women, too, for sixty years or over. Now, it is with a sort of tenderness that people speak and think of him whose walk will, perhaps, go but little further than their own; not that they deem such vitality, and power, and spirit can ever cease, but that they are warned of his apotheosis, as it were, into loftier regions, where his earthly songs shall be turned to the music of the morning stars as they sing together.—*Harriet Prescott Spofford, in the Critic.*

FOOTPRINTS IN THE SNOW.

The snow is a great betrayer. It not only shows the tracks of mice, otters, etc., which else we should rarely, if ever, see, but the tree sparrows are more plainly seen against its white ground, and they in turn are attracted by the dark weeds it reveals. It also drives the crows and other birds out of the woods to the villages for food. We might expect to find in the snow the footprint of a life superior to our own, of which no zoology takes cognizance. Is there no trace of a nobler life than that of an otter or an escaped convict to be looked for in it? Shall we suppose that is the only life that has been abroad in the night? It is only the savage that can see the track of no higher life than an otter's. Why do the vast snow plains give us such pleasure, the twilight of the bent and halfburied woods? Is not all there consonant with virtue, justice, purity, courage, magnanimity; and does not all this amount to the track of a higher life than the otter's—a life which has not gone by and left a footprint merely, but is there with its beauty, its music, its perfume, its sweetness to exhilarate and recreate us! All that we perceive is the impress of its spirit. If there is a perfect government of the world according to the highest laws, do we find no trace of intelligence there, whether in the snow or the earth, or in ourselves—no other trail but such as a dog can scent? Is there none which an angel can detect and follow—none to guide a man in his pilgrimage, which water will not conceal? Is there no order of sanctity to be perceived? Is its trail too old? Have mortals lost the scent?—*Thoreau.*

REPOSE IN CONVERSATION.

The leading quality to be cultivated if you would have an agreeable manner in conversation, is repose. If you are restless and vehement you will be considered weak. So you must not fidget in your chair, nor run your fingers through your hair, nor crack your finger joints, nor gesticulate like a campaign orator. All of these things are in bad form, and make people wish you had sent regrets. You must avoid interrupting other talkers also, and learn to control your temper, and say as little as possible about yourself. No matter how bored you may be, assume the virtue of being interested, and look pleasant at any sacrifice of sincerity and self-respect. Politeness exacts that you do unto others at such times as you expect them to do unto you when your turn comes. Our language should be simple and terse, but clear and comprehensive, and free from slang. Do not seek to shine as humorist unless you are very confident that the company is an easy one to amuse; but if another person makes such a venture, it is your duty to laugh, even if his jokes are so thin and flat that you long to strangle him. The amenities of social conversation do not permit the introduction of political or religious topics, for the reason that they can rarely be discussed in a calm and kind spirit.—*The Mentor.*

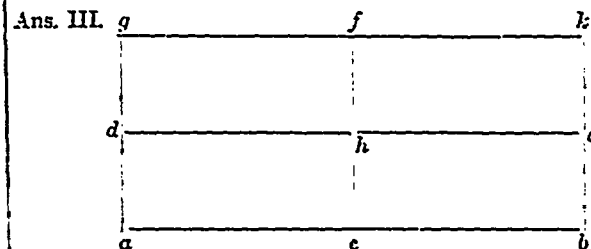
Question Drawer.

I. Please state meaning of following sentence, and give grammatical *kind* and *relation* of italicised words:—"The force amounted to upwards of 1,000 strong." J. M. M., Penetanguishene.

The following answers have been received to the question in a previous number:—"Why does a ten acre field require more fence when of an oblong shape than when square:—

Ans. I. A 10 acre field when square is 10 x 10 chains, and requires 400 chains of fence. If the length be double, and the width one-half, it will be 20 by 5 chains, and will require 500 chains of fence. If the length be four times and the width one-fourth, it will be 40 x 2½ chains, and will require 850 chains of fence. In a similar way it may be shown that the farther an oblong recedes from a square the more fence it will require for a similar area.

Ans. II. A field 10 x 10 chains, contains 10 acres. A field 11 x 9 chains will require the same quantity of fence, but will contain a less area. Therefore an oblong field of equal area will require a greater quantity of fence. J. H. KNIGHT, LINDSAY.



Let ABCD be a rectangular field containing 10 acres, and let AB be greater than BC; and let AEFG be a square field containing 10 acres.

AB<sup>2</sup> is greater than rectangle AB BC since AB is greater than BC, therefore the side of a square equal to rectangle AB BC will be less than AB, and E will fall between A and B.

