L'Institut a microfilmé le meilleur exemplaire qu'il

lui a été possible de se procurer. Les détails de cet

bibliographique, qui peuvent modifier une image

reproduite, ou qui peuvent exiger une modification

dans la méthode normale de filmage sont indiqués

exemplaire qui sont peut-être uniques du point de vue

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.

12X

16X

									C	ci-des	sous.								
	Coloured covers Couverture de c	•							[Colou Pages	•	-						
	Covers damaged/ Couverture endommagée							[Pages damaged/ Pages endommagées										
	Covers restored and/or laminated/ Couverture restaurée et/ou pelliculée							[Pages restored and/or laminated/ Pages restaurées et/ou pelliculées										
	Cover title missing/ Le titre de couverture manque							[Pages discoloured, stained or foxed/ Pages décolorées, tachetées ou piquées										
	Coloured maps/ Cartes géographiques en couleur						[Pages detached/ Pages détachées											
	Coloured ink (i.e. other than blue or black)/ Encre de couleur (i.e. autre que bleue ou noire)							[Showthrough/ Transparence										
	Coloured plates and/or illustrations/ Planches et/ou illustrations en couleur							Ľ	Quality of print varies/ Qualité inégale de l'impression										
	Bound with other material/ Relié avec d'autres documents						Continuous pagination/ Pagination continue												
	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							Includes index(es)/ Comprend un (des) index Title on header taken from:/ Le titre de l'en-tête provient:											
	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								Title p Page d Captio	age o le titre on of i	f issue e de la ssue/	/ livrai							
pas été filmées.								Masthead/ Générique (périodiques) de la livraison											
Additional comments:/ Commentaires supplémentaires:																			
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									22 X				26X				30 X		
																			T

20X

24X

32X

28X

The Canada School Journal.

VOL. X.

:

2

TORONTO, DECEMBER, 1884.

PROSPECTUS NUMBER.

Table of Contents.	The Right Hon. George J. Shaw-Lefevre, M.P., has been appointed Postmaster-General of Great Britain, vice Mr. Faw-
• FAUE	
TOPICS OF THE TIMES	· · · · · · · · · · · · · · · · · · ·
Toronto University Curriculum	All is quiet on Manhattan Island. Blaine and the Repub-
Our New Departure	lican committee accepted the situation and Grover Cleveland
Business Announcement.	
At Home and Abroad	is virtually President of the United States.
The Bible in Public Schools	
The Health of Teachers	The Canadian boatmen are beginning to find that they
The Old Man at School	laughed too soon at the Nile cataracts. They und their task
CORRESPONDENCE.	both difficult and dangerous.
PRACTICAL DEPARTMENT	-
PERSONAL	
MATHEMATICAL DEPARTMENT	
ALL SORTS	operating a printing press by concentrating the sun's rays upon
THE QUESTION DRAWAR	a steam boiler, by means of reflectors.
Russia's Policy and Her Fat	
When the Bell Rings 11	
The World what we make it 11	Gen. Wolseley has received a letter from Gen. Gordon, dated
Alaska Olaciere	Khartoum, Nov. 4th. The details are not made public, but
LITERALLY REVIEW	Condem as a bis work of TTL as the second state
	troops in excellent spirits.
THE CANADA SOUCOL INITAL	
THE CANADA SCHOOL JOURNAL.	
Edited by J. E. WELLS, M.A.	John Newton, Chief of Engineers in the United States, in his
and a staff of competent Provincial editors.	annual report to Washington, says the American coast defences
	are not sufficiently strong to resist attack from the most insig-
An Educational Journal devoted to the alouncement of Literature, Science, and the teaching profession in Canada.	nificant enemy.
	At a meeting of the Imperial Federation Conference in Lon-
THE SUBSCRIPTION price for THE CANADA SCHOOL JOURNAL IS \$2.00 per annum, strictly in advance.	
DING ONTENUANCES THE CANADA SCHOOL JOURNAL will not be sent to	strongly in support of the movement and afterwards moved the
any person after the expiration of the time for which payment has been made.	appointment of the General Committee.
RENEWALS of subscriptions should be made promptly.	
ALL BUNINENN communications should be addressed to the busine manager. Articles intended for publication should be addressed to the editor.	The Jamaica Legislature have declined by an emphatic vote
ADVERTISEMENTS of a suitable nature will be inserted at reasonable	of 8 10 1—Mr. Sulomon himself being the glorious minority—
terms. See shedule of rates in another column.	
CANADA SCHOOL JOURNAL PUB. CO. (Limited),	to ask admission to the Canadian confederation. What a waste
Publishers,	of good editorial thunder we have had, to be sure !
J. L. ROBERTSON, JACOB M. KENNEDY,	
Secretary-Treasurer. Business Manager.	An injunction having been issued to prevent Louisa. Devey
	from publishing Lord Lytton's letters, she says she will be
Topics of the Times.	
Copies de inc Cimes.	obliggi to use other and not less forcible evidence to vindicate
	Lady Lytton.
Her Majesty has conferred the Grand Cross of the Order of	
the Bath on Sir John A. Macdonald.	Mr. Trevelyan, late Irish Secretary, has been made Chancellor
	of the Duchy of Lancaster, with a seat in the cabinet. Mr
Sir John A. Macdonald and President Stephen, of the C. P.	Campbell Bannerman, a Scotchman and kinsman of the Duke
R., sailed from England for Canada on the 29th inst.	of Argyle and Marquis of Lorne, has succeeded to the thorny
Thomas David King, an enthusiastic student and patron of	chair of the Irish Secretaryship.
Literature and the originator of the Shakespeare Club of Mon-	
÷ -	The largest main building ever erected, it is said, is now
treal, is dead.	.
	completed at New Orleans, for the coming World's Exhibition.
A cablegram announces that Mr. Matthew Arnold is about to	
make an extensive tour in America, and has resigned the In-	larger in extent than all the buildings of the greatest London
spectorship of Schools, for that purpose.	exposition together.
• •	

literary prince and seer, only to reveal a poor specimen of dys- of many homes. peptic, splenetic, cantankerous humanity.

Considerable interest attaches to the efforts that are being persistently made to open up a new trade between Europe and Siberia, by the North Sea. Siberia is rich in minerals and a large part of it well suited for grain growing and its developement will be of importance to the whole civilized world.

From addresses recently delivered in connection with the movement in the United States for doing away with the contract labour system in prisons, it appears that about 60,000 per sons are now in duress in the United States on account of crime, and that two-thirds of them are under thirty years of age.

The new French method of fighting without making war has its disadvantages. The Egyptian Government has refused the French demand for an embargo on 100 Krupp cannon recently sold by Egypt to a German firm, and suspected to be destined for China, on the ground that France has not declared war against China.

The Molecular telephones which are shortly to be introduced into London, are said to possess many new and important features, among which is that of enabling one to hear distinctly a person at a long distance talking almost in a whisper and entirely doing away with the disagreeable crackling sensation so annoving to all familiar with other instruments.

The Czar of Russia has suppressed nine newspapers since he began his reign. Only two Liberal newspapers now remain in all Russia and they hourly expect to be forbidden. Surely the time is not far distant when the Emperor of Russia will learn that such attempts to suppress the expression of public opinion have no other effect than to plant thorns in his own path.

The Senate of the University of Toronto has received a petition signed by 198 students, representing the Y. M. C. A. of University College, asking permission to erect on some suitable part of the University grounds an Association Hall to be used for moral and religious purposes only, said students undertaking to raise funds needed to construct and maintain the building.

The despatches are as contradictory about the objects of Gen. Wolseley's expedition as about everything else in regard to the embroglio in Upper Egypt. One cablegram says his instructions are emphatic to go no further than is absolutely required in order to rescue Gordon and his band, while another alleges that he is not forbidden to establish a stable Government in and around Khartoum, if he deems it necessary.

Silk culture bids fair to become a popular industry in the United States. At the recent fair in Boston, there was a re-

Rarely has posthumous biography proved so disastrous to a in every State of the Union, Kentucky and one or two others great reputation as in the case of Froud's Carlyle. It seems bearing off the palm. The indications are that cocoon raising too bad to lift the veil from the private life of one revered as a will become an easy means of adding materially to the income

> The East Middlesex Teachers' Association held in London on the 13th and 14th inst., passed resolutions recommending the abolition of the clause in the School Law which gave power to the local authorities to vary the length of holidays, and asking that the compulsory features of the Superannuation scheme be abrogated and subscription to its funds made optional with teachers.

