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# The Canada School Journal.

Vol. VII.

TORONTO, MARCH, 1892.,

No. 58.

#### SAMUEL ARTHUR MARLING, M.A.

Samuel Arthur Marling, the fourth son of John F. and Elizabeth Marling, was born at Ebley, in Gloucestershire, England, January 19th, 1830. His father was engaged in the business of manufacturing cloth at that place, where his establishment is still continued under the proprietorship of his brother, Mr. Samuel S. Marling, who represented West Gloucestershire in the last Parliament of the United Kingdom. , In

1860. His daughter died in early life; but his wife and four of his sons are still alive. Of these, one is the genial and painstaking Secretary of the Education Department, another, a clergyman, formerly in Toronto, is now in New York; the two others are engaged in business.

The school life of the subject of our sketch began at Devizes in Wiltshire, at the boarding school of Mr. Biggs, a fair specimen of the classical master to be found in old English towns. Here he remained until he came to Canada, when his father, who valued a good education, entered him and his younger brother at Upper Canada College. He was placed in the fourth form, and, though put at a disadvantage on account of the principal's admitting him to a higher class than his attainments warranted, soon distinguished himself. At the end of each year of his

of 1843 to midsummer 1846, the College records show that he the heart, and that the successive pulsations of that organ was awarded some prize or honorable position. When, at the gradually increased the distention and finally effected a rupture early age of sixteen years and a half, he passed out of the at the weakened spot. seventh form, he received the German prize, was ranked first in Latin verse and reading, and was placed among the list of attended by a number of High School masters from different those leaving the College with honors.

After this Mr. Marling spent some time in a commercial house, but, his tastes being those of a student, he entered Toronto University in 1850. During a distinguished academic career he uniformly obtained first-class honors in the ancient classics. In 1851 he obtained a prize for proficiency in Greek and Latin, and one for English verse. In 1852 he gained the Davies, principal of the Toronto Normal School, read the Chancellor's medal for proficiency in the evidences of natural burial service of the Church of England. and revealed religion. In 1853, on taking his degree, he carried off the gold medal for the ancient classics. The next daughter of the late Mr. James Woodhouse, for some years an

twenty years of his life were occupied in teaching. He was Head Master, in succession, of the Grammar or High School at Bond Head, Newmarket, Chatham, and Whitby. In 1873, on account of his reputation and experience, he was appointed an inspector of High Schools and a member of the Central Committee of Examiners. These offices he held until his death, and, in addition, acted on several occasions as examiner in classics in the University of Toronto. During this period of his life he proved a valuable assistant, first to the late Chief 1842 Mr. Marling came to Canada with his wife and family of Superintendent and the Council of Public Instruction, and five sons and one daughter, and was for some time engaged as afterwards to the Minister of Education in effecting the various an importer in Toronto, where he resided until his death, in improvements which have marked the history of the public

> and high school systems during the past eight years.

> His death, which was sudden and unexpected, occurred on Sunday, the day on which his former chief, the late Dr. Ryerson; likewise passed to his rest. A fall on the preceding day gave him some uneasiness, but did not alarm or seriously inconvenience him. In order to recover from its effects he remained at home on Sunday, spent the day in reading, took his meals with his family, and conversed with them in his usual genial way. In the evening, shortly after they returned from church, he retired, taking with him Trench on the Parables to read in bed until he should fall asleep. Not long afterwards he was heard to call loudly, and, when his alarmed wife and children rushed in, he was found unable to speak and in the agony of death. It is supposed that the shock



course in this institution, which extended from the beginning of the fall on the day before had distended an artery near

His funeral took place on Thursday, February 23. It was parts of the Province, who had closed their schools as a mark of respect to the deceased, by the president, professors, and students of University College, in academic costume, and by many other friends.- The services in the house were conducted by the Rev. Mr. Hogg, pastor of the Charles St. Presbyterian Church, of which Mr. Marling was an elder; at the grave Dr.

Mr. Marling married, in 1854, Miss Ellen Ada Woodhouse,

officer in the customs at Toronto. She, two sons, and three in obedience to a father's mandate, his adherence to the doctrines the University of Toronto, is a missionary on the Gaboon most commending itself to his convictions of truth. Telling States; the daughters live in Canada.

The friend, of whose life we have just presented the skeletonized facts, was in the prime of his powers and at the height of his usefulness when so suddenly called away. Possessed of a large and genial nature, which had been thoroughly trained in who from time to time crossed his path in his pursuits at a early life and ripened by much subsequent reading, reflection, and experience, there was still in him the promise of a valuable future. His mind was still open to receive new ideas, or to modify old ones. His character was becoming every day better appreciated. The longer one knew him, the better one liked him. Whatever may have been his faults, his heart was always right. His instincts always placed him on the side of fair play and progress. He was in the highest sense of the term an honor. Strachan's ill-advised attack upon Dissenters; his communicaable man. His life was marked in an especial manner by un-tions to the London Times on Canadian Affairs shortly before ostentatious piety and strong religious convictions. With the the rebellion, and the host of able reports and trenchant replies culture of a scholar he never wavered in belief of the revealed to criticism which are scattered all along the record of his thirtytruths of Christianity, and, whenever it was proper, insisted two years as Chief Superintendent of Education in Upper Canupon the principles of the Christian faith as the foundation on ada, all alike testify to the writer's intellectual vigor, indomitable which all education worthy of the name must be based. But resolution and unyielding tenacity of purpose. These are the with all this earnestness there was nothing austere in his nature, qualities that contribute mainly to success, especially when and he will long be remembered for his kindly humour. He is enlisted, as they undoubtedly were in the case of Dr. Ryergone; and, though we who remain cannot understand why

The good die first, And those whose hearts are dry as summer's dust Burn to the socket,

yet it is a consolation to us, as we hope it will prove to his family, into the idyllic beauty of whose daily domestic existence death has intruded so rudely, that he still lives even on this earth for the benefit of others in the example which he has set of a life dominated by high principle and softened by all the amenities of a cultivated intellect and tender feelings.

#### REV. DR. RYERSON.

On the morning of Sunday, February 19th, Egerton Ryerson D.D., LL.D., passed away at the ripe age of 79 years. Dr. Ryerson was one of a class of men who are the peculiar products of a new country and a vigorous race. Strong, energetic, self reliant, he could scarcely have failed in any land or under any circumstances to leave his mark upon the history of his country. But growing into manhood in Canada at a time when its institutions were just in their formative stage, and when the people themselves were passing through the first prolonged repository of general and statistical information on a variety of crisis of their historical development, he could not fail to be drawn into the whirl of its religious, political, and intellectual movements. In each of those three spheres of acitivity he the impression of great industry in the offices from which it found a field for the exercise of his talents, and scope for the emanates. It consists of four principal parts. Part I., respectfull display of that manly strength which was probably the most ing the Education Department, gives us an account of the promarked feature of his character. The promise of that strength ceedings during the years 1880 and 1881; statistics of Public, was given in the inflexibility of will and faithfulness to consci-Separate, and High School during the year 1880; and a detailed ence which led him to choose rather to leave his father's house comparison between the work and methods of the last five

daughter survive him. The elder son, who is a graduate of of Methodism, which he had accepted as the form of religion River in Equatorial Africa; the second resides in the United manifestations of that same strength were given when he entered the political arena as the champion of the rights of Dissenters, when he, as perhaps became a faithful descendent of the Loyalists, set himself to conteract the aims and influence of William Lyon McKenzie and his followers, while none of those later period of his cherished educational ideas and theories, but must have recoiled under the weight of those vigorous blows which were sure to rain hard and fast upon him. Dr. Ryerson's career has been already set forth at length in the columns of the Canada School, Journal, and it is uunecessary that we should again outline even the salient features of a life so familiar to all our readers. His letters in reply to Archdeaon son, in the service of an unfaltering conviction of duty. We mournfully pay our tribute of admiration and regard to the memory of an able and useful servant of the public. A great and a good man has fallen; a man to whom the Public School System of Ontario is more deeply indebted than to any other; who imparted to it an impetus which still urges it forward and which it will feel for long years, perhaps centuries to come It is therefore meet that the CANADA SCHOOL JOURNAL should cast its wreath, as it does in all sincere respect, upon the tomb of the honored dead.

We are much pleased to notice that the Toronto Public School Board has taken steps to communicate with the other Boards throughout the Province, with a view to the erection of a monument to Dr. Ryerson's memory. Nothing could be more appropriate than that his statue should adorn the Normal School Square, and every teacher and ex-teacher in Ontario would do honor to himself in contributing towards its erection.

#### THE EDUCATIONAL REPORT.

The Report of the Minister of Education for 1880 and 1881 is a volume of upwards of 400 pages. It may be regarded, as to some extent, a new departure. Instead of confining himself to a mere exhibit of the legislation and work of the Department during the period, Mr. Crooks has given us in addition a Educational matters. The volume cannot have been produced without a great expenditure of thought and toil, and gives us and carve out a path for himself in the world than to renounce years under the old system, and the first five under the new.

This part also gives us some interesting comparisons of our to us wrong in principle and tending often to discourage real the control of the Lieutenant Governor in Council. Part IV. gives facts and figures respecting Universities, Colleges, and while a Superintendent of Education can legitimately deal only at school, a statement which seems almost incredible. Education may, and should give attention to all the Educaisting by public act or charter.

Amongst the suggestions and recommendations in Part I. of the Report, we notice one based upon the opinions of the Central Committee and the High School Inspectors, n favor to determine the educational fitness of a young man or woman a High School Pupil, to pass from one form to another. The or to himself. difference too in the average ages of the two classes of pupils in-their own hands? They have only, one might suppose, to the purpose. school a term of admission to any public examinatian, seems walls, than in a College whose chief work is that of preparing

Educational system with that of many other countries, and merit, and after all can not the examination questions be so closes with a series of suggestions and recommendations. Part framed as to put all cramming, all haste, and superficial pre-II. relates to Mechanics Institutes, and the like Societies, aided paration at such a discount that it will soon cease to be offered? by public funds. Part III. has to do with the Universities, But the student who is prepared to abide the test, ought to be Colleges, and Schools endowed by the Province, and subject to allowed to pass, whether he has been at school one term or

Amongst several interesting facts brought out in the table in Schools not under provincial control, but incorporated by the Report in which the Comparative Statistics of Elementary charter or act of the Legislature. Wide as is the field thus Education in twenty-eight principal countrie are given, two covered, it is not, we suppose, wider than should properly come seem worthy of special notice. On the one hand the percentwithin the purview of a Minister of Education. In fact, one of age of pupils to total population in Ontario, is higher than that the chief advantages of the change by which the supervision of of any other country. It shows that 28 per cent., or consideducational matters was made a Government office, is that erably more than a fourth of all the inhabitants of Canada, are with the schools directly under State control, the Minister of Victoria, which comes next in order, the percentage is 25, while in the United States it is but 19, and in Scotland, Engtional work being carried on in the Province in Institutions ex land, and Wales but 15, other countries falling much lower. Surely the next generation of Canadians ought to be well educated. The other fact, which affords much less matter for congratulation, is that in Ontario the number of pupils to each teacher is higher than in any other country. Can it be beof separating the High School and Intermediate Examination lieved that on the average each teacher in the Public Schools from the Non-Professional Examinations for Third and Second of Canada, has 72 to 74 pupils under his instruction and con-It is proposed to have them concurrent in the trol? As many have less, it follows that many others must same week in order to save expense. The suggestion is no have more than even this appalling number. The point is one doubt a good one, as the kind of test which should be applied upon which practical teachers might do well to speak. To us it seems simply impossible that any teacher, even with the help for entering the teaching prefession, should surely differ both of the most perfect grading and classification imaginable, can, in kind and extent from that suitable for testing the fitness of in the presence of such numbers, do justice either to his pupils

In view of past and prospective discussions in the Legislais no doubt considerable, and should be taken into the account ture and elsewhere, the part of the Report treating of Upper by those preparing the questions. Another proposal in the Canada College, will be read with great interest. The chief same connection does not strike us so favourably, "to protect features of the Minister's scheme for prolonging the life of the teachers' examinations from candidates too rapidly prepared," College, have already been published and discussed. It is it is suggested that each candidate should be required to fur-now proposed to add to its functions that of acting as the nish certificates of attendance for two years at the High or Model High School of Ontario, and "supplying facilities Public School, after having passed through the fourth class. The "for the professional instruction of High School Teachers', end in view-that of repressing the inordinate haste of the "including Candidates for First Class Public School Teachers' average candidate to cram up for the examination, is certainly "Certificates, in the best methods of teaching higher sub-a desirable one. Such pupils are, we can readily imagine; the "jects," &c.? Such a proposal naturally suggests two disbane of the Head Master's life. But the remedy proposed tinct questions: First, that of the need of such an institution strikes us as a very mechanical one. It might often lead to as an addition to our already extensive school system, and great injustice. Have not the Head Masters the matter largely second, that of the suitableness of Upper Canada College for In regard to the first point, we hold that there refuse to form special classes or courses, for the accommodatis no valuable end to be reached that cannot be attained much tion of the numerous young men and women who want to be better and more simply by the addition of an accomplished got ready for the examination in three or six months, and in Professor of Education to the Staff of University College. sist on such following the regular programme for the study of Such a course has been adopted at Cambridge, Eng., and at St. the required subjects. Of course the school might sometimes Andrew's, Scotland, and at several other great seats of learning. lose a pupil by this means, and this under the system of pay Most of our High School teachers are educated at University Colment by results is a serious matter. That difficulty could, how lege, and those of them who are not would accept much more ever, be met by concurrent action on the part of masters. But kindly, and, we venture to add, with much greater probability the method of making a certain period of attendance at any of benefit, a compulsory short course in Education within its

are necessarily University Graduates, the idea of sending gentle-is everywhere accepted as the unmistakable sign of good breedmen who have already taken their degree in Arts, to receive pro-ling. The new appointee again should be thoroughly familiar fessional training in a College whose principal work is the pre-with the history, nature, and operation of the school system of favorably. It could only at least be of use as a school of practurder different conditions, and prepossessed with ideas foreign tice, in which their ability to teach could be tested. Further, to the genius of our institutions, no matter what his educational ing if not a High Class School after the manner of the famous High School Masters too would be sure to resent, and rightly, English Schools for gentlemen's sons? gentlemen sending their sons to be experimented on by a class. High School Inspector should be in harmory with the existing of young men seeking practice in the art of teaching. us hope that this proposal is the last of a series of efforts Inspector, as far, at least, as to prevent danger of unpleasant to prolong the life of an institution which has done its friction. In other words, he should be a man who can work work and outlived its usefulness in its present shape. There is, as we have before pointed out, one, and but one way in which course implies no necessary lack of individuality or force of this well endowed College, can be made of the very highest character, both of which qualities are highly useful in such a service to Canadian culture. The need of a University College position. We write without knowledge of any favoured candifor women is at present our great educational need. The long date, and so without prejudice. We earnestly hope that Mr. want of such an institution, where young women ambitious of Crooks may succeed in selecting one who will prove himself thorough culture might receive an education comparable with "the right man in the right place." that, for which such excellent facilities are provided for young men at University College, is a crying shame and reproach to By devoting its halls and revenues to so worthy a purpose Mr. Crooks may make the defunct High Class School for boys a credit and an honour to the country and a blessing to generations yet unborn. Is it not of more importance to Canada that the young women who, as the mothers of the next generation will have most to do in moulding the national character, and in shaping the national future should have placed within their reach the means of securing a thorough intellectual training, than that special facilities should be provided for perpetuating Class traditions, which are out of place in this young and democratic country?

The appointment of the right man to take the place of the lamented Inspector of High Schools, is a matter of the first judge, the new Course of Study provided for the Schools of importance. Candidates there will no doubt be in abundance, but the combination of qualities essential to the highest use fulness in the position is rare. The new Inspector should be newer studies of Elementary Science. We have no doubt that a man of superior ability and of thorough education, having the Maritime Provinces, rich in a great variety of undeveloped a special training in Classics, especially as Mathematics natural resources, have had their industrial development serare thoroughly well represented in the present High School jously retarded, by what Dr. Allison aptly terms, "the bookish Inspector, Dr. McLellan. These qualities are a sine qual or literary" bias of the instruction imparted in their Schools; non. But were these all, the selection would be compara. At the same time we are glad to observe that in neither New not always associated with these, are yet well-nigh indis- the primary function of the Common School, by introducing pensable. In this "rough, raw, and democratic" country into it facilities for elaborate forms of special instruction in it is quite easy to find men of good ability and scholar mere manual processes. The bringing in of the new is not ship, who are below par in social habits. The Inspector of made to involve the sacrifice of what was really valuable in the High Schools should be beyond dispute a gentleman both old. Such books as Mr. Stetson's well-known Essay on "Techby instinct and by training. His personal presence should nical Education," and such addresses as that of Dr. White bebe such as to command the unhesitating respect of those with fore the American Institute of Instruction, have done much to whom he has to deal, many of whom might otherwise clear the air of error as to the proper relation of studies in a naturally be tempted to regard themselves as his superiors.