Since square AF = rect. AC, the remainder GH = EB, and therefore rect. EF FK is greater than rect. GF FH; but rect. GF FH = EF FH since Gh=EF ∴ rect. EF FK is greater than EF FH ∴ FK is greater than FH; but FK = EB ∴ EB is greater than FH. To each add AE and EH, then AB and EH are greater than AE and EF; but EH = EC ∴ AB and BC are greater than AE and EF. Now AB and BC is half the perimeter of the oblong field, and AE and EF is half the perimeter of the square field, therefore the oblong field will require more fence.

W. J. MACDONALD, Guelph.

Ans. IV. It is a well known principle that if a number be separated into two parts, the product of these parts will be the greatest possible when they are equal. Hence, it follows that if the product of two unequal numbers is equal to that of two equal numbers, their sum will be greater than the sum of the equal numbers. Now, an oblong is the product of two unequal numbers, and a square of two equal numbers; therefore, the perimeter of an oblong, which is twice the sum of its factors, must be greater than that of the square of equal area, which is also twice the sum of its factors. It may be observed that the difference in perimeter will increase in proportion as the length of the oblong exceeds its breadth.

H., Sherbrooke.

NOTE.—The following is a simple demonstration or proof of the principle stated.

Let 2a be the number to be separated, and d the difference of the parts, then

$$a + \frac{d}{2} = \text{greater part.}$$

and  $a - \frac{d}{2} = \text{less part.}$

then  $a^2 - \frac{d^2}{4} = P$  their product.

It is plain that P the product increases as d diminishes, and will be the greatest possible when d = 0; that is, when the parts are equal.

Ans. V. Let  $x = \text{area.}$   
 $\sqrt{x} = \text{side of square field.}$

Let 1 = one side of oblong.

$x$  = other side of oblong.

Since  $(x - 1)^2 > 0$

$$x^2(2x) + 1 < 0$$

$$x^2 + 1 < 2x$$

$$x^2 + 2x + 1 > 4x \therefore x + 1 > 2 \sqrt{x}$$

$$\therefore 2(x + 1) > 4 \sqrt{x}$$

But  $4 \sqrt{x}$  = perimeter of square field

$2(x + 1)$  = " " oblong

Hence perimeter of square is less than perimeter of oblong of the same area.

#### SPECIAL CASE

Area of ten acres = 1,600 rods

Side of square = 40 rods.

Perimeter of square = 160 rods.

Let one side of oblong = 20 rods.

Let the other side of oblong = 80 rods.

Perimeter of oblong =  $(80 + 20) 2 = 200$  rods.

Hence perimeter of square is less than perimeter of oblong of the same area.

H. GRAY, Milton.

To these Arithmetical, Geometrical and Algebraic demonstrations might be added the logical or metaphysical one, that as the figure in question is changed from a square to an oblong, two of the parallel sides are made to approach each other. Let the process be continued until they are infinitely near each other, and it is evident that in order to enclose the same space they must be infinitely prolonged, and of course at any intermediate degree of nearness the prolongation will be proportional.

Ed

Several other answers have been received for which we have not room.

### Contemporary Opinion.

We have received copies of THE SCHOOL JOURNAL and *The Educational Weekly*, both published at Toronto. They are both ably edited, the former by Prof. Wells, and the latter by J. E. Bryant, M.A., a well known writer on educational subjects. These weeklies should be in the hands of every school teacher in the country, and we wish them abundant success.—*Haldimand Advocate*.

Educational journalism is making rapid progress in Toronto. Last week we drew attention to an entirely new venture; now we are pleased to welcome THE CANADA SCHOOL JOURNAL in a new form. Hitherto published as a monthly by Mr. Gage, it has bloomed into an attractive weekly—weh got-up and printed on good paper, its various departments full of matters interesting to the important section of the community to whom the JOURNAL specially appeals.—*The Week*.

The educational world in Ontario is not likely, we apprehend, to suffer from the lack of press organs whose mission it is to speak for the teaching profession. There are now in the field, in this Province, two weeklies, THE SCHOOL JOURNAL and *The Educational Weekly*, and two monthlies, *The Canada Educational Monthly* and *The School Supplement*. Of these the oldest is the CANADA SCHOOL JOURNAL, formerly a monthly, but quite recently changed to a weekly under the same name. The nearest in age to the SCHOOL JOURNAL is the *Canada Educational Monthly* now in its seventh year. The more recent ventures are the *School Supplement*, a monthly started last year, and the *Educational Weekly* the first number of which has just been published. It may be interesting to our readers to know that THE SCHOOL JOURNAL is edited by Professor Wells, late of Woodstock Baptist College, the *School Supplement* by Mr. Eaton, late of Pickering College, and the *Educational Weekly* by Mr. Bryant, a well known Whitley man, and late Principal of Galt Collegiate Institute. The *Canada Educational Monthly* since the departure of Mr. G. Mercer Adam, its founder, has been edited by our former town-man, Mr. G. H. Robinson. Mr. Robinson we hear has just resigned the editorship of the *Monthly* to devote his whole time and energies to the new enumeration weekly *The Presbyterian Review*. It has not transpired who is to be his successor in the editorial chair of *The Monthly*. All these school journals are ably edited and are indispensable to the teaching profession. The general reader, too, will find very much in them that is interesting and profitable.—*Whitley Chronicle*.