> The Chicago Current avouches that the "politicians are drones;" that they "are but a tax on the people at the best," and calls on "the men who do the hard, grinding work of the world-who toil and sweat all day and plan all night," to form an "anti political-nonsense league" in 1888 and have done with this system of Presidential elections which ruins the business of one out of every four years.

> The proceedings at the Congo Conference now in session at Beilin are to be secret. Stanley is not to be admitted to its deliberations but his testimony may be called for. It is devoutly to be wished that some international action may be taken to stay the unspeakable horrors of the slave trade carried on by the Arabs, of which Stanley gave so harrowing an account the other day before the British and Foreign Anti-Slavery Society, in Manchester.

> It affords us .nuch pleasure to present to our readers, in this iss e of the School. JOURNAL, an original poem by Mr. Geo. W. Johnson, Head Master Model School, Hamilton. As the author of such beautiful and popular pieces as "When You and I Were Young, Maggie," and "Wanting, a Recommendation," Mr. Johnson has justly established a claim to high rank among Canadian authors. We trust to be able, from time to time, to publish in the WEEKLY SCHOOL JOURNAL other contributions from the pen of this gifted writer.

> Mr. Gladstone intimated in the House of Commons and Lord Granville in the Upper Chamber that, on receipt of an adequate assurance from the Opposition that the Franchise Bill shall be passed this autumn, his Government was willing to make the main features of the Redistribution Bill a subject of friendly conference, or to introduce a measure forthwith and press it with all speed, but they would make it a vital point to carry the Franchise Bill early next year. A late despatch says that the Lords have accepted the compromise and read the Bill a second time without division.

The fact that seven young ladies are already attending lectures in University College and that several more intend presenting themselves next term, shows pretty clearly that the demand was not wholly imaginary. The throwing open of the College doors is an act of simple justice but by no means a markable exhibition of cocoons. They have now been produced solution of the problem of f iversity education for women.

There is a grand opportunity for wealthy philanthropists who wish to confer lasting benefit upon their country. The man, or men who will found, in Toronto, a well equipped Ladies' University College, on the principle of Girton or the Harvard annex, will deserve well, not only of his own but of all coming generations.

The resignation of Mr. D. H. Hunter, B.A., of the headmastership of the Waterdown High School, to accept that of the Woodstock Collegiate Institute, calls for more than a passing notice. Mr. Hunter, during a connection of some eight or nine years with the institution he now leaves, has earned for himself a place in the front rank of teachers in Ontario. Under his management the Waterdown High School has steadily risen until it is justly regarded as one of the best institutions of the kind in the Dominion. Mr Hunter stands high in the esteem of the people in Waterdown and is beloved by his pupils. Many will regret his departure, but all will be glad to know that the change means his promotion to a wider sphere of usefulness and one in which he will have a better field for the exercise of his abilities as an educator.

Editorial.

TORONTO UNIVERSITY CURRICULUM.

Every change made in the Entrance Examination of the Provincial University is a matter of deep interest to the collegiate institutes, the high schools, and even the public schools of the Province. Just now the University curriculum is under going revision, and as it will be fixed for five years after adoption it is well for teachers to see in what direction the alterations tend.

In classics it is proposed to encourage practical work in translation, and to insist as far as possible on a more thorough and intelligent acquaintaince with grammar. The examination in Latin Prose will be based, for pass work, on a portion of Bradley's edition of Arnold's work, which will afford a fairer test of the candidate's real attainments than the usual practice does. For honor work at matriculation the texts selected are to some extent identical with those selected for pass work in the first year, thus facilitating the classification of pupils in schools which attempt first year work. The increased importance attached to sight translation, even with the aid of the dictionary thrown in, will tend to discourage rote work, which has lately been driving all conscientious translation out of our schools and colleges.

The mathematical requirements of the curriculum remain unchanged, but there will probably be introduced under the head of science some optional work in applied mathematics, such as high school masters and pupils have long been familiar with under the title of natural philosophy. The other optional subjects in the same class will be chemistry and botany, each candia c being allowed to obtain marks in only one of the three. For even this modicum of recognition those schools which thankful.

The requirements in history and geography remain unchanged, but a note in the new curriculum indicates that the prescribed period in English history is intended to cover also the histories of the colonies. This is the response to the high school masters' request to have Canadian history placed in the curriculum, and in the hands of judicious examiners it may serve the purpose. It would have been as well, however, to have Canadian history specifically.

In French and German an attempt has been made to give a better practical direction to school work by requiring candidates for honors at matriculation and for first year pass to write passages from dictation. Practice of this kind will educate the pupils in the phonetics of the language taught, and will prepare them for acquiring at a later stage some facility in conversation. The honor work for matriculation has been made identical with the pass work of the first year for the purpose of simplifying classification in the schools.

The most important changes have been made in the department of English. For matriculation the texts for critical reading are changed annually, so that even stupid examiners can hardly fail to set fair papers. The reputition of the same texts leads on the one hand to the anticipation of stock questions on the part of the teacher, and on the other to a resort on the part of the examiner to out of the way topics in order to discourage rote work. It is hoped that frequent changes of texts will minimize this growing evil. For the first time prose texts have been prescribed, and the Senate indicates a judicious use of them by specifying that they are intended solely as the basis of exercises in composition. For the first year pass a play of Shakespeare has been prescribed, so that hereafter no man will be able to complete his university career without having read at least one great English classic. It is possible that certain features of the English department may be in the opinion of some educationists capable of further improvement, but it is now much better than ever before, and five years' experience will no doubt suggest useful amendments .- William Houston. M. A.

OUR NEW DEPARTURE.

In submitting this specimen number of the CANADA SCHOOL JOURNAL to our patrons not many words are needed. It affords cause for mutual congratulation that the day has at length come when such an advance-step may be made with comparative safety. It is for our readers, no less than for us, to say what measure of success shall attend the venture. The true success of the JOURNAL will depend as much upon the hearty co-operation, not only of members of the teaching profession, but of all who are interested-as who is not?-in the great work of national education, as upon the energy and ability of editors and publishers. The latter are resolved to spare neither toil nor expense to make the CANADA SCHOOL JOURNAL, more and more an efficient and powerful organ of the guild of Canaunder adverse circumstances cultivate natural science will be dian teachers. May they not confidently reckon upon the active sympathy and substantial aid of the former?

THE CANADA SCHOOL JOURNAL

We need not refer to the work of the JOURNAL in the past. That is upon record and will speak for itself. Its issue now as a weekly, means simply a great advance all along the line. means stepping up to a still higher plane and out into a wider field. It means that its opportunities and appliances for serving the cause of Canadian teachers and Canadian education are to be multiplied many fold. Let all who sympathize with these aims take hold and help us by their subscriptions, their contributions, their advocacy, to make the CANADA SCHOOL JOURNAL, primus inter pares, amongst the weekly educational papers of England and America.

There are now at least seven leading universities in the United States which have established chairs of pedagogics. Acadia, in Nova Scotia, has the honor of being the first, and is, so far as we are aware, the only Canadian University which has, as yet, recognized, in this practical way, the claims of Pedagogy, or Teaching, to be regarded and studied as a science.

We want to make the SCHOOL JOURNAL more and more helpful to teachers in their daily work. We should like to see it become largely a medium of communication between teachers, through which the young and inexperienced may be able to receive wise counsel and suggestion from the more mature and experienced. To this end we invite questions and contributions. The questions when not answered by correspondents, we shall answer, not with infallible wisdom, but to the best of our ability, aided Ly all the resources at our command for consultation and advice. Short, pointed communications on live educational topics will always be welcome and have due prominence.

JUSINESS ANNOUNCEMENT.

With the November number the MONTHLY SCHOOL JOURNAL will be discontinued, or rather merged in the WEEKLY. The regular issue of the latter will commence with the first week in January. All subscribers to the Monthly, who have paid for a longer or a shorter time in advance will receive the Weekly for the unexpired period. New subscriptions and renewals of those which have expired are solicited in full confidence that the new arrangements will produce a paper far in advance of what was possible under the old. Not only will the subscribers henceforth receive fifty-two numbers in the year instead of twelve, but provision is being made at great increase of expense, to make the paper increasingly worthy of patronage in every respect. The weekly issue necessitates the constant attention of a skilful manager, and the regular tervices of a competent writer and educator as editor, in addition to local and departmental editors and contributors in every Province. In order to enhance its interest and value, not only for teachers, but for all classes of readers, its pages will every week contain carefully written news notes, and brief articles on current topics, as well as notes, tales and other literary selections from the best periodicals. In short, neither effort nor expense will be spared to furn sh a p per whose weekly visits will be eagerly welcomed not orly by thachers but by parents and pupils one hard one to answer by the advocates of either an hereditary or

complish this we want the help of every teacher both in enlarging our subscription list and by way of contribution, suggestion, It or criticism. Will you not help us, in all these ways, to make the Journal the brightest, breeziest, spiciest and most reliable school paper on the Continent?

