

The Canada School Journal.

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BENJAMIN CRONYN, ESQ.,

BARRISTER, &C., &C., LATE CHAIRMAN OF THE BOARD OF EDUCATION,
LONDON.

Few young men of the Province have taken a more active interest in all that tends to the improvement of society and the diffusion of knowledge in their respective neighborhoods, than has the subject of the present sketch, Benjamin Cronyn, Esq., Barrister, of the city of London, and for the last three years Chairman of the Board of Education. Mr. Cronyn is the fourth son of the late esteemed and lamented Dr. Cronyn, Bishop of Huron, and having been born in 1840, he is only in his thirty-ninth year. He was principally educated under the eye of his father, and in the Grammar School of London, of which the Rev. B. Bayley, A.B., was Head Master. He entered Osgoode Hall as a law student in 1859, studied in the office of Mr. Beecher of London, and in that of the Hon. Edward Blake, became Attorney in 1865, and was called to the Bar in 1867.

Mr. Cronyn has taken an active interest in every movement that has had for its object the improvement and progress of the city, whether as regards its moral, material, charitable, or educational interests. He has already filled some of the highest civic offices in the gift of the people, and his administration has in every instance been characterised by energy, sound judgment and discriminating economy. For four years, from 1872 to 1875 inclusive, he was a member of the City Council, and for the last two he filled with dignity and marked ability the office of Mayor, and gave in his administration of civic affairs the highest satisfaction, both

to the body over which he presided, and to the municipality generally. If his popularity in office may be taken as the measure of his administrative talent, then Mr. Cronyn may be fairly held as a young man of great promise, and one who will yet, if spared, be called to serve his country in even higher walks than any of those which his fellow-citizens have hitherto bestowed upon him.

But it is rather in the part he has played in connection with the education of his native city that we desire to notice his public career. Upon retiring from the City Council, he accepted from the Board of Aldermen the office of a High School Trustee, and was at once appointed Chairman of the united Board of Education for the city. His zeal for the good of the public, his activity

and breadth of views led him at once to the consideration and adoption of such measures as would secure the improvement of both the High and Public Schools of the city. Though the London Grammar School is one of the oldest institutions of the kind in the Province, and though it has been under that experienced teacher and accomplished scholar, the Rev. Benjamin Bayly, A.B., T.C.D., for the last thirty-seven years, yet it never enjoyed what may be called a permanent home until Mr. Cronyn and a few enterprising gentlemen, members of the same Board, took up the question with determination, and by tact and judgment carried it to a successful issue.

The Grammar School Block, as it has been called, comprised a square of five acres in the very centre of the city. By former action of the Board, three-fourths of this block had been leased for

a long term of years, and is now covered with substantial brick buildings. The city, with the sanction of the Dominion Government, granted a beautiful site for a new High School on the old military reserve, and the Ontario Government permitted the sale of that portion of the old Grammar School block still remaining in the hands of the Board, and by these two circumstances combined, the trustees were enabled to erect and equip one of the finest High Schools to be found in the Province of Ontario, and all this without any expense to the city for the erection of the building. Perhaps ere this reaches the readers of the JOURNAL, the institution will have taken rank as a Collegiate Institute, as every particular required for claiming this distinction as prescribed by the laws and regulations has been fully complied with, and the application made to His Honor the Lieutenant.

Governor for the granting of this title, and the advantages that accompany the distinction.

While giving due credit to all the members of the Board of Education who joined heartily in bringing this great work to a happy and successful completion, we believe that not one of his colleagues will hesitate to acknowledge that Mr. Cronyn has been the life and soul of the Board in every effort put forth to accomplish the object aimed at. A few months before he retired from office, Mr. Cronyn had the pleasure of seeing the High School, with his old and esteemed teacher, Mr. Bayly, at the head of it, removed to the new building. Since this notice was written, Mr. Bayly has departed this life full of years and honors, and deeply regretted by the whole community. We hope a useful and honor-



able career is before the London High School, and that with extended accommodation and improved facilities for teaching, a corresponding advance will be made in the quantity and quality of the work done, and that the advantages to the community may be fully commensurate with the expectations of the promoters, with the additional expenditure which has already been incurred, and with whatever may be the increase in sustaining it in efficiency in the future. Mr. Cronyn's name must stand imperishably connected with the securing of this beautiful building—a valuable addition to the public institutions of the city—and we have no doubt that the sense of right and justice which ultimately shapes the people's verdict will ascribe to Mr. Cronyn, and those who acted with him, that honor and credit to which they are entitled for their disinterested efforts on behalf of the city and the cause of education.

Equally considerate and active has he been in promoting the cause of Public School education among the people. He has taken a leading part in everything that can add to the comfort and promote the progress of the scholars, and at the same time advance the interests and happiness of the teachers. By the removal of the High School to its new quarters, the class-room accommodation has been greatly extended, and a superior classification obtained. The interest he took in the encouragement of education may be seen in the fact that during the time he held the office of Chairman of the Board of Education, he presented annually prize books in every class, to be competed for by the scholars; in this respect showing himself "a worthy son of a worthy sire."

We cannot, we believe, better finish this brief sketch of Mr. Cronyn's public career than by appending a few sentences calculated to show how much the subject of our notice resembles his father in the deep interest he takes in matters affecting education. The Right Reverend Benjamin Cronyn, D.D., late Bishop of Huron, was born in Kilkenny in 1802, educated in Trinity College, Dublin, obtained his degree in 1822, and during his course took a distinguished position in classics and mathematics. He was prizeman in divinity in 1824, obtained his D.D. in 1855, became Rector in St. Paul's, London, in 1832, and was consecrated First Bishop of Huron, in 1857. From his settlement in this section of country he took a deep and abiding interest in all matters in connection with education. He and his old and steady friends, the Rev. Messrs. Brough and Flood, were, with his Honor Judge Elliott, the principal members of the Board of Examiners for the County of Middlesex for many years. He was also the Chairman of the Board of Grammar School Trustees for nearly a quarter of a century, and even after he had assumed the onerous duties of Bishop of this extensive Diocese he consented, on the elevation of the late Mr. Justice Wilson to the Bench, to act as Local Superintendent—an office which he held until the change of the law in 1871—a change which was introduced only a short time before his death. During the whole period in which he held this office, he generously gave the salary attached to the place to be employed by the Board in the purchase of prize books for the encouragement of the pupils, and the promotion of education in the city. It will thus be seen that in character the father and son much resemble each other, especially in their devotion to the public good their activity in promoting every useful improvement, their unselfishness in the service they had rendered the community, and in the deep interest both, in their time, have taken in the work of general education. Of the one we can only say now—"Peace to his ashes;" and of the other, express the hope that his country may yet hear of his labours and influence in a wider sphere of action.

Gleanings.

PRIMARY WORK IN SCHOOLS.

BY J. J. BALDWIN.

Pestalozzi is credited with the discovery of childhood. Every successful primary teacher makes the same discovery. As a result, our primary schools are becoming models of interest, and their means and methods are adapted to child nature. As flowers unfold amid sunshine and showers, so beautifully do children develop under genial influences.

I. School work should give pleasure.—As motion is in the line of the least resistance, so education is in the line of the greatest pleasure. Not painful, but pleasurable, are the processes of development. The discovery of this pervading principle is working

an educational revolution such as the world has never before known.

The old education was painful and repulsive. Studies were considered beneficial in the proportion that they were distasteful. The new education inspires voluntary and glad effort. Adaptation and interest are cardinal. The old education consisted largely of unmeaning task work, which tended to discourage and repress. The new education leads the pupil to discover and apply, and thus fills him with boundless enthusiasm.

II. Play is an educational process.—It is the wild spontaneity of child activity. Properly directed, the child plays up to work. To thus direct play is the mission of the kindergarten. This can be done largely in every family and every primary school. The play songs cultivate a love of music. The construction blocks lay a foundation for inventive drawing. The exercise plays develop strength and grace. The mother and the teacher who understand childhood will need no hints. There is a boundless field from which to choose.

III. Hand Culture.—The child is incapable of abstract study. He deals with the concrete. (Ideas are developed through action. Results are worked out.)

1. *Reading.*—The object is examined. The name is spoken and placed on the board. The pupils find the word on the cards, print it on the board, write it on their slates. Words are combined and read. Lessons are written or printed on board and slates. Words are spelled and sentences written. Pictures are drawn. Objects are collected and brought to class. Constant activity and endless change characterize preparation and recitation. Hand work leads up to mind work. The pupils read well because they understand what they read.

2. *Drawing and Penmanship.*—The fact that every child loves to make pictures indicates a great educational law. Drawing educates the hand, develops taste, aids in the acquisition of knowledge, and is of great practical value. It keeps pupils interested and busy.

3. *Arithmetic.*—With small sticks, the numeral frame, weights, measures, etc., each pupil performs the operation. The board and slate are used without limit. The children are delighted because they can do as well as understand the work.

4. *Geography.*—With a board and some clay and sand, the continents, the divisions of land and water, etc., are constructed. Maps are drawn on slates and board. The globe and outline maps are made to do good service. The divisions of land and water are all made on the playground. A solid geographical foundation is laid in actual experience.

5. *Other branches* equally engage the hand. Indeed, hand exercise is the secret of success in primary school work. The little ones are overflowing with activity. Let this activity be so directed as to keep them interested and busy. At the same time let it be so directed as to lead to knowledge and culture.

IV. Voice Culture.—Speech and song are divine. All children delight in vocal effort. The teacher so manages as to make the vocal exercises educational. The child becomes an excellent reader, a charming conversationalist, a sweet singer. The teacher takes lessons from the children while at play, and trains them to be equally natural and eloquent in the school-room. Every lesson is full of meaning and full of action. Kindergarten has taught us invaluable lessons, true to nature.

V. Body Culture.—Play, spontaneous activity, prepares for work—determined activity. Play is the best exercise for children, yet calisthenics are indispensable. (1.) These exercises educate the body, give the children better command of the body. (2.) They are hygienic. By fostering a good circulation of the blood they make the brain a better instrument for mental effort. (3.) They promote order by working off the restless activity of childhood. (4.) They tend to fit for citizenship. Pupils learn to act in concert, and thus prepare for the rhythm of society. They learn exact and prompt obedience to rightful authority, and are thus prepared for citizenship.

These exercises need to be frequent and varied, calling into activity every muscle. They must be adapted to the strength of the pupils, and must be so managed as to delight the children.

VI. Action and Culture.—The following great educational principles pervade all primary work:

1. All education is self-education.
2. Personal and persistent effort is the condition of growth.
3. Child culture consists largely in well-directed physical activities.
4. The chief office of the teacher is to stimulate and direct child effort.

The day for parrot work, for stuffing, for mere book teaching, for stultifying and dwarfing, for lifeless, repulsive schoolrooms is forever past. Now, our little ones begin their education with glad activity. They see, and hear, and taste, and handle. They feel, and choose, and do. They begin with nature and oral teaching, and from ideas are led to words, from words to definitions, then to books. They tread surely, because every step rests on a rock of personal experience. They move on cheerily, because each lesson opens up new beauties. They grow strong, because each step is a victory.—*American Journal of Education.*

EDUCATIONAL POSTULATES.

The first duty of the State is self-preservation. General intelligence is the only means by which it can be obtained. All homes are not centres of intelligence, therefore schools are necessary in order to supply the deficiency. Children should grow up intelligent, therefore they should attend school.

Parents have no right to destroy the security of the State. If they prevent their children from attending school they must be judged and treated as open enemies of the commonwealth. No single individual has any right to set himself against the public good. The law has a right to say to such parents: "You have no right to destroy public prosperity," and it has a right to take children from such families and place them in school, and require them, when there, to obey its reasonable requirements. Schools are necessary for general security, and therefore should be paid for by all.

Public security is just as much more valuable to the rich man than to the poor man, as his property is larger; therefore he should pay a proportionately larger tax, and this whether he has children or not.

Higher education is not a private luxury, but a public necessity; therefore the State is bound to encourage it to the extent it is demanded.

As good teaching is necessary to the well-being of the State, it is important it should secure the best talent that can be had, for if it must have good schools it must have good teachers. They must be educated, and the means of obtaining this special training for their work must be supplied by the State. Normal Schools, supported by the State, are as much a necessity as common schools and common school teachers, supported by the State.

Teachers should be required to be prepared before they enter the school-room, but the State must also be prepared to support them after they do enter it. The demand of the State should be for those only who are of mature age and qualified to guard its interests. All who are thus qualified should be encouraged to remain in the profession, and the pay should be sufficient to render it an honorable calling, desirable in the estimation of the most talented and ambitious scholars.—*Barnes' Educational Monthly.*

HOW TO WRITE.

Few people ever learn to write with telling effect. If they would just plainly say what they think, without roundabout phrases, and without being haunted at every step with the thought of saying fine things, and the necessity of moving on stilts in order to show style, they would be more interesting and effective. William Cullen Bryant once made the following sensible remarks to a young man who had offered an article for the *New York Evening Post*:

"My young friend, I observe that you have used several French expressions in your letter. I think if you will study the English language, that you will find it capable of expressing all the ideas that you may have. I have always found it so, and in all that I have written I do not recall an instance where I was tempted to use a foreign word, but that, on searching, I have found a better one in my own language.

"Be simple, unaffected; be honest in your speaking and writing. Never use a long word when a short one will do as well.

"Call a spade by its name, not a well-known oblong instrument of manual labor; let a home be a home, and not a residence; a place, not a locality; and so on of the rest. When a short word will do, you always lose by a long one. You lose in clearness; you lose in honest expression of meaning; and, in the estimation of all men who are capable of judging, you lose in reputation for ability.

"The only true way to shine, even in this false world, is to be modest and unassuming. Falsehood may be a thick crust, but in the course of time truth will find a place to break through. Elegance of language may not be in the power of us all, but simplicity and straightforwardness are.

"Write much as you would speak, and as you think. If with your inferior, speak no coarser than usual; if with your superior, speak no finer. Be what you say, and within the rules of prudence. No one was ever a gainer by singularity of words or in pronunciation. The truly wise man will so speak that no one will observe how he speaks. A man may show great knowledge of chemistry by carrying bladders of strange gases to breathe; but one will enjoy better health, and find more time for business, who lives on common air."

Sidney Smith once remarked: "After you have written an article, take your pen and strike out half the words, and you will be surprised to see how much stronger it is."

THE EMOTIONS OF CHILDREN.

A little child eleven months old was pleased to hold the nursing-bottle, and to eat various foods; he loved to play; he showed affection for his parents, and made some difference in this respect between different persons that he liked. He showed aversion to some inanimate objects (hammer syringe); for a little black barking dog; and for the caresses of a neighbouring child seven years old, who had played him more than one trick. The organization of children being more feeble than ours, their motions are short-lived, and things the most disagreeable or painful do not long remain so.

Animal Sympathy.—Children love animals, but in a purely egotistic fashion. A child six months old, left alone with a turtle, half tore off one of its feet, and when his nurse came was pulling at another with all his might.

Human Sympathy.—One child a year old, coming home after a month's absence, paid no attention to a cat and dog that he knew well, but with a smile reached out his arms to an old servant. Children have only a germ of true sympathy. A little child four years old lost one of his dearest companions. The father of the dead boy took him on his knee while sobbing. The child escaped, frisked about for a little, and, coming back to the afflicted father, said, "Now Peter is dead, you will give me his horse and drum, will you not?" Sometimes more sensibility is manifested; a baby of sixteen months would cry to the shedding of hot tears on seeing his father take a shower-bath. The same child at the same time was the terror of cats.—*From "The First Three Years of Childhood," in Popular Science Monthly for March.*

—Col. Labranche, commanding the 65th Mount Royal Rifles, has written a letter to the *Montreal Herald* suggesting that military drill should be a part of every Canadian's education. In speaking of the letter the *Carlton Place Herald* says: "We consider this subject a matter of great importance, and would recommend its most careful consideration to every friend of education. The country is at a good deal of expense in the training of a militia force; but a much more valuable—at all events a very valuable—amount of training could be obtained at little or no expense, if proper arrangements were made in the public and other schools. Boys like drill. It is as good as play to them as an amusement, and better than play as a means of developing every muscle in due proportion, without disparaging any, for the advantage of others, in the man which occurs with many descriptions of exercise. Drill, to use the appropriate military word, sets a man up, and, in one great particular, confers upon the veriest lout the external bearing of a highly bred man. This being the case, there appears to be no reason why boys at school should not be drilled as part of the educational course."

TO DIE IN THE LAST DITCH.—Hume says that the origin of this phrase may be ascribed to William of Orange. When Buckingham urged the inevitable destruction which hung over the United Provinces (Holland), and asked William if he did not see that the Commonwealth was ruined, the prince replied, "There is one certain way by which I can be sure never to see my country's ruins, —'I will die in the last ditch.'"

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The SCHOOL JOURNAL is now the best medium in the Dominion of Canada for reaching Teachers and Trustees. As a proof of the rapid increase of its circulation ~~137~~ 1100 NEW SUBSCRIBERS have been received from Nova Scotia in January, and 550 FROM NEW BRUNSWICK in February.

TORONTO, MARCH, 1879.