### All Sorts.

"But," said the serenaded man, "I must go out and make a speech. Something must be done to stop the playin' of that band."—*Exchange*.

A large and interesting association of United States bank cashiers could be formed in Canada, and an appropriate evening song for their meetings would be, "Do they miss me at Home?"—*Middleton Transcript*.

When Patti was in San Francisco, she was described as the greatest diva on earth. Whereupon, a professional sent her a challenge to swim any distance she might name for a silver cup! Here is an argument against phonetic spelling.—*Keynote*.

All books are divisible into two classes, the books of the hour and the books of all time. There are good books for the hour, and good books for all time; bad books for the hour, and bad ones for all time.—*N. E. School Journal*.

Mark Lemon, late editor of *Punch*, as described by Mr. Edmund Yates: "He was made for the part. Corpulent, jovial, bright-eyed, with a hearty laugh and an air of bonhomie he rolled through life the outward impersonation of jollity and good temper."

Every man in his own life has follies enough—in the performance of his own duties deficiencies enough—in his fortunes evils enough—without minding other people's business.

### Literary Review.

COLLOQUIAL EXERCISES AND SELECT GERMAN GRAMMAR by Wm. Deutsch Ginn, Heath, & Co., 261 pp. The main idea of this book is the principle that grammar should be postponed till some knowledge of speech is obtained. One hundred short stories come first, then fairy tales, history, novels, next twelve standard poems, collections of names of objects, common verbs and adjectives, short phrases, idiomatic expressions follow lastly copious English notes and a vocabulary of the entire book.

WESTWORTH & HILL'S EXERCISE MANUALS, No. III GEOMETRY. Ginn, Heath & Co., 225 pp. Those who have seen only the Arithmetic and algebra manual, will not be prepared for the completeness of the present treatise. It is far more than a mere exercise manual and folds the leading principles of modern geometry. It is simply an invaluable book to every teacher of mathematics.

ALCOHOLIC PHYSIOLOGY with special reference to the use of Alcoholic Drinks and Narcotics, by J. D. Steele Ph.D.; Barnes Co., New York, 270 pp. An exceedingly practical book in every way, just the sort of book that is needed in our public schools. If this book were read in every family once a year it would prevent much misery and disease.

A MANUAL OF GYMNASTIC EXERCISES, by Dr. Edward Hitchcock, Prof. of Physical Education in Amherst College Massachusetts, Ginn, Heath, & Co., Boston, 57 pp paper. This handy little manual furnishes a series of exercises suitable for the light gymnastics required in our schools. It also contains a series of simple military movements for a class in a hall or out of doors. The dumb-bell exercises are valuable.

A HANDBOOK OF LATIN SYNONYMS, based on Meissner's "Kurzgefasst Lateinische Synonymik," by Prof. Edgar S. Shumway A.M., 53 pp. Ginn, Heath & Co. This terse little manual contains about 1200 words. It is precisely suited to the wants of high school students.

STORIES FOR YOUNG CHILDREN, by E. A. Turner, 87 pp. Ginn, Heath & Co. A neat little sequel to the second primer. Teachers will find it a handy book for black-board stories.

SOPHOCLES' ANTIKONE, on the basis of Wolff's Edition. By Martin L. D. Oge Prof. of Greek, Michigan University. Ginn, Heath & Co., 1884. Beautifully printed in large type, notes on the same page, rhythmic scheme, critical appendix of different readings.

CHOICE READINGS, by R. J. Fulton and T. C. Trueblood, 702 pp. Ginn, Heath & Co. The moment this book is opened one sees that it is well adapted to supply suitable readings for Friday afternoons. Teachers will find in this book a true friend which they cannot afford to do without.

OUTLINES OF METAPHYSIC, Hermann Lotze, translated and edited by Geo. F. Ladd, Professor of Philosophy, Yale College. Ginn, Heath & Co., 159 pp. These outlines cover the entire ground of Lotze's mature teaching at Göttingen and Berlin, as given in his latest lectures recorded in the notes of his hearers and revised by Professor Rehuisch.