Students for matriculation at the University. And this suggests His address and manner should be at the least pleasing and the Second question. Considering that High School Masters not devoid of a fair measure of that indescribable charm which paration of boys for Junior Matriculation, does not strike us Ontario. This is clearly indispensable. No stranger, trained have we not been assured, that Upper Canada College is noth- attainments or social standing, could hope to succeed. The Fancy Canadian the foisting of such an one into the vacant office. Further, the Let system, with the views of the Minister, and of his fellow with other men, and with whom other men can work. This of

> The Educational Systems of the Maritime Provinces are being rapidly broadened and improved by the introduction in large measure into their Common School Curricula, of the elements of industrial knowledge, scientific and artistic, which lie at the foundation of the great modern industries. In his Annual Report to the New Brunswick Legislature, in 1881, Dr. Theodore H. Rand, Chief Superintendent of Education, discussed the subject of Common School instruction in a luminous and exhaustive manner. By reference to another column of the Journal, it will be seen that Dr. Allison, Supertendent of Education for Nova Scotia, in his Report recently presented to the Legislature of that Province, has written some not less weighty words on the same subject. So far as we can Nova Scotia, is a fair mediation between the study of letters, formative and disciplinary, as well as practically useful, and the Other qualifications which unfortunately are Brunswick nor Nova Scotia is any disposition shown to ignore Com...ion School Course,

#### THE JOURNAL APPROVED.

WE are pleased to find that our efforts to still further improve the School Journal, and School Examiner are fully appreciated by our subscribers as the following from a Head Master of High School will show:--"Both the Journal, and the Examiner shew marked improvement, not only in ablilty but also in the general appreciation of the wants of those they are designated to help. The article "Incredible," (article referred to the proposed appointment of Mr. Hunter to the Central Committee) for ability would grace any School Journal, and assuredly its teachings will be endorsed by every unprejudiced High School Master in Ontario."

#### AN IMPORTANT MEASURE.

A bill has been introduced into the Senate of the United States by Hon. H. W. Blair, Senator for New Hampshire and Chairman of the Senate Committee on Education, designed to supplement the working of the common school system of the various States by aid from the Federal treasury. The gist of the bill will be gathered from the four opening sections, which are as follows:—

Be it enacted by the Senate and House of Representatives of the United States of America in Congress as embled. That for ten years next after the passage of this act there shall be annually appropriated from the money in the Treasury the following sums, to wit: The first year the sum of \$15,000,000, the second year the sum of \$14,000,000, the third year the sum of \$13,000,000, and therefore a sum diminished \$1,000,000 yearly from the sum last appropriated until ten annual appropriations shall have been made, when all appropriations under this act shall cease; which several sums shall be expended to secure the benefits of common school education to all the children living in the United States.

SEC. 2. That the instruction in the common schools wherein these moneys shall be expended shall include the art of reading, writing, and speaking the English language, arithmetic, gography, history of the United States, and such other branches of useful knowledge as may be taught under local laws, and may include, whenever practicable, instruction in the arts of industry; which instruction shall be free to all, without distinction of race, nativity, or condition in life: Provided, That nothing herein shall deprive children of different races, living in the same community but attending separate schools, from receiving the benefits of this act, the same as though the attendance therein were without distinction of race.

SEC. 3. That such money shall be annually divided among and paid out in the several States and Territories in that proportion which the whole number of persons in each who, being of the age of ten years and over, cannot read and write bears to the whole number of such persons in the United States; and until otherwise provided such computation shall be made according to the official returns of the census of 1880.

SEC. 4. That such moneys shall be expended in each State by the concurrent action, each having a negative upon the other, of the Secretary of the Interior, on the part of the United States, and of the superintendent of public schools, board of education, or other body in which the administration of the public-school laws shall be vested, on the part of the several States wherein the expenditures are respectively to be made; and whenever the authorities of the United States and of the State fail to agree as to the distribution, use, and application of the money hereby provided for, or any part thereof, payment thereof, or such part thereof, shall be suspended, and if such disagreement continue throughout the fiscal year for which the same was appropriated, it shall be covered into the Treasury and shall be added to the general appropriation of the next year provided for the first section of this act.

It is provided that the Secretary of the Interior shall be should tresponsible for the practical administration of this law through present.

the Bureau of Education. The necessity for such a measure is urged on the ground of the painful illiteracy prevalent in some of the states and territories. Senator Blair was able to sustain his plan in a favorable manner by a compilation of statistical facts bearing on illiteracy, prepared at his instance through the Census office and the Bureau of Education, a portion of which we subjoin:

STATES AND TERRITORIES.	Total Population.	Total population who cannot read, 10 years of age and over.	Percentage of total population who can- not read.
The United States	50,155,783	4,928,451	9.82
Alabama . Arizona Arkansas Arkansas Colorado Colorado Connecticut Dakota Delawaro District of Columbia Florida Ge-rgia Idaho Illinois Indiana Iowa Indiana Iowa Indiana Iowa Maryland Massachusetts Michigan Missouri Missouri Montana New Hampshire New Jorsey New Hampshire New Jorsey New Hoxico Now York North Carolina Ohio Oregan Pennsylvania Ribode Island South Carolina Fonnessee Pexas Ctah Vermont West Virginia Washington West Virginia Wisconsin West Virginia Wisconsin West Washington	269,493 1,542,180 32,610 3,077,871 1,978,301 1,624,615	370,270 5,496 153,229 49,583 9,321 20,086 3,094 16,012 21,541 70,219 446,683 41,384 96,809 70,008 28,117 25,503 259,186 297,312 18,181 111,387 75,635 47,112 20,551 315,612 138,818 1,580 3,703 31,982 39,186 52,994 166,625 367,890 80,764 5,376 146,138 17,456 321,780 321,385 256,223 142,033 360,495 32,093	20.83 13.59 10.69 4.80 3.37 2.29 11.13 26.06 23.96 1.21 2.50 11.60 23.96 1.60 23.96 1.60 23.96 1.73 2.89 1.14 2.88 2.60 2.90 1.17 2.88 2.60 3.17 3.18 4.24 3.18 4.24 3.18 4.24 3.18 4.24 3.18 3.25 3.26 3.26 3.26 3.27 3.28 3.28 3.28 3.28 3.28 3.28 3.28 3.28

It is a matter of regret to many that the provisions of our Dominion Census Act do not include statistical elements, of the very highest value.

Teachers' Conventions.—A number of communications have reached us from officers of Teachers' Associations informing us that a meeting of Association would be held on a certain day, and asking for the attendance of Mr. Ross or one of the representatives of the School Journal. When we say that Mr. Ross is already engaged for a number of the Associations during May, it will be at once understood that it will be necessary to communicate with us before fixing the day of meeting, should the Association desire to have any of these gentlemen present.

-WE are pleased to record the appointment of Mr. White, late Principal of the Lindsay Separate Schools, as Inspector of the existence of only one Examination for admission of pupils Separate Schools for Ontario. Mr. White is a young gentleman of ability, and his training and experience have been such as to warrant the prediction that he will perform the duties of his new position with success. When Archbishop Lynch generously offered a reward of one hundred dollars to the first Roman Catholic student who would secure a First-Class certificate, Grade A, from the Toronto Normal School, Mr. White carried off the honors. We hope that he may be of great service to the cause of education generally in his new position.

—The teachers of England are to be congratulated on the fact that the Government Inspectorships are to be opened to them in future. In the past, Her Majesty's Inspectors did not require to have any practical experience in teaching in the public sch. als. This was clearly wrong, and doubtless led to the numerous complaints frequently made to the English De partment, concerning the unjust and unreasonable actions of the Inspectors. It must have been galling to an experienced teacher to feel that his Inspector, however scholarly he might be, was often totally at sea in the school room. The new Regulation will have a most beneficial influence in elevating the general standard of the profession, and in developing a proper spirit among its members.

-We clip the following from the London (England) School Master. It illustrates one aspect of the woman's rights movement. It must not be inferred that all women on School Boards exhibit such weakness. Many of them are excellent members. "There is a good story to d of the way in which the lady members of the School Board revenge themselves. The scene is a special committee, in which Mrs. A., who is interested in the matter under investigation, but not a member of the committee, is allowed to be present on sufferance, and of course cannot take part in the discussion. Mrs. B. is daggers drawn with Mrs. A., and is a member of the committee. Fate happens to place Mrs. A.'s chair next Mrs. B.'s, and Mrs. B. takes advantage of the situation. Selecting the largest pen she can find, she dips it as far as it will go in the deepest inkstand, and makes a point of shaking off the superfluous ink in the most innocent manner possible on to Mrs. A.'s dress. Mrs. A. (who, by-the-by, dresses better than any other lady on the Board, and therefore has incurred their mortal hatred) shifts her skirt, but is still pursued by the energetic scribe. At last, moved to remonstrance, she says, 'Mrs. B., I wish you wouldn't throw your ink on my dress.' Says Mrs. B., spluttering with her quill at a great rate, 'I can't help your dress, Mrs. A. You needn't be here, you know. You are not wanted.' How pleasant, and how truly feminine!"

-Mr. McLean, the energetic Principal of the Model School, Milton, has, in addition to his Model School and Public School duties, undertaken to prepare a class of four students for Intermediate Examination.

-Mr. Wellwood, Principal of High School, Oakville, urges to High School.

#### IMPORTANT ANNOUNCEMENT TO TEACHERS.

We have pleasure in advising our friends that in connection with the " (anada School Journal" we have secured the services of

#### G. W. ROSS, Esq., M. P. (Middlesex).

one of the ablest and most practical educators in the country.

The popularity deservedly gained by Mr. Ross as one of the most gifted lecturers that has ever appeared before Teachers' Associations in this country—has induced us to place his services at the disposal of Associations in the months of May and June, and during such months as we may find most convenient the latter part of the year.

In addition to the well-known ability of Mr. Ross, we can add the services of our

#### Mr. J. H. METCALFE, M.P.P. (Kingston),

#### -AND-Mr. J. L. ROBERTSON,

who will at once be prepared to attend Conventions in the interests of the Journal. As both of the latter gentlemen have had a large exper-

ience in School work, much valuable aid may thus be given.

Associations desiring the presence of any of the above-noned gentlemen will please note-That, as NO CHARGE WILL BE MADE for services rendered or expenses incurred, many requests will be received for attendance at Conventions, it will therefore be desirable to communicate with us at an early date—if possible, six or eight weeks before proposed Convention will take place.

In arranging for attendance at Conventions, please state how long services will be desired, so that it may be distinctly known how much time will be required at each place.

The circulation of the "School Journal" during the past year has reached nearly 5,000, five times larger than that of any other Educational paper published in Canada. This success, with the high praise bestowed upon the Paper by the leading Educationists in America and Great Britain, has induced us to make every effort to place our Paper in the hands of every Trustee and Teacher in the Dominion.

All communications intending to secure aid at Associations, should be addressed to nur firm.

Yours faithfully,

W. J. GAGE & CO.

# Mathematical Department.

# SOLUTIONS TO PAPER IN FEBRUARY NUMBER

SUITABLE FOR INTERMEDIATE EXAMINATIONS.

#### ALGEBRA.

- 1. (a) See H. Smith's Algebra, Section 58.
  - (b) Take a as letter of reference, arrange coefficients of divi dend thus:  $(2x-y)^2+0-x^2(x+y)^2+0+2x'(x+y)-x^6$ . Apply Horner's method. Quotient  $=a^2(2x-y)+ax$  $(x+y)-x^3$ .
- $a + b + c = 0 : a^2 + b^2 + c^2 = -2(ab + bc + ca)$  $(a^2 + b^2 + c^2)^2 = 4(a^2b^2 + b^2c^2 + c^2a^2) + 8abc(a + b + c)$ (c) a + b + c = 0+0, since a+b+c=0 (A) also,  $(a^2 + b^2 + c^2)^2 = (a^4 + b^4 + c^4) + 2(a^2b^2 + b^2c^2 + c^2a^2)$ , comp. with (A)  $a^4 + b^4 + c^4 = 2(a^2b^2 + b^2c^2)$ and  $2(a^4+b^4+c^4)=4($  $(a^2+b^2+c^2)^2$

- 2. (a) Expression =  $(a+b)(a^2+b^2)=0$ . Now  $a^2+b^2$  is necessarily +ve unless a and b separately vanish, a+b=0.

  - (b) Ans.  $a^{\sqrt{2}} a^{-\sqrt{2}}$ . (c)  $x^3 + x^{-1} + 3(x + x^{-1}) = 27$ , or  $x^3 + x^{-3} + 3$  (3) = 27. Ans. 18.
- 3. (a) Multiply terms of 1st by  $x^{n-m}$ , and of 3rd by  $x^{n-p}$  sum  $= \frac{1+x^{n-m}+x^{n-p}}{1+x^{n-m}+x^{n-p}} = 1$ .
  - (b) By actual division find 1st three terms  $x^{q(p-1)} + x^{q(p-2)} + x^{q(p-3)} + &c.$  Last term must be  $x^{q(p-p)}$ , and the last three are  $+x^{2q}+x^q+1$ .
  - (c) This is a fallacy if 0 means nonentity, as may be seen by putting a=1, b=2. But if 0 represents a quantity less than any assignable quantity, the inference a=b follows. The symbol 0 generally has reference to some other quantity from which it is derived. Thus if we have a(x-y)=b(x-y), we cannot infer a=b when x=y, but only when y approaches x in value without actually equation, and multiply numerator and denominator by Rb+c, then reaching that value.
- 4. (a) Every square quantity >0,  $a^2+b^3>0$ , unless a=0 and
  - (b) Put the expression in the form Now 2nd term > 1st term,  $\therefore$  expression is negative For  $a^2+b^2>2ab$ ,  $b^2+c^2>2bc$ , &c., since  $(a-b)^2$ , &c., >0 $\therefore u^2 + b^2 + c^2 > bc + ca + ab.$
  - (c) Expression =  $(x^2 + y^2)(x + y)(x y)^2$  and each factor is necessarily +ve when x and y are +ve and unequal.
- 5. (a) Cube by formula  $(a+b)^3 = a^3 + b^3 + 3ab(a+b)$  and substitute 3 for sum of quantities, &c.,  $x = \frac{1}{27} (\pm 14 \sqrt{-10})$ .
  - (b) Add and subtract  $\frac{2x^2}{x^2-1}$  on left and =n becomes

    Ans. £3 10s. 7d.

    2. The cost is the same. Provided in the entropy of the en which  $\frac{2x^2}{x^2-1}$  may be found,  $\therefore x = \sqrt{\frac{n}{n-2}}$ , or  $\sqrt{\frac{n-1}{n+1}}$
  - (c) Square, &c., x=0, or  $\frac{2a^3}{c(a^2+1)}$
- 5. (a) Expression is symmetrical for a, b, c, and x. When (b-c)=0, or (x-a)=0 the expression vanishes, ... (a-b)(b-c)(c-a) and (x-a)(x-b)(x-c) are factors. And there are no other literal factors than these six, for the expression is of only six dimensions. Put x=0, a=1b=2, c=-1, and the numerical factor comes out =16.  $\therefore \text{ Expression } = 16(a-b)(b-c)(c-a)(x-a)(x-b)(x-c)$ 
  - (b)  $a^2+b^2>2ab$ ;  $b^2+c^2>2bc$ ;  $a^2+c^3>2ac$ .  $a^2+2b^2+c^3>2ab+2bc=4ac$  from given relation, and  $2a^2+2c^3>4ac$ , subtracting  $a^2+c^2>2b^2$ .
  - (c) (a+b+c-d)(a+b-c+d)(a-b+c+d)(-a+b+c+d) $\div 4(\alpha b + cd)^2$ .
- 7. (a) 1st + 2nd =  $2(x+y)(y+z)b^2$ 1st 2nd = 2(x+y)(x-z)ab. Now 2 is not a measure  $\therefore$  G.C.M.=b(x+y).
  - (b) Given  $\frac{a}{b} = \frac{c}{d}$ , i. c.,  $\frac{ad}{bc} = \frac{bc}{ad} = 1$ . Take identity  $\frac{1}{ma} + \frac{1}{nb} + \frac{1}{nc} + \frac{1}{nd}$  $= \left(\frac{1}{ma} + \frac{1}{nd}\right) + \left(\frac{1}{nb} + \frac{1}{pc}\right)$  $=\frac{ad}{bc}\begin{pmatrix} & & & \\ & & & \end{pmatrix} + \frac{bc}{ad}\begin{pmatrix} & & & \\ & & & \end{pmatrix}$  $=\frac{1}{bc}\left(\frac{d}{m}+\frac{a}{a}\right)+\frac{1}{ad}\left(\frac{c}{n}+\frac{b}{n}\right)$ , but ad=bc $=\frac{1}{bc}\left\{\frac{a}{a}+\frac{b}{p}+\frac{c}{n}+\frac{d}{m}\right\}.$

- (c) Take square root of both sides. Observe double sign.  $(a^2+bc)(b^2+ac)(c^2+ab)=\pm (a^2-bc)(b^2-ac)(c^2-ab)$ Take upper sign, reduce, divide through by a b c, and we get  $\frac{1}{a^3} + \frac{1}{b^3} + &c., = 0$ . Take lower sign, reduce, divide through by abc and  $a^3+b^3+c^3+abc=0$ .
- 8. Area=pq-(p-2r)(q-2r)=2r(p+q-2r).
- 9. Let x=rate of train, y of coach  $\therefore 20x \div y = \text{length of journey, and } (20x \div y) - 56 = \text{part by coach}$ :.  $(20x+y^2)-(56+y)=$ time by coach, whence  $\frac{20x^2}{y^2}-\frac{56x}{y}=35+\frac{20x}{y}-56$ and x:y=7:2 or 3:10. But the latter value makes the distance by

coach —ve, and therefore does not apply to the problem. Ans. 7:2.

- 10. Let R=amount of \$1 for 1 year, ., y, z=present shares.  $x \nmid y \nmid z = P$ ;  $xR^a = yR^b = zR^c$ . Substitute for y and z in first
  - $R^{a+b}+R^{a+c}+R^{b+c}$ . Write y and x by symmetry.

# SOLUTIONS TO VICTORIA UNIVERSITY MATRICULATION PAPER.

#### ARITHMETIC.

 Book-work See Hamblin Smith's Arith., Sec. 99 and 102. ".475 of  $\frac{S}{5}$ " should read "of 5S."