—We are pleased to announce to our friends and readers that the JOURNAL is now receiving a support far exceeding the most sanguine expectations of its founders. It commenced less than two years ago with a few hundred subscribers, and although its patronage, during the first year of its existence, was chiefly confined to Ontario, the subscription list increased very rapidly. It is now largely patronized by the High and Public School Teachers, Inspectors and Trustees of Ontario, and recognized in all the different Provinces as a Dominion instead of a Provincial organ. Nova Scotia has contributed over 1,100 new subscribers since the beginning of the year, and New Brunswick over 550 during the month of February. The province of Quebec gives it a liberal support, and Prince Edward Island, Manitoba and British Columbia are contributing their quota to augment the subscription list. We accept the number of patrons, now over 6,000, as an indication of increasing interest in educational affairs, and a manifestation of the appreciation in which the JOURNAL is held by teachers and friends of education.

THE ONTARIO SCHOOL BILL.

The Minister of Education for this Province has introduced a Bill into the Legislature amending the School law in various important particulars. With some of the proposed amendments we have no fault to find, and therefore it is unnecessary to dwell upon them; with others we are the reverse of satisfied, and cannot avoid the conviction that, unless the Bill is very much modified in its progress through Parliament, its operation will be fraught with great danger to our School system.

Before saying anything about the provisions of the Bill to which we object, it may not be amiss to call attention to what we regard as a serious defect. We are not, at this stage of our political history, called upon to discuss whether voting by ballot is to be preferred to open voting or not. What does call for consideration is the fact that, in all our political and municipal elections, voting is now carried on exclusively by ballot, and it seems to us only reasonable that the same method should be pursued as far as practicable in School

elections. No one would be so unreasonable as to demand that voting by ballot should be introduced in rural School sections, for instance, because the smallness of the vote and the great number of sections would make the expense enormously great. But in cities and towns where intimidation can be and often is, practised, the ballot ought to be used. In this respect there should be no distinction made between Public and Separate Schools, and we regret to see that, at this writing, there seems to be little chance of securing the passage of any amendment in favor of the ballot in connection with either.

To us the most objectionable feature of the Bill is the section putting a veto on School Board expenditures in the hands of City and Town Councils, provided the veto is sustained by a two-thirds majority in each case. We admit that the powers vested in School Boards under the Act as it now stands are very arbitrary, but we cannot recall any instance in which they have been abused. Take the case of Toronto, for example. Every year there is a great outcry during the municipal elections against the expenditure incurred in the erection and enlargement of school houses, and if this provision becomes law there can be little doubt that two-thirds of the City Council will be ready to vote at any time to keep down such expenditures. And yet the school houses in this city do not furnish anything like the amount of accommodation prescribed by law for even the children in actual attendance, to say nothing of those who ought to be compelled to attend school under the compulsory clauses of the Act. As the population of a city or town increases the school accommodation must increase with it, and the Minister of Education, if he does not consent to modify the section in question, will find that in many places where the accommodation is now merely straitened, it will soon become utterly inadequate, and the law on this point will become a dead letter, as it virtually is now in Toronto. Why introduce one legal provision to destroy the effect of another? If City Councils are willing to furnish the funds required by the School Boards for the erection of school houses, then there will be no inclination to exercise this veto power; if they are not willing to do so, then they should not be allowed to exercise it until the accommodation is ample.

We have also a very decided objection to the section of the Bill authorizing the Department to hand over library and prize books from the Depository in payment of the 100 per cent. addition to the sums invested in such books by trustees. Since 1874 School Boards have had the option of purchasing their books wherever they pleased, and we submit that there is no reason for taking away from them now the liberty of doing so. No evil effect has followed the change of system then inaugurated, unless it be the accumulation of stock on the Depository book shelves. If such accumulation is the reason for introducing this section into the Bill, then we submit that a better and more obvious remedy would be to adapt the purchases to the sales. The expediency of maintaining the Depository in existence at all has been often discussed in Parliament, and the Minister of Education has more than once stated that he had the whole matter under consideration. While it is in this position it would surely be most

unwise to take any step, the effect of which would be to force trustees back into the position they occupied before 1874. It may be said that they can still invest their own money with booksellers. But this would involve the necessity of making two selections—a piece of extra work and trouble which School Boards will not be likely to undertake.

There are other provisions to which, if space permitted, we would like to take exception. The only one we shall at present refer to is that which disqualifies High School and County Model School masters from acting as County Examiners. We can easily understand the Minister's anxiety to prevent the dissatisfaction arising at times from the examination of candidates by the men whose students they are, but unfortunately while this clause will not remedy the evil complained of, it will greatly cripple many County Boards. A large proportion of the candidates for third class certificates are now taught by Public School masters who are still to be eligible for the position of examiner, while those who receive their training in Model Schools are not preparing for the non-professional examination at all, and those who attend High Schools are candidates, not so often for third as for second class certificates. We trust the Bill will be amended to a considerable extent, either by the Minister or the Assembly.

THE KINDERGARTEN.

At the last meeting of the American Frœbel Union, held at Cambridge, December 30th, 1878, the following resolutions were unanimously passed:

Resolved, That in the opinion of this meeting the system of education for children between the ages of three and seven years is of the utmost importance.

Resolved, That the kindergarten is well suited to the education of children between the years of three and seven.

Resolved, That every endeavor be made to extend the knowledge of the kindergarten system, and, as fast and as far as may safely be done, to secure its adoption by public-school boards.

It is only a question of time. Kindergarten must be the basis of the great educational structure. It seems strange that men should go on whitewashing and patching the upper stories without seeming to care whether the foundation is secure or rotten. Master hands must build the walls, but any apprentice may form the foundation. This cannot last long.

The words "as may safely be done" refer to the fact that it would be dangerous to the kindergarten system to expose it to the merciless blundering and conceited ignorance of many school boards. So many "improvements on the system," and remarkable adoptions of it would be made, that its identity would in many instances be lost. A Blackfoot Indian knows as much about the telephone as the average trustee does about the kindergarten, and the savage's experiments with the one would be nearly as satisfactory as those of the educational brakesman would be with the other. Inspectors and earnest and intelligent teachers must read, and think, and investigate on this wonderful work. By doing so they will fit themselves

better for their high avocation, even if they never become kindergarteners.

A LACK IN OUR LANGUAGE.

Two magazines, "The Atlantic Monthly," and "The Ohio Educational Monthly," have lately discussed the necessity for a new personal pronoun to represent the third person singular number and common gender. This is an old subject. Who has not felt the need of such a pronoun? How awkward it is to have to say "He or she," "His or hers," "Him or her," when one word might do for each couplet. Various words have been suggested to supply the deficiency. There is a growing tendency to make the plural form at present in use do double duty. This is the opinion expressed by both the magazines named. The "Atlantic" says, "As I perceive the 'aching void' in our language that a common-gender pronoun should fill, the thought comes to me, 'Why not make it correct to say, If Mr. and Mrs. Smith will come out on the train, I will meet *them*,' meaning one of the two, parsing them as singular number, common gender? My argument is this: We use *you* in both singular and plural, and our pupils understand by the context which number is meant. A scholar parsing 'Mary, study your lesson,' says that *your* is singular because it refers to a singular antecedent; that in 'Boys, study your lessons,' *your* is plural because it refers to a plural antecedent. Then why not *they*, used of course with a plural verb, in the singular, common gender? It would be easy to adopt this idiom, for we are continually struggling against its use, and how delightful it would be for once to make wrong right!" The following sentence is given in the November "Atlantic" to show the want of such a pronoun: "Let every brother or sister examine himself or herself, and looking into his or her heart, find out his or her besetting sin, and resolutely cast it from him or her." In the December "Atlantic" another contributor calls attention to the fact that in 1872 some grammarian proposed *hesh*, *hizer*, *himer*, for the needed pronoun, saying in his circular, "Should this addition be acceptable to persons speaking and writing the English language, I will subsequently propose a number of new words, as analogous improvements." Another contributor in the same number says, *che*, *cher's*, or *cher* was proposed in 1851 or 1852. "The Ohio Educational Monthly" gives the following additional suggestions: "About thirty years ago Hall, in his Encyclopædia of English Grammar, proposed *ne*, *nis*, *nim*. Some one else has suggested *e*, *es*, *em*. All such suggestions are worthless. We say this notwithstanding the fact that we do not class ourself among those who declare that no such pronoun is needed, who claim that *he*, *his*, *him*, must do the duty of the needed pronoun. We touch upon this subject for the purpose of calling attention to the fact that English writers as well as conversationalists have for more than a hundred years been engaged in introducing a mode of speech purposely or unconsciously adapted to meet the difficulty, not by adopting new words, but giving an extension to old ones. We predict that before another hundred years shall be past this device, now considered ungrammatical, just as *its* was once so considered, will be an accepted mode of speech. We

use, by a figure of speech called ——— the plural pronoun *you* to refer to one person as well as to two or more. By a corresponding figure of speech, *they*, *their* or *theirs*, and *them*, are also used in reference to one person as well as to more than one. We see then that these words are to do the duty of the needed pronoun as well as their own original duty. Sam. Richardson, in his noted novel, "Clarissa Harlowe," (1748) said, vol. 8, p. 95, "triumphing in it, and leaving behind her every one less assured of happiness, tho' equally certain that the lot would one day be their own." J. Richardson, in 1734, wrote in his work on Paradise Lost, "Whoever Reads without being the better for My Labour in Some Degree, 'tis Their Own Fault, though that they are not More Benefitted may be Mine; not from any Defect in my Will, but Capacity." Not long ago the present Bishop of Exeter wrote, "When a man or a woman in after life comes to use their knowledge, they will find that the knowledge is really of no use unless they are able to apply it absolutely without assistance, and without the slightest guidance to prevent them falling into the most grievous mistakes." Such a use of *they*, *their*, and *them*, is by all grammars now pronounced wrong, but popular speech and the practice of writers is destined to gain the day, and the grammars of a hundred years hence will doubtless admit this use. All such innovations are of slow but sure growth. "Is being built" has fairly fought its way against the grammars into popular speech and writing. Let us hear no more of a new pronoun, but let our bold writers and speakers add their influence in adding a new use to an old pronoun."

TEACHERS' SALARIES.

A rich nobleman once ordered a picture from a celebrated painter. The picture was in due time finished, and the bill sent in. The sum asked was large, though not even then a fair amount for so fine a work. The nobleman went in haste and anger to remonstrate with the artist for his lack of conscience in charging such an exorbitant price. "Why," said he, "you only took seven weeks to paint it." "True," replied the painter, "but you forget that it took me seven years to learn how to paint that picture in seven weeks." There are a few trustees occasionally, whose intelligence is of an inferior order, and who are therefore unable to appreciate fully the nature of the work done by teachers, who talk as though teachers were overpaid. They forget that the teacher has to spend years in preparing for his work. A boy who goes into a warehouse on leaving school at the age of fifteen, gets a small salary at once, which is regularly increased year by year. The boy who intends to be a teacher receives no remuneration while passing his apprenticeship. He has to continue at school, working hard until he is at least eighteen, before he can receive any certificate at all. He has then to put in a term at a County Model School, usually away from home. After this he must go to a Normal School before he can obtain a permanent certificate. During all these years the business apprentice has been in receipt of a salary, yet some trustees would expect the teachers to work for less than the business apprentice of the same age receives. They do not consider the nature of the

work done, or its wearing effects on the system. They merely count the hours taught, and think the teacher should be satisfied if paid for these hours at the rate of a common laborer.

The doctor or the lawyer spends perhaps an hour in attending to a case, and charges for his work a sum equal to that earned by the teacher in a week. They are not overpaid for their work. The teacher is underpaid. He had to spend nearly as much time in preparing for his profession as they did in fitting themselves for theirs. His work requires talents of an order quite as high as theirs. His reading should be more extensive than theirs. Why should so great a difference exist in the remuneration received? The cause of the difference is this: the teacher is the servant of the public, the doctor and the lawyer are its masters. It is to be hoped that as education produces its results on the masses, public opinion will become more enlightened, that public officers may be treated justly if not generously.

WHAT DOES AUTHORIZATION MEAN?

Everybody knows the meaning of the *positive* side of authorization. If a book is authorized it may be used in any public school. This needs no explanation. What the *negative* side means is not so clear. "None but authorized books must be used." This gives rise to no difficulty in those subjects for the teaching of which any book or books are authorized. How is it, however, if no book is authorized in any subject?

If a subject is on the official programme, and no book is specified for use in teaching it, it seems clear that the one regarded by the teacher as most suitable may be used. What the Department has not fixed may be decided by the local authorities. No copy-books, for example, are authorized, but this does not indicate that none are to be used. The teacher recommends a series to his board, and, having obtained their sanction, he introduces it into his school. All that is necessary is that each pupil should be supplied with a book of the same series. Uniformity of text books is essential in each school, even if not deemed desirable for the whole province.

Contributions and Correspondence.

THE PUBLIC SCHOOLS IN CALIFORNIA.

BY PROFESSOR ANDERSON, SANTA CRUZ.

I.

In order to convey a tolerably clear idea of our public schools it seems necessary to give first a brief outline of the main features of our school law.

The State is divided into school districts, the power of creating new districts being vested in the Board of Supervisors (County Council) of each county. Each incorporated city and town constitutes a district, but may be subdivided by the legislative authority thereof. In each rural district there are three trustees, one of whom retires each year. Should, however, no election be held on the day prescribed by law, or should the office of trustee become vacant for any other reason, the vacancy is filled by the County Superintendent, who nominates whom he pleases. There is not

much danger, however, of this enormous power being abused, as the Superintendent is himself elected by direct vote of the people. In towns and cities the number of trustees varies, according to the provisions of the charter of incorporation, and in some cities, as in San Francisco, the whole Board retires at the end of two years. This is beginning to be recognized as an objectionable arrangement. The trustees, in rural districts, have not adequate powers. They cannot raise a dime for school purposes until a special election has been held in the district, and the majority of their electors have thus signified their acquiescence in the imposition of a tax. The results are that no direct tax being imposed on the people, they are comparatively careless as to the election of trustees, and frequently have to ask their Superintendent to appoint one or more. My first Board all went out of office at the election held after my engagement, one only having been elected, the other two being nominees of the County Superintendent. Yet these three men were building a school house at a cost of about \$21,000. Another difficulty arising from this want of power is the expense it involves. About two years ago a Board needing money for building purposes held an election, and to raise \$2,500 cost them about \$600. That includes election expenses as well as expense of assessment and collection. In most towns and cities the School Board can instruct the "city fathers" to provide them with requisite funds. In San Francisco, however, this year the latter body cut down the school appropriation about \$100,000. There was a demand for retrenchment, and the schools had to bear the brunt first.

The schools are ranked as first, second, or third grade schools, according to the advancement of the pupils, the rank being decided by the County Superintendent. Such is the theory of the law. The practice is not in accordance therewith. None but those teachers holding first grade certificates can teach first grade schools, and third grade teachers cannot teach in any but the lowest (third) grade schools. In towns and cities this provision is probably observed, but in rural districts there is much laxity in that respect.

High Schools are practically ignored by the School law. There is not a single provision for their establishment, nor even a recognition of their existence, save in the clauses stating in what schools teachers of certain grades may be employed. Each town and city is left to its own discretion in establishing and maintaining High Schools, and it reflects the greatest credit on the School Boards that they generally encourage the formation of schools of a higher class than the mere "grammar school." The course of study in the first, second and third grades is prescribed by the State Board of Education, and is as follows:

Primary or Third Grade: First three books of *McGuffey's Readers*.

Arithmetic: Numeration and Notation to millions; Exercises in addition and subtraction; multiplication and division of numbers to 1,000,000, multiplier and divisor not to exceed 9; reduction of mixed numbers to improper fractions, and the contrary; division of fractions having 1 for numerator by whole numbers (divisor not to exceed 9) illustrated objectively; Roman numerals finished.

Object Lessons: Form, color, size and weight; animals and plants; characters of families; Calkins' *Object Lessons* and Wilson's *Manual* being guides.

Writing: First on slate, and then in copy books; local geography.

Composition: Writing sentences containing words selected from reading lessons; descriptions and narrations, attention being paid to punctuation.

The above work occupies three years. In most schools free-hand drawing and vocal music are added.

Second Grade work:—Reading: McGuffey's 4th Reader, reading. Arithmetic: Robinson's Rudiments completed. (*This is a very much simpler work than any of the Canadian Elementary Arithmetics.*) Colburn's Intellectual Arithmetic, first half.

Composition continued; letter writing also introduced.

Grammar: Nouns, Adjectives, Verbs, Adverbs, personal Pronouns, Conjunctions and Interjections, subject and predicate; gender and number, comparison of Adjectives. Synthetic exercises, embracing modifications of subject and predicate to be introduced. The instructions to be given orally.

Geography: Monteith's manual completed; map drawing and use of globe continued.

Object Lessons: Characters of orders, and classification of animals and plants.

Time allowed for work, two years.

First Grade work:—Reading: McGuffey's Fifth Reader.

Arithmetic: Robinson's Progressive Practical and Colburn's Intellectual completed and reviewed.

Physiology: Oral, or Cutter's First Book.

Natural Philosophy: Oral, or Hotze's First Lessons in Physics.