AT HOME AND ABROAD.

The struggle between the Lords and Commons, in the British Parliament, is at an end, and the nation again breathes freely. Their Lordships have accepted with the best grace possible the slight concessions offered by Lord Granville on behalf of the Government. Precedents and probabilities all pointed to this as the outcome of the conflict. It is not the first time by many when their Lordships have found it expedient to retreat from an untenable position and bow to the will of the people as expressed through their representatives. Had they been, on the other hand, so infatuated as to reject the bill a second time, it would have been hard to predict the consequences. One thing is certain. The will of the people will be found the supreme law. With the consent of the Lords, or without it, through the Upper Chamber, or over it, the decisions of the people's Chamber on questions affecting the people's interests, will be carried into effect.

Still it would, we conceive, be a mistake to suppose as many seem to do, that the House of Lords was in any serious danger of immediate overthrow. It rests on a more stable foundation than we on this side the water are apt to think. Those reckon without their host who think of it as upheld by the aristocracy only. It it deeply rooted in the popular imagination. It is cherished by a large and influential portion of the middle classes. It is revered by multitudes in the lower. Any convulsion powerful enough to wrench it from its ancient foundation would shake the nation to its very centre. There can, it is true, be little doubt that the people are gradually outgrowing the conditions which give the hereditary body its strength. But they are as yet far from having outgrown them.

On the other hand the transparent justice of the principle underlying the bill in question put their Lordships so completely in the wrong, that continued resistance would have done more than almost anything else to impair their prestige and hasten their downfall. They themselves were unable to deny the inherent righteousness of the measure which simply does away with an invidious distinction between the men of the country and those of the city.

As to the rest Mr. Chamberlain's impeachment of the usefulness of an Upper House is crushing. The chief argument in support of such an institution is usually drawn from its fancied beneficent agency in checking hasty legislation. Mr. Chamberlain collates the most noted modern instances in which the action of the Lord's has delayed the adoption of important measures sent up from the Commons, such as the various Reform Bills, the Irish Land Act, etc. "In which of these cases," he asks, "was the nation the better for the delay?" The question has much practical point, and will be found a worthy of a place in every family in the land. In order to ac 1 a nominated Second Chamber. The responsibility of Consti-

tutional Governments, the accountability of the people's representatives and the forms of Parliamentary procedure supply the most effectual safeguards against ill-considered legislation.

The tension of public feeling in England produced by the quarrel between Lords and Commons has had its counterpart in that caused in the United States by the closeness of the voting in the Presidential election. The danger of conflict has, however, passed away. The better sense and feeling of the people has prevailed. There is now no room for a reasonable doubt that Cleveland is fairly elected. The pivot on which the election turned was the vote of the State of New York, a state in which, happily, the intelligence of the people is so high, and respect for legal and constitutional forms so sincere, that a resort to either fraud or violence was from the first improbable. The late announcements that both Blaine and the Republican Committee have resolved to accept the issue is only what was to be expected.

The election has been one of the most remarkable, and we may add, the most hopeful, that has ever taken place in the United States. For the first time, probably, in American history, the personal character of the candidates was with an influential body of electors the chief point of interest. The power of "the machine" has been broken. The "divine and inalienable right of bolting" has been vindicated. The Independent Republicans turned the scale by voting for the Democratic candidate. They did so on the high ground of principle, in the interest of national morality. They declared by their action, that no bonds of purty allegiance should harness them to the triumphal chariot of a candidate whose record they believed to be bad and whose principles and methods they regarded as irredeemably corrupt. Few will doubt that had the Republican Convention nominated an able man of irreproachable character he would have been elected by a sweeping majority, or that Cleveland's pluralities would have, on the other hand, been much greater, but for the dark blot on one page of his early history. The leaders of both parties have been taught a lesson which, it is to be hoped, they will lay to heart. A not improbable result would be the uprising of a third great party, free from the c rruption and digeneracy of both the old ones, and based on purer and more patriotic principles.

In Canada there is happily no one question of supreme importance agitating the minds of the people. The announcement, should it be confirmed, that President Stephen is returning from England without having found money for more than the partial construction of a single branch road in the North-West, will cause serious disappointment and, it may be feared, discontent amongst our fellowcountrymen, in that great country. Curiosity is still on the qui vive as to the "public business" which, it is said, has been occupying the attention of the Premier, conjointly with the consultation of his medical adviser, in England. Probably we shall have to wait till the opening of Parliament for an authoritative explanation. Writers in the press still keep prophesying mental authority, when, should his teaching closh with the pre-

change of some sort in the relations of the Provinces to each other and of the whole to the Empire. That the Confederation has not thus far developed the strong Canadian feeling many hoped for and prophesied, is, unhappily, too obvious. It is somewhat discouraging to a Canadian loyalist to find so many, especially amongst the younger men, who really do not seem to care a fig for retaining either the bond of union between the Provinces or the connection with the Mother Country. One thing impresses itself on the mind of an onlocker, though it has not, we believe, been distinctly pointed out. Each of the various nostrums offered for the cure of our commercial and political ills logically carries with it the idea of absolute freedom on the part of Canadians to shape their own destiny. In other words, they make practical independence the necessary starting point. To be constantly digging up the roots of a plant is not the best way to promote its growth. It any statesman or party can devise a means of cultivating amongst us a true love of our own land, a deep and abiding Canadian sentiment, they will have deserved well of their country.

Special Articles.

THE BIBLE IN PUBLIC SCHOOLS.

After a period of comparative quiescence, one of the Toronto dailies has taken up the vexed question of the "Bible in the public school," and one of the advocates for the introduction, Rev. Dr. Laing e Dundas, furnishes a letter of thanks to the editor for the stand the latter has taken on the question. Dr. Laing also recounts his reasons for his former and present advocacy. Dr. Luing further makes an attack upon our educational system because the Minister cannot see as he sees upon the subject. Without assailing Dr. Laing's reasons, I have a point or two to which I should like to call his attention. In the first case, were the Government to prescribe the Bible as a text-book in our schools, I presume that Dr. Laing would have something more than mere bible reating. He would, doubtless, have our teachers give explanations of the various portions of scripture coming up for consideration. If he did not, I much fear we should have boys leaving school with much the same ideas with reference to the parable of the sower that many of their fathers have left to the church.

He also urges that in case a Roman Catholic should not care to take part in the exercise he might leave the room, as provided by law. Now, I think that Dr. Laing must admit that the reason for the Catholic pupil leaving the recitation room would be solely one of doctrine, for, we cannot suppose that he would infer that because the pupil was a Roman Catholic he would not wish to listen to a moral lesson. Now, granting that the pupils of this particular sect absent themselves on a question of doctrine, on the same logic why should not pupils of the Episcopalian or Methodist denominations absent themselves while a Presbyterian teacher is giving his explanations, or vice versa? For, try as we may, early training and prejudice cannot fail to leave their impress upon our teaching.

Further, should the State prescribe religious instruction in our schools, to place our teachers in a just position with the ratepayers of their sections they (the Government) must prescribe of what this religious instruction shall consist, for how otherwise is a teacher to reconcile the various elements in his section to the style of his instruction unless that instruction has the stamp of departconceived ideas of some of his ratepayers, he may say, "I am only fitness for her place, and that fitness is often largely decided by the carrying out the law as laid down in our regulations."

Then, granting this, the advocates of the introduction of biblical study would have the Government prepare a national code of ethics, which, while not saying what we shall not believe, would assert that certain things must be accepted, and the teaching must be conducted on those lines.

Again, our public schools are intended to be just what their name implies—schools for the public, whether that public may consist of Methodists, Presbyterians, Episcopalians or Catholics, or a mixture of all these; and I contend that anything which has a tendency to make them any other than *public* schools, in the widest sense of the term, is an enemy to that educational structure which we are, with so much care, endeavoring to rear in our young Dominion. Instead of introducing new features which can have only the tendency to create distrust of our system among our Catholic fellowcitizens, and strengthen them in their desire for Separate Schools, we should endeavor to let them see that their pupils may attend our public schools with no more fear of their religious feelings being hurt, and with the same feeling of security as meet now the children of the Calvinist, the Baptist, \neg in fact, the children of parents of any other Christian denomination.