- 2. The cost is the same. Paper 27 in. wide at 9c. is the same
  - 3. Book-work. L. C. M. of A and B =AB÷G. C. M. ∴ B=L. C. M. × G. C. M. ÷ A. =634938944494 × 9187 ÷ 85044059.
  - 4. Book-work. Chicory = $\frac{3}{7}$  first =270Hs. = $\frac{7}{17}$  second mixture. .. second mixture = $\frac{17}{7} \times 270 = 655\frac{5}{7}$ Hs. Increase= $655\frac{7}{7} 630 = 25\frac{5}{7}$ Hs. =coffee added.
- 5. Interest  $= \frac{1}{10}$ , : discount  $= \frac{1}{10} = 9\frac{1}{10}$ %. But if 10% per an. is meant the answer is slightly different, viz.: Interest= $\{\ddot{s} \text{ of } \gamma_0 = \ddot{z_0}, \therefore \text{ discount} = \ddot{z_0}, \&c.$

6.4 men = 7 women = 14 boys

6 men+10 women+14 boys=\$110 per day,

10 men+10 women=

Answer \$100.

- 7.  $\{\frac{2}{3} \text{ capital } \div 90\} \times 3\frac{1}{2} + \{\frac{2}{3} \text{ capital } \div 95\} \times 4 = \$1340.$ Capital  $\{\frac{7}{48} + \frac{1}{48}\} = 1340 \times 25, \&c.$ Capital  $\{\frac{7}{48} + \frac{1}{48}\} = 1340 \times 25, \&c.$ Capital  $\Rightarrow \$32828 \cdot 08.$
- 8. Shell = external internal dimensions;  $=\pi r^3 - \pi r_1^3 = \pi (r^3 - r_1^3)$   $= \frac{2^2 \{(\frac{7}{2})^3 - (\frac{5}{2})^3\}}{\frac{5^2}{6}(3\overline{43} - 12\overline{5}) = 8\overline{5}_1^9 \text{ cubic inches.}}$
- 9. ½ sum of sides=47, difference between this and each side 19.5, 31.5, 34.5, 8.5.

 $\therefore$  area =  $\sqrt{19.5 \times 31.5 + 34.5 \times 8.5}$  $= \sqrt{13 \times 21 \times 60 \times 17} = 424.42$  nearly.

N.B.—Probably the figure is not a trapezoid, for if we calculate the perpendicular and apply the rule for tapezoids the area comes out =408.75.

10. Let x=annual payment, then  $x\{1+1.06+1.06^2+1.06^3\}=9000$ x(4.374616) = 9000payment =\$2057.323.

#### ANSWERS TO CORRESPONDENTS.

W. F. M. asks, "Is there a regular progression in prime numbers." We believe not, as it can be shown that no general algebraical formula can represent prime numbers only

H. M. B. wishes us to point out the fallacy in the following proposed solution of No. 4, Last Class Arithmetic, July, 1881 Nov. No., '81, also Dec. No.

2% of \$180 = \$33,

.. disct. off \$90 for 101 dys. + disct. of \$90 for 40 dys. = \$3?

:. disct. off \$90 for 141 dys. =33

: int. on \$86% =3%

66 \$100 = &c., =\$10.78.

The fallacy lies on the third line. The discount on \$90 for 101 days + discount on \$90 for 40 days is NOT = discount on \$90 for 141 days. The discount does not vary directly as the time, as here assumed, of course interest does vary directly as the time.

### Contributions.

#### THE TEACHERS APPEARANCE IN THE SCHOOL ROOM

SUBSTANCE OF A PAPER READ BY MR. HEWITT BEFORE THE MANITORA TEACHERS ASSOCIATION, WINNIPEG.

It is hard, he said, for one so young and inexperienced in the profession as I, to say what appearance the teacher should at all times assume in his school; but I will give you my ideal of what it should be, and should I advance any thought worthy of criticism I hope to profit by having it thoroughly and fairly discussed.

I assume that the teacher's appearance in the school room includes his dress, habits, language, sentiments. tone of voice, bearing, expression of countenance, etc.

With regard to dress the teacher should in a great measure adapt himself to circumstances, but the following general rule will be found to apply in all cases : he should neither dress so gaily nor so meanly as to make his dress an object of special notice; in short, the teacher himself should be the attraction, and not his dress.

The habits of a teacher should be such that if copied to the letter they may not be injurious to his pupils. This will, of course, prohibit him from the use of tobacco and mtoxicating liquor, for, though individuals differ as to the effects of these on adults, all agree that they are very injurious to children; but while he abstains from such things himself he will also do well to abstain from any unpleasant remarks concerning those who use them, for injuring one person is not the way to insure correct habits in another habits of an upright teacher will also include punctuality, earnestness, calmness, kindness, gentleness, firmness, truthfulness, etc. If he is not punctual he sets a bad example to his pupils, and also renders himself unable to carry out any regular programme without which his teachings cannot be successful. He should be earnest, because his contract with his trustees calls for earnest work, he will be earnest because he delights in his work, and he feels he must be earnest because he is working not only for time, but also for eternity. He should be calm as well as carnest, for an excited or blustering habit renders him unfit to maintain good order in his school, and thus becomes as great a barrier to success as want of punctuality. While the ideal teacher is at all times calm, gentle, and kind, he is also firm, and will not shirk even the painful duty of inflicting corporal punishment when he is sure it is for the benefit of all concerned. Truth is the very basis of education and he ought to show by his appearance, in every possible way, that he is would be respectable. The teacher should set an example of clean-aiming at it regardless of what theories or hobbies may be over-liness, and we should require attention to this matter on the part aiming at it regardless of what theories or hobbies may be overthrown by it. His motto should be, "I will hew to the line, let of the pupils. The speaker concluded by expressing his approval the chips fall where they may."

At all times, but especially in the school-room, the teacher will find it to his own advantage, as well as that of his pupils, to use only well chosen words. The use of low, vulgar, or incorrect words is to be avoided, for the language of the teacher will be the language of his pupils. The use of good language by the teacher is closely connected with the sentiment that pervades a school for which the teacher is, to a great extent, responsible. But he finds little difficulty in this matter if he is careful not to color his opinions too highly in order to serve his own selfish interests.

The tone of the teacher's voice will express his feelings more forcibly than his words will, however well chosen they may be, hence he should be careful that his words accord with the tone in which they are uttered. By the skilful use of his voice he can indicate his approval or administer a reprimand without causing either jealousy or ill-feeling toward himself or others, whereas the same words uttered in a different voice would be certain to rouse a spirit of rebellion.

To be successful in governing a school it is necessary that all words of command be uttered kindly but firmly, and while the tone m which they are spoken indicates a desire to dispense even justice, it should also exhibit a spirit of mercy.

The bearing of a public school teacher should be neither haughty nor meanly condescending, but should rather be that happy mien which willingly recognizes honest worth even when found among the lowest, and at the same time curries the favor of none, not even the highest. Such a bearing will command the respect of all worthy persons, and secure for him a social position he could not otherwise attain.

It is very desirable that a teacher be always cheerful, and maintain a pleasant countenance while in the school-room. There is a great deal of truth in the belief of Edmund Spenser that "outer beauty springs from the beauty of the soul within." It is impossible for one to maintain a pleasant countenance while within he is full of rage, sorrow, grief, or any other passion, or while he is undergoing bodily suffering. For example, a person suffering from headache, toothache, etc., cannot possibly be cheerful; a person suffering from dyspepsia is generally melancholy and peevish. It may be asked, how is the teacher to avoid the many ills which tend to injure his pleasant countenance? My answer is, he should have complete control of his passions, should not worry too much about the future, and should always look at the bright side of everything. He should also thoroughly understand himself. Our bodies are governed by natural laws, laws which we are capable of understanding and obeying, and we should obey them if we wish to enjoy good health and a cheerful countenance here; and further, we must obey them if we wish to be happy in eternity, for "the laws of nature are the laws of God."

Mr. Springer introduced the general discussion of the subject. While he agreed with most of the points brought forward he thought that there was a danger of paying too much attention to personal appearances. Young persons sometimes spent hours of valuable time before the looking glass. This tended to foppishness, which was the twin sister of laziness. Some men of the highest positions paid the least attention to their personal appearance. He illustrated this from his observations of five millionaires, and from the case of a very learned gentleman, a great linguist, in Toronto. He did not mention these cases as examples. If a teacher could not afford a better coat it was no disgrace to wear a patched one; if clean, it of the recommendation that the teacher be cheerful.

# REPORT OF REV. CYPRIAN PINKHAM, B.D. CONCERNING HIS VISIT TO ONTARIO AND QUEBEC, PRESENTED TO THE MANITOBA BOARD OF EDUCATION.

Winnipeg Free Press.)

A special meeting of the Protestant section of the Board of Education was held in the education office on Tuesday, Dec, 27th, the members present being Rev. Prof. Hart, (called to the chair), Rev. Canon O'Meara, S Mulvey, W. Hespeler, W. J. James, Rev. W. C. Pinkham, Superintendent of Education, and the Bishop of Rupert's Land, and Rov. Dr. Rice.

The minutes of the last meeting were read and confirmed

The Superintendent stated that the Rev. Alex. Matheson had resigned the office of inspector of schools for Springfield and parts adjacent, and moved, seconded by Canon O'Meara, that the resignation be accepted, and that Mr. John B. Ferguson be appointed to the position. Carried.

The Superintendent then read the following report of the text-

book committee, which on motion of Mr. Mulvey, seconded by

Mr. Hospeler, was unanimously agreed to, viz;
EDUCATION OFFICES, WINNIPEG,

December 21st, 1881.

At a meeting of the Text-book Committee held here to-day, Rev. S. D. Rice in the chair, it was unanimously resolved to recommend.

1st. That the following books be authorized for use in the Pro-

testant public Schools, viz:

(1) English Readers by Prof. Meiklejohn adapted for use in Canadian schools, to be used exclusively in all schools opened after this date, and all the Protestant public schools after January 31st

Outlines of English Grammar, Mason.

English Composition, Harrison. Cutlines of Canadian History, Joffers.

(5) Calkin's Geogr. phy for junior classes.
(6) Practical Speller, (published by Gage & Co.)

(7) Pretty Stories, (composition) Kellogg. (8) Mental Arithmetic, Dr. McLellan.

(9) Canadian Accountant, Beatty.
(10) Science of Accounts, Dr Bryant.
2nd. That the following be removed from the list (after January) 31st, 1883, viz.)

Composition, Quackenbos, Easy Lessons in Geography, Lovell. 3rd. That the following be recommended for teachers use viz. Algebra, Dr. McLellan's.

Examination questions in arithmetic, McLellan.

Object Lessons, Calkin.

A number of petitions for new school districts were then laid before the meeting, and were, on motion duly seconded referred to the executive committee, who were empowered to deal with them.

The Superintendent then read the following report; To the Protestant Section of the Board of Education.

Gentlemen:—At our last meeting, held on the 17th of October, I was instructed by you "to proceed as soon as possible to the eastern provinces, for the purpose of visiting some of the principal Normal, Model and High schools of the Dominion, and on my return, to report to you upon a system of High Schools and Training Schools, for the Province of Mamtoba."

Before setting out on this mission I felt that it was my duty to submit the question of my going to the Provincial Secretary for the concurrence of His Honor the Lieut. Governor in Council, and I need hardly say that the answer I received was satisfactory. was told "The Council had no objection to your absence, being sure that your mission will advance the cause of education in this pro-Accordingly I left home on the 24th of October, and returned on the 29th of last month, being absent a little over a mouth. I spent several days in Toronto, visiting the Department of Education, Normal and Model schools, the Collegiate Institute, the public day and night schools, and other educational Institutions, and I was present for a short time at a meeting of the Board of trustees for the city. I was three days in Ottawa, and saw the Ottawa Normal and Model Schools, and the Collegiate Institute. I spent nearly a week in Montreal, during which time I had the opportunity of visiting the McGill University, the McGill Normal School, the Model Schools in connection with it, the high school for boys and girls, the primary high school, and two or three public schools of the city, as well as the Mackay Institute for deaf mutes. I spent an afternoon and evening at St. Catherines and in the company of my friend Mr. J. B. Somerest, inspector of the schools for the county of Linclon,

visited the public schools and Collegiate Institute of that city. went to Boston, being told that there I should see the most flourishing educational institutions of the great republic, but unfortunately, just as I arrived, all the schools were closing for the rest of the week, to colebrate the nationa. thanksgiving, and I felt reluctantly obliged. to limit my visit for a few hours, during which I made the acquaintance of the secretary of the board supervisors, and obtained valuable official documents from him. On my way home I spent the greater part of a day at Minneapolis, during which, beside visiting one of the primary schools I was shown over the admirable high school of that city, and saw something of the work done there.

When I left Winnipeg I intended to go to Nova Scotia and Now

Brunswick, but having only a limited time at my disposal, and feeling that the whole of it might have been spent with exceeding advantage either in Toronto or Montreal I deferred my visit to

these interesting portions of the Dominion to a later date. I visited the Art institutions in Toronto, Ottawa, Montreal and

Chicago.

The object of my visit implied the making myself and it known to the leading educationists wherever I went, from all of whom I met with the utmost kindness and encouragement. I deem it no slight privilege to have had intercourse with such men as Prinicipal Dawson, Dr. Wilson, president of Toronto University, Canon Normani, D. C. L., the cultured and able chairman of the Montreal Protestant school commissioners, whom every pupil of the public schools seems to love, Mr. Murchey, Principal of the Toronto Collegiato Institute, Inspector Hughes, who by his energy and ability has elevated the public schools of Toronto to a very high standard indeed To Poblics superintendent of the Protestant public schools indeed, Dr Robins, superintendent of the Protestant public schools of Montreal and those who fill positions in the Department of Education in Toronto and in the different no mal, model and high schools of the captial and the two leading . ies of the Dominion.
At the request of some of my friends I delive ed a lecture there on
the "Educational Outlook in Manitoba," which was warmly received.
You will, I am sure, be pleased to hear, that even in Ontario—

whose educational system received the highest encomiums at the Centennial exhibition, and among such men as I have mentioned, Manitoba is credited with being in some of the leading features of her educational system, in advance of that most enlightened Province. In our University system; in such features of our school law as the superintendents instead of a minister of education; in the appointment of our inspectors by a Board such as this, wather than by the councils of the different municipalities, in the rather than by the councils of the different municipalities, in the power now employed by school trustees throughout the Province, to determine the amount of money to be raised in their respective districts, to supplement the Legislative grant; in the payment of a ump sum to such school rather than the system of payment by results; and in the proposed programme of studies in use in the cities and towns of Manitoba, with which the name of J. H. Stewart, inspecand towns of Manitoba, with which the name of J. H. Stewart, inspector of city schools, must always be attached, some of the leading educationists whom I have met with do not hesitate to say that we have surpassed them. They think, too, that in exercising our judgment, as to the adoption of what will suit Manitoba, whether from the older provinces, the mother country or the United States, we are not only within our right, but are exhibiting the true spirit of master-builders who are from the special circumstances in which we are placed, preeminently "the heirs of all the ages;" and, recognizing the wisdom and by adth of view oxhibited by us in laving our nizing the wisdom and breadth of view exhibited by us in laying our educational foundation, t. ay anticipate a superstructure that will celipse all others. And if, while in Toronto, on which I found it difficult to turn my back, when the time came for me to do so, where I gladly admitted that we had received from their elaborate system much that is extremely valuable, I felt proud to be the honored representative of this Board and rejoiced to think that I had a share in bringing about results whose value is so generously admitted the feeling you will say was a natural one. But beyond all this I was specially gratified to find that my ideas about the development of our system in the direction of high school work, and the training of our teachers, were warmly endorsed by many of those whose professional opinion deserves to be carefully considered.

The best friends of any system are not those who close their eyes to its defects. The high school system of Ontario, although it has accomplished gratifying results, is not in the opinion of its most ar-dent supporters perfect. It has been very costly. It has frequently drifted into a most unsatisfactory rivalry with the neighboring common schools—two most serious objections, due in my opinion in a very great degree to the fact that high schools and common schools are managed by distinct boards of trustees. Then, its teachers, even in these days when so much importance is attached to a professional training, are not required to be taught how to teach; and, thousand dollars spent in this way would provide a stimulus which from the way in which the Legislative grant for high school work is would be exceedingly gratifying in its results. apportioned, cramming and high pressure become not only possible. In my opinion the time for establishing a Normal School for the but as one of the ablest and most intelligent of the high school training of teachers for this Province has fully come. It is true that teachers of the province frankly admitted, a necessity. As the Rev. a large number of our teachers are drawn from the ranks of the George Bruce, B. A., of St. Catharines, puts it in an article published steaching professions in other Provinces. No doubt this will be the in the Canadian Monthly for May and June, 1879, "To reward a case for some time to come, and no one extends a warmer welcome school according to the number of pupils it can "through to good teachers from other Provinces than myself, and candenny it for turning its attent, who are really good are able are almost cartain to de well wherever the intermediate examination, and condemn it for turning its attent who are really good, and who are almost certain to do well wherever tion to the process by which this can be most successfully accomplished, is like training a retriever to bring game to you, and then scold him because he brings it. Suppose prizes were offered at have had anything to do with our teacher examinations know that Lloyds' to the vessel which carried the greatest number of passengers across the Atlantic in the shortest time, one would read with surprise of captains and engineers being reprimanded for taking a large number of passengers on board and running under high pressure of steam. There might be officers who valued the lives and comfort of their passengers more highly than the inducements held out in the foolish and criminal arrangement, but no thanks to the arrangement. And if, in the competition which arose among vessels, and under the influence of placarded results of the numbers landed in Liverpool or New York every half year by each vessel, owners learned to employ captains who were successful, only one result could be looked these subjects as education—and although probably seventy-five per for. So long as the system continued in force scafaring men would be compelled to accept the situation no matter how much against their judgment, or else abandon their occupation.

