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## The Canada School Journal

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CANADA SCHOOL JOURNAL HAS RECEIVED

An Honorable Mention at Paris Exhibition, 1878.  
Recommended by the Minister of Education for Ontario.  
Recommended by the Council of Public Instruction, Quebec.  
Recommended by Chief Superintendent of Education, New Brunswick.  
Recommended by Chief Superintendent of Education, Nova Scotia.  
Recommended by Chief Superintendent of Education, British Columbia.  
Recommended by Chief Superintendent of Education, Manitoba.

The Publishers frequently receive letters from their friends complaining of the non-receipt of the JOURNAL. In explanation they would state, as subscriptions are necessarily payable in advance, the mailing clerks have instructions to discontinue the paper when a subscription expires. The clerks are, of course, unable to make any distinction in a list containing names from all parts of the United States and Canada.

### THE EDUCATION DEPARTMENT REPORT.

This report, which has just been laid before the Local House, deserves the attentive perusal of all interested in upholding that system of Canadian National Education which we believe to be the most important factor in the evolution of the future of our country. The educational system of our Public Schools is the one feature in the Government of Canada which has received the enthusiastic approval of the leading educational writers and thinkers in Great Britain and America. To quote an unimpeachable authority of the highest class, the *Educational Times*, of London, Eng., speaks of "that admirable system of public instruction which has placed the Dominion of Canada so high as regards Education, not only among the British Colonies, but among the civilized nations of the world." Our JOURNAL is essentially non-political, and we are supported by the general voice of the press of Canada in maintaining the principle that the Education question shall not be dragged into the arena of politics to be a target for the professional mud-throwers of party. Their cue is to magnify ephemeral grievances, to resurrect dead issues such as the University Professor question, and to circulate statements such as those respecting the Central Committee, whose untruthfulness has been proved again and again in the columns of this Journal. But in order to judge the question upon its real merits, it is necessary to look away from this or that detail to which exception is taken, to the general result of the work achieved since the Minister of Education entered office. The Report now before us gives ample material for forming an opinion. There may be details in our School system in which improvement is desirable, but no system will benefit by change for the sake of change; by that constant tinkering of political fault-finders, whose animadversions on the Education Department are like those of the Art-critic in *Punch*, who in reply to the artist asking whether he could suggest any change in the pictured under consideration, said "You have made the Duke standing and the Duchess sitting

down, now could you not make the Duchess standing, and the Duke sitting down."

The following is an abstract of the portion of the report most interesting to teachers and trustees.

1. The amount apportioned from the Legislative grant was \$252,564—decrease \$5,794. The apportionment is made to the several Counties, Townships, Cities, Towns, and Incorporated Villages, according to the ratio of the population in each, as compared with the whole population of the Province. The principle of distribution is according to the average attendance and the time of keeping open the Schools, Public and Separate, in each Municipality.
2. The amount apportioned from the Legislative grant (through the Educational Depository) for the purchase of maps, apparatus, prize and library books, was \$12,890—decrease, \$2,866.
3. The amount from the County Municipal Assessment was \$874,071, showing an increase of \$1,716.
4. The amount available from Trustees' School Assessment was \$1,433,153—increase, \$27,466.
5. The amount from Clergy Reserves Moneys, and from other sources, applied to School purposes in 1879 was \$654,050—decrease, \$40,934.
6. The total receipts for all Public School purposes for the year 1879, amounted to \$3,226,730, showing a decrease of \$20,591 below the total receipts of the preceding year.

The School population (comprising only children between the ages of five and sixteen years) reported by trustees was 494,424—increase, 2,064.

The number of pupils between the ages of five and sixteen years attending the schools was 367,845—increase, 412. Number of pupils of other ages attending the schools, 19,167—decrease, 2,415. Total number of pupils attending the schools, 487,012—decrease, 2,003.

The number reported as not attending any school is 27,409—decrease, 6. These were between the ages of seven and twelve years, during which school boards and trustees are required by the Public Schools Act to see that all the children in their school districts attend school for four months in the year.

*Number of Teachers, Male and Female.*—In the 5,123 schools reported, 6,596 teachers have been employed—increase, 123; of whom 3,153 are male teachers—increase, 93, and 3,443 are female teachers—increase, 30. It will thus be seen that there are about 300 more female than male teachers.