Grammar: Elementary. (Swinton's Language Lessons now generally used for oral instruction.)

Geography: Monteith's larger, map drawing.

History: Swinson's Condensed History of the U. S.

Composition continued, and Swinton's Word Analysis also begun and completed.

Time allowed, two years.

Of course throughout the whole course spelling is taught. The pupils are required to spell all the technical terms introduced in the course of instruction, in addition to the words in the reading lessons. Dictation exercises are also laid down in the course.

Cities that have Boards of Education modify the above course to some extent. The readers, geographies, histories, and arithmetics are the same in all; some use Swinton's new grammars, and I suppose that Hotze has already been everywhere relegated to the oblivion it so justly merits. The above course, however, gives a fair idea of the course in all our schools, except that free-hand drawing and music receive considerable attention. In one school that I visited lately the specimens of drawing on the blackboards were marvels of excellence.

For the administration of the school system we have a State Superintendent, elected by direct vote of the people once in four years. For this, as for all other elective offices, no qualification can be imposed save that of being an elector. It is expected that the State Superintendent will be a practical teacher; but that is only because public sentiment demands such qualifications. It does not by any means follow that he is an eminent "educator." If I mistake not, California has had more than one not in any sense the peer of many teachers. The State Superintendent appoints his own Deputy. There is also a State Board of Education, whose composition is very peculiar. It consists of the Governor of the State, the State Superintendent, the Principal of the Normal School, and the Superintendents of six counties that lie near Sacramento. Their duties are about the same as those of similar Boards in Canada.

In each county there is also a School Superintendent, who, in addition to the usual office work, must also visit each school in his county at least once a year. He is elected by the citizens of the county and holds office two years. In case there are 20,000 inhabitants in his county he must give his whole time to his duties. He must also hold in his county one institute each year, which teachers are compelled to attend, or have their certificate cancel-

led. On the other hand, their salary is paid as though they were actually teaching.

Teachers can receive no salary unless they have either a County or State certificate. Examinations of candidates are held semi-annually, and last three days. The subjects are: Algebra, arithmetic, grammar, composition, geography, history of the U. S., Constitution of the United States and California, physiology, natural philosophy, natural history, orthography, defining (*Swinton's Word Analysis*), penmanship, reading, method of teaching, vocal music, drawing, school law of California.

To carry on these examinations there is a State Board of Examination, consisting of the State Superintendent and four teachers appointed by him. Each county has also its County Board of Examination, consisting of the County Superintendent and of not less than three teachers appointed by him.

The questions are uniform throughout the State, being prepared by the State Board, and forwarded, carefully sealed, to the County Superintendent of each county, to be opened only in presence of at least one member of the Board.

The County Board examine all the papers and grant county certificates, which are valid only in their own county. The papers of all candidates so requesting are sent up to the State Board of Examination, and if found worthy State certificates are also issued. Only females can get a third grade. County third grade certificates run for one year, State certificates for two years, County second grades run two years, while State ones are valid for three years; County first grades are valid for three years, State first grades run four years. For a first grade State or County candidates must receive 85 per cent. of all possible credits, for second grade State 80 per cent., and for third grade 75 per cent. County second and third grades are awarded on the same per centage, but on fewer subjects.

Graduates of our State Normal School receive their certificates without examination, though they are "graduated" on the examination of their own teachers. Graduates of all State Normal Schools are on the same footing.

All certificates may be renewed. After a person has held any kind of first grade certificate for five years he can obtain, without examination, an educational diploma, valid for six years. Holders of educational diplomas obtain a life diploma after they have taught not less than 10 years, on filing with the State Board of Examination certificates of success in teaching.

CLEANLINESS, NEATNESS AND MANNERS IN OUR CLASSES.

BY MISS C. M. CHURCHILL.

(Read before Toronto Teachers' Association.)

"Habit is second nature," runs the old proverb. "Habit is ten times nature," says Landor, and those who know anything of the power of a habit of long standing will admit the truth of his assertion.

Habits are the strands which form the cable, the twigs that make the fagot we call character. To learn how early they acquire form and vigor, we have only to study the children by whom we are daily surrounded; and when we reflect that habits, good or ill, gain strength with time—that the silken tie of the present becomes the iron band of the future—can we over-rate the value of good habits, or slacken our efforts in cultivating them in our scholars?

Our task would be less difficult had we only a work of our own to do; but it too often happens that we have the work of others to undo. Long before the children come before us, their education

in habits and manners has begun, and is far advanced, often in a wrong direction, before a better agency can be applied.

This is especially the case with regard to personal neatness, which includes a clean person and orderly dress.

Cleanliness of person is all but indispensable to improvement. There is a sense of degradation in the consciousness of being dirty that destroys all self-respect. When water is so abundant, clean persons and clean clothing are blessings within the reach of all. Cleanliness of person and neatness of dress go hand in hand, and every teacher having the real good of his scholars at heart will endeavor to cultivate these habits in his class.

But how shall we accomplish our end? Here the old fable of the sun and the wind supplies an illustration to the point. It will be remembered that the stormy wind vainly tried its utmost power to remove the traveller's cloak, which was, however, speedily laid aside under the persuasive influence of the sun's genial rays. So the teacher, by harsh words and threats showered upon untidy scholars, and by imperious notes and messages to their parents, may bring about some change for the better; but success so obtained is but a short triumph, and brings with it a decided loss, viz., the loss of sympathy and co-operation of both children and parents; besides which a hostile spirit will often be aroused, which all our after efforts may fail to allay.

Is there not a better way?

There is no rule of universal application. Many ways must be adopted in dealing with various dispositions. An appeal promptly responded to by *A* is thrown away upon *B*, and an argument that convinces *C* has no weight at all with *D*.

Sometimes untidy scholars can be reached through the parents, and to this end the practice of visiting will recommend itself to us. Our access to the child's home may supply an opportunity of correcting the evil at the fountain head. We can speak without offence of our regret that Johnny should appear to disadvantage from having a dirty face or a torn jacket, and kindly request that a little more attention be paid to his appearance.

If from any cause a teacher is unable to visit, a kindly worded note may bring about the result desired.

An example to the point will perhaps be allowed. A note of remonstrance was addressed to the mother of a shock-headed, ragged urchin, concluding with the regret that so handsome a boy should appear so neglected. The mother's vanity was touched, and the result was a wonderful change for the better in her boy's appearance.

It often happens, however, that a parent who would disregard a personal appeal will be won over by the child. Therefore, it will be the teacher's interest to win over the children to a love of beauty and order, and encourage their development in their personal appearance. We may reach the children through various avenues, as their affection, their love of praise; and even their own self-interest may become our ally. A bright ribbon was bestowed upon a motherless child, conspicuous for general untidiness, accompanied by a few words in praise of her pretty hair. The child's affection was won, and a decided improvement took place, not in her appearance only, but in her hitherto neglected lessons and careless conduct.

Let the scholars understand that posts of honor, as monitor, messenger, bell-ringer, &c., so eagerly aspired to by ambitious lads, are bestowed as a rule upon those of neat and orderly appearance, and they will, by some means, convince their friends at home of the importance of these matters.

Any special effort made to win a teacher's approval should be kindly noticed; a smile, a word of praise, or some small favor, will show our appreciation of the attempt to please, and lead to its repetition, and actions frequently repeated harden into habits.

But we will suppose all the milder methods of persuasion have been tried in vain upon an almost hopeless case, what then? Then patience ceases to be a virtue; send the disorderly child home "to receive proper attention." But will not this bring upon us the anger of the parents? It may do so, but of two evils choose the least. Even an occasional storm is better than stagnation. Let those who shrink from their duty in such cases, fearing to bring upon themselves a stormy interview with a wrathful parent, remember the storm will often be averted by a word of explanation or quiet reasoning, and a parent who comes in wrath may depart in peace.

Interviews of this character, however, will be rare; generally a teacher will secure the co-operation of the parents by a courteous note, or still better, a friendly visit.

Manners.—Too much attention cannot be given to the cultivation of good manners in our schools; the result will amply repay us for our trouble. To secure our end, we will not depend on direct teaching—our scholars must put in constant practice the instruction received, and our own example will either strengthen or weaken the instruction given. The benefit to the children themselves will be seen in many ways. A more kindly feeling towards each other will be awakened, and less friction in the play-ground will result. Even our youngest scholars can be taught the habitual use of "If you please" and "Thank you," and a simple "I beg your pardon" will often take the sting out of an accidental blow and prevent many a childish quarrel. If the golden rule had its place in the hearts and lives of our children, we should have a gentle courtesy of words and ways far exceeding mere surface polish.

Some instruction might also, with advantage, be given our children regarding their manners on public occasions. Mistakes and awkwardness too often seen in their manner of receiving school visitors, handing a note, giving a salute on the street, and of receiving prizes, &c., may be avoided by a little previous instruction and practice.

"If my boys do not make a good bow, it will not be my fault, I told them about it," remarked a young teacher at a public meeting for the distribution of prizes. "Did you practise them beforehand?" asked her friend. "Why, no, I did not think that necessary," was the reply. "I forgot even to tell my boys to bow, I hope they will remember it themselves," was the remark of another teacher sitting by. Is it any wonder that the boys of the forgetful teacher should themselves forget to bow, and after clutching their prizes retreat from the platform with more speed than grace; or that the other set of boys, left to their own ideas of making a bow, should give a variety of spasmodic jerks, more or less resembling the spring of a jack-knife. Would it not be better to spend a few moments beforehand in practice, than to spend the same time in chiding the failure? Considering how many see our scholars only on such occasions, it will be our wisdom, as well as our interest, to produce a favorable impression.

The influence of the school training will often reach the homes of our children, in too many of which there is little to be seen of either gentleness or courtesy.

"Papa, you've got your hat on," whispered a little girl on entering the room where her father sat conversing with her teacher. The child blushed as she said it, the father blushed also, and, with an awkward apology, removed his hat. That little girl had learned at school something of the proprieties of social life. A teacher passing along the street was met by one of her little scholars, who was seated upon a huge pile of goods which his father was conveying home in a hand wagon. So insecure did he find his seat that both hands were required to keep his balance. As his teacher drew near he saw his dilemma. Should he hold on and let his

teacher pass without a salute? Regard for her, and force of habit, triumphed; he withdrew one hand, touched his hat and fell over. The father had already, while a few steps in advance, given a slight nod as his salute; but after such an example from his six-year old son, could he do less than take off his own hat and give a second and more respectful greeting. Thus the father received from his little boy the lesson in politeness learned at school.

While instruction and practice will do much towards producing good manners in our scholars, our own example will do more. Our words may be forgotten, our ways will be remembered. Our manners towards each other, towards our visitors, and towards the children themselves, will be keenly observed, and copied more closely than we are often aware of.

"I wish Miss B. would always teach us," said one of our High School girls of a young lady who had taken charge of the class during the absence of the regular teacher. "Why do you like Miss B. so much?" asked a friend. "Because she is so kind; she speaks to us as if we were ladies like herself, and we can't help being good with her; we wouldn't be so mean as to be rude or troublesome to her when she is so polite to us." Miss B. may not have given the class any direct teaching as to good manners, but her own example told upon the scholars with more power and result than any formal instruction.

Thus it is, though often unconsciously, we are, day by day, moulding and fashioning the individual character.

Let us endeavor, then, so to influence, instruct, and train the children committed to our care as to fit them for after life, and the duties that await them.

HOW TO DEAL WITH INDOLENT PUPILS.

BY WILLIAM SCOTT, B.A., PRINCIPAL OF THE MODEL SCHOOL, TORONTO.

Indolence in pupils may manifest itself either in the non-preparation of home lessons and general indifference to school duties, or in tardiness in coming to school. It is with the former of these phases of indolence that I propose to deal.

Before proceeding to suggest a remedy for this evil which tries the patience of most teachers so severely, I will ascertain, as far as possible, its cause, for cause it assuredly has, no one being naturally idle. My experience has shown me that in the majority of cases it may be traced to causes residing in the *Teacher*, in the *Parent*, in the *Pupil*, or in a combination of all these.

Some teachers educate their pupils in laziness in some such manner as the following. Lessons have been assigned to be prepared at home, and, from indifference or laziness on the part of the teacher, no thorough steps are taken to ascertain whether such lessons have been prepared or not. One or more members of the class may not have had an opportunity to prepare the lessons, and this is not detected. These find that they stand just as well in the class as if they had come thoroughly prepared. In a short time they will forego the preparation of their lessons for the most trivial reasons, and finally they venture to school without any preparation whatever, trusting to fortune, or rather to the lack of thoroughness on the part of their teacher, to pass muster as usual. This becomes habitual with some, and another teacher will likely have his skill and tact severely tried in eradicating an evil which, but for the indifference of the teacher, would never have existed.

Other teachers, and these very earnest ones too, cause their pupils insensibly to become indolent by injudicious modes of instruction. They forget that the pleasure of *discovering* is always greater than that of *perceiving*, and teach in such a manner that all the pupils have to do is to take in what they are told. Thus, in teaching a lesson, say in arithmetic, instead of making the

pupils solve the example or deduce the rules, by judicious questioning, the teacher works the example himself somewhat as follows: first we must do so and so; then so and so; next so and so. The teacher does all the work, and merely expects the class to take in what he says. He works hard day after day, and may think he is thoroughly discharging his duty, but sooner or later he will be undeceived. This mode of instruction affords a fine opportunity for the pupils to allow their thoughts to wander away from the school and its work. Besides, this not being the natural and hence the most pleasant mode of learning, wearies the pupils unnecessarily, and is soon followed by manifestations of the greatest indifference for school studies. Some of you have, no doubt, heard teachers complain of the general listlessness and stupidity of their classes. Let such teachers beware lest the cause of such wide-spread indifference may lie in themselves and not in their pupils. Such teaching as I have described awakens little or no interest in the pupils, and consequently they soon acquire ineradicable habits of superficial, careless attention. The judicious teacher retains the attention of his scholars by keeping their curiosity alive. He cannot succeed in doing this by either telling them what to do when appealing to their understanding, or by fatiguing them. Every lesson should be discontinued as soon as the pupils show signs of weariness, otherwise the attention will flag, and that class will have received one lesson in indifference to school work.

I think the remedy for such general indolence as I have referred to will suggest itself to all. If the teacher intends every member of his class to prepare the work assigned, he must be careful to ascertain that this has been done by a thorough examination next day. Systematic attention to this simple duty will prevent any general indifference to the preparation of home work.

When the cause of the want of a good healthy tone in the class lies in the injudicious mode of instruction pursued by the teacher, the simplest remedy is to change the teacher, but when this is not expedient, *the mode of teaching must be changed*. Pupils should always be taught so that they will be more able after the lesson to investigate for themselves than they were before it. This end cannot be attained where the teacher stands, or it may be sits, before the class, and becomes simply a talking machine. He should be director. Under his guidance the pupils should do the investigating and make the discoveries, draw the conclusions, deduce the rules, &c. One who teaches in this way will, I venture to say, never complain of either the stupidity or indifference of his class. He secures and retains the attention of his pupils by exciting their *curiosity* or *desire to know*; and so long as he supplies a sufficient amount of mental pabulum to reasonably satisfy the desire thus awakened, he will have an exemplary class.

I may here remark that, if ever any of you are called on to assume charge of a class which has been spoiled in the way I have described, about the worst thing that can be done to secure attention and banish indifference from the class room, is to appeal to the sense of fear. Stimulate the *curiosity* to know that of which they have become sensible they are ignorant. Nature has implanted this active principle in all minds for the best of reasons, and hence it should not be repressed, but stimulated and encouraged. Never threaten until all other means are exhausted. After all the effects of an energetic, judicious teacher to have an exemplary class, there may be one or more members of it who are still indifferent and inattentive in school and who persistently neglect their home lessons. I shall try to deal with these further on.

Some parents, I am sorry to say, from one reason or other, cause their children to neglect their lessons. It may be that no

time is appropriated at home for the preparation of school lessons; it is left entirely to the discretion of the child whether he will study a lesson or not. Then, some parents send their children on errands and appoint them work to do, to the neglect of the school work. Other parents, from mistaken ideas of kindness, encourage their children in laziness. The child complains, perhaps, of the length of his lesson, and, through the exercise of a little scheming, induces the parents to allow him to put off the preparation from time to time until too late, or until he forgets all about it. This is repeated time and again until the child becomes a confirmed sluggard, and what is worse, a schemer—one who thinks he plays a sharp trick when he deceives his teacher or his parents.

To remedy such cases as these the assistance and co-operation of the parents must be secured. This will be best accomplished by an interview with the parent, and an earnest attempt to show him what he is doing to his child. Let the parent once be assured that the teacher is not the enemy and persecutor of his child, but in reality one of its best friends, and that he takes all his trouble for its benefit, and by a little remissness on his part might easily let this want of preparation pass without notice; let the parent know these things, and he will at once aid him in all reasonable ways to get that child to do his duty.