After weighing the matter in my mind for almost a year, and with the impressions and influences of my recent visit to Ontario and Quebec fresh upon me, I venture to propose again to you to ask for such legislation as will provide a machinery under which a higher department of education to be called "The Collegiate department of Public Schools," may be established by boards of school trustees in cities and towns. In the city of Montreal the high school, the high school for girls, the senior school, are under the control of the Protestant board of school commissioners or trustees. In Boston the high schools from the third grade of the system of public instruction established in the city; and in them a course of advanced study is provided for those who have completed the course in the grammar schools—the grammar schools being the second grade in the system, in which are taught the common branches of an English education. In Minneapolis the high school—the building is a most admirable one

is an integral portion of the public school system.

We want to supply the connecting link between our admirable system of common schools and the University of which we are so Under our present law incorporated cities and towns are entitled to three trustees for each ward. In my opinion a majority of these may safely be entrusted with the responsibility of determining, with the sanction of their section of the Board of Education, whether there shall be a department in connection with their schools in which higher work shall be taken up or not. Or, if it be thought desirable the consent of the ratepayers, given at a public meeting convened for that purpose, might be required. The section of the Board of Education would of course, arrange for the qualifications of the teachers required, prescribe the course of study, determine who should attend such schools and make all necessary arrangements for their efficiency and good government.

I propose to add to the programme of studies already referred to, two grades or standards, that would take pupils up to matriculation

in the University.

I think any scheme to develop what is termed higher education, such as the one proposed, would not be completed if it failed to recognize the work done in the schools connected with the three colleges now in existence, or in any other schools that may be opened under similar circumstances, and for much the same work. must assume that the state wants to have educational institutions opened and carried on, and that she is willing, as far as the public funds will allow, to give assistance wherever and to the extent that boni fida work is done.

Then, until the University has funds of its own—a condition eminently desirable, and one which its friends ought to determine to bring about with as little delay as possible—the Legislature should be asked to vote annually a sum of money to be spent in scholarships, the examinations for which, conducted by the University, should be open to pupils of a certain age from any part of the maximum and the minrors of such scholarships should be called

they go, there are many who have been failures elsewhere, and a number whose attainments are far from satisfactory. Those who a number of those who came to the Province with third and even with second-class certificates are scarcely able to pass our examinations. At the last examination the ignorance displayed in reading and spelling, not to mention other subjects, was most glaring. Teachers profess to know a great deal about Algebra, Geometry, Chemistry, Natural Philosophy, and so on; they can give you pages of Grammar, and yet they can't express themselves correctly either in speaking or writing. We require them to pass an examination in a number of subjects, that as teachers in country schools they will actually never need—I am not speaking of the value of these subjects as adventing, and although probably secret. For new cent of all the children who go to school never attain to any very high standard, of intellectual excellence, but really need to know how to read and write and so on, we employ teachers who have never been taught the true value of these subjects and who are unable to teach them as they ought to be taught. I am not blaming our teachers. I find fault with the system under which they have received their training. In a training institution of our own, we could make thoroughness in reading, spelling, writing, accuracy of speech, composition, a sine qua non, and it would be much easier than it is at present to advance to the acquisition of subjects which, however valuable they may be, are not as essential.

The real and wractical, the absolutely necessary, is what educationisis in thes 'ys overlook. We must not be carried away, but must claim and exercise the privilege of thinking for ourselves, and adopting what we believe will most effectually meet the educa-

tional requirements of our Province.

We ought then in my opinion to have in Winnipeg, within the next twelve months, a first-class Normal School building, thoroughy equipped. With the extent and value of our school lands, there should be no difficulty in getting the funds required for such an object, and if a site should be obtained near the Central School, the departments there would suit for Model schools. But if we can't get a building especially for the purpose, we ought to make an arrangement with the city trustees whereby those persons throughout the Province who desire to become teachers may have the opportunity of studying in the higher departments of the Winnipeg public schools.

In the last two teacher examinations those pupils of the city schools who were candidates were as a rule very successful; and some of the most valuable of our younger teachers have had their sole training there. In passing through some of the best of the public schools of Toronto, I was especially impressed with the skill lisplayed in original drawing. The three and five minute work done while I was there was almost astonishing. I was also highly pleased to find considerable attention given both in Toronto and Montreal to singing and calisthenic exercises. I intend to propose to the trustees of Winnipeg, Portage la Praire and Emerson to unite in employing a drawing master. If they fall in with the suggestion I can recommend for the position a gentleman who called on me while I was in Toronto, the head master of one of the high schools of Ontario, who while possessing the general qualifications of a first-class teacher has a thorough knowledge of this subject, and can for the present easily teach it in the city and the towns I have named.

Let me say now that while in my opinion we have reason to be pleased with the progress made, there is plenty of work before us. I am not satisfied with the condition of the majority of our rural schools; and there is throughout the Province an extraordinary should be asked to vote annually a sum of money to be spent in apathy regarding education. I hope to visit from time to time, as scholarships, the examinations for which, conducted by the Unity officer's duties will permit, different parts of the Province; to versity, should be open to pupils of a certain age from any part of give information respecting the school law; to try and lead people the province, and the winners of such scholarships should be called to see the value of education, and if possible to get parents, teachers "University scholars" and have the right to pursue their university and trustees, to feel an enthusiastic interest in it. I hope that we course in any of the colleges constituting the University, and to may be able to secure as inspectors thoroughly competent and enerhold their scholarships until they graudated. I think two or three getic men, and I expect to have everywhere the active sympathy and number of months in the year, and encouraging them to make such arrangements as they may deem necessary for having all the children in a school district, whose education is not otherwise provided

for, attend school, etc., etc. One thing is certain; for all we have to do we must have sufficient edness, of the unseasonable use of clothing too warm, or too thin funds. We ought to have a grant of from forty to fifty thousand &c., for example "He should know thoroughly the exigencies of a dollars per year at least, apart from what may be required for a school building, with its class rooms and dependencies, he should Normal School. I am sure that if instead of giving one hundred look after the methods of lighting, natural and artificial, the choice dollars per annum to each of our schools, we could give two hundred, of apparatus for warming and ventilation, and apply himself diligentthey could be carried on much better and would accomplish more gratifying results than at present. And if the salaries of those engaged in this important work were better than most of them are at present, better work and much more of it would be done. ought to have the very best people—people of cultivated minds—should look out for any defects which may arise in the working of people whose heart and will are in their work, and to get these we the warming or ventilating apparatus; oversee the condition of the are its least efficient members.

I desire to offer my warmest thanks to my friend, Mr. Mulvey, for his great kindness in discharging the duties of my office during my absence; and to you all, gentlemen, for affording me one of the most enjoyable recreations I have ever had. The time not consumed in travelling was very fully occupied. I have obtained a great many ideas which, although not sufficiently important to find a place in this report, will be worked out as time goes on. I tried, too, not only to receive, but to give information. But the change itself was a rest, and I feel all the better both in mind and body for it.

Respectfully, W. CYPRIAN PINKHAM.

Education Offices, Winnipeg, Dec. 19, 1881.

Moved by Professor Hart, seconded by Canon O'Mears, That the report be received; that the Superintendent be warmly thanked for t, and that his travelling expenses, amounting to two hundred and fifty dollars be paid.—Carried.

Moved by Mr. Mulvey, seconded by Prof. Hart, That the report be printed in pamphlet form for distribution.—Carried.

The meeting then adjourned.

#### MEDICAL INSPECTION OF SCHOOLS IN BRUSSELS.

The 33 schools of the city of Brussels, which are supported wholly or in part by the public funds, have been since 1874 subject to regular sanitary inspection by the Board of Health. This is done through 5 medical officers who devote their whole time to the work. The objects for which this sanitary supervision was undertaken, and which have thereby been to a good degree already attained were: (1) to secure the uniform observance of hygienic law's with regard which are a contraindication to gymnastic exercises. So also he to cleanliness of buildings, water closets &c., ventilation, heating should seek to combat the exclusive prependerance of the right side, &c., and to call immediate attention to any violations thereof or to and to obtain subjects more or less ambidextrous; he will thus unhygienic conditions in, or about any building; (2) to prevent the succeed in preventing spinal curvature in more than one predisposed spread of infectious diseases in, and by means of the schools; (3) to child." "He should have a natural sympathy for childhood, and determine beforehand what children are liable to suffer injury, by especially for those unfortunate by nature." "If in summer the reason of some constitutional tendency from the course of study heat becomes so excessive as to reorder attendence at school are recommended." determine beforehand what children are hable to suffer injury, by especially for those unfortunate by nature." "If in summer the reason of some constitutional tendency, from the course of study heat becomes so excessive as to render attendance at school prejurand discipline, that others might bear without harm, and to make dicial to health as well as to a profitable session of the class, he such pupils the object of special care with a view to building them up should not hesitate to order an immediate suspension of the exerphysically; and (4) to assure to the pupils, proper sanitary instruction, so that the schools shall become a means of diffusing, both by presumpended when the temperature exceeds 82° Fahr." "In short, with respect to the healthy child, he is to favor by every means in the people. These blanks which are their "means of controlling his power, the development T. c., the physical education of the subcept and example, information with regard to santary laws among with respect to the health, including the people. These blanks which are their "means of controling his power, the development, \(\tilde{\til 1880, at Brussels. The scope and practical results of the system can best be given in the words of Dr. Janssens and those of his col-league Dr. Bonmariage who also read a report before the same body, terest, should be to lighten the programmes." "Sick children Extracts from the former will be marked (J), from the latter (B). should specially receive the attention of the physician. \* \* \* Extracts from the former will be marked (J), from the latter (B).

co-operation of members of the learned professions. Changes in the sciences? One hingle reform; viz, the establishment of a hygienic law may soon be needed, viz., making schools districts, co-terminous and rational supervision of schools. \* \* \* "The authorities with municipalities, each township being a ward for the election of thave completely ignored that vital question for the youth in school." one trustee,—the trustees to be paid for their services, like county. The medical inspctor "should possess some aptitude for teaching that councillors, and so on; levying the school tax on real estate only; he may readily know when to give the children elementary notions and estimating all land whether under cultivation or not at the same of hygiene; when he should describe to them, for example, the value; requiring trustees to keep the school open for a certain results of the abuse of alcoholic drinks, and of tobacco, the dangers number of months in the year, and encouraging them to make such of the remedies of charleting and of the prejudices constantly reapof the remedies of charlatuns and of the prejudices constantly reappearing against vaccination; when he can develop certain critical observations, for which his weekly visits will furnish him the occasion, on the subject of vicious attitudes of the causes of nearsightly to the study of the many questions which form a part of the code of modern school hygiene."—(J).

"The best constructed buildings may be renderd unhealthy by the negligence of those in charge of them. The medical inspector must pay liberal salaries. In a country like ours, where so many furniture, the way the building is kept in repair, the conditions of avenues are open to energy and ability, teachers must be well paid the walls, water-closets, sinks and other dependencies; and at the or the profession will be left largely to those who, for the most part, first appearance of a defect of a nature to compromise the healthy state of the premises, he should refer it to the authority by which the school is made right. His attention will be especially directed to the condition of the air as to purity, as to alteration by dust, by corporeal emanations, by fetid gases, by carbonic oxide and by carbonic acid in excess. He should examine the thermometric bulletins which should be placed in each class-room, and ascertain whether the 4 daily observations have been duly registered by the teacher or by his assistant. In short, he should see whether the teacher has rationally acquitted himself of the care which devolves upon him with regard to the renewal of the air in the class-room.

"In the daily observations of the temperature, he should not be satisfied with the averages taken by the teacher in the one spot where the thermometer is hung, but he should take in person, the temperature at different heights, at the level of the floor, and at the height of the pupils' heads, and should note, to have them remedied, the differences existing between the different strata of air." "The aim of the modern school is to favor by all possible means the progressive development of the child, from the physical, as well as from the intellectual and moral point of view. It is hence proper that the medical inspector of schools should be considered a co-laborer in the general regulation of every establishment placed under his surveillance, and that he should even have a word to say in contributing to reform the programme of studies, the actual aims of which are generally a little too ambitious, gymnastic exercises should alternate with the lessons in a proportion much larger then is reserved for them at present. \* \* The model school of Brussels has adopted the uniform system for all classes, of having \( \frac{2}{4}\) hour of lesson alternate with \( \frac{1}{2}\) hour of recreation."

"The surveillance of the physician should moreover extend to certain infirmities which call for special treatment at home and which avenges this ill-treatment by inertia, strained by an indiscreet "What is needed to secure to this numerous group (children in The school is, in fact a very favorable means for the propogation school) the benefits resulting from the progress of the sociological of infantile maladies and notably of the cruptive fevers (small-pox,

scarlet fever, measles,) as well as of diphtheria and whooping cough. disease, a spasmodic nervous affection, &c., will be readmitted except on presentation of a medical certificate stating that the cure is complete."

"With regard to non-contagious chrome or constitutional diseases, we believe that we do not go too far in saying that the school is destined to be the field where preventive medicine will give the most manifest proofs of its power and win its most glorious victories. If we justly consider the school as a normal agency which should help to depopulate the prisons and galleys, we can equally from our present point of view, regard it as destined to lighten the budget of the hospitals and alms-houses. It is certain that at his home, the child of a laborer, if afflicted with a chronic disease that does not confine him to his bed, will but rarely be the object of that hygienic care indispensable to him; while in the class-room, under men both competent and devoted, he can be submitted to an incessant watching and an assiduous care, of which his cure will be very often the assured reward. To care for the children in school so that they shall not become good-for-nothings in the social workshop and in the ranks of the defenders of their country; so that they shall not contribute later to burden the budget of the official charity already too heavy; such is the goal assigned to the efforts of the devoted men who are sacrificing their time and more remunerative occupation, to secure to the young generation at school new elements of health, that is of riches and social prosperity. "Health is wealth" as the progressive decay which is menacing a notable part of our future generation. Its attempts to improve the health of feeble children, predisposed to scrofula, consumption &c., have been seconded by the board in charge of the hospitals.' ("Food medicines" were thus supplied to such as needed them, and were indigent at an annual expense of about \$250. These were administered under the eye of a teacher, with results as given subsequently.) "In our city the medical service of the schools and of the general health are in the

portion as he becomes civilized. The exigencies of our times are so scarlet lever, measies,) as well as of diphtheria and whooping cough. The surveillance in this respect should be incessant, and the physician should give the principal of the school such instruction as will enable him to recognize severe diseases at their start, and thus give themselves very little care about having their children vigor-remove in time all danger of contamination." (Such instruction is one, handsome and well-built. They are early submitted to toil exponents of their normal school course.) "No child that has been affected with a symptic malady, an eruptive fever, a contagious skin possible to read, to recken, to translate certain phrases of Greek and disease, a spasmodic nervous affection. Ac., will be readmitted execution. They are not under a hot-house regimes, they are forced Latin. They are put under a hot-house regime; they are forced just like early fruits, to bear flowers and fruit in haste. Fruits bitter indeed, for soon there is left nothing of the plant that gives them. Health and happiness are pitilessly sacrificed to the need of creating as soon as possible a brilliant and above all a lucrative career for oneself. But as for this steeple-chase, at the goal of which they see fortune and fame, those who reach it are winded, many are dead on the road, worn out by the too great fatigue of an excessive toil; some few only, and these are rare exceptions, reach the goal without being used up. It is proper then, to draw the attention of wise men to the preventive medicine to prescribe in school and especially in the infant and primary schools where the large majority of the nation is forming. \* \* \* The system comprises majority of the nation is forming. \* \* \* The system comprises a number of measures applicable to all the constitutional maladies of children who are born in different conditions of health. Some, born of parents already tainted with an organic disease, have a predisposition to acquire the same disease later. A large number of such enter our schools with the seeds of scrofula or consumption, the evolution of which will come later." But "Heredity is not indispensable to their development. A child placed in unhealthy surroundings, deprived of air and light, can contract the germs which another has received by inhoritance. Much more certainly, may a healthy child become anaemic, lymphatic, and even step by step arrive at scrofula or consumption after some years passed in like surroundings. Whether, the diseases of which we have been Franklin said. Health is the unity that gives value to all the zeros of life, and even education is but a zero, if health does not give the means of using it for the profit of the individual and of society; without health, knowledge is like a precious tree that bears no fruit." "The Board of Health, convinced of the immense utility of preventive medicine, \* \* \* has resolutely undertaken the work of preventing, by the many rescources of therapeutics as far as possible the progressive decay which is menacing a notable part of our future. view both of preserving and of developing his health. The ures to be taken are of two sorts; hygienic and medicinal. child should find in the school the air and the light without which he cannot live, and the most favorable temperature that can be given him. The surroundings in which he passes the early years of his life, should be such as to aid in his development, instead of expense of about a teacher, with results as given.

medical service of the schools and of the general medical service of the schools and of Health) and are mutually helpful same hands(i. e. the Board of Health) and are mutually helpful there." "It is high time."

They have thus been able to render incalculable service to the public health. No other proof of this is needed beyond this, that it makes of most schools, postilential foci, or allowed the children service of the extent of an epidemic in Brussels, while other cities has reached the extent of an epidemic in Brussels, while other cities Physician should carefully see that all the rules of hygiene are large and small but less protected in this respect than the Capital have been cruelly scourged." "Brothers and sisters of children sent home because of the severe contagious diseases (measles, scarled, sege, height, weight, circumference of the chest, &c. of the children; should make special observations among which heredity and the should make special observations among which heredity and the condition of the organs (e.g. of vision) should find a place. Nothing will be more easy than class the sick pupils according to the diseases previously noted. There will then be the groups predisposed to consumption, to scrofula, to lymphatic disease, to rickets, to maemia, which will be the objects of all the solicitude of both maemia, which will be the objects of all the solicitude of both maemia, which will be the objects of all the solicitude of both maemia, which will be the objects of all the solicitude of both maemia, which will be the objects of all the solicitude of both maemia, which will be the objects of all the solicitude of both maemia, which will be the objects of all the solicitude of both makes of most schools, pestilential foci, or "It is high time."

The makes of most schools, pestilential foci, or "It is high time."

The makes of most schools, pestilential foci, or "It is high time."