*Annual Salaries of Teachers.*—The highest salary paid to a male teacher in a county, \$900—the lowest, \$135; in a city, the highest, \$1,000—the lowest, \$250; in a town, the highest, \$1,000—the lowest, \$200. The average salary of male teachers in counties, was \$383—of female teachers, \$249; in cities, of male teachers, \$662—of female teachers, \$296; in towns, of male teachers, \$616—of female teachers, \$270: of the 3,153 male teachers, 10 received salaries ranging from \$901 to \$1,000; 19 from \$801 to \$900; 35 from \$701 to \$800; 45 from \$601 to \$700; 164 from \$501 to \$600; 908 from \$401 to \$500; while 1,972, or the great majority, were paid \$400 and under. The average increase of male teachers' salaries for the province during 1879 is \$8 per male teacher.

### TEXT-BOOKS.

In the new regulations on this subject, Mr. Crooks endeavors to legislate on what has hitherto been the unsolved problem of educationists, namely, how to diminish the continual change of text-books as much as is consistent with educational progress, and how to secure in the text-books in use the minimum of price with the maximum of excellence. The first of these conditions is already insured by the regulation which the Province owes to Mr. Crooks, making any change in text-books depend,

not on the Education Department, but on the Trustees and local Inspector.

The second point is sought to be provided for by legislative action in lowering the price of a number of those text-books for which the demand is greatest, while excellence of mechanical form, in paper, print, and binding, is to be secured by subjecting not only every text-book, but also every separate edition, to the supervision of an officer of the Department. As we have said, the Minister is undertaking a very difficult task, and we most cordially wish him success. Inspection by an officer of the Education Department is what no publisher ought to object to. Nay, he ought, rather, to be glad of it; but it is at least to be hoped that the person appointed to inspect will be one practically acquainted with the business details of the publishing trade, and thus competent for the duty assigned him.

As to the prices of text-books, attempts have been made in nearly every State in the American Union to regulate the cost of text-books by legislation, the latest being in the State of Minnesota, where signal failure elicits the following trenchant criticism from the current number of *Barnes' Educational Monthly*, a leading journal among our professional exchanges, published in New York:

"Some years ago the legislature of Minnesota was persuaded to give to a local dealer a contract to supply all the public schools of the State with text-books, for the term of fifteen years, at certain fixed and apparently low prices. Armed with his 'law,' which specified the contractor by name as well as the prices, but not the books, this gentleman visited the leading publishers, and sought by offering them 'a monopoly' to secure terms that would enable him to supply the books at the extraordinary rates proposed. Naturally the reputable publishers of the best works declined his overtures for the simple business reason that there could be no equivalent in such an arrangement for valuable copyrights. At last, however, he succeeded in securing a 'cheap' series, which we forbear to characterize except by the result. The only relief for the people of Minnesota from the operation of this remarkable 'contract' was provided in the law itself. Some opponent of the measure had contrived to insert a section by which the whole matter was required to be submitted to a popular vote in 1880. Meanwhile Mr. Contractor, confident in the shibboleth of 'cheap school books,' scattered his wares through the State. They have had a fair trial of over two years, but at the general election in November, 1880, the sovereign people arose in their might, and overthrew law, contract, contractor, and 'cheap books' together by a decisive majority. *Moral*—In this free country don't attempt to 'govern too much.' Let the law of demand and supply regulate the prices of books as of other articles of merchandise. While the present terrible competition between publishers exists, there is little danger that our schools will be overcharged."

Those best acquainted with the working of our education system, know well the zeal for the public service of the present Minister, the many important improvements he has effected, his progressive and energetic spirit, of which these very regulations are the outcome. But of the chronic grumbling which is the vice of free institutions and responsible government, none is more irrepressible than that against the Education Department, and this on subjects which the Minister has, by his own act, put from under his control, and into local hands. Has "Sonny" torn his Second Reader, it is the Minister of Education who is to answer for it; or does "Sissy" need a newer and better manual of Algebra to replace the old one which is past its usefulness, it is always the Education Department which is "grinding the faces of the poor," notwithstanding the fact that, as we have already pointed out, the

Trustees and Inspector are the persons responsible for any changes made. The Minister can well afford to laugh at the criticisms of Incompetence and Folly, even when Folly is used as a political tool by Cunning.

#### PAY AND POSITION—THE PROSPECT.

Whenever the "History of Modern Progress" may be written, not the least interesting phase in its evolution will be the gradual rise in social estimation of the callings which have reference to culture and education. The original aristocratic professions were those of the Warrior and the Priest. To these were added in the course of time Physic and Law; Physic as a sort of outlying province of Divinity, the healer of the body being allowed to bear some inferior relation to the physician of the soul; and Law, whose "costs" and "damages" were seen to bear a very respectable analogy to those of war.