Wingham, Nov. 14.

W. E. GROVES.

THE HEALTH OF TEACHERS, - WHO IS RESPONSIBLE

BY MRS. EVA D. KELLOGG.

In the ebb and flow of the educational tide every possible reform seems to have come to the surface except the necessary care of the physical well-being of *teachers*. A long line of high-salaried officials engaged to bring the schools to the highest degree of perfection evolve, from long and critical study of the best thought and most progressive theories of the old and new world, a complete programme for child-development in intelligent psychological conditions of the human mind, from *sense-impressions* to the sovereign *will*; palatial buildings are erected, combining all the latest ^Aiscoveries in light, heating, and ventilation; thoughtful suggestions, full of common-sense and wise foresight for the mental, moral, and physical good of the children, are not wanting; and thus the modern school that crystallizes all the discoveries of the century is ready to begin.

But where is the force to set all this tremendous scheme in action? Who is the engine power to carry forward this admirably equipped train, crowded with human souls that are to shape and mould a nation's destiny ? THE TEACHER. Everything depends on her for the failure or success of those magnificent preparations. Would it not seem that too much care could not be used to keep her physically strong for her duties and responsible vosition / Perhaps she is a young, immature, inexperienced girl, the fresh product of the schools ; perhaps a woman who knows life and has studied children from the objects themselves instead of their poetic pictures ; but, whoever she may be, or however she may have drifted through personal or political influence iato this place of fearful responsibilities where angels might fear to tread, she enters it, and the door is shut, as far as any oversight of her physical or social needs is concerned. She at once becomes a target for the omniscient public, and a source of anxiety or satisfaction to the h gher powers, as she helps or hinders their beautifully rounded scheme of mind development. . . .

The accomplishment of every fine educational purpose ; the successful working of every new method ; in short, the height of all perfection in school work is measured accurately by the teacher's fitness for her place, and that fitness is often largely decided by the amount of her physical strength. Yet a school programme is arranged with no reference whatever to her ability to physically stand up under it.

It is decided that written examinations should be held so many times a month; but who among the powers that be proposes to modify or change this, because this work will oblige the teacher to spend hour after hour, including the golden Saturdays, in bending over these hieroglyphic "papers," with aching back, head, and eyes, when she ought to be out in God's sunshme, taking in oxygen, teachers who ignore their own physical needs, and go up under pressure like mercury in a tube, carry up with them the admiration of the higher powers, and, under this added stimulus of their praise as "devoted," " working " teachers, exert the last ounce of remaining strength, and then,-break down. The lines close up as they fall and present an unbro-en front to the public, who scarcely stop to inquire the fate of the absent teacher who stood, year after year, giving out the best of her mind, heart, body, and soul to their children, who seemingly forget her in a day.

These facts, with all their tragic sadness, fail to arouse the consciences of good men and women. No one accepts any responsibility in the matter. 'The supply of high *per cent*. teachers (the "survival of the FITTEST "?) waiting for vacancies is greater than the demand, and no immediate exigency in that quarter will call the needful attention to the slow, but sure, wrecking of the health and strength of so many of our finest teachers. If the actual physical condition of every American teacher, who has been for any length of time engaged in this most wearing occupation under the sun, and has giren herself to her work, could be taken to-day, even after a summer's rest, and the facts given to the sovereign people,—who can be trusted to be just when they know the truth,—we believo the universal verdict would be, Give the children less, and save tke teachers.

THE OLD MAN AT SCHOOL

Written for the "Canada School Journal."

BY G. W. JOHNSON, H.M.M.S., HAMILTON,

I've come to visit the school, boys, And take a look round, you know, To see if there's much of a diff'rence, Since forty years ago.

Your school-house is more like a palace, There's change in lesson and rule, There's change in teacher and scholar S ':ce I was a youngster at school.

While sitting here watching and thinking, My mem'ry roamed off at its will To a very different school-house— A little log-house on a hill—

Contrasting the past with the present, Our chance and improvident heed, Your chances and means of improvement : You ought to be happy indeed.

You've two or three corners to travel ; We'd miles, in the winter through snow ; You go or you stay at your pleasure,

We cried, for we wanted to go-

THE CANADA SCHOOL JOURNAL.

Somewhere else, for school wasn't enticing— Webster's Spelling Book book of the past, When we'd read it for five or six winters Began to grow tedious at last.

You march to your seats like soldiers With musical tread on the floor; We came in through the open window, If nearer our seat than the door.

You study French, Latin and German, Sometimes *cren English* you try, You know all about the old pagans, Can measure the earth and the sky;

We read, then we wrote, then we ciphered, And if after that there was lack, Our cultivation was varied Between the mind and the back.

Your teachers are models of mercy, Their mandates engender no fear ; To us half a dozen young earthquakes Were lurking in : "Geordic, come here !"

You "watch-chain" and "cane" your teachers, In hopes of prolonging their stay; We'd a very different object, And a very different way.

You've written examinations, With infinite worry and fuss ; We followed an easier method — 'Twas bigness that promoted us.

Yes, boys, there's a change in "larnin" (As we called it), manner and rule, Since the men who now are your fathers Were youngsters and went to school.

Ah ! that little log-house on the hillside I see it in memory yet; And I think of the scholars departed With a sigh that is half of regret.

On its old batten-door our jackknives Carved our names (our only renown). One third of the letters turned backwards, The rest of them upside down.

We each took our turn building fires; Before half the lessons were through, 'Twas a very poor morning for whipping, If we didn't take turns at that, too.

Old Benjamin Brown was the master, We prayed for him every day, And fathomed how justice and mercy Can temper a raw-hide at play.

His brows jutted out in their fierceness The width of a pigeon's wing ; His eyes were like unchained bull-dogs Forever ready to spring.

His nose, a crushed strawberry color; Stood sentinel over a smile That took on the look of an angel's

Whenever he caught us in guile.

When school was called in after dinner He'd doze with his shoulders bowed; And this was always a signal That scholars might study aloud.

I still hear that wonderful cadence That swelled, and sank, and roso, Till the noise broke the thread of his slumbers, Or a fly settled down on his nose.

One day when the door he had bulled And warmly demanded our stay; We bolted the nearest window And promised to stay—away:

He followed us out of the window, We sprang in and fastened it down; And the maddest man in the coun'y Was schoolmaster Benjamin Brown.

In vain were his threats, his fury;
The door never yielded a pin;
Till he'd promised us full and free pardon We still held the fort from within.

*

'The sheep and the goats of his pasture Are scattered; the house on the hill Is falling away into ruins— It's used for a sheep-pen still.

*

In an old-fashioned church-yard near it The master is taking his rest-

"Ben. Brown" at the top of the head-stone, Beneath it, "He did his best."

Good-bye to the flickering fancies, The friendships and laughter and groans, Good-bye to the dear old master---Requiescat in pace, his bones !

Whon I think of the past and the present, Our chance and improvident heed, Your chances and means of improvement— You ought to be happy indeed.

Correspondence.

To the Editor of THE CANADA SCHOOL JOURNAL.

SIR,—I would like to say a little in reply to the communication from an "Acadian School M.s'am" which appeared in the "Journal" of October. I have taught for a number of years in Country Schools and have never had the trouble of "Please master CAN I go out? or with "Please Sir I HAINT got NO pencil?" My pupils understand that recess is given for the purpose of drinking, having a short game, proparing for the next eighty or ninety minutes work, etc. If they wish to borrow any book or pencil, or if they wish to sharpen pencils, it is to be done at recess. Then if any pupils wish to retire from the room during the working hours, they may do so, (one at a time, and not remain out an unreasonable length of time) providing they lose a recess each time, unless it be for sickness (which rarely happens). But their retiring is not to interfere with any recitation.

The consequence of this is I have scarcely any running out, each pupil thinks the rule is just, therefore there is no grumbling about spelling chiefly by means of composition. It is certainly our duty the "master being awful cross "

I think this a much better plan than the "School Ma'am's," as I believe hers to be unjust to the dull pupils.

Now, Sir, this is the first time I have attempted to write to the "Journal," a paper which I could not do without, and if you deem this worthy of space I would like to write upon a couple of other matters before long.

A YORK COUNTY TEACHER,

Practical Department.