The pupil, from early training, or from his naturally sluggish disposition, may be averse to doing school work, and will resort to any means, not even stopping short of deception at times, to avoid the preparation of his lessons. He comes unprepared day after day—some of his lessons have been neglected—he cares little for the healthy tone of public opinion prevailing in the class, and prefers a seat near its foot, to any active effort on his part to rise higher. Emulation has no effect on him; he is in a sphere of his own, so far removed from his fellows as to be altogether out of the reach of the ordinary incentives which actuate most children. What is the teacher to do here? To give him up as a bad case, and allow his example to induce, perhaps, one or two others to do likewise? To rest satisfied with the knowledge that his class, as a whole, is doing well, and that, by allowing this case to pass unnoticed, he is escaping from a great deal of unpleasant school work? By no means. He is a case which will test how thoroughly he understands the motives and has mastered the character of each of his pupils. He should try expedient after expedient, always kindly, but firmly, and above all he should never despair of ultimate success. Let him remember, in the words of Horace Mann, that "there is always an avenue through which a child's mind can be reached; failures come from want of sagacity and *perseverance* in seeking it."

As a skilful physician, when called to see a patient suffering from some serious complaint, makes an exhaustive diagnosis, inquires into the previous habits and conditions of life of his patient, notes the nature of his constitution, etc., before venturing to prescribe for him, so should the teacher, when called on to treat a case of confirmed indolence, ascertain all the facts which will throw light on it, and treat it accordingly. He should note who his companions are at school and at home, what he does at home, the nature of the home influence to which he is subjected. These latter may appear to some as beyond the proper sphere of a teacher; but at school being *in loco parentis*, he can never properly understand a pupil's motives nor thoroughly sympathise with him till he knows perfectly his home-life. Having, as thoroughly as he can, mastered the motives and made himself perfectly acquainted with the pupil, the teacher is now in a condition to try to remedy his carelessness and idleness.

To the Editor of the Canada School Journal.

MY DEAR SIR,—From the enclosed paper you will see how far you have been misinformed as to the action of the Department in regard to the examination papers by the head master to whom you refer in your editorial in the February number. The fact is that upon comparing the number of examination papers asked for and sent out, and those actually used and returned, I found that the discrepancy was from 15,000 to 20,000 sheets. On asking for an explanation of this discrepancy (in the circular herewith of the 4th ult.) it was discovered from the replies received that in many cases a system of indiscriminate distribution of the surplus sheets had been practised, and that in these cases an extra number were ordered for special distribution. No objection was ever made to the retention by each candidate and presiding examiner of a set of papers. In addition, a bound set has for years been sent regularly to High School masters and inspectors (see circular herewith of the 24th ult.); but beyond that the Department could not reasonably be expected to supply these papers gratuitously.

Your correspondent has evidently overlooked the facts which I have stated. Economy required that the Department should interpose to put a stop to the great expense and waste involved in the practice which prevailed, and was growing, of the indiscriminate distribution of surplus papers. He is therefore in error when he says that "the Department limits the number of examination papers for the Intermediate (or any other examination) to the exact number of candidates who are to write in each High School." A margin is always allowed; but we shall hereafter require that the papers sent out shall be duly accounted for. The propriety of this course no one will dispute, not even the Head Master, your correspondent.

Believe me, very truly yours,
J. GEORGE HODGINS.

Toronto, February 20th.

THE ONTARIO SCHOOL BILL.

To the Editor of the Canada School Journal.

SIR,—I notice that the Minister of Education proposes to make some amendments to the School law, and from a careful perusal of his Bill I feel persuaded that its passage in its present form would, on the whole, do more harm than good. If Mr. Crooks finds the law working badly, he ought to be very careful in framing amendments so as to make them at once conservative and effective. I do not propose to take up your space with any attempted enumeration of the defects of the Bill, but may be permitted to instance one glaring piece of injustice which will be perpetrated if the measure passes. This is the exclusion of High School and County Model School masters from the position of County Examiners. This provision has the peculiar merit of being at once offensive and ineffective. It assumes, apparently, that the excluded gentlemen are not fit to be trusted and that Public School masters are. Nothing but an oversight on the part of the Minister can account for this clause in the Bill, and the same may be said of the clause respecting the Depository.

Yours, &c.,
ONE INTERESTED.

Windsor, Feb. 25, 1879.

Mathematical Department.

Communications intended for this part of the JOURNAL should be on separate sheets, written on only one side, and properly paged to prevent mistakes. They must be received on or before the 20th of the month to secure notice in the succeeding issue.

ALFRED BAKER, M.A., EDITOR.

CAMBRIDGE EXAMINATION PAPERS.

Mr. Potts, the distinguished mathematician, whose valuable editions of Euclid are so familiar to Canadians, has kindly forwarded to us the supplement to the *Cambridge Gazette*, containing the Mathematical Tripos Examination Papers for 1879. We select the following—of course the most elementary part of the papers—as likely to prove of interest to our subscribers :

EUCLID.

1. Parallelograms on the same base and between the same parallels are equal to one another.

Having given the base, area, and difference of the squares of the sides, construct the triangle.

2. In obtuse-angled triangles if a perpendicular be drawn from either of the acute angles to the opposite side produced, the square on the side subtending the obtuse angle is greater than the squares on the sides containing the obtuse angle, by twice the rectangle contained by the side on which, when produced, the perpendicular falls, and the straight line intercepted without the triangle, between the perpendicular and the obtuse angle.

Prove that in any quadrilateral the sum of the squares of the four lines drawn from the middle point of the line joining the middle points of two opposite sides to the angular points of the quadrilateral is equal to the sum of the squares of the lines joining the middle points of the opposite sides and of the line joining the middle points of the diagonals.

3. If from any point without a circle two straight lines be drawn, one of which cuts the circle, and the other touches it; the rectangle contained by the whole line which cuts the circle, and the part of it without the circle, shall be equal to the square on the line which touches it.

A and *B* are two fixed points within a given circle. Describe a circle passing through *A* and *B*, and intersecting the circle in *D* and *E*, so that the chords *DA*, *EB* meet on the given circle.

4. Inscribe an equilateral and equiangular pentagon in a given circle.

ACB is a diameter of a circle of which *C* is the centre, and in *AC* a point *D* is taken such that the rectangle *AC.AD* is equal to the square on *CD*. If the circle described with centre *B* and radius *BD* cuts the given circle in *E*, prove that *AE* is one-fifth of the circumference.

5. The sides about the equal angles of equiangular triangles are proportionals; and those which are opposite to the equal angles are homologous sides, that is, are the antecedents or consequents of the ratios.

The straight lines *EAB*, *EDC* and *FDA*, *FCB* form four triangles in one plane; *O* is the common point of intersection of the circles circumscribing these triangles: prove that the rectangle contained by *OA* and *OC* is equal to the rectangle contained by *OE* and *OF*.

ARITHMETIC, ALGEBRA, AND PLANE TRIGONOMETRY.

1. (a) Convert $\frac{1}{7}$ into a circulating decimal, and explain why the period is such that its first sixteen multiples consist of the same digits in the same cyclical order.

(β) Prove that the numbers 220 and 284 are such that the sum of the aliquot parts of each is equal to the other.

(γ) Calculate the value of $\sqrt{5}$ to ten decimal places from the formula

$$\frac{8-\sqrt{5}}{2} = \frac{1}{8} + \frac{1}{3.7} + \frac{1}{3.7.47} + \frac{1}{3.7.47.2207} + \&c.,$$

each of the factors in the denominators being equal to the square of the preceding factor diminished by 2.

2. Divide $1+x+x^2+x^3+x^4+x^5+x^6+x^7+x^8+x^9+x^{10}$ by $1-x^5+x^6$; and prove that $(a+b)^3(a^5+b^5)+5ab(a+b)^2(a^4+b^4)+15a^2b^2(a+b)(a^3+b^3)+85a^3b^3(a^2+b^2)+70a^4b^4=(a+b)^8$.

Prove that $a^{-1}=1+2(1-a)+3(1-a)(1-2a)+n(1-a)(1-2a)\dots\{1-(n-1)a\}+a^{-1}(1-a)(1-2a)\dots(1-na)$.

8. Solve the equations :

$$(1) \frac{x-a}{b} + \frac{x-b}{a} = \frac{b}{x-a} + \frac{a}{x-b}$$

(2) $a(1-x^2+y^2)+b(xy-x^2)=a(y^2-xy)+b(1-x^2+y^2)=c$.
Prove that if

$a(by+cz-ax)=b(cz+ax-by)=c(ax+by-cz)$, and if also $a+b+c=0$, then $x+y+z=0$.

4. Define geometrical progression, and insert m geometrical means between a and b .

Prove that if $x < 1$,

$$\frac{x}{1-x} - \frac{x^3}{1-x^3} + \frac{x^5}{1-x^5} - \dots \text{ad. inf.}$$

$$= \frac{x}{1+x^2} + \frac{x^2}{1+x^4} + \frac{x^3}{1+x^6} + \dots \text{ad. inf.}$$

6. Find the number of combinations of n things taken r together.

Find the number of ways in which $2n$ things can be divided into n pairs.

6. Assuming the binomial theorem to be true when the exponent is a positive integer, prove that it is true when the exponent is any positive quantity.

Prove that

$$(1-x^2)^n = (1+x)^{2n} - 2nx(1+x)^{2n-1} + \frac{2n(2n-2)}{1.2}x^2(1+x)^{2n-2} - \dots$$

7. Explain the different methods of measuring angles, and give their comparative advantages. Define exactly the unit angle in each method.

ABC is a triangle such that, if each of its angles in succession be taken as the unit of measurement and the measures formed of the sums of the other two, these measures are in arithmetical progression. Show that the angles of the triangle are in harmonical progression.

Also show that only one of these angles can be greater than two-thirds of a right angle.

8. Find a general expression for all angles which have a given sine; and shew that if $\sin nC$ be given, then $2n$ values of $\sin C$ are to be expected if n be even, and n if n be odd.

If $\frac{\sin(A+C)}{\sin(A+D)} = \frac{\sin(B+C)}{\sin(B+D)}$, shew that either A and B , or C and D differ by a multiple of π .

If $\frac{\sin(A+C)}{\sin(A+D)} + \frac{\sin(B+C)}{\sin(B+D)} = \frac{\cos(A+C)}{\cos(A+D)} + \frac{\cos(B+C)}{\cos(B+D)} = 2$, shew that either A and B differ by an odd multiple of $\frac{1}{2}\pi$, or C and D differ by an even multiple of π .

9. Prove geometrically that

$$(1) \tan(A+B) = \frac{\tan A + \tan B}{1 - \tan A \tan B}$$

$$(2) \tan^2 \frac{1}{2}A = \frac{1 - \cos A}{1 + \cos A}$$

If $A+B+C = 2\pi$, and if

$$\cos A = \frac{(d-a)(b-c)}{(d+a)(b+c)}, \cos B = \frac{(d-b)(c-a)}{(d+b)(c+a)}$$

$$\cos C = \frac{(d-c)(a-b)}{(d+c)(a+b)}$$

then $\tan \frac{1}{2}A + \tan \frac{1}{2}B + \tan \frac{1}{2}C = \pm 1$.

10. If ABC be a triangle, prove that

$$\sin A + \sin B + \sin C = 4 \cos \frac{1}{2}A \cos \frac{1}{2}B \cos \frac{1}{2}C$$

If ABC be a triangle, shew that

$$\tan^2 \frac{1}{2}B \tan^2 \frac{1}{2}C + \tan^2 \frac{1}{2}C \tan^2 \frac{1}{2}A + \tan^2 \frac{1}{2}A \tan^2 \frac{1}{2}B$$

is always less than 1; and that, if one angle approach indefinitely near to two right angles, the least value of the expression is $\frac{1}{2}$.

11. Prove that the distance from A of the centre of the circle inscribed in the triangle of ABC is equal to $b \sec \frac{1}{2}B \sin \frac{1}{2}C$.

If x, y, z denote the respective distances of the centre of the inscribed circle from A, B, C , then

$$a^2x^4 + b^2y^4 + c^2z^4 + (a+b+c)^2x^2y^2z^2 = 2(b^2c^2y^2z^2 + c^2a^2z^2x^2 + a^2b^2x^2y^2)$$

12. Find the lengths of the diagonals of a quadrilateral inscrib-

ed in a circle in terms of its sides.

If $ABCD$ be any quadrilateral, prove in any manner that the straight line joining the intersection of the bisectors of the angles A and C and the intersection of the bisectors of the angles B and D makes with AD an angle equal to

$$\tan^{-1} \left\{ \frac{\sin A - \sin D + \sin(A+B)}{1 + \cos A + \cos D + \cos(A+B)} \right\}$$

PROBLEMS.

1. The sides of a quadrilateral touch a circle in $ABCD$. If a circle can be described about the same quadrilateral, shew that the middle points of the chords AB, BC, CD, DA lie on another circle.

2. In a given acute-angled triangle ABC inscribe a triangle whose sides shall be bisected by the lines joining the angular points of the triangle ABC to the centre of the circle circumscribing it.

8. If $a+b+c+d=0$, prove that $(a^2+b^2+c^2+d^2)^2 = 9(bcd+cda+dab+abc)^2 = 9(bc-ad)(ca-bd)(ab-cd)$.

4. If n be an odd prime number, shew that, $(a+1)^n - (a^n+1)$ is divisible by $2n$. Hence shew that, if n be an odd prime and p any integer, any number in the scale whose radix is $2n$ will end in the same digit as its $(pn-p+1)$ th power; and deduce Fermat's Theorem.

5. C_r^n denote the number of combinations of n things taken r together, show that

$$\sum_{y=0}^{x-y} \sum_{z=0}^{x-y-z} \frac{C_x^m C_y^n C_z^r}{C_{x+y+z}} = 1 + \frac{m+n}{r+1}$$

whatever be the value of x .

6. Prove that $\cos 2A \cot \frac{1}{2}(C-A) \cot \frac{1}{2}(A-B) + \cos 2B \cot \frac{1}{2}(A-B) \cot \frac{1}{2}(B-C) + \cos 2C \cot \frac{1}{2}(B-C) \cot \frac{1}{2}(C-A) = \cos 2A + \cos 2B + \cos 2C - 2 \cos(B+C) + 2 \cos(C+A) + 2 \cos(A+B)$.

7. D, E, F are the points where the bisectors of the angles of the triangle ABC meet the opposite sides. If x, y, z are the perpendiculars drawn from A, B, C respectively to the opposite sides of the triangle DEF ; p_1, p_2, p_3 , those drawn from A, B, C respectively to the opposite sides of ABC : prove that

$$\frac{p_1^2}{x^2} + \frac{p_2^2}{y^2} + \frac{p_3^2}{z^2} = 11 + 8 \sin \frac{A}{2} \sin \frac{B}{2} \sin \frac{C}{2}$$

8. If $\left. \begin{aligned} a \cos(A+B) + b \cos(A-B) + c &= 0 \\ a \cos(B+C) + b \cos(B-C) + c &= 0 \\ a \cos(C+A) + b \cos(C-A) + c &= 0 \end{aligned} \right\}$

and if A, B, C are all unequal, then

$$a^2 - b^2 + 2bc = 0$$

9. If A, B, C be any three fixed points, P any point on a circle whose centre is O , shew that

$$AP^2 \cdot \Delta BOC + BP^2 \cdot \Delta CAO + CP^2 \cdot \Delta AOB = \text{constant}$$

SOLUTIONS OF PROBLEMS.

Geometrical solution of Prob. 8 in the December number of the CANADA SCHOOL JOURNAL, by "A Farmer":

Let ABC be the triangle, having A for its apex. $AB = 88, BC = 126, CA = 98$. Let $ABEC$ be the circumscribing circle, with AE for its diameter. From A draw AD perpendicular to the base BC . Then $BC^2 + BA^2 = AC^2 + 2BC \cdot BD$. $\therefore BD =$

$$\frac{BC^2 + BA^2 - AC^2}{2BC} = 55\frac{1}{2}$$

Again, $AD = \sqrt{AB^2 - BD^2} = 68.1947$. Then by Prop. C, Bk. VI, $BA \cdot AC = EA \cdot AD$. $\therefore AE$ (the diameter) $= \frac{BA \cdot AC}{AD} =$

128.46; or radius = 63.23.

Direct proof of Prop. 25, Bk. I, Euc., by Gordon Bell, Pembroke:

Let AB be not greater than AC . Apply DEF to ABC , so that E may be on B and EF on BC , and D on the side of BC remote from A . Join AD , and produce DF to meet AC in G . Then, since $DF = AC$, DF is greater than AG , and still greater is DG than AG ; and \therefore the angle GAD is greater than the angle GDA . Also, since $BA = BD$, \therefore angle $BAD =$ angle BDA ; and \therefore the whole or remaining angle BAC is greater than the whole or remaining angle BDF or EDF .

Solution of problems in February number by Mr. John Anderson, Dixie:

Take a right angled triangle whose sides are 1, 1; its hypotenuse will be $\sqrt{2}$. On this hypotenuse as side construct a square; its diagonal will be 2. On this diagonal as side construct a square; its diagonal will be $\sqrt{8}$; and so on. Solution also by the proposer.

A. B., Montreal. Total gain from /58 to /68 = £2080 6s. 6d. \therefore gain from /54 to /68 = £2106 14s. 10d. \therefore gain from /54 to /64 was £2268 4s. 8d; and average gain was £205 5s. 10 $\frac{1}{2}$ d.