The makes of most schools, pestilential foci, or "It is high time hindering it as is the case with a large number of schools where the most elementary rules of hygiene are sacrificed. The Boards contagion." The medical inspector "In case of an opidemic, should insist on proper cleanliness in school, and should have the air of the class rooms frequently renewed, for thorough airing is always the best of disinfectants. \* \* This will be the time to give some advice to children old enough to understand it, with regard to preventive hygiene. This method, well applied will certainly aid in making many useful notions of prophylaxis, penetrate the minds of the children." (As a result of this it is found that opposition to preventive measures e.g. vaccination &c. is rapidly diminishing in Brussels.) "Having reached the end of our teak, may we be permitted to express a hope, the realization of which will contribute mitted to express a hope, the realization of which will contribute see, in a future not distant, every state of Europe and America give a legal sanction to the appointment of medical inspectors of schools, and all large cities follow in the way so resolutely entered upon by Brussels and by Paris." (J.)

"The physical education of childhood is becoming more and more as subject of grave concern for physicians, for philosophers, and for in turn to St. Peter's Hospital where they are properly bathed (the a subject of grave concern for physicians, for philosophers, and for in turn to St. Peter's Hospital where they are properly bathed (the statesmen. The progress of physiology is now lifting day by day, school is in one of the poorest quarters of the city). The experithe veil which conceals the mysteries of life from us, and showing ment is giving the best promises, &c., that with further trial, the us likewise the causes that are making mankind degenerate in pro-results will be marvellous, we are convinced." (B.)

"3. Their Exercise. Well regulated exercise is also a preservative against constitutional diseases. . . Exercises in the open air are specially useful to children. . . Lymphatic children, and scrofulous ones with torpid temperaments are specially benefitted by these exercises. . . . It is certain that muscular exercises alone, have cured constitutional diseases when all medical means by these exercises. . had completely failed. 4. The hours of study. Montal work, too prolonged, fatigues the organs of a child; it is hence very necessary that the arrangement of the hours of study should be as follows:— (1) That the lessons sould not be too long, and should not exceed a normal length, three-quarters of an hour for example. (2) That the instruction should be varied enough to avoid tiring the child's brain. (3) That recesses and physical exercises should alternate with the purely mental occupations. Children predisposed to consumption should do but little brain work. Up to the age of ten or twelve tuberculous manifestations prefer other organs than the lungs. That is why meningitis is so frequent at that age. These children, moreover, show more intellectual precocity, and great care must be no measure of public hygiene or education would bring in larger taken not to have these too young brains, which infallibly inflame returns for the labor and capital expended." "The mere mention under repeated congestions, work beyond measure. Such are the of these facts should stimulate every city of the United States to hygienic means to employ in our schools to prevent the development of these facts should stimulate every city of the United States to similar work." (Med. and Surg. Journal, Oct. 27, '81.) "This will, of constitutional diseases. If these means are known, they are un-I believe, ultimately be brought about." (Dr. E. C. Seguin, N.Y.)

fortunately too, little employed as yet." "For several years, the schools of Brussels, under the direction of the Board of Health, have largely used medical means (as well). Under its influence we have seen feeble children gain flesh, scrofulous affections of skin, eyes, &c., grow rapidly better, and rickets become less. Its use in the schools can not be too much encouraged." (See results in "Preventive Medicine.") These results have been so encouraging as to determine several cities of Belgium to mutate the Board of Health of Brussels. Out of 1163 sick children we have obtained 198 cures, and improved health in 731 (leaving only 234, 20% of the whole, unimproved). "Have not the Boards of Charity every interest in encouraging preventive medicine? It is evident that the number of the sick will dimmish if we prevent the evolution of those affections which are the despair of physicians and the rum of philanthropic institutions.

(B.) The experience of the City of Brussels proves the idea of medical inspection of schools to be thoroughly practical. "Probably

FORMS OF BLANKS USED IN THEIR SYSTEM OF MEDICAL INSPECTION OF SCHOOLS IN THE CITY OF BRUSSELS.

	ST	ATISTIC	CAL IN	FORMAT	CION W	ITH RE	GARI	OT C	PRE	MISE	S.	
		Sch	ool No	• • • • • • •	•							
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OF CLASS ROOM.	CLASS-ROOM.	Length (A).	Breadth.	Height.	Sq. feet.	Cubic feet.	N. W.	N. E.	s. w.	S. E.	VENTILATION IN EACH ROOM.	
										}		
											Dimensions of court yards	
	<u> </u>	(A) Perper	dicular to th	l 10 wall facing	the master's	i platform.	<u> </u>	1	<u>.                                    </u>		" " боув	
			P	REVE	TIVE	MEDI	CINE	•				

NAME OF PUPIL	AGE.	Height and Weight,	Circumfer- ence of Chest.	Date of beginning Treatment.	Physical Examination before Treatment. (a) Temperament. (b) Constitution. (c) Diagnosis.	Date of the Examination at the end of the year.	RESULTS OF	THE TR		
				•			Table of the resul years, '78-9	ls oblair and *79	ed durin '30. (B.	g the two
							DISEASE.	CURED.	BRTTER.	No, treat'd
							Scrofulous disease Lymphatic "Rachitic "Anaemia Chronic Bronchitis	77	156 263 57 251 4	286 366 34 406 21
	Ì						Total	198	731	1163

School .	No.	 	 	 	

CATEGORY, A .- Indispositions at school, accidents, injuries, &c., noted or treated by the Teacher.

B.-Contagious parasitic diseases, or others, causing temporary removal of the pupil by the physician.

C .- Febrile diseases, eruptive, &c., necessitating prolonged treatment at home, and to which the rules of the circular of March 16, 1874, apply.

No. of Order.	Name of Pupil.	Class No.	Residence.	Character of Disease.	Category A, B or C.	 of Re-admission.	Special observations of Physician or Teacher with regard to each case, more especially with regard to those in Category C.
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CITY OF BRUSSELS.	School No	CITY OF BR	8.		School No						
BOARD OF HEALTH SCHOOL HYGIENE.	MONTHLY REPORT ON THE HYGIENIC CONDITION OF THE SCHOOL AND ITS PUPILS,  Month of	SCHOOL HYGIE		1	T	HERM	OMET	ric O	ed bypupils.		
	Month of			Take	n duri	ny th	e weel	r, end	ing188 .		
Visite. Extraordinary	2nd 3rd	DAY OF THE		XINO.		3.30	RVR:	NINO.   9.30	REMARKS,		
	YGIENE OF PREMISES.	Monday							The school physician		
Repair and cleanliness of Cla	iss-Rooms:	Tuesday									
School Furniture:		Thursday Friday Average	<u> </u>	<u></u>							
Lighting:		Jironage , i i i i	kept in of the carbon me or i de oxide wn by				: •••••	ļ	e embodied in the Monthly cmulics by analysis, not a standard solution of nite quantity of air. The upon the blood globules is with a neutral solution of		
Warming and Ventilation:		The physical FACE	of C	ry of	each	child	ıs ke	-	a card as follows:— ck of Card.		
		CITY OF	BRUS	SELS.		1	311	EDICA	L OBSERVATIONS.		
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instruction:	that have been made the subject of talks ar familiar yellow the subject of talks ar familiar talks are familiar yellow the physician are subject to talks are familiar talks are familiar talks.	Meight Weight ne of hea Diameters of head Circumf nee of chest Diameters of chest Pulmonary capacit Force of traction.  Color of hair.  eyes.  Class No.	::::						ODB.		
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BRUSSELS,	Physician in charge.	the Schools is Age?Habit father?of r diseases?	in use i? nothe Age	ble for in the Color?	or collie high rof e. Occu	lecting her Syes?. Ipation rod?.	g sati chool o n of p	istics s of C f hair parent Iow I	concerning pupils in Reveland.  Reveland.  Reveland.  Reveland.  Revelandity of the reditary of the reveland o		
Special observations by the P	rincipal of the School :	Music, No. hrs Fancy work o	. dai r sew : over	ly? ing, ings!	Rea lo. ?	ding, Ex .Wh	do.? ercise st eve	····.I ening	Housework, do.? he open zir, do.? mostly?How		
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	Inspector of Health Service.	alenses	••••	<u>l</u>	••••	•••••	••••	!.			

First menses, at what age?Character?
If eyes are unsound, when first noted?
What kind of work most trying to the eyes?
At what age, and stage of the course did ill health, if any, first ap
pear?
At what season of the year is it most marked?
To what causes attributed?
Remarks
***************************************
***************************************
DIRECTIONS

Write plainly. Give age, length of attendance &c., in years (y) and months (m). Habit, whether short or tall, fleshy or spare. Under hereditary diseases inquire with regard to rheumatism, nervous or brain troubles, scrofula, consumption &c. If appetite be poor, note what time of the day when most marked, also note if capricious or craving indigestible foods. (cap). Under headache note how often; locality, if in the front (fr) back part (oc), right side (r. s.), or left side (l. s.) of the head; and if severe (sev) or dull (d). Under backache include sideache, and note with regard thereto, the same points; viz, frequency, locality and severity. Under nerrousness, note unnatural irritability (irr), tremor (tr), chorea or St. Vitus dance (cho), hysterical conditions (hys), melancholy of Connecticut; and the general, placing the greatest reliance on (mel) &c. Under circulation, note if subject to cold extremities Mr. Trumbull's judgment, remarked: "We must consult Brother (c. ex.) or attacks of palpitation of the heart (pal). Is there gain Jonathan on the subject." He did so, and the governor supplied or loss in weight? Are eyes near sighted (my), or weak (w) or painful (pa) or both. Note interval between menses, and their character, whether too profuse (pr), too scanty (sc) or painful (pa); also their character, when first established. Under causes, give those to which the parents have been accustomed to attribute ill health. Under Remarks, note habits as to proper protection against cold and wet, sitting in damp clothes and the like, also any other points of interest not included under other heads. If the pupil be colored, note that. The letters in brackets, are abbreviations to be used in filling blank.

## General Information.

THE CHINESE GIANT.—The largest man in the world is said to be Chang, the Chinese giant, who has been exhibited in New York. He is thirty-three years old, and is the son of a wealthy silk and tea merchant in Pekin. He speaks, reads and writes English, German, French, Italian, and Spanish. He is nine feet high. He was exhibited before the crowned heads of Europe, and in Australia. The Emperor of Russia presented him with a diamond ring, and Queen Victoria a watch which weighs two pounds and a half, and whose chain is nine feet long.

WESTMINSTER ABBEY.—There is but one mechanic buried in Westminster Abbey. His name was Graham, and he was a clockmaker. He made exact astronomy possible by his great improve-ments in time pieces. He invented the dead-beat escapement and the gridiron compensating pendulum, and he was the first to make clocks that would run for many days without winding. Graham was also a maker of great quadrants and instruments of that sort. His funeral was attended by all the members of the Royal Society.

A Dog. -This story is told of a San Francisco dog named General. His wonderful performances were admired by everybody who knew him. It was General's custom every morning to take a ten-cent-piece wrapped up in a paper to an adjoining butcher's shop, in return for which he obtained a chunk of beef for his breakfast, first carrying it, however, to his master. One day the butcher intentionally failed to give the dog his meat after taking his money. The dog remained there patiently for some time, but finally trotted off. The next day the dog took his paper and ten-cent-piece to another butcher's shop, and positively refused over after to patronize the man who had cheated him.

with bread. It is supposed that every piece she gives the poor on her way to church averts some misfortune. In Norway the bride

end of the diliner, and to throw over the bridegroom's house a hard cake made of coarse flour; the higher she throws it the happier she In Circassia, there are always set upon the carpet in one of the rooms in the bridegroom's house a vessel of wine and a plate of dough; and the first thing the bride does on entering, is to kick over the wine and scatter the dough with her hands about the room. This is supposed to bring good luck.

WHERE THINGS CAME FROM.—Naturalists assert that cabbages grew wild in Siberia; celery originated in Germany; the potato is a native of Peru; the onion originated in Egypt; tobacco was a native of South America; millet was first discovered in India; the nettle is a native of Europe; the citron of Asia; oats originated in North Africa; rye came from Siberia; parsley was discovered in Sardinia; the parsnip is a native of Arabia; the sunflower was brought from Peru; spinach was cultivated in Arabia; the horse-chesnut is a native of Thibet; the quince came from the Island of Crete; the pear is supposed to be of Egyptian origin; the horse-radish came from the south of Europe.

BROTHER JONATHAN.—The origin of this term is said to have arisen as follows: When General Washington, after being appointed commander of the Revolutionary army, went to Massachusetts to organize it, he found a great want of ammunition and the means of defence. Jonathan Trumbull was then the governor of the State many of the wants of the army; and thenceforward-when difficulties arose, and the army was spread over the country—it became a by-phrase, "We must consult Brother Jonathan." And the name has now become a designation for the whole country, as John Bull has for England.

Glucose.—Few persons know to what an extent our sugar, syrups and candies are adulterated with this article. It is now made in immense quantities from corn. First common corn is ground and the starch is extracted by the usual mechanical process. The starch is then boiled with dilute sulphuric-acid for a couple of hours; after this the solution mixed with carbonate of lime to neutralize the acid, sweet solution remains which by purification and evaporation can be made into syrup; or by further evaporation converted into a colid called grape sugar. The wonderful properties of this "sugar from corn" is that the acid is not destroyed by using, it is neither diminished nor changed, and the amount of sugar exceeds in weight the amount of starch used. Glucose is a cheap substitute for sugar, costing when manufactured in large quantities less than three cents per pound. It is used chiefly as an adulterant, and is found in the cheap syrups and sugars sold by grocers. All the soft candies sold by confectioners are more or less adultorated with it, and even honey is made from it. By making a comb out of parrafine, and filling the cells of the comb with the glucose it is sold for pure white clover honey. Nearly all of the clear white syrups used on the table to put on buckwheat cakes, etc., are largely adulterated with this article. It is not unhealthy to use; it simply is not sweet.

# Practical Department.

#### LESSONS ON CHEMISTRY.

(Continued from last month.)

3. If a glass globe, with proper mountings and a capacity of about s cubic foot, have a cubic inch of water put into it and the air then exhausted by the air pump, the globe will be filled with steam, and all the water will be evaporated when the temperature is brought to the boiling point of water. But the steam does not fill the space continuously to the exclusion of everything else. For we can, by proper arrangement, introduce a cubic inch of alcohol, and we find Wedding Customs.—In Sweden a bride has her pockets filled the globe will hold just as much alcohol vapor as though no steam were present. Again introduce some ether, and we find that the her way to chirch averts some instorting. In Korway the price globe holds as much ether-vapor as if the other two vapors were long life to her, and the wedding feasts last some days. In Liburahabsent. And so we might go on, as far as we know, indefinitely. nia, it is the custom of the bride to retire from the table before the We can only explain the phenomena of evaporation on the assumpglobe holds as much ether-vapor as if the other two vapors were

tion that each substance is an aggregate of particles, with intermolecular spaces (See Section 1), for this is not a case of chemical union and condensation.

- 4. Take four ounces of the best white castile-soap, or better palmshavings. Fill up the bottle with pure rain water. Shake well till two gases will combine to form solid ammonic chloride (NH4Cl), all the scap is dissolved, or as much as will dissolve. If it does not or sal ammoniac, which will be seen at first as a white cloud and settle clear on standing, pour off some of the liquid and add more afterwards as a fine dust in the jars. water, till finally a clear solution is obtained. Then add to some of this clear solution half its own volume of pure concentrated glycerine. This will produce magnificent bubbles. With a common clay pipe solved in their own water of crystallization. it is easy to blow them three or four inches in diameter. Pour a little of the mixture into a shallow dish and dip into it the open mouth of a common tumbler or a wide mouthed jar. The mouth will be covered with a thin film. Observe the play of colors, The theory of light enables us to measure the thickness of this film. Α gary band always appears before the bubble bursts. In the soap films made by Plateau the thickness scarcely reached the millionth of a millimeter (0394 inch). Sir. Wm. Thompson has shown that of zinc. They form a liquid. (See Exp. 16.) it is impossible for such a film to contain more than one layer of molecules. As a parallel case: Rosaniline dye gives a distinct color to 100-million times its weight of alcohol.
- 5. Faraday prepared goldleaf the thickness of which he estimated at the hundreth part of a wave-length of light or not more than the 5-millionths of a millimeter. A grain of common goldleaf covers 49 sq. inches. A square inch of this may be cut into 100 strips. and each strip into 100 peices all visible to the naked eye. One of these peices weighing one 490-thousandth of a grain, may be attached to glass and have parallel lines ruled across it at the rate of 10,000 or even 224,000 to the inch: So that a grain of gold can by mechanical means alone be divided into 4,900,000,000 or more fragments each of which is still visible by means of the microscope. But when goldleaf is dissolved in nitro-hydrochloric acid the subdivision is carried much farther, and the particles are no longer visible even with the most powerful magnifiers.
- 6. Three millionths of a millionth of a gramme, or less of sodium may be detected by the appearance of the peculiar yellow line in the spectrum of a substance. If a clear platinum wire which of itself gives no color to the flame, be passed between the fingers, the yellow sodium flame will be seen when the wire is again put into the flame. For sodium exists in the dust suspended in air, and in fact is almost universally present.
- 7. Make colorless solutions of potassic iodide (KI) and mercuric ide. chloride (HgCl<sub>2</sub>) commonly called corrosive sublimate. Pour them separately into a small jar of water. They produce bright scarlet mercuric iodide.  $(2KI+H_9Cl_2=2KCl+H_9I_2.)$ 
  - 8. Use plumbic nitrate (nitrate of lead) and KI-bright yellow.
  - 9. Argentic nitrate (nitrate of silver) and KI-pale yellow.
- 10. To a weak solution of starch add a few drops of chlorine water. Drop into this some solution of KI and a deep blue appears. Cl unites with the K to produce KCl (potassic chloride), and the I with the starch forms a deep-blue compound.
- 11. Dissolve by heating a little gallic acid in some strong sulphuric acid. A rich crimson is produced.
- 12. Add a dilute solution of ferrocyanide of potassium to a very dilute solution of copper nitrate. Red color produced.
- 13. Add a dilute solution of copper nitrate to a solution of common salt, and heat the mixture. Plight green cupric chloride is formed.
- 14. Heat together a small quantity of mercury and plenty of flour of sulphur. Bright red vermillion is produced.
- 15. Take two warm glass jars with the necks ground so as to fit each other closely. Moisten the interior of one jar with a little

hydrochloric acid (HCl) and cover the mouth with a piece of glass. Moisten the interior of the other jar with a little ammonia (NH<sub>3</sub>) and immediately place it mouth downwards on the glass plate and exactly over the mouth of the lower jar. So long as the glass plate oil soap. But the soap in a quart-bottle after cutting it into thin remains the jars will appear empty. Withdraw the glass and the