"Migwout ?" "Me getter rink ?" "Mis peak ?" this is the language often heard in the school-room. This ought not to be. Teachers should not allow it. When a pupil asks a question in such a vulgar, ungrammatical way, he should be taught to ask the question properly before receiving any grant or favor -- Towa Normal Monthly.

The fears entertained by many intelligent persons, at the opening of the schools, that the admission of the colored children to the white schools would cause disturbance and the withdrawal of many white children, have not been realized. It may seem strange, but it is true, that the children most difficult to control come from well-to-do and wealthy families. I do not mean to say they are vicious, disrespectful, and impolite, but are indolent and averse to doing anything contrary to their own sweet wills. There is a good reason for this. They come to school without knowing what it is to do anything that requires any sacrifice of pleasure. -R. W. Stevenson, Supt. Schools, Columbus, O.

AN ESSENTIAL THING. - Pupils must be trained to read and write their mother tongue correctly. Teach them to do this so that every scholar, at lifteen years of age, shall be able to read a newspaper readily; shall be able to spell common words correctly; shall be able to converse free from provincialism in pronunciation ; shall be able to write a legible letter in correct English. In reading, teach them not merely to pronounce words, but to get at the meaning of what they read. There must be no sham scholarship here. Good spelling is a conventional test of education, and oven a spelling lesson may be made the means of valuable mental training. -John Swett.

COL. PARKER AND SPELLERS.

In his very practical address delivered before the Teachers Association in August, Col. Parker said, "Burn your Spellers." years ago he would have been loudly applauded in Toronto, if he Master, was a cepted. Mr. Orr has done good work in Whitby, had expressed the same opinion. Oral spelling had been the and it is to be regretted that the School Board could not arrange to only method of teaching spelling. Thoughtful teachers saw the retain him. absurdity of this method. Unfortunately for the Speller it had been as long associated with oral spelling, that the reformers regarded them as inseparable and thoughtlessly concluded that the Speller could only be used in connection with oral spelling. The wave of progress that swept away the one carried the other with it. It was unquestionably a mistake to discard the Spellers. Most of them were bad enough in themselves to deserve condemnation, and this made it easier to offer them up as a sacrifice of "burnt offering" on the altar of dictation. It does not seem to have uccurred to those who led in the cruside against them, that the with a view to report on the matter. Notwithstanding the re-im-Spellers might be improved. Dazzled by the light of the truth position of fees and the opening of the Ridgetown High School the which they saw on one side, they were made blind on the other attendance shows a considerable increase on that of last year at the side, and failed to see that the Speller might be used as a basis for the work in written spelling. So they took the children's bread from them and gave them the stone-dictation from the reading lessons. The bread was not so good as it should have been, but it with 3 First Class and 3 Second Class Honours. was better than the stone. Their method, learning to spell words unable to spell many of the common words used in every-day life. average one to every 500 inhabitants.

Most teachers will fully endorse Col, Parker's method of teaching to teach the child his own vocabulary ; but it is also our duty to ex-tend that vocabulary. We can do neither in a definite and systematic manner, without a well arranged series of lessons. Such a series of lessons, when printed we call a Speller, and such a Speller properly used must prove of immense advantage in the school-room. I join with Col. Parker in condomning the old-fashioned Spellers filled with terrifiers ending in " osity" and " ation." They were bad, and the oral method associated with them was worse; but a logically arranged Speller, with the words classified, generally under topical headings, may be used as the basis for dictation lessons, and composition exercises, and it then fills a place which nothing else can fill so well.

Such a Speller may occasionally be used with advantage in o al spelling, as there are some pupils in whose memories the spelling of a word is more firmly fixed by perceptions received through the Yours, &c., ear.

JAMES L. HUGHES, P. S. Inspector, Toronto.

Educational Aotes.

At the annual banquet of the Toronto School of Medicine, Prof. Clarke, of Trinity College, in reply to the vast "Universities and Colleges," said Trinity College would not be greatly benefitted by federation. But he regarded too many Universities as an evil, as where there are so many Universities the value of a degree is not properly recognized. Canada, in his opinion had too many Universities and he thought the number should be diminished.

The annual dinner of the students of Toronto School of Medicine was a great success this year. As usual, many of the distinguished men of the Province were present, and the numerous toasts proposed elicited much enthusiasm and many good speeches were made in reply. The students are to be congratulated upon the excellent character of these banquets as well as upon their good judgment in excluding from the tables all intoxicating liquors.

The Stratford High School has been constituted a Collegiate Institute, to take effect the first of the year. Application has also been made for changing the High School at Strathroy to a Collegiate Institute.

The closing examinations of the Normal Schools at Toronto and Ottawa begin on December 11th, and continue for four or five days.

Additional Intermediate Certificates have just been granted by the Education Department to the following pupils of the Whitby Collegiate Institute: John G. Campbell, Josephine McBrady, George Emmett, James McBrady, Luura R. Gordon, Henry Mc-Brien, Robert M. Holtby, Thomas Nolan, Thomas B. James, T. E. Robinson, James R. Lawler, M. Wilson and W. Gee who wrote at the Institute also received Intermediate Certificates.

At a recent meeting of the Board of Education in Whitby, Mr. His advice on this subject was coldly received. About twenty R. K. Orrs, letter tendoring his resignation as Modern Languages'

teach the boys and girls who attend the night schools, separately.

The High School at Port Hope is undergoing extensive repairs which will make it a very comfortable building.

Formal application having been made to the Education Department to have the Chatham High School raised to the status of a Collegiate Institute, H. S. Inspector Hodgson, M.A., made an official inspection of the School on the 13th and 14th November same date. The record of the School for 1884, is as follows :-10

It is stated that there are 139 Medical Schools in the United by writing them was excellent, but the source from which the States and Canada, containing about 12,000 students—viz., 10,000 words were taken was utterly inadequate. Even if it were possible to teach all the words in the Reading books, pupils would still be students. The total number of doctors is about 100,000, or on an

The advantages offered by the leading Business Colleges are now boing appreciated in Canada. College, which was established in this city about a quarter of a is re-engaged for another year. - Woodstock Sentinel. century ago, has found it necessary to change its quarters several times in order to accomodate students. Its latest removal was into the handsome Areado Building on Yonge Street, where spacious rooms have been specially fitted for its use, with all modern improvements. The reputation of this school is of the highest, and its management is excellent.

Personal.

Miss Victoria C. Temple has been engaged for the third time in the Cr.wford School, Durham Co., with a large advance in her salary.

Miss Kate McEwen, of the Winnipeg Public Schools, formerly of London South, on the occasion of leaving the service of the Board in that city, was presented by her class with a costly five o'clock tea set, and by her fellow teachers with an elegant silver fruit dish.

Mr. John Gunion Rutherford, who graduated at the Ontario Voterinary Collego in 1879, has received a certificato from the Secretary-Treasurer of the Manitoba Board authorizing him to practice his profession in that Province.

Siddey L. Hellwell, of California, the famous Democratic orator of the Pacific slope, was born in West Flamboro', Ontario.

James W. Packham, B.A., of Smithville High School, Lincoln Co., Ont., has received a good appointment on the staff of the Owen Sound High School.

Colin C. McPhee, head master of the Fort Erie Public Schools, and late of Palermo Public School, is about to leave the profession. I: is a pity, for "Mac" was a good teacher.

Mr. Lewis Flechenstein, of Nilestown, has been appointed head master of the Port Stanley school.

Mr. Geo. D. Corrigan, who recently graduated with high honors at the Ottawa Normal School, has been appointed head master of the Kilbride Public School.

Mr. C. M. Orr, who has taught for the past five years in Stockdale Public School, has been re-engaged for 1885.

A. D. Crosby, B.A., has been re-engaged as head master of Smithville High School. He is a good man and the Smithvillians know it.

Mr. W. J. Black, head master of the East Ward School, is still confined to his house by rheumatism. His classes in the School are taken by Miss Anderson under the supervision of Mr. Bowerman, while Miss Harris takes Miss Anderson's classes.-Napance Standard.

Mr. Thomas Pearse, of Ingersoli County Model School has been appointed Principal of the Salford Public School for 1885.

Mr. W. Ellio't has resigned his position as teacher in Public School Section No. 1, Dereham.

Mr. C. R. Howell, teacher in Canifton, has resigned his school and accepted a position with the "Sun Life Insurance Co." Mr. Howell taught for seven years, bu felt that there was not sufficient remuneration in the profession.

Mr. W. G. Morrison has resigned his position as head master of the Drumbo Public Schools. He is engaged to teach, during 1885, at Wrigley's Corners at a considerable advance in salary.