R. R. R., Black Creek. (1) True disc. = $\frac{7\frac{1}{2}}{100\frac{1}{2}}$ of 549 = \$2.41.

(2) Rad. of bed is 10 yds. \therefore area = $\frac{1}{2}(10)^2 \times 8.14169 = 157.079$ sq. yds. (3) If the man were standing upright, and remained perfectly rigid, it would depend partly on the length of his feet. The question, however, is very indefinite.

PROBLEMS FROM SUBSCRIBERS.

1. If a = first term of an Arithmetical series; b = its common difference, and number of terms = n ; shew that the sum of the products of the terms taken two and two together is

$$\frac{(n-1)na^2}{2} + \frac{(n-1)^2n}{2} \times ab + \frac{(3n-1)n(n-1)n-2}{24} \times b^2.$$

2. Solve $\frac{8}{2} 6^{x+1} + \frac{5}{8}$ of $15^{x+2} = \frac{1}{8}$ of $9^{x+2} + \frac{2}{25}$ of 10^{x+2} .

3. (Selected.) A boy flying a kite at noon when the wind was blowing A° from the South, and the angular distance of the kite's shadow from the north was B° , the wind suddenly changed to A° from the south, and the shadow to B° from the north, and the kite was raised as much above 45° as it had before been below that elevation. Find the angular altitude of the sun and the angular elevation of the kite.

4. For any plane triangle ABC the angles B and C are bisected, the bisectors meeting the opposite sides in B_1 and C_1 , respectively. Join B_1 and C_1 , and from any point P in B_1C_1 , let perpendiculars p_1, p_2 , and p_3 fall upon the sides a, b and c respectively; prove that $p_1 = p_2 + p_3$.

5. A ship is sailing at the rate of 10 miles an hour, and a balloon whose altitude is $1\frac{1}{2}$ miles, is rising at the rate of 12 miles an hour. A stone dropped from the balloon falls 4 miles from the ship. Find the rate at which ship and balloon separate.

SUBSCRIBER, Euphemia.

6. There is a field in the shape of a rhomboid whose adjacent sides are 12 and 7 chains respectively; the shortest diagonal is 11 chains. Find the other. (Capable of two solutions, one algebraic and one geometrical.)

A FARMER.

7. To determine the angle which a plane capable of turning freely about one side, must make with the wind blowing in a given direction, that the plane itself may exert in another given direction the greatest force possible.

G. SHAW, Kemble.

Mathematical Editor Canada School Journal:

DEAR SIR,—Perhaps you will allow me to give my method in eliminating the signs +, -, \times , \div , of, in a collocation of fractions or whole numbers.

Agreeing with Mr. Wilkins in his conclusions (though perhaps not entirely in his reasoning), I always instruct my classes to eliminate in this order, viz.:

(1) "of", (2) \div , (3) \times , (4) + and -.

It will be seen that apparently giving the sign \div precedence over \times will make them of equal standing. Thus, $\frac{2}{3} \times \frac{3}{4} \div \frac{1}{2} \times \frac{2}{3} = \frac{2}{3} \times (\frac{3}{4} \div \frac{1}{2}) \times \frac{2}{3}$, or $\frac{2}{3} \times \frac{3}{4} \times \frac{2}{3}$. While if we eliminate \times first, the expression equals $\frac{\frac{2}{3} \times \frac{3}{4}}{\frac{1}{2} \times \frac{2}{3}}$.

This furnishes another reason for declining with Hamblin Smith to look upon \times and "of" as identical. The meaning attached to \times (i.e., "times") by Mr. Smith and his Canadian editors, is objectionable in other respects, but I shall not trouble you with anything further on this point at present.

I am, sir,

Yours very truly,

Ottawa, Feb. 20th, 1879.

R.

Examination Questions.

Under this head will be published from month to month the papers set at the examination for entrance into the High Schools of Ontario, the Intermediate High School Examination, the examination of candidates for Public School teachers' certificates, and the Junior and Senior Matriculation examinations of the University of Toronto. The Mathematical papers will in all cases be accompanied by analytical solutions of the more difficult problems and hints on the best methods of solving the others.

COMPETITIVE EXAMINATION.

COUNTY OF DURHAM, MARCH 15 AND 16, 1878.

BOOK-KEEPING.

SPECIAL.

Value.

January 1st, 1878.—John King has the following resources and liabilities as shown in his Ledger (B): Ontario Bank acct. shows a balance in his favor of \$3200. Cash acct. a balance of \$860. His Inventory shows mdse. on hand \$4500. Jas. McKinnon's acct. shows a balance in favor of Jas. McKinnon of \$648. 2nd—He bought mdse. from S. Taylor as per invoice, giving him a check on the Ontario Bank in full for \$420. 10th.—Sold H. McFaul, on a note for one year, \$1500 worth of mdse. 17th.—Paid Jas. McKinnon in full \$640, per check on the Ontario Bank. Feb'y 1st—Sold Jas. McKinnon \$1000 worth of mdse. and received in payment a check on the Dominion Bank for \$600, cash for the balance. 15th.—John King took out of the business, for private use, cash \$500. 20th.—Had his own note, at 20 days, discounted at the Dominion Bank; face of note \$500, discount allowed \$5. March 9th.—Paid his note, which was discounted at the Dominion Bank on the 20th Feb'y, by a check on the Ontario Bank \$500. 15th.—Sold out the business to James McKinnon, keeping the cash and the money in the Bank, Jas. McKinnon to take the mdse. at \$3500 and H. McFaul's note at \$1450, and allow John King \$500 for his good-will of the business. James McKinnon settled in full by giving his note for \$4000 and a check on the Ontario Bank, which John King deposited, for the balance.

- 30 1. Give John King's Journal entries for the above.
- 12 2. Post the accts. which show a Loss or a Gain.
- 6 3. Find his present worth.
- 8 4. Write out the check given by John King to S Taylor on the 10th of Jan'y.
- 8 5. Write out the note, making it negotiable, given by H. McFaul to John King on the 10th of January.
- 5 6. Give the Dominion Bank's Journal entry on discounting Jno. King's note Feb'y 20th.
- 5 7. Give James McKinnon's Journal entry on buying the business March 15th.
- 6 8. Post John King's acct. and close it.

EUCLID.

Value.

SPECIAL.

- 8 1. Classify triangles and define each class. (1.) With reference to the angles contained. (2.) With reference to the sides.
- 8 2. In what propositions Book I. does Euclid discuss the equality of triangles?
- 14 3. Upon the same base and upon the same side of it there cannot be two triangles, which have their sides terminating in one extremity of the base equal, and also those terminating in the other extremity of the base equal to each other.
- 12 4. If any side of a triangle be produced, the exterior angle is greater than either of the interior opposite angles.
- 12 5. Triangles upon the same base and between the same parallels are equal to one another.
- 12 6. State and prove the converse of this proposition.
- 12 7. Two straight lines A B, C D intersect in E, and the triangle A E C is equal to the triangle B E D. Shew that B C is parallel to A D.
- 14 8. A line drawn from the middle point of one side of a triangle, parallel to the base, bisects the opposite side.
- 14 9. D is the middle part of the side B C of the triangle A B C. If A D be equal to B D, show that the angle B A C is a right angle.

100 marks a full paper.

ARITHMETIC.

Value.

INTERMEDIATE.

- 15 1. Find the greatest number by which, when 8621 and 4791 are divided, the respective remainders are 5 and 3.
- 15 2. A bankrupt's assets are \$328.60, out of which he pays $37\frac{1}{2}$ cts. in the \$ on half his debts, and 40 cts. in the \$ on the other half. Find the amount of his debts.
- 15 3. Sold goods that cost me \$9 60 so as to gain $\frac{1}{3}$ of the proceeds. Find proceeds.
- 18 4. Find the price of a stack of hay containing 65 cub. yds. when hay is worth \$15 per ton, if $2\frac{1}{2}$ cub. ft. of hay weigh 8 lbs.
- 18 5. Which is the better way to buy sugar: at \$11.76 per cwt. of 112 lbs., or at \$10.12 $\frac{1}{2}$ per cwt. of 100 lbs.? And how much must be bought that the gain by the more advantageous way may be \$12 60.
- 18 6. How many farms can be formed from 1272 ac. 24 sq. yds. 8 sq. ft., one half of them to contain 97 ac. 2 sq. yds. each, and the other half to contain 62 ac. 1 sq. yd. 1 sq. foot each.
- 18 7. John gave James 11 more than $\frac{1}{10}$ of his marbles. If John had given him $\frac{1}{5}$ of them James would have received 11 marbles more than he did. How many marbles had John?
- 18 8. (a) Find the difference between the sum and difference of $\frac{3}{8}$ of $8\frac{1}{2} - \frac{1}{2}$ and $\frac{3}{2} - 2.5$
 $\frac{3}{4} - \frac{1}{2}$ of $4\frac{1}{2}$ and $\frac{1}{3} - .5$
- (b) What fraction of ($\frac{1}{2}$ of .5 + .3) of \$48.15 is $\frac{3}{4} - .2$ of $\frac{1}{10}$ of £7 15s. 7 $\frac{1}{2}$ d.?

120 marks a full paper.

JUNIOR.

- 15 1. The sum of 48678 equal addends is greater than 9881605 by 29. Find one of the addends.
- 15 2. If the number 2480 be multiplied by 24 and also divided by a certain number, the product will be 96 times the quotient. Find the number to be used as divisor.
- 15 3. Find the least number which can be divided by 15, 6, 9 and 14, with a remainder of 4 in every case.
- 15 4. A person bought 512 yds. of cloth at \$3.10 $\frac{1}{2}$ per yd. and retailed it at \$3.37 $\frac{1}{2}$ per yd. What was his profit on 22 $\frac{1}{2}$ yds?
- 18 5. One gang of men builds 12 mls. 2 per. 1 ft. of road in one year; a second gang builds 13 mls. 1 per. 1 $\frac{1}{2}$ ft. in a year. How long will it take both gangs to build 75 mls. 9 per. 2 yds. 1 $\frac{1}{2}$ ft. of road?
- 18 6. How many times can a 3 $\frac{1}{2}$ pt. measure be filled from a cistern containing 481 gal. 1 qt., and how long would it take to empty the cistern dipping 25 times a minute?
- 20 7. A house and lot are worth \$3465.66; the house is worth $\frac{1}{3}$ times the lot. Find the price of house.
- 18 8. (a) Simplify $\frac{5\frac{1}{2} + 4\frac{1}{2} + \frac{1}{2}}{2\frac{3}{4} + (\frac{1}{2} + \frac{1}{4})}$.
- (b) What fraction of ($\frac{1}{2}$ + $\frac{1}{3}$ of $\frac{1}{2}$) of \$13.60 is ($\frac{3}{4} - \frac{1}{3}$ of $\frac{1}{2}$) of £2 8s. 6d.?

120 marks a full paper.

Practical Department.

—A candidate for a Second Class Professional Certificate, a short time ago, having failed to pass a fair examination in drawing, wrote at the bottom of her examination paper: "Please do not pluck me on this most detestible subject, as I have no taste for it and can make no show." Probably she has a "taste" for spelling and elegant expression. If teachers would devote one-tenth of the time to studying the principles of drawing, which is usually spent in studying any other subject, they could teach it with success.

SCHOOL ETIQUETTE.

BY JAMES HUGHES.

"Young America" is charged with a lack of respect for their seniors and superiors. There is usually a reason for making the charge. This is not to be wondered at. The boys do not deserve the blame. They naturally prefer to be respectful. *They take an intense delight* in showing due courtesy to those in authority over them. The teacher who has never trained his boys, and girls too, to pay proper honors to the Inspector, the trustees, ministers and other school "visitors," has been neglecting an important duty. He has omitted to help his pupils to form a most desirable habit, and has at the same time lost a very valuable aid in the easy and natural management of his school. The practice of saluting in a graceful manner the ladies and gentlemen whom he meets on the street has a very beneficial influence on a boy's character. It develops the true gentleman in him. It elevates him morally. It has a bracing effect upon him in every right direction. It may have more influence in making him a successful man than all the teaching of the regular school programme. The importance of good manners and a respectful demeanor can scarcely be over-estimated.

Some teachers object to having their classes stand up and salute a school officer when he visits their schools, because they say it is "toadying" to do so. The princes of rank and intellect are those who are most courteous in their demeanor towards others. It can not certainly be wrong to inculcate due respect for superiors. On the contrary, it is the duty of every teacher to do so.

SALUTING IN SCHOOL.

How should a trustee, or the Inspector, be received by the pupils, when he enters a school-room?

When the visitor reaches the front of the school-room and faces the class, the pupils should stand together and give him the regular military salute.

How is this done? The military salute is now a very simple and graceful movement. The hand is simply raised by a curved motion to the forehead, the elbow being bent as soon as the motion is begun. The palm of the hand is kept to the front, and the fingers are extended along the forehead, pointing slightly upwards. The elbow should not be raised too high.

When should the hand be dropped? The hand should be dropped to the side when the salute is returned by the visitor, or after a pause during which one could count five. The hand should not be brought down in a formal way, as though "laying on hands" to convey a blessing.

How can pupils be trained to stand together? Unless the scholars all stand together the full effect of the movement will be lost. The pupils behind should take their time from those sitting in the front row of seats, and they should take time from the right hand pupil. The salute should be timed in a similar way. No haste should be manifest in standing or saluting. Two or three nervous pupils

may spoil the effect of a salute. Plenty of practice should be given, the teacher personating a visitor. Some teachers give a signal for standing, or have the class stand and salute "by numbers." It is nicer if the class can act independently.

How can pupils best stand when seated at desks? For the purpose of dismissing they should all stand in the aisles; for a salute, each pupil should stand to the right of his seat. In either case the feet should be moved out into position before the pupils stand. With most desks it is wise to use the arms to assist in rising. The standing may be done by numbers. *One*, feet out; *two*, hands on desks; *three*, stand in the position of attention. The feet should not shuffle, nor the body sway in an undecided manner, after the pupils have stood up.

How should girls salute? Just as boys do. On this subject Commander Norman, of the Royal Navy, in the last edition of his Schoolmasters' Drill Assistant, says: "In former editions a curtsy was recommended in the case of girls. Further experience, however, has shown that a uniform method for scholars of both sexes is preferable. Teachers need not be at all afraid of instituting the military salute for their girls in schools on such occasions. It is perfectly becoming; and, especially in mixed classes, does not seem at all out of place." Classes of young women may be allowed to stand and courtesy, or even to stand without courtesying.

Which hand should be used in saluting? Never use the hand next to the person saluted. By doing so you cover the face, and prevent the glance of the eye which should accompany the hand; except in cases of very distinguished visitors.

SALUTING ON THE STREET.

This is done in accordance with the rules laid down for saluting in school. The hand *farthest from* the person saluted is used. It is raised in one easy motion till the thumb and forefinger touch the peak of the cap, the fingers are *extended and close together*, and the palm *to the front*. It should be raised a few paces before meeting, and dropped when the person saluted is passed. The hat should be raised in saluting ladies.

MISTAKES IN TEACHING. V.

BY JAMES HUGHES.

It is a mistake to assign a lesson without testing the class to see whether they prepared it or not. To do so is to encourage the pupils to neglect their lessons regularly. The act of assigning a lesson should convey to the minds of pupils, without any words to that effect, the statement, "I will examine you on this portion of work to-morrow, or at our next lesson on this subject." Some teachers even require written exercises to be brought in some subjects, and forget or neglect to call for them. Some call for them without ever returning them or reporting their corrections in any way. These teachers are training their pupils to be careless and indifferent, and often dishonest. They are also sinning against themselves, for they could take no better way to secure the disrespect of their classes. Pupils soon detect the weaknesses of teachers. They love system and definiteness of purpose. They respect a teacher who attends to his own duty thoroughly and at the right time. They lose confidence in a teacher who forgets or neglects a duty.

It is a mistake to be indefinite in teaching. In teaching map geography, for instance, many teachers place the pointer on the map in a sort of hap-hazard manner, when indicating the position of a place. The point, and the point only, should be placed and held firmly at the spot where the place is situated. If this be not done, the knowledge given will be inaccurate, and habits of care-

lessness and superficial study will be formed by the pupils. One of the most important lessons we can teach in school is thoroughness. Knowledge is valuable only when it is reliable. Be accurate first, even if you have to make apparently slow progress. Be sure that one idea is clearly understood and impressed before you proceed to another. Avoid ambiguous expressions. Correct them when used by your pupils either orally or in their compositions.

WHAT SPELLING SHOULD WE TEACH IN PUBLIC SCHOOLS?

BY JAMES HUGHES.

Certainly not the whole of the words in a dictionary. How many pupils will ever require to use them *all*? None.

2. Not by giving dictation lessons only from the reading books. You cannot spell the whole of the words in the books at dictation lessons, and if you could, they contain only a limited number of words, and these not always the words which a boy or girl would be likely ever to use in practical life.

3. Not by giving mere lists of words, selected from the Reading book or any other book. Words should be spelled in connection, so that more than spelling may be taught at the same time.