- 16. Grind together equal parts by weight of ammonic chloride and sodic sulphate. Two dry solids form a semi-liquid mass, dis-
- 17. Make a warm and thick solution of white sugar and add slowly in a wide mouthed jar less than half full, some strong sulphuric acid (H2SO4). Stir gently, and the clear syrup will be blackened and a semi-solid, porous mass of carbon left in the mortar or jar. The acid withdraws the elements of water from the sugar and leaves the carbon.
- 18. Grind together two dry solids, acetate of lead, and sulphate
- 19. Boil some distilled water in a large test tube about half full. Keep dropping in lumps of calcic chloride until the boiling water will dissolve no more. Have ready a little dilute sulphuric acid in wide mouthed tumbler, wine-glass, or egg-cup. Pour into this the solution of calcic chloride. Two liquids produce a milk white solid, which may be turned out on a piece of dark colored blotting paper. This solid is gypsum, calcic sulphate, or plaster of paris.
- 20. Powder separately some lime and some sal ammoniac. Stir the dry powders together and a pungent gas (NH<sub>2</sub>) is evolved when the mixture is slightly warmed.
- 21. Mix four parts of dilute sulphuric acid with five parts of the powdered crystals of sodic sulphate. Great cold is produced. The thermometer will fall from 50° Fah. to 3°.
- 22. Strong hydrochloric acid poured on powdered ice lowers the temperature about 15° Fah.
- 23. Finely powered fresh crystals of sodic sulphate drenched with strong hydrochloric acid—temperature sinks from 50° F. to 0°.
- 24. Place a thin slice of yellow phosphorus, which must be cut under water and handled cautiously, upon a bit of sheet iron. When it has become quite dry, sprinkle upon it a few grains of iodine. The vapors of iodine and phosphorus combine and evolve sufficient heat to set fire to the phosphorus.
- 25. Dissolve a small quantity of red phosphorus in carbon disulph-Pour out the solution on a filter paper laid over a retort ring. The liquid evaporates in a few minutes leaving the P. in a very minute state of division. The oxygen of the air combines with it
- and spontaneous combustion takes place.

  26. Fill a plain retort entirely full, tube and bulb, with milk of lime. Drop in a dozen slices of yellow phosphorus cut as thin as possible (under water). Put the thumb over the end of the retort and place the end under the surface of lime water in a shallow dish. The retort will remain entirely full. Place the spirit lamp under retort. Some of the lime-water will boil out into the dish, but no air must be allowed to enter the retort, else there is danger of an explosion. After the retort has been heated for some time. a gas, phosphoretted hydrogen (PH<sub>3</sub>) will be given off and rise through the water of the dish. As each bubble of gas comes in contact with the air a flash of light is seen, especially in a dark room, the spontaneous combustion of the gas forming beautiful rings of smoke which are luminous in the dark, and revolve vertically round a circular axis and at the same time the whole ring increases in diameter horizontally.

27. Take a shallow glass dish full of water. Throw in a number of small fragments of phosphorus. Surround and cover these with powdered potassic chlorate. Put the end of the funnel down through the water and pour strong sulphuric acid directly on the chlorate and the phosphorus. The chlorate is decomposed; its oxygen seizes the phosphorus, which burns with a distinct flame under water.

To be continued.

PRACTICAL HINTS FOR TEACHING PRIMARY READING BY ANY METHOD.

BY JAMES L. HUGHES.

#### ш.

- 3. Do not ask Pupils to read Words with whose Meaning they are Unacquainted .- In primary classes the pupils conducting a reading lesson which is so supremely excellent as to should be required to read no words which they are not in the warrant a teacher in using it to the exclusion of all others. There habit of using. The object of reading at this stage is not to enlarge are few subjects in which the method of teaching may be varied to their vocabulary, nor to add to their store of information; but to so great an extent as in the case of reading, and yet there are few enable them to acquire freedom in recognizing the names of words in teaching which, the teacher is more liable to become mechanical from their printed signs. When taking up a new lesson the atten-Tand formal. Among the plans for varying the plan of teaching a tion of the pupils should be directed to the illustrations in it, and reading lesson in primary classes are the following: they should be encouraged to express in their own language the ideas which are suggested by the pictures. Having thus got the ideas first, the words which represent them may be given. It is always best to print the words used by the pupils on the black-board, and read them, before taking the lesson on the tablet itself. teacher may print the words and require the pupils to name them, or occasionally she may repeat the words and ask the pupils to direct her in spelling them as she puts them on the board. In this way by skilful questioning the teacher may lead the pupils them selves to use all the new and difficult words in the tablet, and after they have read them from the black-board they will have no difficulty in reading them from the tablet. Remember that in the primary classes the child does not read to acquire knowledge, nor to learn to use new words, but simply to learn to name at sight words that he is in the habit of using in conversation.
- 4. Do not keep the Class too long at a Single Lesson.-Children were formerly kept droning sleepily at the "alphabet card" longer than they should require to master the first two primers under intelligent teaching. In process of time they were advanced to the "ox" card, and they remained with that interesting quadruped in many cases for weeks, and in all cases until they knew by rote all that was on the card, and could name the words quite as much by their location as by their form. Such a method of "getting through the book" could have only one effect on the mental condition of the children. It is questionable whether any child ever passed through such an ordeal without having its faculties blunted. This process generally changes the vivacious child into the dull school-boy or school-girl in a few months.

It is a grave mistake to expect perfection in reading the first les. son, before proceeding to the next. Perfection must be reached by of that which is injurious to health, as well as that which proa gradual process, and may be secured much more readily by practising with new sentences than by merely repeating those already questions of the greatest importance to everyone. Since most boys so familiar as to have lost their interest. Without laying down a definite rule specifying the length of time to be devoted to each tablet, it is quite safe to say that every lesson should include some son more or less of an invalid during the later periods of life. new work, and that if a teacher has to devote more than two or three lessons to the same tablet, he should be convinced that a we cannot even infringe upon her laws without paying the penalty weakness exists either in himself or his method. It is much better Thus, if we sit in a draft or with wet feet, for even a very few to review regularly the part of the book already read, than to dwell minutes, nature admonishes us that we have done wrong by giving on each lesson until the pupils lose interest in it.

the entire country into consideration, there is probably no other too great action on the part of either the mind or the body is injuriclass in which the pupils display so much inattention and listless ous, and the sympathy between mind and body is so great that one ness as in the primary reading class. This is largely due to reason's cannot suffer without the other being also affected. The object of already given, but it is often caused by the length of time occupied these "familiar talks," as I call them, is to show us how to secure by the lesson. The younger the pupils the shorter the lessons and preserve—mens sana in corpore sano—a sound mind in a sound should be. It is wrong to expect them, or try to force young child-body. I think that hitherto the education and training of the body ren to concentrate their attention on any subject for more than a have been too much neglected in our schools. Nearly the whole

son ceases to be of real value. Short lessons will develop habits of briskness and premptness on the part of the pupils, which will have a beneficial effect on them during their whole lives.

Vary the Plan of Conducting the Reading Lesson as much as Possible. - When, as is too often the case, the reading lesson degenerates into a monotonous routine, it should cause little wonder if the pupils come to it with apathy. There is no way of

- 1. The pupils may read simultaneously.
- 2. They may read individually.
- 3. They may read from the black-board.
- 4. They may read from tablets.
- 5. They may read from primers.
- 6. They may read backwards.
- 7. They may read from the tablets as the teacher forms sentences by pointing to words in different parts of the tablet.
- 8. They may read by paragraphs, by sentences, or by words If by words they should read in rotation to save time.)
- 9. They may print on their slates the words named by the teacher. This is not spelling, but testing their knowledge of the powers and sounds of the letters.
- 10. They may combine the above in various ways in the same

When reading from the black-board, or using the slates, all the varieties of plans suggested in previous articles may be employed.

#### NOTES ON HYGIENE.

BY J. A. WISMER, PRINCIPAL OF PARKDALE PUBLIC SCHOOLS.

"Familiar Talks" on the laws of health, for twenty minutes, on Friday afternoons, between the teacher and pupils of the Parkdale Public School.

(Pupils ask questions and take notes in memorandum books, which are preserved).

Introductory.—The term Hygiene is derived from a Greek word meaning health, and properly includes the discussion motes it. How to secure good health, and how to retain it, are and girls are naturally healthy, we will consider more particularly the causes which injure and undermine the health, making the per-

Nature has laws which cannot be broken with impunity, in fact us a bad cold. All action is followed by a corresponding reaction. 5. Avoid long continued Lessons.—Taking the schools of and this is true of the mind as well as of the body. Too little or few minutes at a time, and as soon as the attention wavers the les-attention of teachers has been devoted to the development of the

intellectual faculties of the mind; the body, therefore, has had to suffer at the expense of the mind, and the many early graves of our brightest and best students cry out against this mind-cramming and body-neglecting system of education. I am an uncompromising opponent of the very general practice of "keeping-in," the school hours are too long as it is. In a great deal of what I shall have to say, of course, I cannot lay claim to originality, as the laws of health and the physiological conditions of a healthy body are immutable, and are well known to all who have made the study of physiology part of their education. Teachers now-a-days should know some. thing of Law, more of Medicine, and as much about everything as is possible for them to obtain and retain. How are pupils to get clear, lucid, streams of practical instruction, if half of the wells of knowledge in the teacher's mind are partially dried up, or, as is often the case, empty altogether?

First, let us take a look at "the body, or "the house we live in," as it has been aptly termed by an emment physiologist. It is the most wonderful structure, the grandest piece of mechanism that has ever been designed; a knowledge, therefore, of even a few of its functions, will not only prove interesting, but must lead our minds to acknowledge and revore its great Architect and Designer-God!

The head, or skull rather, is composed of eight bones, which join one another by saw-teeth shaped or ragged edges, called sutures. These are considerably separated in childhood, but become solid in old age. Blows on the head are more apt to produce fracture of the skull, and are, therefore, more dangerous to an old person than to a young one. The face consists of fourteen bones; there are also three small bones in the ear, making a total of twenty-five bones in the head. The covering of the skull is called the scalp, which is filled with little cells, called hair follicles, in which the hair is produced. To keep these hair follicles healthy and enable them to perform their natural functions all that is necessary is attention to cleanliness, the free use of soft water, and a stiff hair-brush. Do not use hairoil, pomatum, bear's grease, or anything of that kind on the hair. They are liable to become rancid and offensive to the sense of smell.

To be continued.

#### HOW TO USE TEACHER'S ASSOCIATIONS.

BY J. A. COOPER, PRINCIPAL STATE NORMAL SCHOOL. ERIE, PA.

1st. Take a note-book and pencil with you to the Association, 2nd. Make a careful study of your deficiencies as a Teacher, and write down the supposed remedy for your admitted defects.

- 3rd. Go early to the Association, and remain until its close.
- 4th. Be punctual at each and every exercise of the Association.
- 5th. Give close attention to the exercises.
- 6th. Make a mental comparison of each speakers matter and methed, with your own idea of what should be said, and how it should be said.
  - 7th. Behave as you think the other members should behave.
  - 8th. Behave as you desire your own pupils to behave in school.
- 9th. At the proper time ask questions upon those topics about which you desire to know more.
- 10th. Pay special attention to those exercises which relate to your admitted defects.
- 11th. Be willing to do any thing requested by the instructors and to aid in making a good Association.
  - 12th. Use your note-book freely and judiciously.
- 13.h. Enter in such questions and topics as you desire to examine more fully.

- 14th. Seek to learn how to use your opportunities to better advantago.
  - 15th. Strive to learn how to get your pupils to study more.
- 16th. Endeavour to learn how to get your pupils to study in a better manner.
  - 17th. Talk freely and frankly with other teachers during recesses. 18th. Review the more important exercises during the session.
- 19th. Write out at length such suggestions as you decide to adopt.
- 20th. At the close of the Association make and write out an estimate of the value of the whole session to you, and the influence it will have upon your teaching.
- 21st. Remember that you are personally responsible, to some extent, for a good Association.
- 22nd. Remember that the amount of good you receive from the Association will depend largely upon yourself.

#### THE WISE TEACHER AND THE FOOLISH.

The wise teacher shutteth his mouth and placeth a lock thereon. He expresseth not his opinion on any subject political or other-

The wise teacher dare not say his soul is his own. Yea, verily, for the School Commissioner hath a mortage thereon.

The wise teacher exerteth himself to weariness, trying to make the School Commissioner's thick headed little boy learn something, when the said little boy spoileth for a thrashing.

The wise teacher lieth awake nights, thinking how he may con-

ciliate the above named little boy. He sayeth unto his father, "Yea, verily thy son is among my

most promising pupils. For him have I great hopes." Whereat groundth ye wise teacher inwardly.

The wise teacher spendeth his substance in riotously treating the

School Commissioner to beer, cider, et cetera.

When the end of the year cometh the wise teacher getteth reappointed and can work like a slave for another year to earn twentyfive dollars a month.

But lo! and behold what doeth the foolish teacher?

Ye foolish teacher sayeth boldly that Garfield was the right man; that ward politicians should not be made School Commissioners.

He dareth to vote against ye doughty Alderman, who is the School Commissioner's "stand by.

Yea, verily and thrasheth ye Commissioner's little boy right merrily, till the little boy howleth lustly and promiseth to "knuckle

Next cometh irate Commissioner whom he darath even to tell that he understandeth his own business, and can run his school without interference.

Whereat ye high and mighty Commissioner waxeth wroth, stampeth, and danceth around.

Thereupon ye audacious but foolish teacher telleth him to vaate the premises, and maketh it plain that such is the best policy. And ye foolish teacher groweth fat in his own independence and wickedness.

There cometh the end of the year, and the foolish teacher is bounced. But he sayeth unto all men, "Care not I for this a denarius." And he goeth straightway into the marts of trade and commerce, and worketh up a business that payeth him \$500,000 a year.-Educational Weekly.

# Aotes and Aews.

Mr. S. Woods was made the recipient of a handsome present from his late pupils at Stratford on his leaving for Chicago.

We are pleased to note that Mr. W. McBride, H. M. of Rich-

mond Hill High School, has succeeded in securing a nucleus for a "Library of Reference" in connection with the school. Last term they raised \$17 by subscription, and obtained \$17 more from the High School Board. This term they engaged Mr. J. W. Bengough to give one of his well known humorous sketches, and collected \$81 at the door.

The Rev. R. L. Stephenson was elected Chairman of the Perth Board of Education for 1882. At the subsequent meeting F. L. Michell, Esq., Inspector, reported favorably on the results obtained by the teachers in the Public Schools, and also on the considerable increase in the attendance during the past year.

At the meeting of the Separate School Board, Perth, the Rev. J. S. O'Connor was appointed Chairman of the Board for 1882, and the Rev. James Morrison, Secretary.

Members of the Whitby School Board and Mr. Brown, teacher at the Model School there, have expressed an opinion quite favorable to Gago's new series of school-books. The school boards and teachers generally, we see, agree in this opinion. The question is being constantly asked:—Can an option not be given in the matter of readers as is given in the case of other text-books?-Mail.

desiring admission to the High School, must pay in advance a nonresident fee, the Belleville Board of Education has left the collection of these fees to the Teachers, stating "that any loss the Board may sustain by their non-attention to it, will be deducted from their salaries.

Unquestionably the reason why so much difficulty is experienced in securing Teachers for so many of the County Schools, is the salaries. The miserable pittance offered is not what the head bootblack in an ordinary hotel would accept, and consequently is not even sufficient for the class of Teachers they do get, that is, "permits" and "extensions." Morever on such salaries it is all but impossible for the Teachers to improve themselves or their position. Once located they must in most cases remain, through sheer want of funds. A pleasing contrast to this state of things exists in the County of Wentworth. From statistics in our possession we find that three are paid \$550, others \$525, and quite a number \$500; the average for male teachers being \$420. We are unable to say The how the salaries of the female teachers compare with these. farsightedness of those in authority in thus giving a fair remuneration, is securing good teachers who remain, and good results in the schools. Only 24 changes took place in this County at the commencement of this year.

Mr. J. Cousins has been elected Chairman of the London School Board. An application was made by the Public School Teachers received and adopted, as also were favorable reports from Mr. Boyle the Inspector, and the Rev. F. L. Checkley, Head Master of the Collegiate Institute.

Mr. J. Diamond is the Secretary-Treasurer of the Belleville School Board.

Mr. Irving had great difficulty in evading his election as Chairman of the Kingston School Board, for 1882. By persistently voting for his opponent. Dr. Fee, however, he succeeded in securing Dr. Fee's election.

No efforts are being spared to make the great play of "Antigone" a splendid success at University College. The Choruses are in full rehearsal, and subscriptions are pouring in to defray expenses. Admission will be one and two dollars each.

Mr. D. Ormston, Chairman of the Whitby School Board, has a method of lubricating the wheels of business and smoothing down those accrbities which so often detract from the dignity of such august bodies as Educational Boards, in a manner we believe peculiar to himself. A supporat his house, to which the members of the board and press are invited, has now become an annual institution. The harmony and mutual good feeling thus generated must have a powerful effect in smoothing away differences, and rendering the intercourse through the year of a more agreeable

The schools in Windsor remained closed till February on account of scarlet fever.