Mr. D. Hogarth, of Wolverton, has been engaged to teach the Drumbo School.

Mr. Thos. McKee has been engaged to teach at the same school at Maple Dell for another year.

The High School in Oshawa is flourishing and the public schools are contributing largely to this cheerful state of affairs. At last departmental examinations 21 pupils passed out of 29, and at the examinations of the previous year 25 candidates wrote, all of whom passed. This is highly creditable to L. C. Smith, B.A., the head master, and his efficient staff. Mr. Smith has the supervision of the Public Schools, and has exercised the greatest care in their thorough organization and is now experiencing the beneficial results.

Mr. William Janneson, who for five years taught the Aberfoyle Misses Abbot, Overing, and Knowlton, graduates of McGiil School, has been appointed principle of the Amherstburg High normal school, have been appointed teachers in the Waterloo School.

Teachers are getting ready to .nove. Several changes will take The British American Business place at the close of the year. The teacher of No. 7 Cooley Pond

A great number of changes among teachers will take place in Wilmot township with the advent of 1885. New Dundee, Baden and Haysville will have new teachers, and two of the New Ham-burg staff are likely to leave, but Miss Dockrill and the Principal of the school have been re-engaged. The profession is yearly losing some of its brightest ornaments owing to the scanty pay received and people who are liberal in almost all other ways seem to take special delight in keeping down the low salary of the "coming race." -Woodstock Sentinel Review.

Mr. Peter Curran having lately resigned his position as Inspector of Schools for the Eastern division, and Mr. J. W. Morrison. of Savage Harbor, left on the 6th inst., for Rome, to study for the riesthood at the College of Propaganda. It is rumored that Mr. Curran's position is to be filled by Mr. Wm. Cain, at present Principal of Souris East School. -P. E. I. Advertiser.

QUITE A LOSS. - Our Waterdown correspondent writes that Mr. D. H. Hunter, the well-known head-master of the Waterdown High School, has resigned and is goi ; to Woodstock. Mr. Hunter has proved himself one of the most successful head masters in the Province, having built up the Waterdown School from nothing to a front position amongst the best. The Woodstock people are to be congratulated on securing Mr. Hunter's services, but his loss will be a serious one to Waterdown.-Dundas Banner.

Mr. Brough has tendered his resignation of Newark Public School and purposes attending the Normal.

Mr. W. C. Allin, Principal of Orono Public School, has been re-engaged at a considerable advance in salary. Miss Reid has also been re-engaged at an advance.

Mr. McDowell, of Kent County, is engaged to teacle the Public School in Kirby, Durham County.

Mr. Davidson teacher of S. S. No. 2, Caledon, took about twenty of his female pupils on the train to Orangeville, and had the photograph of the group taken.

Mr. F. Nowman, of Albion, has been appointed principal of the Shelburne school in the place of Mr. R. L. Mortimer. resigned.

Samuel Woods, M.A., the talented Principal of the Young Ladies' College at Ottawa, has, during the past month, lost his wife.

The many friends in Ontario of Principal Goggin of Manitoba Normal School, will regret to hear of his severe illness, he has been attacked by a malignant form of diphtheria. The same disease carried off his only child, a bright boy of some four years of age.

Mr. D. J. Goggin who has been appointed to take charge of the Provincial Normal School in Manitoba is meeting with success. At a recent meeting of the School Board, his salary was raised to \$2,000.

Mr. G. B. Kirk formerly Principal of the Cobourg Model School, has had charge of the Port Hope Model School during the present session, awaiting the arrival of Mr. Wood who has been employed by the Board to take charge of the schools of that town. He has twenty-five students in training.

Port Hope School Board could have made no better choice than the appointment of Mr. Wood, who for some years has had charge of the Bradford Model School, where he carried on the work to the satisfaction of all concerned.

Mr. H. F. McDiarmid, head master of Cobourg Model School, has 33 students in training this term. This is the highest record yet.

Mr. E. R. Eddy, Principal of Pickering Public Schools, is doing good work, as is evidenced by the increased attendance of pupils and the advanced nature of the subjects taught.

Miss Labree, formerly teacher in Robinson, Quebec, has been appointed to take charge of the graded s 'hool at Waterville.

Mr. D. C. Delauo, a graduate of Dartmouth College, has reopened Barnston Academy, Quebec.

Inverness Academy, Quebec, has an excellent teacher in the person of Mr. Alexander.

Miss Kinghorn has begun the seventh year as teacher at Wilson's Corners, Megantic, Quebec.

Academy in Quobec.

Miss Fairfield has been appointed teacher in Adamsville school, Quebec.

Mr. Mayo, formerly of Magog public school, has been appointed to take charge of the Masonville, Que., school.

M. P. McMaster formerly principal of the Flesherton public school, has been appeinted head master of the rublic schools in Thorold. Mr. McMaster is one of the best of teachers, and we predict for him a good record.

Mr. S. C. Haliday, formerly principal in the Lachate. Quebec, Academy, has been appointed principal of the Huntingdon Academy, at a salary of \$1,150. Mr. Hahday is deserving of his good fortune, being an excellent educator.

Mr. Grant has resigned his position in the Hull, Que., model school. He is now engaged in teaching at Aylmer. He will be of her Majesty. succeeded in Hull by Miss Stacy.

Mathematical Department.

HARVARD COLLEGE, CAMBRIDGE, MASS.

EXAMINATION FOR ADMISSION, JUNE, 1883.

1. Find the difference between $3\frac{1}{4} \times 6\frac{1}{6}$ and

$$1\frac{5+6}{73}$$
. Ans. =2215

2. A field is 38_{50}^{-1} rods long and $37\frac{1}{2}$ rods wide. Find its area in acres and sq. rods. Axs =17 ac., 140.4998 rods.

3. Find all the factors of 1001 and 616 that are common. Ans. 7, 11 and 77.

4. The distance from Boston to Albany is 320 1 m. Find the distance in miles assuming 1 meter= $3\frac{1}{25}$ for Ans. 320 km. = (3280 × 320+ 52^{26} , muss=198 78 miles.

5. A man, travelling 9 hours a day, goes 234 miles in 15 days. How far can be go in 30 days, travelling S hours a day? Ans.=\$ of twice 234 miles=16 × 26=416 miles.

1. Solve $\frac{1}{x} = 2 - \frac{4ax^2 - 3bx - 2}{2a(x^2 + 1) + 3b}$

Complete division, and cancel the twos,

$$\frac{1}{x} = \frac{4a - 3bx}{2a^2 + 2a + 3b}, \quad \therefore \quad (x^2 + 1)(2a + 3b) = 4ax,$$
$$\frac{x^2 + 2x + 1}{x^2 - 2x + 1} = \frac{4a + 3b}{-3b}, \quad \therefore \quad \frac{x + 1}{x - 1} = \&c.$$

2. A man walks at a regular speed, on a road which crosses a bridge 21 miles from the point he had reached at noon. If his rate were half a mile an hour greater, he would cross the bridge an hour sooner than he does. Find his speed and the time at which how cosses the bridge. Explain the negative result, $xy=21, (x+\frac{1}{2})(y-1)=21, \therefore y=2x-1,$ $(2x-7)(x+3)=0, x=3\frac{1}{2} \text{ or } -3, y=6 \text{ or } -7.$

3. Find the prime factors of the coefficient of the 6th term of oblong shape then when square ? $(a-b)^{p}$. What are the exponents, what the sign of this term. ANS. $19 \times 17 \times 3^2 \times 2^2$; $-a^{14}b^3$.

4. Reduce to lowest terms,

$$\frac{x^{4}+2x^{2}+9}{x^{4}-4x^{3}+10x^{2}-12x+9}$$
Ans. Numr.= $(x^{2}+2x+3)(x^{2}-2x+3)$
Denr.= $(x^{2}-2x+3)^{2}$: &c.

5. Prove that if a:b=c:d, then

(a+b)+(c+d)=(a-b)+(c-d)=a+c=b+d. Book-work.

6. Solve $xy=4-y^2$; $2x^2-y^2=17$. Find all the answers, and show that values of x and y belong together.

Put
$$y=rr$$
, divide I by II and $(r+r^2)+(2-r^2)=4+17$

Whence r=-3 or $\frac{1}{2}$, substitute these values separately and four pairs values for x and y result.

All Sorts.

Richard Grant White says Shakespeare is clear enough to be understood without commentaries.

Dear comrades of the teachers' guild, There's much to do and little done ; Brothers, sisters, every one Lend a helping hand, nor shirk Any part of God's great work. -Exchange.