4. The pupils should be drilled in the spelling of the words which they will be likely to write in conducting correspondence, keeping accounts, &c. Those who wish to learn how to spell the technical words used in any special department of science or learning, may do so after leaving the public school. How can we best accomplish the desired result of familiarizing the pupils with the correct spelling of the words they will have to make use of on paper in after life? In two ways:

First, by preparing a series of dictation lessons which will contain the words deemed most important by the teacher. These lessons should include household terms, names of family relationships, kinds of clothing and food, parts of the body, parts of a house and articles of furniture, words relating to farming, and the various trades, the animal, the mineral and the vegetable kingdom, &c.

Second, by teaching spelling by composition, as soon as pupils are old enough to express themselves fluently on paper. In this way the teacher can learn the words in each child's own vocabulary which he is likely to spell incorrectly. These are the words which should be most persistently drilled upon. Each pupil should keep a list of every word he ever mis-spelled at school, either in a special note book or in a certain part of his dictation book. It is better to have a note book, into which words missed may be copied from time to time. Such a book would be of great value to a man all through life.

PERSONALS.

Rev. Francis L. Checkley, M.A., has been appointed Head Master of the London High School.

Mr. J. A. Badgley, of Belleville, has been appointed Classical Master of Picton High School.

Mr. D. K. McKenzie has been elected Chairman of the St. Thomas School Board.

Mr. Bowerman, of the Whitby Public School, has been appointed Head Master of the Napanee Model School, in the place of Mr. A. C. Osborne, resigned, at a salary of \$700 per annum.

The Bath Public School is rapidly regaining its former leading

position under the Headmastership of Mr. T. M. Henry, an under graduate of the University of Toronto.

The Renfrew Schools, under the management of Mr. R. N. Curry, are in a very satisfactory state, as the following resolution, passed by the Board of Education, at their annual meeting held on the 5th ult., shows: "Resolved, that this Board having received the very lucid report of Mr. Curry, Head Master of the Model School, begs leave to thank him for the same, and to express the pleasure the Board has experienced in learning that the several schools under his control are so efficiently managed."

THE REV. BENJAMIN BAYLY, A.B. T.C.D.,
LATE HEAD MASTER OF THE LONDON HIGH SCHOOL.

In the decease of the Rev. Mr. Bayly, the oldest member of his own branch of the profession has ceased to be. He was very properly termed the Nestor of his order, and he enjoyed without an exception the respect and esteem of all who knew him intimately. We do not believe that Mr. Bayly had a single enemy in the community in which he lived and labored for the better part of a long life, and few indeed could boast of a greater number of sincere and disinterested friends. The professional and business men of London are largely made up of his old pupils, and among these his memory will be cherished while life remains. We question whether any other place in the Province of Ontario, town or city, can boast of having retained the same gentleman in the position of Head Master for such a period as Mr. Bayly has filled the office in London. Either as Head Master of the Grammar School or High School, he spent thirty-seven years of his life without a single interruption, and this of itself forms a high tribute to the character of Mr. Bayly, and we believe we are safe in saying that, during all this period, an unkind word was never spoken to, nor a harsh thought entertained of him by the Trustees of his School.

Mr. Bayly was born in Dublin, educated in that city, and took his degree from Trinity College in 1828. In Dublin, he studied for some time in the office of his uncle with a view to the legal profession, but not finding the pursuit agreeable he abandoned the study, and made up his mind to emigrate to Canada and become a farmer. He first settled in the neighbourhood of Orillia, where he had for his neighbor and life-long friend the late Archdeacon Brough, who had retired from his clerical labors on account of the loss of voice, and had settled on a farm in the same place. On the recovery of his voice, Mr. Brough was appointed to a pastoral charge in the Manitoulin Islands, and after moving to his new charge, he invited his friend, Mr. Bayly, to follow him, and take charge of a school that had been established there, and this was the beginning of Mr. Bayly's career as a teacher. Mr. Brough's stay in the Islands was not long, and on being appointed Rector of St. Paul's, London, he wrote to Mr. Bayly that the Head Mastership of the London Grammar School was vacant, for which he applied and was appointed. He moved to London after a stay in the Islands of about three years, and continued to fill the office to which he was then appointed to the day of his death.

In the life of Mr. Bayly there were, after this, few vicissitudes, and few events of a kind that would much interest the general reader. He managed the Grammar School with marked ability and success, though for almost his whole career in London he labored under serious difficulties from deficient accommodation. Mr. Bayly enjoyed a monopoly of the work of classical teaching in his own neighborhood for many years, and to his school flocked all the young men of the city and surrounding country, who desired to cultivate an acquaintance with the literature of Greece and Rome.

Negotiations were at length opened between the trustees of the Grammar and Public Schools of the city, with a view to bring about a union between the former institution and the higher department of the Central School, and to effect a union of the two Boards at the same time. This was effected in 1865, and the union of the Boards still exists, but the schools were separated by the action of the Legislature, though the High School continued till the latter part of last year to occupy class rooms in the Central School. A splendid High School building has been erected and was opened for the classes in the fall of 1878, and it was then, for the first time in this

long period, that Mr. Bayly found himself and his pupils in a building worthy of him and the work in which he was so long engaged. While all his friends regret his loss, regret it deeply, and will regret it long, it seems to intensify one's grief that after waiting so long he should have enjoyed the pleasure and advantage of such a large and finely equipped building for only a few months.

Mr. Bayly took Orders in the Church of England in 1860, and has been, we believe, assistant in Christ Church in London ever since. This was purely a labor of love on his part, as his ministrations in connection with this church were gratuitously rendered, but not the less valued on this account. He was highly esteemed by the pastor and congregation, as his life formed a noble illustration of the Christian virtues, the Christian faith and doctrines. That Mr. Bayly enjoyed in an eminent degree the confidence and respect of the Board of Education as well as of his fellow-citizens, will be shown by the following resolution of regret for his loss and of sympathy with his family, passed unanimously at a meeting specially convened on this occasion:

Mr. Johnston moved, seconded by Mr. Sharmon, "that this Board feel deeply the sudden death of the Rev. Mr. Bayly, who has held for the long period of thirty-seven years the responsible position of Head Master of the London Grammar or High School, who was universally esteemed and respected by all who knew him, and whose amiable disposition endeared him to a large circle of friends and acquaintances. In the death of Mr. Bayly the teachers' profession has lost one of its oldest and most worthy members, the youth of London a devoted and skilful instructor, and this Board a most efficient and highly esteemed officer. To the bereaved family the Board of Education desire to offer their sincere and heartfelt sympathy in the mournful and trying dispensation with which they have, in the providence of God, been so unexpectedly visited."

Notes and News.

ONTARIO.

The total number of children between the ages of 5 and 17 residing in the city of London is 4,314; the average number attending school 3,247, and the large number of 698 do not attend school four months in the year.

The number of pupils registered in St. Thomas is 1,070; the average attendance is 807.

St. Thomas High School Board has applied to be called a Collegiate Institute.

Strathroy requires more school accommodation.

Woodstock is erecting a new Model School, at an estimated cost of \$20,000.

The Picton High School is growing rapidly. The attendance is now 90.

Quite an addition was made to the Lennox & Addington Teachers' Library last week—the books being selected by Mr. Burrows, Inspector.

A reference library for the Napanee High School is about to be purchased—the Board of Trustees having appropriated a sum of money for that purpose.

ELOCUTION TOURNAMENT.—This tournament was held at Brantford, under the auspices of the Y.M.C.A. The judges were Prof. Bell, Principal McIntyre, and Dr. Kelly. The competitors were representatives of Y.M.C.A. from Toronto, Hamilton, London, &c., and the highest prize was awarded to Robt Widdowson, the youngest of the contestants, and a pupil of Mr. R. Lewis, elocutionist, of Toronto. Mr. Warren, of Hamilton, and Mr. Leeming, of Farringdon, ranked second and third respectively.

A correspondent of the London *Free Press* makes the following sensible remarks regarding the teaching of music in Public Schools: "In our new country music is too much looked upon by many as a mere accomplishment, and so quite unnecessary to be provided for in a system of free instruction, but a glance at the place it takes in the Public School studies in the leading countries of Europe is sufficient to prove that with those peoples who have long had the most perfect system of education it is considered as great a means for cultivating and refining the powers of the mind as any other department of school training, and also that it is as necessary and important for the child to begin a course in music while young as that it should begin any course of study at an early age."

In reply to an address presented by the Principal of the Ottawa Normal School, his Excellency spoke as follows: "Gentlemen,—I need hardly assure you of the very great interest with which I take this opportunity of learning by conversation with you the manner and means by which you undertake the arduous, responsible, and important labors devolving on the teachers and students of a great Normal School. You observe that I come from a country long famous for the heed given to the teaching of the whole youth of the land, and as you are aware, the parish schools of Scotland have been the instruments by which training has been given to men who have in every part of the world left their mark, and been an honor to the system founded of old by the wisdom of its Parliament. An equal love of perfecting to the utmost the educational facilities given to the people has led to the introduction in that kingdom of the most stringent measures, and of heavy local taxation, which is ungrudgingly and cheerfully borne, to ensure that no child shall go untaught, and that none shall be taught anywhere but in a good building, where he or she shall have as much pure air to refresh the body as sound instruction for the mind. The position given to the teacher has always been a high one. Indeed, I have often heard him called the most powerful person in the parish. And, gentlemen, it is right that those who fill the responsible positions to which the students here present aspire, should have all the authority which a well-recognized position can give, for they are to take their places in the world as the commissioners of the army of civilization, and the peaceable and honorable leaders of the force which by industry, culture, learning, and training is to advance the intellectual progress and the material prosperity of their country. You will have to deal with a long succession of men who come here to learn how to teach, and these, gentlemen, will see as they pass under their instruction a yet larger number who, in time, will represent the manhood and power of our nation upon this continent. I shall only be able to watch your progress and theirs for a brief period, but I hope I shall be able to show the interest I take in your success, and I shall in after years not cease to follow, with the fullest and warmest sympathy, the progress of the great cause of education, and the effect produced by your efforts and labours on the welfare and greatness of the Canadian Dominion."

Mr. H. L. Slack, M. A., Inspector of Schools for Lanark, always prepares a model report. We clip the following facts from the one just issued by him for 1877: There are in the county 121 schools, with 150 teachers, exclusive of the town of Perth, which has 10 public school departments. The highest salary paid is \$700. Eight teachers hold second-class Provincial certificates, 11 first-class of the old County Board, 118 third-class and 12 under-interim certificates, but all of these are only assistant teachers. The number of children between 5 and 16 is 8,424, and the total number on the registers of all ages 8,498, of whom 4,508 were boys, and 3,990 girls—200 being non-residents. Those who attended less than 20 days were 719; and those over 100, 4,283. The average attendance for the first half year was 3,904, and for the second half 4,035. There are 28 libraries in the county, with a total of 8,503 volumes.

The Guelph School Board has forwarded a petition to the Legislative Assembly to make six years the minimum age instead of five, or give School Trustees power not to admit any pupils under six.

A fine new High School building is being built in Guelph, and will be ready for use in a couple of months.

QUEBEC.

Quebec will have to wait this year for the Education Report, as the House of Assembly will probably not meet before summer.

The hard times are said to have pressed heavily upon the secondary institutions of learning, inasmuch as model schools and academies are partly supported by fees. Even in the best of times these institutions lead but a precarious existence.

Messrs. Weir and Emberson have just completed their annual tour of inspection of model schools and academies. These gentlemen inspected the same schools as they did last year, so as to enable them to judge of the progress made by each school. This is the second year of inspection, and it is yet premature to decide what advantages have resulted from this system of inspection, inaugurated by the Protestant Committee of Public Instruction. One of the greatest evils which the Protestant schools of Quebec have to contend with is the multiplicity of text-books on the same subject, which for some recondite reason is authorized by the Council. The work of inspection is not thereby made easier.

Quebec is behind Ontario in the meaning which she attaches to

the phrase secondary education. In order to participate in the grant made for superior education, the study of Latin is essential. One consequence of this is the sustentation of various educational absurdities in the poorly equipped schools. Classes of boys and girls, against the openly expressed wish of parents, are dragged by main force through *hic, haec, hoc*, and *amo, umas, amat*, to save appearances, and a grant of some \$50 (!) from the Superior Education Fund. Even in the centres of population, such as the cities of Quebec and Montreal, the study of Latin has hard work to hold its place. If this is the case, one can well imagine what must be the condition of classical education in the townships, for instance. If there existed in Quebec anything like public opinion on school matters, or any man of influence independent enough to act in the matter, the question presents no insuperable difficulty. The question would be solved all the more easily, as French is from circumstances almost as compulsory as English. Furthermore, the bulk of the Protestant population is mercantile, and to the mercantile mind the study of Latin and Greek is an abomination. To meet this want, which the higher class schools cannot or do not meet, private schools are established, to teach whatever is wanted, and especially not to teach whatever is not wanted.

A sort of mercantile high school was opened in Montreal on the 3rd of February, by Mr. H. Arnold, in the house lately occupied by Hon. Peter Mitchell. The course of studies embrace English and French, while Latin and Greek are optional and extras. Both in this matter and in the matter of text-books, a move must be made in the immediate future.

The Montreal School Commissioners, who now have control of the High School, contemplate some changes in the hours of teaching, which have hitherto been from 9 to 12, and from 1.30 to 3.30. But most parents find that these hours are, on the whole, most convenient.

The Montreal *Star* has had a series of articles on the advantages and necessity of compulsory education. The belief in the efficacy of governmental interference seems to be ineradicable in some minds. When few care for education at all, it is a great step to compulsory education all at once. For the efficient working of a law, some measure at least of public opinion must be forthcoming to support it. Some time back, the *Canadian Monthly*, in reviewing the work, "L'Instruction Publique au Canada," by Mr. Chauveau, formerly Superintendent, remarked, that the impression left upon the mind after reading that work was, that the public men of Quebec, even the officers of the Education Department, took no real interest in the work of education, particularly of the masses; and that if any feeling at all existed on the subject, it was rather one of hostility. The spread of education would rudely crush hopes which have long been cherished; to hinder the spread of education would, therefore, seem to be the path of duty plainly indicated to those who have cherished such hopes.

There is a great scarcity of educational items this month, which is usually devoted to the annual report.

NOVA SCOTIA.

The report in last month's notes of the resignation of Rev. W. S. Donagh, Inspector of Schools for the County of Cumberland, is confirmed. No announcement has yet been made as to his successor. There is, we believe, a law on the Statute Book empowering the Council of Public Instruction to divide the Province into Inspectorial Districts, regardless of County lines. Pending the arrival of the fitting time to put this law into force, we suppose individual vacancies will be filled up as usual.

We regret to record the death of J. J. McKenzie, Esq., A. M., Ph. D., Professor of Physics in Dalhousie College. Dr. McKenzie's loss will be a serious one to this College, and to the cause of higher education in Nova Scotia.

In educational circles it is canvassed with some degree of interest whether any changes of importance in the School Law of the Province will be made during the approaching session of the Legislature.

A new edition of the School Law Manual is looked for at an early date.

NEW BRUNSWICK.

The second annual meeting of the Westmorland County Teachers' Institute was held on the 13th and 14th of February, in the fine new school-house at Shediac. Some fifty or sixty teachers were present, and an admirable tone and spirit characterized the proceedings. Mr. Jas. G. McCurdy, of Moncton, was elected President, and Mr. H. G. Heustis, Secretary-Treasurer. Papers

were read on the following subjects: "Drawing," by Mr. William Levinge; "Reading," by Mr. Barnes; "How best to secure the elevation and dignity of the teacher's office," by Mr. S. C. Wilbur; "How to study, and how to teach pupils to study," by Mr. D. B. White; "How best to secure regularity of attendance," by the President; and "The importance of having the co-operation of trustees in school work," by Miss C. Honnessey. Each paper gave rise to conversation and discussion; and there were also, at the third session, exceedingly profitable discussions upon penmanship and narrative composition. The Chief Superintendent of Education was present by invitation, and participated in the discussions. On the Thursday evening he addressed a large audience in Smith's Hall, the President of the Institute occupying the chair. In the course of his remarks upon the work and the dignity of the teaching profession, Dr. Rand claimed for the teachers that kindly sympathy and liberal support which are too often withheld by the people in whose interest they are earnestly laboring. The Hon. P. A. Landry, Chief Commissioner of Public Works, and one of the representatives of the county, who sat beside the President, also addressed the meeting by request, expressing his concurrence in what Dr. Rand had said, and his own personal interest in the teachers and their work, in which he himself had formerly been engaged. Both these addresses were listened to with the greatest interest, and were frequently applauded. Before the close of the Institute, hearty votes of thanks were passed to Dr. Rand for his counsel and assistance, and to the popular Inspector for the county, R. Wilson, Jr., Esq., for his painstaking efforts toward making the meeting a success. On the evening of the 14th there was a public meeting of a very entertaining character, at which readings and recitations were given by some of the teachers, and a phonograph was exhibited.

Mr. G. U. Hay, of St. John, whose essay on Natural Science in Schools was published in our November number, has recently presented to the museum of Acadia College his valuable collection of the flora of New Brunswick, embracing over 600 species of phanogamous plants, besides many others, all properly labelled and arranged. Probably no educational institution in the Dominion has so complete a collection of Acadian plants. A handsome cabinet, specially constructed to contain this herbarium and such other specimens of the plants and woods of the Lower Provinces as may be accumulated from time to time at the museum, has been presented by Mr. John March, Secretary to the School Board of St. John.