Dr. Agnew, Esq., Inspector of Frontenac County, makes a rather startling comparison between the County and City Schools. He believes that were the two fairly tested, the 4th class of the County Schools would equal or surpass the 5th in the City of Kingston. This rather upsets the pronounced notions of the smartness of city children.

It is proposed to issue debentures to extend over five years to raise from \$1000 to \$1500, to erect a school on Manitoulin Island.

The Lindsay Post appears inconsistent in entering such a strong protest against the School Board for requiring \$8000 to render habitable the High School, and then stating that the buildings on the north of the Town Hall are not fit for pig styes.

Jesse Ryerson, B.A., Head Master of the Orillia High School, is a connection of the Rev. Dr. Ryerson.

The Sarnia Board of High and Public School Trustees, at their taken place in the London Schools, owing to the prevalence of the meeting unanimously conferred the Chairmanship for the en-Scarlet Fever. late meeting unanimously conferred the Chairmanship for the en-

suing year, on Mr. C. Saunders. Subsequently with equal unanimity, a resolution to raise the salary of Mr. Brebner, P.S.I., by \$200 per annum, was carried. Highly satisfactory reports on both the High and Public Schools, were received and adopted.

Mr. A. D. Griffin, of Port Hope, will succeed Mr. Nugent, at

Woodstock. Mr. Griffin holds a First Class Previncial Certificate, and is an undergraduate of the Second Year in Civil Engineering.

We wish him every success in his new sphere of labour.

The Minister of Education in his circular of instructions to In-To secure the carrying out of their order, that non-resident pupils spectors, has directed them to ensure the keeping of books of accounts in conformity with the form prescribed by him, by the spident fee the Belloville Reard of Education has left the columns of the Belloville Reard of Education has left the columns of the Belloville Reard of Education has left the columns of the Belloville Reard of Education has left the columns of the Belloville Reard of Education has left the columns of the Belloville Reard of Education has left the columns of the Belloville Reard of Education has left the columns of the Belloville Reard of Education has left the columns of the Belloville Reard of Education has left the columns of the Belloville Reard of Education has left the columns of the Belloville Reard of the Bellovill

every town. The prescribed book of account is furnished by the trade at 25 cents per copy.

The Stratford Advertiser editorially takes the ground that the work of the four Model Schools in the County of Perth could be better done and more economically with one school. The same idea was advanced by members of the County Council in regard to the Lambton Model Schools. The same staff that is required to run one school could do the work in the two schools, and, of course, at a great saving of cost. We trust that it will not be found that this p-called economical policy will result in a great diminution of efficiency, if it be put into practice.

At a meeting of the London East School Board, J. Dearness, Esq., I.P.S., was appointed Inspector of the Schools in London East, for which he is to receive no equivalent in extra salary.

Mr. Hall was unanimously appointed Chairman of the Napanee

School Board, at their late meeting.

From the London Advertiser we learn that: -The Kingsville Public school is crowded with pupils. The teachers, Mr. A. Ross, Miss Wigle, and Miss Hennis, have charge of sixty pupils each, and it is proposed to lighten their labors by the employment of an additional teacher and the bringing into use of another room, there being an unemployed room in the school building. At present, in order to lighten the labors of the over-burdened teachers, the plan for an increase of salary. Recommendations by Dr. Fraser were is adopted of dismissing a part of the pupils at the forencon and afternoon recesses respectively.

At a special meeting of the Stratford High School board on Friday evening, Mr. D. K. Clark, B.A., of the Hamilton Collegiate Institute, was chosen as classical master of the High School in the place of Mr. Samuel Woods, M.A., who resigned the position. Mr. Clark is said to be a good teacher of considerable experience. -Beacon.

We congratulate the trustees of S. S. No. 3 in securing the services of Miss Nellie Whyte, of Blandford, as teacher for the ensu-

ng year.—Woodstock Sentinel and Review.
We regret to record the fact that A. Nugent, B.A., who has been for three years mathematical master in the High School here, left town this week for Dunnville, in the High School of which town he has secured the position of head teacher. Mr. N. is a graduate of Queen's University, and a most progressive and successful educationalist. During his stay here he has proved himself both com-potent and energotic; and his departure is deeply regretted by all cationalist. his pupils and their friends, as well as by others who have known him personally. On Monday morning, provious to his leaving, his class presented him with an address and ten volumes of the poets, beautifully bound, as an expression of their esteem and gratitude. We hope to hear of Mr. Nugent's success in Dunnville, and trust that our High School Board will engage none but a really first-class man to fill his place.—Woodstock Sentinel and Review.

Alexander McQueen, Esq., Head Master of London South School, presented his report to the School Trustees at their late meeting, from which, we cull the following particulars:—The School was open 21 days, and the attendance in the different divisions was as follows:—

	_ :	NC. ON ROLL.	AV. ATT'S.
4th Div.	Head Master's	63	55
3rd "	Miss Walker's	63	52
2nd "	Miss Westland	's 65	51
lst "	Miss Lewis'	102	70

Considering that many were absent from Miss Lewis' department owing to the severity of the weather, the crowded state of this room will be very serious as the weather improves. In view of this the Board are seriously considering means of providing increased accommodation.

We are sorry to find that a great decrease in the attendance has

Mr. A. Reid, B.A., Gold Medalist, Toronto, has been appointed Mathematical Master of Sarnia High School.

Inspector Huron, through iliness, desired the County Council to permit him to engage a substitute at his own expense. This was refused, with the intimation that as he was studying for the law, he ought to resign.

Mr. J. M. Buchan, Principal of U. C. College, also first English Master, receives as salary \$2,500 and a fine residence.

Dr. Tassie, till lately Principal of the Galt Collegiate Institute, in rebutting attacks made on him by the Mayor, says: "One word as to my salary. It was nominally \$2000, but mark:—I furnished the Board every year with sums varying from \$1,000 to \$1,400 in payment of it, so that they had merely to furnish the balance. may here state that during my entire career at Galt I never had a pupil taught by myself plucked at an examination, save one, and then I was associated with another master, and there was a want of capacity besides." "After totally disregarding my advice in everything, and treating me with insolence and insult, assurance can reach no greater height than by charging me with the consequences of its own acts." Nevertheless, I alone brought the Institute at first amid opposition to the front, side by side with institutions heavily endowed with public money, or supported by powerful ecclesiastical corporations.

ing, Writing, Grammar and Composition, Arithmetic, and Book-Keeping. Beatty's copy books have been introduced.

OTTAWA COLLEGIATE INSTITUTE.

OTTAWA, 21st February, 1882.

To the Editor of the Canada School Journal:

DEAR SIR, -At a meeting of the Trustees of the Ottawa Collegiate Institute held yesterday, the enclosed resolution was adopted and I was instructed to furnish you with a copy of the same.

Yours truly,

John, Pennock, Secretary.

[COPY OF RESOLUTION.]

OTTAWA, 20 February, 1882.

At a meeting of the Board of the Ottawa Collegiate Institute, held this day, the following resolution was unanimously adopted:

Moved by Mr. Wm. Pennock, seconded by Rev. D. M. Gordon, B.D., "That the Board of Trustees of the Collegiate Institute, Ct. tawa, has learned of the death of the Rev. Egerton Ryerson, D.D., with deep regret, and that it desires to give expression to its sense of the valuable services rendered to the cause of Education in the Province of Ontario, during the long period of his incumbency as Chief Superintendant—services resulting in the present system, ouilt up with unwearied patience, care, and ability, which while it will leave its impress on the minds of our people for all time, will form an imperishable monument to his memory.
"That the Secretary be instructed to forward copies of the fore-

going to the family of the deceased, and to the CANADA SCHOOL Journal, Toronto.

Certified a true copy.

JOHN PENNOCK, Secretary.

#### NOVA SCOTIA.

ended October 31st 1881 was laid before both branches of the Leg-which we cannot afford to neglect."
Islature on the 16th inst. The Superintendent reports for the year, Mr. Harrington's Bill, designed to promote a better attendance as compared with the preceding one, and for each term of the year at school, did not become law at the recent session of the Legislas compared with the corresponding term of its predecessor, an interest on its second reading being moved, it secured a calm and crease in the number of schools in operation, of teachers employed, and pupils employed, and of pupils in attendance. During the from several members of influence. The Hon. Attorney General Winter Term there were in operation 1763 schools employing 1824 while complimenting the introducer of the measure on his philan-Teachers, and during the Summer Term 1877 schools employing thropic earnestness, suggested that the further consideration of the

1938 Teachers. Of the Teachers engaged in the Winter Term, 28 hold Academic, 312 First Class, 788 Second Class, and 660 Third 1938 Teachers. Class Licenses. Of those engaged in the Summer Term, 25 held Academic, 204 First Class, 807 Second Class, and 779 Third Class Licenses. For the Winter Term, 746 Teachers were Males and 1042 Females, for the Summer Term, 682 Males and 1223 Females. The number of pupils registered at school for the respective terms was 77468 and 80189; and of different pupils for the entire year, 98148 or 1 in 3.9 of the population according to the census of 1871. The total Government Expenditure for Education for the year is put down as \$185,518.80 as compared with \$196,217.98. The reduction is chiefly attributable to the lapse of grants to Colleges. It is announced that the Council of Public Instruction has amended the Regulations of the Provincial Normal School of making attendance for a full annual session necessary for professional classification. The Institution is represented as in a highly prosperous condition. The report deals fully with the important question of a course of study for the Public Schools. A course for Common Schools as authorized by the Council of Public Instruction is published and one for High Schools announced as in the near future, The principles underlying the prescribed course are discussed by the Superintendent with considerable fulness. He claims that—"It is based on a rational conception of the scope and attainable ends of a common school system. Its framers were convinced that it would be We are pleased to note that the salary of J. B. Somerst, Esq., in the highest degree prejudicial to the educational interests of the Inspector of Schools, Winnipeg, has been increased from \$1,000 to Province to attempt to convert its schools, primarily designed to \$1,500. The Board of Education, Guelph, lately advertised for a male furnishing special training for special pursuits. Recognizing the teacher, holding a Second-Class Certificate of Qualification, at a public school as existing for the general good, their prime aim was salary of \$550, and received sixty-one applications, some of these to make it, so far as its curriculum of study is concerned, of the folding First-Class Certificates. The Board has opened night classes greatest possible value to the great najority of its pupils. They for young men. On the first evening 55 names were enrolled, and assumed as a fundamental postulate that there is knowledge within the number has since increased to 83. The subjects taught are Read. the power of the common school to impart which is desirable for all, so desirable in fact that it is a shame and a national misfortune that any of the future citizens of a responsibly governed country should grow up without it; and that it is the primary function of the Common School to impart this knowledge, whose value is entirely independent of the prospective calling of its possessor. For imparting such knowledge the course makes, in my opinion, judicious and ample theoretic provision. To have proceeded otherwise, to have made the interests of some particular pursuit or pursuits the controlling principle, would have been to sacrifice the greater for the less without any rational prospect of securing even the less." The course, however, shows that the framers are in full sympathy with natural methods of instruction. As the Superintendent observes. felt bound to weigh most thoughtfully the question whether our Common School instruction might not fairly be asked to do much more than it has been doing to indirectly foster and enoble those industrial callings by which so large a portion of the people of Nova Scotia must continue to earn a livelihood. A careful collation of facts re-lating to our ordinary school work showed that beyond all question it was to an extreme and injudicious degree bookish or literary, leaving untrained and undeveloped the very faculities which are most active in childhood and which are most directly related to industrial processes and pursuits. The high educative value of the neglected studies was also an element not to be overlooked. The course, therefore, provides that to a large extent certain elements of technical knowledge which are of general application and utility, as well as the elements of the physical and natural sciences, shall henceforth have a distinct recognition in the schools of Nova Scotia. It is scarcely necessary to observe that the scientific and technical instruction embraced in the course is not of the formal and elaborate character suited to the lecture room of the University, or the laboratory of the School of Technology. It is the lower preceding the higher, nay, it is the very lowest preceding that which is only a little higher. Yet, it is on these simple Object-Studies faithfully a little higher. Yet, it is on these simple Object-Studies faithfully carried out under the directions of the teachers in full sympathy with both youth and nature, that we must depend for the provision of material by operating on which our projected Schools of Technical Instruction can alone be made real blessings to the country. The Report of the Superintendent of Education for the year. The history of industrial development in other lands teaches lessons

ture. On its second reading being moved, it secured a calm and pretty thorough discussion, and elicited expressions of approval Bill should be deferred till next year, the Bill in the meantime to be printed and circulated through the Province. The main provision of the Bill empowered school sections and municipalities by vote of the rate-payers to make attendance at school compulsory in respect to all children between the ages of 7 and 12, for at least 80 days of the school year.

The death is announced of Charles W. Hiltz Esq., M.D., of Chester, Lunenburg County. The deceased gentlemen was a graduate of Dalhousie College and for several years prior to 1880 filled the position of Inspector of schools for the County of Lunenburg.

# Readings and Recitations.

### SIMPLEX MUNDITIIS, OR WHAT SHOULD A MAIDEN DE?

A friend in Cambridge (Eng.) sends the following for the CANADA SCHOOL JOURNAL:

"To us who in the present age hear so much about the higher education of women, it cannot be uninteresting to find that the two most popular poets of the times are at one on the question of Woman's sphere,—of Woman's place in the drama of life.

Take the following lines from Tennyson's Princess.

Man for the field, and woman for the hearth; Man for the sword, and for the needle she; Man with the head, and woman with the heart; Man to command and woman to obey; All else confusion;

with these lines from Longfellow's Spanish Student:

'What I most prize in woman is her affections, not her intellect! The intellect is finite; but the affections Are infinite and cannot be exhausted.'

SINPLEX MUNDITHS OR, WHAT SHOULD A MAIDEN BE?

What should a maiden be? Pure as the rill, Ere it has left its first hone in the hill; Thinking no evil, suspecting no guile, Cherishing nought that can harm or defile.

What should a maiden he? Honest and true, Giving to God and to neighbor their due; Modest and merciful, simple and neat, Clad in the white robe of innocence sweet.

What should a maiden be? She should be loath Lightly to give or receive loving troth; But when her faith is once plighted, till breath Leave her, her love should be stronger than death.

What should a maiden be? Merry, whene'er Merriment comes with a natural air; But let not mirth be an every-day guest, Quietness sits on a maiden the best.

Like a fair lily, sequestered and meek, She should be sought for, not others should seek; But, when the wild winds of trouble arise, She should be calm and courageous and wise.

What should her words be? Her words should be few Honest and genuine, tender and true; Words that o'erflow from a pure heart within, Guiltless of folly, untainted by sin.

What should her dress be? Not gaudy and vain, But unaffectedly pretty and plain; She should remember these few simple words— "Fine feathers flourish on foolish young birds."

Where should a maiden be? Home is the place Which a fair maid is most fitted to grace; There should she turn, like a bird to the nest, There should a maiden be, blossing and blest.

There should she drall arthe handmaid of God, And if He bid, her 'pass under the rod,' Let her each murmur repining suppress, Knowing He chasteneth that He may bless.

But if earth's blessings each day He renew, Let her give glory where glory is due; Deem every blessing a gift from above, Given and designed for a purpose of love.

What will her future be? If she become Matron and mother, may God bless her home! God to the matron all blessings will give, If as God's maiden the young maiden live.

What will her future be? If she should die, Lightly the earth on her ashes will lie; Softly her body will sleep neath the sod, While her pure spirit is safe with her God.

"ARCULUS."

#### THE JOLLY OLD PEDAGOGUE.

"Twas a jolly old pedagogue, long ago,
Tall and slender and shallow and dry;
His form was bent and his gait was slow,
His long thin hair was white as snow,
But a wonderful twinkle shone in his eye;
And he sang every night as he went to bed,
"Let us be happy down here below;
The living must hive though the dead be dead,"
Said the jolly old pedagogue, long ago.

He taught his scholars the rule of three,
Writing, and reading, and history, too;
He took the little ones up on his knee—
For a kind old heart in his breast had he,—
And the wants of the littlest child he knew.
"Learn when you're young," he often said,
"There's much to enjoy down here below;
Life for the living and rest for the dead,"
Said the jolly old pedagogue, long ago.

With the stupidest boy he was kind and cool, Speaking only in gentlest tones:
The rod was hardly known in his school,—
Whipping to him was a barbarous rule,
And too hard work for his poor old bones:
Besides it was painful, he sometimes said,
"We must make life pleasant here below,"
The living need charity more than the dead,"
Said the jolly old pedagogue, long ago.

He lived in the house by the hawthern lane, With the roses and woodbine over the door; His room was quiet, and neat, and plain, But a spirit of comfort here held reign, And made him forget he was old and poor; "I need so little," he often said, "And my friends and relatives here below Won't litigate over me when I am dead," Said the jolly old pedagogue, long ago.

He smoked his pipe in the balmy air
Every evening when the sun went down,
While the soft wind played in his silvery hair,
Leaving the tenderest kisses there,
On the jolly old pedagogue's old crown;
And feeling the kisses, he smiled and said,
"'Twas a glorious world down here below:
Why wait for happiness till we are dead?"
Said the jolly old pedagogue, long ago.

He sat in the door one summer night,
After the sun had sunk in the west,
And the lingering beams of golden light
Made his kindly old face look warm and bright,
While the odorous night wind whispered rest!
Gently, gently he bowed his head,—
There were angels waiting for him I know;
He was sure of hie happiness, living or dead,
This jolly old pedagogue, long ago.

--George Arnold.