It is a singular fact that the Queen of England is now the greatest Mohammedan sovereign in the world, -that is, his more Mohammedan subjects than any other power. These are found chiefly in India, over which the Queen rules. There are not so many Mohammedans in Turkey as there are in the Eist Indian dominions

The tallest structure formed by man is the great Pyramid which stands near the city of Memphis, in Egypt. It is supposed to have been built by the order of the tyrant Cheops, king of Egypt. It is about 516 feet high, and its base covers an area of eleven acres. Three hundred and sixty thousand men were engaged for thirty years in its crection.

St. Peter's Cathedral in Rome is the largest church in the world. Its architect was the famous sculptor, Michael Angelo. Its height is 464 feet. It was begun in the reign of Julius II., in 1500, and was completed in 1784, -taking a period of two hundred and seventyeight years for its crection. In less than that time, by many years, the United States have been changed from a wilderness to a country whose cities rival those of the "Old World" in population, and wealth, science and art.

Sir William Phipps, colonial governor of Massachusetts, and Benamin Franklin are noted examples of the populousness of New England ancestral families. The former was one of a family of twenty-six children, twenty-one of whom were sons. The latter was one of seventeen children.

The Modelites now eschew the vulgar " Bet your sweet life " for the scholarly "Wager your sacharine vitality." No doubt about their success.

The Question Prawer.

We invite our readers, especially the younger of them, to send to this drawer, questions and difficulties that may arise in the course of either their professional duties or their daily reading. The questions will be left over for two weeks before being answered, and answers are invited from correspondents. When correct answers are not received within two weeks we will do our best to supply them. By way of commencement we subjoin a few, the answers to which will be published in the first regular number of the Weekly, in January.

Q. 1. Who was called "the wisest, brightest, meanest of mankind," and by whom, and why?

2. Why does a ten acre field require more fence when of an

3. What is the composition of dynamite, and why so called?

4. Which of the following pair of expressions, if either, is correct, and why?

He don't know, He doesn't know. Two teaspoonsful, Two teaspoonfuls. Ain't you coming ? Aren't you coming?

5. It is said that a person lost on the prairie almost always walks in a circle. Can any reason be assigned?

6. Who were the authors of the following current phrases. "The Almighty Dollar," "What will Mrs. Grundy say ?" "All cry and no wool."

7. What is to be done with a bright, cager pupil who is constantly putting questions and asking for help over difficulties that spring up at every step? How can he be kept from being troublesome, without rebuff, or discouragement?

Miscellancous Reading.

RUSSIA'S POLICY AND HER FATE.

Russia is behind the rest of the civilized world, if, indeed, it be proper to call her "civilized." Socialistic books have been for some time suppressed, and now works of history, philosophy and political economy are forbidden. The University of Kieff has been closed, and nearly two hundred students have been arrested. The Czar's main effort seems to be to keep out the light, but the bow will be sent a little too far ; it will break. The outbreak is certain to come. Nihilism in the natural result of oppression. What else could be expected ? Human nature is certain to assert itself sometime. This has been the history of the past, and is certain to be of the future. Russia is preparing to write her history in the blood of her own children. In fact, the manner her people have been treated, and the pains and terrors they have been called upon to suffer have already been sufficient to call for the interposition of other nations. This would take place if Europe did not to-day value peace above justice and right. To the observing student of history, the present government of Russia is full of intense interest; for the mills of the gods grind slowly; but they grind exceedingly fine.-School Journal.

WHEN THE BELL RINGS.

The day has passed wearily away, and no longer the rays of the sun left their impress on the fluor or kissed the face of the sufferer who was lying so ill upon the bed. The shadows of evening gathering, and the chill of the twilight air seemed to rouse the little one who asked to know the hour.

"It is eight o'clock dear," said the mother, whose darling must soon wander away so far that it seemed as if eternity could hardly re-unite them.

"All the bells will ring at nine, mother, and I do so want to hear the bell once again," said the little one, whose face lighted up at the thought, and as immediately grow shadowy as pain in its acuteness cut another cord which bound humanity to eternity.

"Yes, my dear. The bell will ring at nine, but do not speak as if you were dying, my child, because you want to get well, don't you ?"

"Yes, mamma, I would like to, but I feel that I am going away, and, and —— " the little head fell back and the sentence was unfinished.

The day wore on. Not a sound had escaped from the little sufferer, and the clock was pointing the hour of nine. The mother looked anxiously at the child, and listened with aching heart for the sound of the old church bell, which something seemed to say was to take her darling away at its call.

Sometimes hearts so full of sympathy and love expand until the strain overpowers our nature, and leaves us a shattered wreck which neither time nor association can repair, requiring the passing of the soul through the veil which separates here and beyond, to class that which has preceded us.

"Oh, mother, I hear the bell," said the little one, as the sound rang out loud and clear upon the air; "and mamma, when I am gone, you will think of me when the bell rings, won't you, mamma?"

The mother's heart, fast breaking under the strain, could make but one reply, and clasping her darling, she held her in a fond embrace, as though the white-winged spirits could would take her away before the time.

As the bell ceased ringing, a smile crossed the face of the little country beneath its weight and leave a wilderness behi one, and with a voice full of earnest feeling, she murmured, "Goodbye, mamma, I shall look for you when the bell rings," and fell single stream among the many.—San Francisco Chronicle.

Angels carried her away, and crossed the river with their precious burden, but the sound of the old church bell still remains sacred to one heart, and ever with its ringing, scems to unite the mortal with the immortal, the seen with the unknown.

Ring on, sweet bells ! You awaken memories in our hearts which bring us to nobler thought and action, and ever as we hear your ringing, we remember those who left us at your call.

THE WORLD WHAT WE MAKE IT.

A man's world is pretty much what the man himself makes it. It is true in psychology that what the mind itself contributes to the making of a conception, is at least as important as what the outer world supplies for that conception. And it is no less true that the things which constitute our social or moral or religious world, are affected as much by our own shaping of them within our selves, as by the bare materials of them which exist outside of ourselves. Shakespeare is not the same to any two readers; each reader has his own Shakespeare-a Shakespeare formed by the growth into the reader's mind of those elements in Shakespear which are akin to the mind of the reader. And so it is with every single object which is presented to human thought. Each sees the object; but each puts something of himself into his seeing. The same blue sky is shining with joy for one, and is calmly pitiless for another. The world of nature takes on the aspect of our moods, and what we think of the world of men, is but the reflection of what we know of ourselves. If we are convinced that truth and faith and purity have died out of the world, it is a sure sign that we are sadly in need of reformation ourselves. If we recognize nobility in another, it is an evidence that the best within ourselves is not yet dead. This power, this habit, of shaping our world into our own image, carries with it a certain responsibility. When we are most firmly convinced that what the world needs is some sharp reformation, we ought first to question ourselves how much of the wickedness we see is really the world's, and how much of it is only the shadow of ourselves. Before our world can grow better, we must grow better ourselves; and we never have a right to insist that the world shall purify itself, until we first have done what we could do towards its purification, by taking heed to the correction of our own ways.-Sunday School Times.

ALASKA GLACIERS.

It was nearly sunset when we began to near the Muir glacier, and the day was nearly ended when the cliff was reached and wo nad anchored near the frowning precipice. The shades of evening had gathered about the islands passed during the day and half hid from sight the lower ranges and the trackless forests, but the Fairweather peaks were visible still and glowed with a ghostly light in the isolated hight like banks of phosphorus hung above the trees. Around us floated ico fragments, grinding against each other, or floating, solitary and majestic, down the watery way. The scene was grand past all conception, wild and beautiful, and silencing all with admiration. No other wonder equals this glacier of untold age, as it moves silently yet irresistibly down from its birthplace to the sea, crying as it comes, the very embodiment of strength, the destroyer of all life. All the glaciers of Switzerland might be combined and together they would not equal this of Glacier Bay. Set it crawling over the valleys guarded by Mont Blanc, and it would crush the country beneath its weight and leave a wilderness behind. And yet in Alaska, long and broad and wild, it is a more fissure-a

Teachers' Associations.