About a month or more ago, the Councillors of the Town of Portland entertained a proposal to petition the Legislature for certain amendments in the "Common Schools Act," the main purpose of which was to effect a saving of expense, by restricting the limits of the school age to seven and fourteen years, and by providing for instruction in the English branches only. Doubtless the difficulties arising from the present financial pressure are very great; but to take such a retrograde step would clearly be unwise, even if it were demonstrated that a considerable saving might thus be effected. Better counsels appear to have prevailed, for no further action has been taken.

The school-house at Kingston, Kent, was destroyed by fire on the 1st of February; the result of a defective flue. The building was partially insured.

G. E. Coulthard, M.D., has been appointed a member of the Board of School Trustees for the City of Fredericton.

Mr. Arthur J. Trueman, A. M., Superintendent of the Schools of Portland, has resigned his position, with the view of completing his study for the legal profession.

A Theological Professorship in connection with the Anglican Cathedral at Fredericton is to be established by the Society for Promoting Christian Knowledge.

During the school term ended Oct. 31, 1878, there were 1,343 public schools in operation in the Province, and 1,384 teachers and assistants. For the corresponding term of 1877 the numbers were, 1,305 schools and 1,349 teachers. Looking back five years, the number of schools in the summer term of 1873 is found to have been 979, and the number of teachers 1,020. The total number of different pupils registered in the public schools of New Brunswick during the last school year was 68,780, or 1 in 4.15 of the population. It is gratifying to note the steady increase in the proportion of the population attending school, as shown by the following figures:—

1874.....	(Estimated)	1	in 4.72
1875.....	"	1	" 4.58

1876.....	(Estimated)	1	" 4.41
1877.....	"	1	" 4.23
1878.....	"	1	" 4.15

There are at the present time about 22,000 pupils more than there were ten years ago, and some 9,000 more than there were five years ago.

MANITOBA.

A number of leading citizens met at the Court House on the 23rd January, to organize an Historical and Scientific Society; Rev. Messrs. Robertson, Pinkham, Grisdale, Hart, Prof. Bryce, Dr. Cowan, Messrs. Whiteher, W. H. Ross, D. Codd, Allan McDonald, W. R. Nursey, Alex. McArthur, — Parsons, F. L. Hurz, Geo. H. Ham, Alex. Begg, and a number of other leading citizens, were present. An interesting and exhaustive paper on the importance and necessity of such a society, the vastness of the field for historical and scientific research, and an outline of the work to be accomplished, was read by Ald. McArthur. A resolution was then passed affirming the advisability of forming a society, as described by the essayist. After a discussion as to the name to be given to the society, it was decided to call it "The Historical and Scientific Society of Manitoba." A committee was appointed, on motion of Rev. Mr. Pinkham, to draft a constitution and by-laws, to report to another meeting.

The annual school meetings for the election of trustees and auditors, and for voting the sum of money to be raised by assessment, to supplement the government grant, were held on the first Monday in February. Judging from the minutes of these meetings, it is pretty evident that there will be a large increase in the number of public schools during the present year, as well as considerable advancement in the condition and prospect of those now in existence.

Winnipeg, which works under an admirable Act to meet the special requirements of cities and towns, passed three years ago, has a Board consisting of twelve trustees—three for each ward. Since the late election the Board has been organized, by the appointment of A. J. Belch, chairman, and James Stewart, secretary-treasurer, and the following standing committees have been struck, the chairman being an *ex officio* member of each committee, viz.: *Rules and By-laws*—Mulvey, Stewart, Huggard and Campbell. *Finance*—McNee, Mulvey, Roberts and Doidge. *Buildings*—Huggard, Patterson, Palk and Luxton. *School Management*—Luxton, McNee, Biggs and Campbell.

The Rev. J. F. German, M.A., has been re-appointed Inspector of the city schools, and the following is the present staff of teachers, viz.:—J. B. Ferguson, Acting Principal; P. C. McIntyre, Mrs. Chisholm, Miss Maggie Hore, Miss Affleck, Miss Hurssell, Miss McElroy, and Miss Edwards.

Emerson, our pushing little border town, intends erecting during the coming summer a \$3,000 brick school house, like the one in the north ward of the city of Winnipeg. Mr. T. S. Menary is the teacher.

The number of school districts under the jurisdiction of the Protestant section of the Board of Education at the present time is, English, 73; Mennonite, 36; total, 109. English Districts are being formed by the Board whenever it meets, and it is likely that before the year ends the rest of the Mennonite villages will have been organized into school districts.

The following summary shows the number of Protestant schools in operation each year since Confederation, with the total number of scholars attending them, as given in the Superintendent's reports:—

Year.	No. of Schools.	Total Attendance.
1871	16	816
1872	17	1,097
1873	17	1,108
1874	22	1,248
1875	26	1,595
1876	30	1,600
1877	38	2,027
1878	49	2,652

The following important resolutions were, on motion of the Superintendent, adopted at the last meeting of the Board of Education:—1. That after the present year examinations be held semi-annually. 2. That in consequence of the special circumstances of the country, and the number of candidates applying to be qualified, a general examination of teachers be held in March next, to com-

mence on the 3rd Tuesday in the month. 3. That the Superintendent be hereby empowered to endorse for interim certificates, the teachers' certificates dating back not more than two years, of candidates coming from other Provinces of the Dominion; that candidates who have failed to obtain a certificate at any general examination are not eligible for interim certificates; and that, in the opinion of the Board, it is not expedient to encourage candidates who have never taught to apply for such certificates, although, if there be an absolute want of teachers, the Executive Committee may exercise the powers delegated to them, in a resolution of the Board adopted at a meeting held on the 7th day of December, 1876. This examination will not interfere with the one to be held during the month of August, of which teachers in various parts of the Dominion have received notice.

Rev. Canon O'Meara, of St. John's College, has been appointed a member of the Board of Education, to take the place of Captain Kennedy, who has resigned.

The following gentlemen have been appointed to form the Board of Examiners for the current year: The Revs. Professors Bryce and Hart, Canon O'Meara, J. F. German, E. Morrow, J. Robertson, S. Pritchard, S. P. Matheson, — Campbell and the Superintendent, and Messrs. R. Bourne, S. C. Biggs, J. H. Bell, W. Black, A. M. Sutherland, W. Hespeler, J. Friesen and A. Isaac.

Readings and Recitations.

THE BABY'S KISS.

[AN INCIDENT OF THE AMERICAN CIVIL WAR.]

Rough and ready the troopers ride,
Pistol in holster and sword by side;
They have ridden long, they have ridden hard,
They are travel-stained and battle-scarred:
The hard ground shakes with their martial tramp,
And coarse is the laugh of the men of the camp.

They reach a spot where a mother stands,
With a baby, shaking its little hands,
Laughing aloud at the gallant sight
Of the mounted soldiers fresh from the fight.
The captain laughs out—"I will give you this,
A bright piece of gold, your baby to kiss."

"My darling's kisses cannot be sold,
But gladly he'll kiss a soldier bold."
He lifts up the babe with a manly grace,
And covers with kisses its smiling face,
Its rosy cheeks, and its dimpled charms,
And it crows with delight in the soldier's arms.

"Not all for the captain," the troopers call;
"The baby, we know, has a kiss for all."
To each soldier's breast the baby is pressed
By the strong rough men, and kissed and caressed,
And louder it laughs, and the lady's face
Wears a mother's smile at the fond embrace.

"Just such a kiss," cries one warrior grim,
"When I left my boy, I gave to him."
"And just such a kiss, on the parting day,
I gave to my girl, as asleep she lay."
Such were the words of these soldiers brave,
And their eyes were moist when the kiss they gave.

G. R. Emerson.

SUNSHINE AND SHOWER.

Two children stood at their father's gate,—
Two girls with golden hair;
And their eyes were bright, and their voices glad,
Because the morn was fair.
For they said, "We will take that long, long walk
To the hawthorn copse to-day;
And gather great bunches of lovely flowers
From off the scented May;
And oh! we shall be so happy there,
'Twill be sorrow to come away."

As the children spoke, a little cloud
Passed slowly across the sky;

And one looked up in her sister's face
With a tear drop in her eye.
But the other said, "Oh! heed it not;
'Tis far too fair to rain;
That little cloud may search the sky
For other clouds in vain."
And soon the children's voices rose
In merriment again.

But ere the morning hours had waned
The sky had changed its hue,
And that one cloud had chased away
The whole great heaven of blue.
The rain fell down in heavy drops,
The wind began to blow,
And the children, in their nice warm room,
Went fretting to and fro;
For they said, "When we have aught in store,
It always happens so!"

Now these two fair-haired sisters
Had a brother out at sea;
A little midshipman, aboard
The gallant "Victory;"
And on that self-same morning
When they stood beside the gate,
His ship was wrecked! and on a raft
He stood all desolate,
With the other sailors round him,
Prepared to meet their fate.

Beyond, they saw the cool green land,—
The land with its waving trees,
And the little brooks that rise and fall
Like butterflies to the breeze:
And above them the burning noontide sun
With scorching stillness shone;
Their throats were parched with bitter thirst,
And they knelt down one by one,
Praying to God for a drop of rain
And a gale to waft them on.

Just then that little cloud was sent,—
That shower in mercy given!
And as a bird before the breeze,
Their bark was landward driven.
Now some few mornings after,
When the children met once more,
And their brother told the story,
They knew it was the hour
When they had wished for sunshine,
And God had sent the shower!

Science Notes.

—A note was read at a recent meeting of the Paris Academy of Sciences, from Mr. J. Norman Lockyer, in which the author says that he believes he has succeeded in proving that many of the "elements" are in reality compound bodies.

—*The English Mechanic* says:—We have had an opportunity of inspecting the apparatus for drilling square holes by rotary motion. It was patented by Mr. Julius Hall, of Chancery-lane, and it has been on view at the Paris Exhibition, where it attracted much attention from mechanics, engineers, and others. The idea of "drilling" a square hole is of course beyond the conception of the average mechanic; but it is done, and done very accurately, by the apparatus patented by Mr. Hall.

—"A HALF ounce letter taken to the sun," says Proctor, "would weigh four and a half tons, if the attraction of gravitation remained the same as on the earth in proportion to the mass."

CEMENT FOR LEATHER.—Of many substances lately brought very conspicuously to notice for fastening pieces of leather together, and in mending harness, joining machinery belting, and making shoes, one of the best is made by mixing ten parts of sulphide of carbon with one of oil of turpentine, and then add enough gutta-percha to make a thickly flowing liquid. One essential prerequisite to a thorough union of the parts consists in freedom of the surfaces to be joined from grease. This may be accomplished by laying a cloth upon them and applying a hot iron for a time. The

ement is then applied to both pieces, the surfaces brought in contact, and pressure applied until the joint is dry.

—PROFESSOR EMERSON REYNOLDS proposes this simple test of the purity of water. Put into a perfectly clean bottle of white glass one half litre of water, and a piece of loaf-sugar the size of a pea. Then set it on a sheet of white paper in a window exposed to the sun's rays for eight or ten days. If the water is then turbid it contains foreign substances, impurities, probably sewage.

A new danger to health is found in the use of artificial flowers colored with aniline dyes. The bronze-green and other colors now so much in vogue, are not "fixed," and the dye is apt to be transferred to the skin of the head, producing much annoyance, unpleasant irritation, or even inflammation.

ANSWERS TO QUERIES.

C.—French for *Intermediate*, 1879. Somerlie chap. 1: 8. or Lazare Hoche, Part first together with chap 1 and 2 of Part second.

SUBSCRIBER, *Carlton Place*.—The Minister of Education has not yet decided to place Psychology on the list of subjects for First-class Examinations.

SUBSCRIBER, *Leeds*.—You can collect salary till January 6th, 1879.

SUBSCRIBER, *Stirton*. Write to the Educational Depository for price list of globes, &c., and list of examination subjects. Your Inspector can arrange to let you teach during the last half of the year, if you fail in July next.

C. S. B.—You would be entitled to salary for seven months.

C. C., *Sheguianah*.—The works authorised by the Education Department in the subjects mentioned, are; Botany, Gray's "How Plants Grow," and "Oliver's Elementary Botany;" Philosophy, Kirkland's Statics, Hamblin Smith's Statics, and Hamblin Smith's Hydrostatics; Physiology, "Health in the House," by Miss Buckton; European History, Freeman's; Canadian, none yet.

J. F. S., *Scugog*.—You may write for a First-class Non-professional Certificate before passing any professional examination on going to the Normal School. If you take a First (N.P.) you may get a First-class Certificate by attending the Normal School for one session and passing both Second and First-class Professional Examinations.

J. F. W., *North Gorrer*.—Your Normal School attendance in 1876 and 1877 should be sufficient if you gave satisfaction then. Write to the Principal. English Literature for July 1879 is *Paradise Lost*, Book II.

Teachers' Associations.

The publishers of the JOURNAL will be obliged to Inspectors and Secretaries of Teachers' Associations if they will send for publication programmes of meetings to be held, and brief accounts of meetings held.

WEST HURON.—The West Huron Teachers' Association held its regular half-yearly meeting in the Central School, Exeter, on Friday and Saturday, January 24th and 25th. The attendance was large, and the greatest interest and enthusiasm were manifested throughout the whole meeting. A considerable portion of the time was taken up by Dr. McLellan, who gave many useful hints and valuable information on the methods of teaching reading, arithmetic and algebra. In algebra, particularly, his unique method of factoring, and his remarkably short and simple solutions of difficult problems were much admired. On the evening of Friday he delivered his popular lecture on "The Future of Canada" to a large and highly appreciative audience. Inspector Miller, as representative to the Provincial Association, gave a minute and detailed report of the last meeting of that body, after which he took up the subject of military drill in connection with school work, pointing out the many benefits arising from a regular course of calisthenics and drill. The subject was made practical by the teachers adjourning to a large vacant room and going through a number of movements under the direction of Mr. Miller.

Mr. H. I. Strang, B.A., of Goderich, dealt in a very interesting and instructive manner with the difficulties in analysis and parsing presented to him. Miss Spicer ably illustrated her method of teaching Canadian history to a class of beginners, and Mr. Gregory treated physical geography in a similar manner. Mr. S. P. Halls treated in a very lucid manner the method of applying the principles of the triangle of forces to the solution of problems in natural philosophy.

The following resolutions were unanimously adopted by the Association:—

Resolved—That the members of this association take much pleasure in conveying to Dr. McLellan their hearty thanks for his able lectures on Reading Arithmetic and Algebra, and last, though not least, his eloquent lecture on "The Future of Canada"; and that they deem it their duty to say that they feel greatly indebted to him for giving such clear and instructive explanations on the subjects he discussed, and that they can go back to their work much better able to give instruction in these important departments of school work; and further, that this association, takes this opportunity of thanking Dr. McLellan for his valuable works on Mental Arithmetic, which contain so many useful hints and examples for teachers and pupils, and hope that he may see fit to prepare a work on Elementary Algebra.

Resolved—That military drill in schools is highly beneficial, not only as a means of developing the muscles and expanding the chest, but is also a valuable aid in promoting orderly habits and good discipline.

W. R. MILLER, Secretary.

RUSSELL.—The semi-annual meeting of the Russell Teachers' Association was held in the Duncanville school house Friday and Saturday, the 9th and 10th of January. There was more practical institute work done than at any previous meeting. Mr. Riddell, Mathematical Master of Ottawa Normal School, Mr. MacMillan, of Ottawa Collegiate Institute, and Messrs. Smirle and Munro, of Ottawa, were present. Mr. J. H. Hill, of Bear Brook Public School, read a paper on "Grammar to Junior Classes," which showed that he was up to the times in teaching grammar. Prof. Riddell took up the subject of "How to teach Algebra through the Simple Rules to beginners?" He presented the subject so clearly that none present could fail to be benefited by his many valuable hints. In the afternoon Mr. Riddell addressed the teachers on "Arithmetic and how to make it interesting to beginners?" On Friday evening there was an entertainment at the Town Hall which was opened by Rev. T. Garrett, B.A., Inspector. F. R. Powell, Esq. was moved into the chair. He introduced to a large and intelligent audience Mr. Riddell, who delivered his excellent lecture on "The Stuff that Dreams are made of." The lecture was so replete with scientific knowledge, so free from technical terms, and clothed with language so spicy and racy, that all partook of the seasoned dish. A few dialogues and music by the band brought this highly amusing and instructive entertainment to an end. On Saturday, Mr. MacMillan took up "The discussion of difficult words in parsing." He very ably parsed and illustrated the use of a number of hard, knotty words by means of sentences written on the blackboard. An animated discussion followed, in which Messrs. Smirle, Riddell, MacMillan and others took part. Mr. J. Munro formed the teachers in a class and taught a lesson to illustrate his method of managing a Fourth Class in teaching reading, which was very interesting and instructive. Mr. A. Smirle then showed how the blackboard might be used in giving an object lesson, in teaching reading to beginners, in teaching grammar, chemistry, &c. The teachers present went home determined to use the black-board more than ever, and pleased that Mr. Smirle took up so practical a subject. A very hearty vote of thanks was then voted to the friends from Ottawa, and the association adjourned to meet in Bear Brook, on Friday and Saturday, the 6th and 7th of June.