#### PUBLIC SCHOOLS AND POLITICIANS.

At an examination of a public school on Staten Island, the teacher justly proud of his scholars, addressing the audience, said: "Ladies and gentlemen, to prove that the boys are not crammed for the occasion, I will direct one of them to open the arithmetic at random, and read out the first problem. Then I shall invite a gentleman of the audience to work out the sum on the board, and commit inten-

nine-elevenths.'

The teacher turned to the audience and said: "Now, Supervisor , will you step to the black-board and work it out t

The supervisor hesitated, then said, "Certainly," and advanced a step, but paused and asked the teacher, "Is it fair to put to the children so difficult a problem?" "Oh never fear," replied the teacher, some figures in an off-hand manner.

"they will be equal to it." "Very well," said

the supervisor, "go on."
The boy began the question: "Add fifteensixteenths-

"No, no!" said the supervisor, "I will not be a party to over-taxing children's brains! I have conscientious scruples against it! This forcing system is ruining the rising generation! and he gave back the chalk and left the room.

"Well, Judge Castleton, will you favour us?" asked the teacher, tendering the chalk. "I would do so with pleasure," replied the judge, "but I have a case coming on in my court room in a minute or two," and he left.

'Assessor Middletown, we must fall back on you," said the teacher, smiling. "Oh," said the assessor, "I pass I mean, I decline in favor of Collector X." "Well that will do," re-plied the teacher, "Mr. Collector, will you favor

"I would certainlythat is—of course," replied the collector; "but -ahem!—I think it should be referred to a Why, bless commit-me! is that the four o'clock boat? I'll never catch it! Good-byc. Some other time!" and he left.

"I know Justice Southfield will not refuse!" said the teacher, and the Justice stepped promptly up to the black-board amidst a round of applause from the audience. The scholar again began to read the sum. "Add fifteen-sixteenths and-

A dozen hands went up as the judge made the first figures.

"Well, what is it?" asked the teacher.

"He's got the denominator on top of the line!" cried the boys in

"Very good, boys, very good; I see you are attentive!" said the judge as he rubbed out the figures, turned red, and began again, but was interupted by the class calling out:

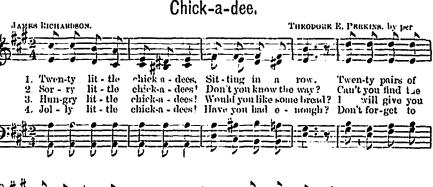
"Now he's got the numerator and denominator both under the line!"
"Aha! you young regues! You're sharp, I see!" said the judge

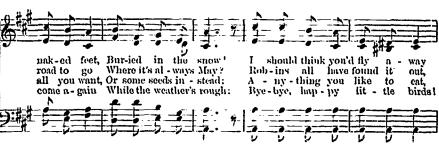
tional errors, which, you will observe, the boys will instantly detect.

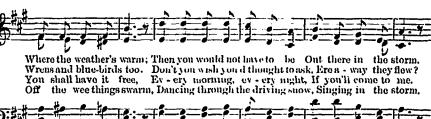
John Smith, op the book and read the first question!"

The scholar obeyed and read out - "Add fifteen-sixteenths and sixteen!" was the cry that hailed the judge's new combination of figures.

"Really, Mr. Teacher," ojaculated the judge, "I must compliment you on the wonderful proficiency of your scholars in algebra!











"That aint a fraction! It's six thousand one hundred and fifty-one!' yelled the boys!

"Mr. Teacher," said the judge, "it would be ungenerous on my part, and imply an unworthy suspicion as to your efficiency, to put these extraordinarily bright children to additional tests; I would not-I could not—Oh! excuse me! There's Brown! I have important business with him. Sheriff! I want to see you!" and he left. Some days afterward

a boy was brought before Justice Southfield for throwing stones in the street. "John," the street. said the judge sternly, " were you the boy that laughed in school on Monday while I was working that problem?" "Yes, sir!" was the reply. John got thirty days .- Richmond Co. Guzette.

#### LITTLE BROOK.

"O stay, little brook! Why hasten away? The banks here are green,

How are you to know What dangers await The path you would go? Take heed ere too late.

The blossoms are gay.

I fear nothing, child, When duty is clear; God's hand shapes my course:

Good - bye to you, dear. J.F.S.

#### TIME.

Sixty seconds make a minute; Use them well, you will win it. Sixty minutes make an

hour; se them well while in your power.

#### THE OLD BROWN SCHOOL-HOUSE.

BY REV. DWIGHT WILLIAMS.

In memory's hall hangs the nicture. And years of sad care are between: It hangs with a beautiful gilding, And well do I love it, I ween. It stood on a bleak country corner, But boyhood's young heart made it warm, It glowed in the sunshine of summer; Twas cheerful in winter and storm.

Oh, gay were the sports of the noontide, When winter winds frolicked with snow; We laughed at the freaks of the storm king, And shouted him on all aglow. We dashed at his beautiful sculpture, Regardless of all its array; We plunged in the feathery snow-drifts, And sported the winter away.

We sat on the old fashioned benches. Beguiled with our pencil and slate; We thought of the opening future, And dreamed of our manhood's estate.
Oh, days of my boyhood, I bless ye. While looking from life's busy prime; The treasures are lingering with me I gothered in life's carly time.

Oh, still to that bleak country corner Turns my heart in weariness yet, Where, leading my gentle young sisters, With youthful companions I met;

ciation. Reports of treasurer, showing balance in hand of \$56.89, and of library committee, showing total number of volumes in library to be 364, and recommending that the School Journal be supplied to members for 30 cents, and Educational Monthly for 45 cents per annum (balance to be paid out of funds of Association), were then read and adopted. Mr. McIntyre then read an able and interesting essay on tributing much to the success. The enthusiastic reception which was "The Teachers' Association in the past," in which he gave a brief still retains the confidence of the teachers of the Co. of Norfolk, and that adopted. Mr. McIntyre then read an able and interesting essay on sketch of its first organization, its ups and downs, sometimes dying a natural death from lack of interest displayed by the teachers, then natural death from lack of interest displayed by the teachers, then starting again with renewed vigor to meet, perhaps, the same fate until the present one was organised. After a short discussion between the older members the meeting adjourned until 2 p.m. The first hour in the afternoon was taken up by general business, after which Mr. A. H. Morrison, of Galt, read a masterly and eloquent address on "Competitive Examinations," in which he condemned the system from beginning to end, claiming that its results were unjust alike to teachers and pupils. This provoked a warm discussion in which, although all paid a high tribute to the literary excellence of the essay, yet the essayist's strong condemnation of the system was strongly criticised. A very lengthy and well-prepared essay on "Overwork in Public Schools," by J. E. Bryant, M.A., of Galt, was read, but owing to the lateness of the hour

could not be finished or discussed. In the evening the members were could not be inished or discussed. In the evoling the members were entertained to an instructive and interesting debate on the question: "Resolved that it would be of greater advantage to the cause of higher education to have the tuition free," in which the affirmative was sustained by Messrs. Lewis and Brown, and the negative by Messrs. Chaptained by Messrs. Lewis and Brown, and the negative by Messrs. Chapman and W. Linton. During intervals in the debate music, readings, &c., were furnished by Misses Ziegler, Weaver, Hunter, and Bechtel; and Messrs. Groh, Brown, Morrison, Chapman, Ziegler, Moyer, and Winter. Faturday, 9.30 a.m.—Opened with the election of officers, as follows! President, J. Suddaby; Vice-President, Wm. Linton; Sec.-Treasurer, Sylvester Moyer; Executive Committee, Misses Ziegler, Scott, and Messrs. Lewis, McIntyre, Ballantye. Mr. F. McKinney introduced the subject of "Geography," showing how he would convey to the minds of his pupils practical ideas of the physical features of the earth by utilizing the resources at hand, viz.: the physical features of the locality, as hills, rivers, ponds, &c., if possible, thus progressing from the known to the unknown. The Committee on "Promotion Examinations" then reported, "That owing to circumstances beyond our influence the uniform Promotion Examinations have to be discontinued for the present," and after some discussion the report was adopted. for the present," and after some discussion the report was adopted.

Mr. Whitmer then illustrated his method of teaching "Reading" (3rd Book), followed by an interesting discussion taken part in by a number of the members present. After the election of Mr. Lewis, of Ayr, as delegate to the Provincial Teachers' Association, Mr. Suddaby dealt with the Subjunctive Mood in an effective manner, and spent some little time in replying to queries by members present. On motion the meeting adjourned until 1.30 p.m. In the afternoon, a motion of condolence to the friends of the late W. S. Brown, and a motion of regret at the retirement of Mr. S. Eby from the profession were passed, and the managing committee's report on programme for next meeting read and adopted.
In the absence of Miss Armstrong, her essay on "Physical Culture" was read by the secretary, and a vote of thanks passed to Miss Armstrong for preparing it. After routine business the Association adjourned to meet on the third Friday and Saturday in September.—Chas. A. WINTER, Sec.-Treasurer.

Thris my heart in weariness yet,
Where, leading my gentle young sisters,
With youthful companions I met;
I cast a fond glance o'er the meadow;
The hills just behind it I see:
Away in the charm of the distance,
Old school-house, a blessing on thee!

\*\*Cutcliers' Association was held in the Brick School House, Aloxandria, on Thurstand And Street and St W. D. JOHNSTON, Secretary.

NORFOLK.—The Norfolk Teachers' Association met in the High School building, Simcoe, on the 17th and 18th inst. A splendid programme was prepared, chiefly through the efforts of the Secretary, Mr. Cron. The meeting was one of the most successful ever held, Mr. McLellan conhe has lost none of that well-deserved popularity, notwithstanding the fierce and unjust attacks which have been made upon him by his unscrupulous enemics in the city of Toronto. There is no doubt but that at the present moment there is no more popular man among the teachers of Ontario than Dr. McLellan, and all rejoice that his health has so far Ontario than Dr. AlcLellan, and all rejoice that his health has so far recovered as to permit his visiting the Associations again. The meeting was called to order by President Smith, at 10 a.m. After some business, Mr. S. C. Woodsworth took up "Uniform Promotion Examinations." He presented his scheme in a clear manner, and was attentively listened to by all present. After a few remarks from Dr. Woodsworth, Mr. Grant, and Dr. McLellan, S. F. Passmore, B.A., read an essay on the "Study of Classics," giving the history of the language and the connection of our tongue with the Latin. Afternoon Session—Mr. Courtland presented "Illusions of History" in his usual clear style, showing that many of our most beautiful stories in Instory are without foundation. In. McLellan gave "Grammatical Analysis" in a clear and forcible manner, introducing some new features, which will aid the teacher in this very important but much neglected study. Miss Watts read "Miles Standish's Courtship" in her usual happy style. Dr. McLellan followed with "Reading in School and How to Improve It." Referring to the importance of the subject, and to the necessity of teachers becoming good readers, and that a higher standard will be required from students at the Normal Schools in the future. Evening Session—The large Mechanics Hall was crowded to hear the lecture by Dr. McLellan; all were well pleased with the treat which they received. Rev. Messrs. Croll and Brethnour gave short addresses. A splendid musical treat was given by the Baptist Choir, under Mr. Kitchen. Saturday afternoon—A resolution was passed to introduce Uniform Promotion Examinations, after some discussion on the subject Dr. McLellan explained the German or Kindergarten system of teaching the simple rules of arithmetic, illustrating his remark by the use of diagrams, cubes, &c. If the plan mapped out by the Dr. were followed there would be fewer failures in teaching the subject. Mr. S. C. Woodworth, S. M. S., taught a class of the Fourth Readers a literature lesson. Some parts of the teaching should be adopted by every teacher, such as the frequent use of the black-board; giving a synopsis of each verse in prose and correcting them in a narrative; quoting similar passages from poems gone over before. The whole method was calculated to make the pupil read and examine the lesson attentively. At the close of the morning session a vote of thanks and confidence was given Dr. McLellan. The afternoon session was spent in discussing the Umform Promotion Examinations and in the election of officers. S. C. Woodworth, Socretary.

#### REVIEWS.

POPULAR SCIENCE MONTHLY, MARCH. New York, D. Appleton & Co.—This magazine is always specially acceptable to teachers. Its pages are full of scientific facts connected with every day life, which can be interwoven with the teaching in all classes of schools, and which will greatly increase the interest of pupils in their studies. Among many excellent articles we name those most directly interesting to teachers. "To eat and to be Eaten," by Chas. Morris, gives many striking illustrations of the fact that one portion of nature supplies food for another: "Longevity of Plants": "Gulf Stream and Panama Canal"; Recent wonders in Electricity. Two articles will be intresting to Canadians on account of their authorship. "Materialism and Positivism, by Mr. Le Seur of Ottawa; and The Machinery of Elective Government, by Professor Goldwin Smith.

OUR LITTLE ONES AND THE NUISERY IS acknowledged by all in England, as well as America, to be the very finest magazine for little children published in the world. We advise teachers and parents to subscribe for it. Boston. The Russell Publishing Co.

The Century. New York. Seribuer a Co. A very excellent portrait of W. D. Howell's, the distinguished American novelist, forms the frontispiece for March. A sketch of this author's life and work accompanies it. In travel there are "From Morelia to Mexico City on Horseback," and "A Ramble in Old Philadelphia." In biography, we cannot fail to be interested in "Lord Beaconsfield," Bryant and Longfellow," and "Leigh Hunt," the latter containing a beautiful portrait. Arthur G. Sedgwick writes a good article on "The Copyright Negociations," a subject of more than usual interest in Canada just now, thanks to Mark Twain. Mrs. Burnett's "Through One Administration," and Mr. Howell's "A Modern Instance, are both worthy of the best attention of lovers of the best light literature written by American authors.

GUIDES FOR SCIENCE TEACHING.—This is No. 12 of the admirable little pamphlet guides issued by the Boston Society of Natural History, and published by Messrs. Ginn and Heath. This relates to Common Minerals and Rocks. These manuals, in the hands of teachers and older scholars, would soon furnish every school with a museum of the natural history of the district in which it is suitable. Two or three of them would form an appropriate padding for a small corner of a teacher's valise during vacation trips.

HISTORY OF THE UNITED STATES.—This is a brief history profusely illustrated by pictures and maps. It is written in a very interesting

style, and is filled with stirring ancedotes calculated to show the bravery and the difficulties of the early settlers in America, and the social customs of the people in the various stages of development. In this way a great amount of information is taught in the best possible way inciden tally. There is less anti-British bombast in it than was formerly found in United States Histories.

MOFFATT'S OUTLINES OF MODELS. This is the best set of Freehand Drawing Copies we have seen. They are carefully selected from the models set at South Kensington; 36 in a pocket. The price is two shillings sterling. London. Meffatt and Paize.

BANNER DIALOGUES. This is a collection of twelve simple dialogues published in Richmond Hill, County of York, at the *Herahl* office, by Mrs. R. P. Hopper. They are free from objectionable language.

The Naedle-work Hand book is a most valuable little manual con taming patterns, with full directions for making them. It describes by diagram, which teachers might explain by the black board, the various stitches and the different methods of drawing, &c.

A DIGEST OF INFINITIVES, PARTICIPLES AND ABRIDGEMENT, AND A COMPLETE OUTLINE OF GEOGRAPHY AND ENGLISH GRAMMAR. BY ALFRED A. CROSIER. J. E. Sherrill, Pub., Danville, Ind., pp. 91. The pamphlet bearing the above title is certainly all it claims to be. The Infinitive and Participle are very fairly treated. The examples are well chosen and are made to explain very clearly the points under discussion. The outline of Geography and Grammar indicates what should be taught about each of the divisions and subdivisions of these subjects, and also the order in which the severaliparts ought to be taken up. The outline also presents an excellent method of review, and affords the pupil, especially, an excellent plan of classifying his knowledge and selecting the important parts from the whole, and of expressing these in a concise manner. The work contains many suggestions by which even the most experienced might profit, and is well suited to give young teachers the kind of aid they frequently need.

#### MAGAZINES.

North Arerican Review, Narch 1882. All our renders are aware of the intense nterest taken in the trial of the assassin of President Garfield, and of reflections made on the forbearance and includence extended to him by the Court. The remark was a common one that suc a proceedings would not be allowed at the trial of a prisoner in my other country than the United States. The first article in this No. of the Review leals with the subject under the title "The conduct of the Guiteau Trial" by Senator George F. Edmonds. The design of the writer is to show that no other course could have been legally adopted than the one pursued and, perhaps, now the feeling is alm st universal that it was better to allow the culprit all the liberty that was granted idea. The Progress of the French Re ablic," sketches briefly the events immediately connected with the fall of the Empire in France and the setting up of the system of govern ment at present in force. In "Trial by Jury," Judge E. A. Thomas argues in favor of the abolition of the system and of the institution of a court consisting of one or three judges by whom cases should be tried "The True Lesson of Protestantism" is clearly written and is designed to show that the philosophy of the future will not be materialistic contrary to the cour out appears to have been taking if late and that religious belief does not concern society in any way but merely the individual, and of course that religious creeds will be abolished. "Law for the Indians" brings out the injustice committed by the States against these original owners of this continent, earnestly pleads that they be granted a status as persons and not merely as words, and compares the treatment accorded them with the course pursued in Canada. "The Fallacies of liomocopathy the word is mis-spelled throughout the article,, by Prof. A. B. Palmer, as strong and honest condemnation of that system of medicine, and concludes by showing that its practitioners and those of what has been called the Allopathic, cannot consult nor work together. The last article by Neal Dow on the "Results of Prohibitory Legislation" shows the condition of the State of Maine before the manufacture of intoxicating liquors was forbidden by law, the improvement that has taken place since, the firm conviction of the people that the law is a right and beneficial one, and the improbability that any change will be made on it except to make it stricter.

THE DAY OF REST.—The No. for February comes out in a new style. None of the articles call for special notice. "Pages for the Young, at the close, may be interesting to children."

# Publishers' Department.

Owing to the Unexpected demand, the January and February numbers of the "School Journal," have been exhausted. Future subscriptions, therefore, must commence with MARCH issue.