ELGIN - At the late session of the Elgin Teachers' Association held at S Thomas, after a longthy and warm discussion on the subject of uniform promotion examinations in the schools of the County of Elgin, it was moved by Mr. Maxwell, so ondel by Mr. Littlejohn, that this Associa tion favor a system of uniform promition examination papers for the county, and that a committee be elected to mature some scheme for conducting such examination, an I if practicable to hold the examination next March or April A representative was elected by each manicipal hext Mirch of April - A representative Wisclever by each manapal-ity in the county to form said committee as follows: Messrs. W. Atkin, I P S, C niverer ; E Higley, Aldbraugh Township ; J. Eedy, Southwold ; Peat, Dunwich ; Chesseman, Yarm mth , Bardick, M dla-hide ; Orton, S Dorchester. The Association elected the following officers for the ensuing year --President, E R Gunn, B. A., Vienna H. S.; Vice President, Thys Hammon I, Aylmar ; Corresponding Secre-tors Miss H. Rohimon ; Towners and Libraria Theory Theory is hear Thomas C I ; Executive Committee - Messrs. W. Atkin, I. P. S., J. Orton, J. W. Eely, E. Higley, W. Miller, B.A., Misses Satherland, Murray, Lane, Arnold and Drake.

NORTHUMBERLAND. - The annual meeting of the Teachers' Association was held in the Collegrate Institute, Cobourg, on 17th and 18th October. A large number of members attended from all parts of the county. The following is a synopsis of the proceedings, which were interesting throughout.

Friday.—The President, D. Robertson, in the chair. After routine business, Mr. Dixon introduced the subject "Spelling-defects and their Remedies." He described his own method of teaching spelling, in which he attaches spenal importance to written exercises. Dr. Hamilton of Port Hope pointed out the advantages of the phonic alphabet. Speakers who followed admitted the simplicity of the method, but thought its introduction would greatly detract from the value of etymo-logical study. "Mental Arithmetic" was introduced by Mr. C. A. Lapp. The general opnion was that greater attention should be given to this important exercise. Mr. G. B. Ward, M. A., Brighton, furnished a valuable paper on "School Ethics." Rev. Dr. Burwash gave a most excellent address on "The Teacher's Self-culture, how best attaine l." The speaker clearly showed that a teacher even in elementary work, may attain true culture, as well as by a special course of collateral reading. These points were elaborated in a masterly manner.

Saturday. - The Committee on Uniform Promotion Examinations having reported, it was decided, after a short discussion, to rescind all resolutions in force bearing on the question. This leaves promotions in the hands of the teacher. The new programme of subjects for teachers was explained by D. C. McHenry, M.A., and discussed by the convention. The election of officers resulted as follows :- President, D. C. Me-Henry, M.A.; Vice-President, H. F. McDiarmid; Sec.-Treas., C. A. Lapp, other members of the Executive, Messrs. Scarlett, Ellis, Ash, Gould, and Orr. "Text-books, their use and abuse," was introduced by Mr. W. S. Ellis, B.A., B. Se. A short discussion on "Importance of Thoroughness in Primary Classes," was opened by Mr. M. Diarmid. Next meeting to be held in Cobourg in September or October. if the time can be so arranged. Details relating to Township Conventions were left with the Executive. Rev. Dr. Roy then gave an address on "Reading," in which he pointed out prevalent errors, and suggested excellent methods of teaching the subjects. After the usual compli-mentary resolutions, the Convention adjourned.

LAMBTON. - A union meeting of the East and West Lambton Teachers' Association was held in Sarnia on Thursday and Friday, 9th and 10th October There was a large attendance of teachers, and considerable interest was manifested in the proceedings. Dr. McLellans presence and lectures during the afternoon of Thursday and the whole son was opened at ten o clock, C. A. Barnes, P. S. I., in the chair.

After routine business Mr. Barnes gave an address explaining the new regulations regar ling Teachers' Associations.

At the conclusion of Mr. Barnes a ldress Mr. Sinclair, B.A., took up the subject of Elementary Physics. A discussion followed the intro-duction of this subject, after which a committer was appointed to nominate officers for the ensuing year, with instructions to report next day. Afternoon Session. - The roll being called, Miss E. Austin explained

her method of teaching primary arithmetic to junior pupils; her method of dealing with the subject was exemplified by illustrations with blackboard. At the conclusion of Miss Austin's lesson it was moved by Mr. Holmes, seconded by Mr. White, that the thanks of this Association be tendered her for the very excellent lesson which she has given. Carried.

The holding of local associations at various places throughout the county was next considered, when it was moved by Mr. White, seconded by Mr Holmes, that the matter be referred to a committee consisting of the two inspectors, the two high school masters, and on. teacher from each township. Carries.

Mr. Woodworth next explained his pl in of teaching geography. He would begin teaching this subject in the second class. A lively discussion followed relating to map drawing, definitions, etc.

Dr. McLellan proceeded to discuss gram.nar. He began by stating that he could not agree with the idea advanced by some that the English language was a grammarless tongue. He then went on to explain the benefits derived from the study of this subject and what he considered the best method of teaching it. He considered analysis very useful in developing reasoning power.

In the evening a lecture was delivered by Dr. McLellan in the Tem-perance Hall, subject. "Teacher and Parent in the work of Education." The hall was filled to its utmost capacity by teachers and citizens of the town, who listened with delight to the eloquent remarks of the lecturer as he contrasted the condition of affairs now with what they were twentyfive or thirty years ago. At the conclusion a vote of thanks was ten-dered Dr. McLella. for the very able lecture which he had given. The meeting was opened on Friday with prayer by N. L. Holmes,

after which the roll was called by the secretary.

The committee regarding local associations reported in favor of holding associations during the first half of next year at the following places: Florence, Watlord, Forest, Petrolea, Sarnia, and S. S. No. 11, Sunbra. On motion of Mr. Barnes, seconded by Mr. White, the report was adopted.

Dr. McLellan then answered several questions on Thursday's lesson in grammar, after which he proceeded to discuss "The Art of Ques-tioning." The further consideration of this subject was adjourned till the afternoon, and Mr. D. N. Smelair was called upon for his subject, "Writing." A general discussion followed the introduction of this subject, in which a number of teachers took part.

At the afternoon session Dr. McLellan renewed his address on the art of questioning. At the conclusion of this address the secretary read the report regarding nomination of officers, and on motion of T. White, seconded by Mr. McDonald, the following officers were appointed for the ensuing year, viz.:-John Brebner, President; C. Barnes, Vice-President; John Johnston, Secretary Treasurer; W. Sinclair, B.A., W. Phillips, B.A., J. R. Brown, S. C. Woodworth, A. Wark, Executive Committee.

The President brought up the matter of uniform promotion examinations for East and West Lambton, and after a short discussion it was moved by Robert McWorter, seconded by J. J. Mathews, that uniform promotion examinations be held throughout the county. Carried.

On motion by Mr. White a vote of thanks wis tendered to Dr. Mc-Lellan for the very able series of lectures which he had given.

The association then adjourned.

Literary Review.

Ma. GLORGE ALFRED TOWNSEND IS at work upon a new novel which will be entitled " Katy of Cotocton."

PROF. DOWDEN is hard at work on his Life of Shelley, and has been won lerfully fortunate in getting hold of fresh materials from the most hopeless looking quarters.

PROF. JOWETT has nearly finished his transl tion of "The Politics of Aristotle."

JUSTIS MCC SITHY has prepared a volume of "Irish Lyrics" for publication in the Parchment series.

FIRST PRINCIPLES OF NATURAL PHILOSOPHY. A text-book for Common Schools, By E.roy M. Avery, Ph.D. Sheldon & Computy, New York and Chicago.

This is a good work for primary classes in Natural Philosophy. It is a much simpler and briefer treatise than the Author's Elements of Natural Philosophy. Each subject is discussed from the standpoint of experiment, and yet such experiments do not require expensive apparatus. It will prove a good work in schools when there is not much time to devote to the ophilase of the schools when there is not much time to devote to the subject.

The November number of the Magazine of American History contains a splendidly injustrated article on the "Unsuccessful Candidates for the Presidency of the Nation.'

tree. Routledge & Sons have recently published four volumes of their "One-Syncole Historical Course, comprising the histories of France, Ger-many, England and the United States.

SIXTEENTH ANNUAL CIRCULAR OF THE ONTANIO BUSINESS COLLEGE, BELLE-VILLE, UNT., Robiason and Johnson, Principals and Proprietors.

This little sheet is elegantly gotten up and contains much valuable in formation for those y ung men who wish to secure a good, practical educa-tion before entering the business world. It famishes full information to the puble, regarding the different branches of study taught in the College, the charges for tintion, the time it takes a student to complete a certain course, &c. Young men who purpose taking a course in a business college should write to Messrs. Robinson & Johason, for their interesting catalogue.