REV. T. GARRETT, B.A., President.

N. G. ROSS, Sec.

OTTAWA TEACHERS' ASSOCIATION.—The second regular meeting of the Ottawa Teachers' Association was held in the Ottawa Normal School on Friday and Saturday the 21st and 22nd of February.

Mr. Glashan, I. P. S., opened the proceedings by an address entitled "Some Notes on Recent Examinations," in which he exhibited the influence examinations have exerted on the teaching of the various branches of the Public School course.

Mr. A. Smith introduced the subject of "Mensuration to Beginners," showing in a clear practical manner how the elementary principles of that subject may be best communicated.

Mr. E. D. Parlow exhibited his method of teaching "Arithmetic to Advanced Classes," in which he illustrated fully how a knowledge of the higher rules of that subject may be easily acquired when taught according to the "Unitary Method."

Mr. Thornburn, M. A., read a carefully written paper on Examinations which received the hearty approbation of the Association.

On the evening of Friday, Dr. Baptie, Science Master of the A. N.S., delivered an able and instructive address on the subject of "Light."

Rev. T. D. Philipps, took up, on Saturday morning, the subject of

"Military Drill in Schools," and showed very fully the various advantages that would arise from its introduction.

Miss McLardy, in a most pleasing and instructive manner showed how many of the branches taught in primary classes might be made to assume the form of Object Lessons.

On the afternoon of Saturday, G. W. Ross, M.P., delivered an eloquent lecture on "The Teachers' Profession," in which he showed the various requirements with which teachers should comply, and the mistakes they should endeavor to avoid in order to render their work efficient.

The Question Drawer conducted by Mr. Glashan, proved an interesting and profitable feature of the proceedings of Saturday.

The following are the officers for the ensuing year:—

President, Prof. Riddell, Math. Master of O. N. S., Vice-President, A. Smirle, President of Central School East; Sec. Treasurer, C. Campbell; Managing Committee, J. C. Glashan, J. McMillan, E. D. Parlow, Miss McLardy, and Miss Joyco.

R. R. COCHRANE, Sec. Treas.

NORTH HASTINGS.—The North Hastings Teachers' Association held its usual semi-annual meeting at Madoc on Thursday and Friday, 27th and 28th February.

First session, Thursday morning, February 27.—The President took the chair at 11 o'clock a. m. After routine business and an address from the President, the Association adjourned till 2 o'clock p. m.

Second session, Thursday afternoon, Feb. 27.—The Association met at 2 o'clock and proceeded to elect its officers for the ensuing year, viz.: President, Wm. Mackintosh, P. S. I.; Vice-President, Mr. Thompson; Secretary, George Kirk; Treasurer, Miss A. Cowie; Librarian, Miss J. Riddell; Councillors, Messrs. J. W. Rodgers, J. B. Morton, Chas. Fuller; Leonard Tait, Edward Conovan, J. M. Henderson, and Misses Ludlow and Riddell. The subject of spelling was introduced by Mr. C. Fuller, who did himself credit by the efficient way in which he treated it. After a discussion, in which the Inspector, (Mr. Mackintosh) and others took part, the subject was succeeded by that of map sketching, introduced in a most masterly manner by Mr. Hughes, P. S. I., Toronto, who showed, in a way calculated to convince even the most skeptical, that this was a valuable auxiliary in the teaching of geography. Even those without special training in drawing will find it valuable, as the sketches need not be elaborate. But particularly was the necessity of requiring the pupils to draw the map on slates for themselves insisted upon. Etymology was then introduced by Mr. Tait, who pointed out the desirability of pupils acquiring a knowledge not only of Greek and Latin, roots, prefixes and suffixes, but also of those of Saxon origin. Mr. Mackintosh then explained the manner of keeping daily and general registers.

Third Session, Thursday evening, 8 o'clock. A large number of the friends of education, as well as the teachers at Institute, attended this session. Mr. Thompson read an article entitled "Some hindrances to Effective Public School Teaching," in which the fossilized teacher was dealt with without gloves. The essay frequently evoked rounds of applause. Rev. Mr. Kenner then addressed the meeting, urging teachers to make their profession a life work, and concluded by pointing out the advantages of such gatherings as the present, feeling assured that teachers would go back to their schools more enthusiastic and better prepared for the performance of their duties. Rev. Mr. Wishart was delighted to know that we had a Model School and a first-class library at Madoc. He stated that the standard of education was higher here than in several adjoining States of the American Union. He urged teachers to be enthusiastic. "The Almighty," he said, "has written two books, viz., those of Nature and Revelation, and is writing a third, the Book of Providence, and in his wisdom is shaping the educational course to advance his cause." Mr. Hughes, during the evening, delighted the audience with a recitation, "The Parting of Marmion and Douglas," and also gave an address, citing some objections to our school system and effectively answering them.

Fourth Session, Friday morning 9.30.—Mr. Kirk introduced the subject "Grammar," and handled the second-class examination paper satisfactorily. Miss Ludlow then took up the subject of "Geography," receiving the thanks of the Association for her able article. Mr. Hughes then took up "Minor points in school management."

Fifth Session, Friday, 2 p.m.—Mr. Hughes took up the subject of "Mistakes in Teaching." Among other mistakes he said the following were prominent: 1. Not to have order. 2. To think pupils like disorder. 3. To think that order means absolute silence. 4. To try to drown disorder by speaking in a loud tone. "Mistakes in Method"—1. To ask questions consecutively. 2. To name the person, and then propose the question. 3. To concentrate your questions upon a few pupils. 4. To come to the class unprepared. 5. To attempt to teach without previous explanation. 6. To tell anything you can teach without telling. 7. To ask questions that pupils cannot answer. A question drawer containing a large number of questions was then opened, and appropriate answers given to the queries by Messrs. MacKintosh and Hughes. The success of the Institute was largely owing to the efforts of M. J. Hughes, Inspector, Toronto.

GEORGE KIRK, Secretary.

REVIEWS.

THE NORMAL UNION SYSTEM OF INDUSTRIAL DRAWING. By J. V. Montgomery. Philadelphia, Sower, Potts & Co. The primary course of this series consists of eight numbers. The progression of lessons is admirable. The economy of the arrangement of the books is also to be commended. The system is based upon a knowledge of geometrical figures. The patterns and elements given are exceedingly simple and varied. For a series of Industrial Drawing, this has not enough of the inventive for even juniors, but every earnest teacher of the subject would be benefitted by an examination of these books. The patterns and the instructions given on each book are very suggestive.

UNCONSCIOUS TUITION. Davis, Bardeen & Co., Syracuse, N. Y. Messrs. Davis, Bardeen & Co., are the publishers of the *School Bulletin*, a very practical teachers' journal. They also publish numerous educational works. *Unconscious Tuition* is the first of the proposed series of "Schoolroom Classics." It is a lecture delivered by the Rev. F. D. Huntingdon, Bishop of Central New York. He discusses the subject in a clear, logical and comprehensive manner. The thoughts are fine and the language elegant. The price of the book would be about 15 cents.

APPLETON'S JOURNAL for March opens with a novelette entitled "My Comedy," from the pen of Barnet Phillips, like "Macleod of Dare," it has an actress for a heroine, but the character is a very different one, while the situations are fresh, piquant, and thoroughly good. Although a story of goodly length, it is given complete. This is followed by the concluding part of the chapter on English literature, from Spencer Walpole's "History of England." The survey of English Literature is from the period when the history opens, and is remarkable for many fresh ideas and suggestions. "Musical Romanticism" is an eminently readable paper, being an attempt to show the real source of our enjoyment of music, and the principles that enter into its construction. There are an interesting paper on "The Evil Eye," an article on "Dr. Smiles's Works on Self-Help," and a paper from "Blackwood," called "Two Ladies," which takes up the two recent volumes, Mrs. Kemble's "Recollections of Girlhood," and the "Memoirs of Mrs. Jameson," for comment and exposition. The editor discusses "Paganism in Fiction," in which he shows how completely the modern novel commonly ignores Christianity. This is followed by "Fitness in Art," "The City Beautiful," and "Water-Colors." D. APPLETON & Co., NEW YORK. \$8.00 per year.

The Atlantic Monthly, March. Richard Grant White's Americanisms (No. VI.), is worth the price of the number. Three good poems by Rose Tevey Cook, Whittier and Longfellow, two short stories, a very spiritual article on Ghost Stories, a humorous sketch by Mark Twain, several "solid" articles, including one on the "Natural History of Politics" bring us to the Contributors' Club and Literary Notices. These are very instructive.

Scribner's Monthly, March. Beautifully illustrated as usual. George Ropp and the "Harmonists" sketches, the growth and decline of that strange community; some Western Schoolmasters, by Edward Edgleston, is funny, thoughtful, and sentimental; "Haworth's Mrs. Burnett's story grows stranger and stronger; Topics of the Times; Culture and Progress; The World's Work; and A College Camp at Lake George, are among the choice gems of its 26 articles and departments.

St. Nicholas, March. Tales and wonderful facts; tales of adventure, facts of history; tales of school life, facts of nature, tales of fairy land, facts of science; all these are told in simple language, and pictured in speaking illustrations. This is St. Nicholas, the delight and charmer of childhood.

The Peep-Shot. (Strahan & Co., London.) This is a delightful child's paper. The stories are of an elevating character, the illustrations are very good, and the topics discussed such as are of interest to little folks. It is a brother of St. Nicholas.

The Musical Times is published by Novello & Co., London. Either its articles, its music, or its advertisements are worth the cost of it; only three pence per month. Order it through your music dealer or bookseller.

The Contemporary Review. Full as usual. "Professor Goddes on the

Homeric Problems, by Dr. Freeman: "Naturalism, Roman Catholicism and Converts," "London Medical School," and "Contemporary Life and Thought," will be interesting to Teachers.

Vicks' Floral Guide. Every school-room and school ground should have flowers. They educate and elevate. They may be made of great service in adding to the interest of children in their school, and in decreasing the difficulty of the teacher in disciplining his pupils. *Vicks' Floral Guide* tells what flowers to select, where to get them, how to treat them, and does it better than any similar work.

To the Editor of the *Canada School Journal*.

SIR,—Permit me to direct attention to two of the clauses of the School Bill now before the Legislature.

The tenth clause proposes that Masters in High and County Model Schools shall be ineligible as members of County Boards of Examiners. My objection to this is that there is a serious omission. If High School Masters should not be on Boards of Examiners, much more Public School Teachers should not. I think I am correct in stating that more candidates go up for third class certificates, and it is only such that County Boards can grant, from the Public Schools than from the High Schools. At all events, their attendance at the latter has been for only a brief period, and their Public School Teacher has a deeper interest in them than their High School Teacher. It is to be hoped that the clause will be amended.

By the twenty third clause trustees of Separate Schools in every village, town or city, being the county town of the county, are empowered to appoint a "competent person," to be approved of by the Education Department, to be a member of the County Board of Examiners of such county. To us this appears to be a most objectionable provision. On reading it, we cannot but think there is a purpose to be served by it. County Councils, hitherto, have had the power of appointing these Boards, the law providing that there must be one or more Public School Inspectors on it. All the members, however, must possess certain qualifications from the department. But, if we read this clause aright, such qualifications may not be possessed by the "competent person," and his appointment is withdrawn from the Council and handed over to the Separate School Trustees. Now, we do not object to a Roman Catholic being placed on the Board, but to the source of his appointment. With as much reason might the trustees of Public Schools in any village, town or city, have the same privilege,

Yours respectfully,
INSPECTOR.

THE SCHOOL AMENDMENT BILL.

To the Editor of the *Canada School Journal*.

DEAR SIR,—Will you be good enough to allow me space in your valuable paper to call attention to the School Amendment Bill.

No doubt Mr. Crooks intends by the second section of this Bill to create a greater interest in School Trustee elections, but he will find himself greatly mistaken when the clause comes into operation. The franchise even now is only too widely extended, and were it curtailed, and the property qualification for a school trustee made the same as that for a member of the Board of Aldermen in cities and towns, the result would be a deeper interest taken by the electors in the choice of trustees, and the election of a superior class of men to fill these offices. It is impossible for the Legislature to devise a test that will secure for this important trust a Board in whose members will be found happily blended the intelligence, morality and patriotism so necessary in the character of a School Trustee. Still, success in life is about as far-reaching a test as the people can apply to the one, while social position and popular respect may be trusted to pronounce upon the other.

Then the amount of money dispensed annually by school corporations having now mounted up to something like three millions and a half of dollars per annum, there is certainly a need of securing to those whose property is taxed to meet this large expenditure, a controlling voice in the application of these large sums. To give this control to sister corporations freely chosen by mostly the same electorate, is one of the most short-sighted acts that could possibly be thought of. If Mr. Crooks desired to ferment discord, create and keep alive antagonisms between municipal councils and school boards, he could not have devised more effective machinery. But had he desired to check extravagance real or assumed, on the part of school corporations, he should have assigned more power to property as a factor in the constitution of these Trustee Boards. He should have

made the one list of voters do for both elections, he should have brought on these elections at the same time, and adopted the ballot as the medium of voting in both these cases.

Then the two corporations being similarly constituted, a simple provision might have been inserted, making it obligatory upon the Trustee Board to refer the question of the purchase of a site or the erection of a building, to the ratepayers, when this course was demanded by a certain number of the trustees themselves, or of property owners, when the latter made their wishes known to the board in writing. This would have been more in accordance with the spirit of our constitution, than to give one election barely a veto over the decisions of another elected by the same constituency, at least as respects physical boundaries. The twenty-fifth section, so far from forming a safeguard to the property owners, and checking extravagance, when such is found to exist, will, in nine cases out of ten, furnish captious and pragmatic alderman with the means of preventing legitimate and necessary expenditure.

But this is not the worst feature in connection with this proposed amendment. In most of the cities of Ontario, perhaps in all, the members of the Trustee Board are quite as intelligent a body of men, of quite as good standing, socially considered, and quite as liable to be affected by the visit of the tax-gatherer, as are the members of the Board of Aldermen. In addition to all this, they are, or ought to be, thoroughly acquainted with the wants of the schools as respects accommodation—what the others are not, and therefore common sense would point to these as the parties that ought to be invested with the power to impose taxation for school purposes, subject only to the veto of those who will have to foot the bill.

The teachers of the Province looked to Mr. Crooks' proposed modification of the Act, to produce a radical change in the distribution of the superannuation fund. As the law and regulations stand at present, they may be said to actually exclude female teachers from all participation in the fund, and yet there is no portion of the teachers better entitled to share in these benefits in proportion to their service. It is needless to point out to any man of judgment, that it is a cruel mockery to call upon a woman, who generally enters the profession at sixteen or eighteen, to struggle on until she reaches sixty, in order to qualify her to share in this provision, as not one in twenty is capable of such endurance. Besides, old teachers, especially old female teachers, know well the difficulty, or rather the impossibility of obtaining an appointment, when they have attained to this venerable age. On this subject the law might, with infinite advantage to the female teachers, have been changed, and strict justice and humanity would have promptly effected the change.

Middlesex, Feb. 28, 1879. Yours, &c.
CONSTANT READER.

Publishers' Department.

The friends of the CANADA SCHOOL JOURNAL will be glad to learn that the subscription list is increasing unprecedentedly fast in all the different provinces. Nova Scotia has contributed over 1,100 new subscribers since the beginning of the year, and over 550 have been received from New Brunswick during the month of February. The number of patrons, now over SIX THOUSAND, indicates the interest that is taken in educational matters, and shows the appreciation in which the JOURNAL is held by teachers and friends of education throughout the Dominion.

CONTRIBUTIONS for the CANADA SCHOOL JOURNAL should reach the office not later than the 20th of the month, and to ensure insertion must be brief.

CHANGE OF ADDRESS.—Subscribers wishing the address of the JOURNAL changed, will please mention the post office to which it has formerly been sent, and write the new address in an unmistakably plain hand.

Educational intelligence for the column of "Ontario Notes and News," "Personals," &c., are respectfully requested.

We wish it understood that as the CANADA SCHOOL JOURNAL has ceased to be a provincial organ, it is published in the interest of education throughout the Dominion, and occupies a perfectly independent position. Its pages are open to all intelligent writers, for the free discussion of educational subjects, no matter how diverse their opinions may be.

ADAM MILLER & CO.,
Publishers, Toronto, Ont., Can.

LOVELL'S SERIES OF SCHOOL BOOKS.

MR. LOVELL has much pleasure in announcing that he has in active preparation an entirely new series of Geographies—designed to take the place of Lovell's "Easy Lessons" and "General Geography," which were the first native text books on the subject, and have been so long and favorably known in the schools of the Dominion. The new series will be a great improvement upon the former text books, having been carefully edited by competent scholars and scrupulously revised by gentlemen familiar with the results of modern geographical research. New maps, prepared at great expense, and in the best style of the engraver's art, will appear in the books.

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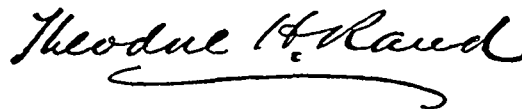


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