Minor distinctions, those of surgeon and physician, attorney and barrister—like that between alligator and crocodile—did not amount to difference of species. But all other callings, though much more directly related to art and culture, were long under the ban of "society." The general feeling of the English upper class of his time was expressed by the boorish king who avowed his distaste for "boets and bainters." Things had not much improved when in George the Third's time general astonishment was expressed that Sir Joshua Reynolds, "a mere painter," could be a member of Parliament; or when the noblest representative of English literature was sneered at by a stupid Scotch laird as "a Dominie, wha keepit a school an' ca'd it an Academy."

The absence of an aristocracy and of its inevitable accompaniment, a social hierarchy of caste, on this continent, has already changed all this. The aristocracy of Money may pay to that of Rank the unrecognized homage of its awkward imitation, but no lord and no millionaire can command the public respect of all classes as can a great writer, or inventor, or scientific thinker, or artist. Has the rise in social position of the teacher kept pace with that of the merchant, the man of letters, or the artist?

In answer to this question, it may fairly be said that the social position of the teacher has risen in this country, and that this is due in no small degree to the elevation of the professional standard carried out during the last few years by the Minister of Education in Ontario, and by the Chief Superintendents in the sister provinces. The fact that a vast Governmental machinery exists for the purpose of organizing the teachers of the Province, gives the profession dignity in the eyes of those who least value culture.

But as society is constituted with us, no profession can command social position when remuneration is below the average income of other kinds of skilled labour. It is felt that the inferior physical and mental types will gravitate to such a profession, and that the better class will avoid it, or use it as a stepping stone to something else. But, without counting such prizes as the High Schools, and some of our town and city schools, which are fairly within the reach of the average

teacher's diligence and ambition, the remuneration of teachers is on the whole steadily improving. There is still, however, too much cheap teaching, too many inducements held out by penny-wise and pound-foolish trustees to get teachers to underbid each other. Besides the "Please state salary required" device, which we exposed in the January issue of this journal, it is only too common for teachers to make private arrangements with trustees, so as to secure an engagement at a smaller salary than would be needed were the matter left to public competition. All such practices are treasonable to the self-respect and interests of both teachers and trustees.

The real evil which is at the root of all under-selling and under-estimating teachers' salaries is the over-crowded state of the profession. The teaching profession, we repeat, is at present over-crowded by third-class certificate teachers. This enables the cheap teachers to play into the hands of the economizing trustee nobly ambitious of saving his constituents five cents each in school-tax. Other motives besides economy may prevent the trustees from being always ready to secure an advanced teacher for a school, some of whose pupils need advanced teaching. The trustee may have no children, or may have young children in one of the junior classes, while perhaps the children of the poorest man in the section, who has neither land nor farm stock on which to employ them, are the most regular attendants at school, and may even have studied the entire course for third-class certificate, and thus be absolutely in need of a teacher of higher grade.

A very simple remedy for this we venture to suggest. It is that the Inspector be instructed to grade the schools in his district, for those in which there are the more advanced pupils making it imperative for the trustees to employ only first or second-class teachers, whilst for others the third-class certificate holders would still be available.

#### MR. DICKSON IN COURT.

As intimated in the last number of the JOURNAL, a suit was entered by Mr. Milton Haight against Mr. George Dickson, Principal of the Hamilton Collegiate Institute, to obtain the sum of seventy-five dollars, the amount of a scholarship offered by Mr. Dickson to the student of the Hamilton Institute who took the highest number of marks at the first-class teachers' examination in 1880. The trial took place on January 25th, and judgment was reserved until the 28th. The judge then announced that he had decided to have the case tried before a jury, and it has been set down for hearing on the 28th of February. The facts as elicited at the trial are as follows:—Mr. Dickson admitted on oath that he was responsible for issuing the circulars; money for the scholarships having been partly raised by subscription. He did not deny that Mr. Haight had fairly earned the scholarship, but urged that as Mr. Haight did not return to the Hamilton Institute, he was justified in withholding the scholarship, although the circular issued contained no proviso requiring attendance for any specified time.

We refrain from making any remarks concerning the case until it is concluded. We are informed that other actions are depending on the issue of the one instituted by Mr. Haight.

We sincerely hope, however, that whatever may be the result of this trial, the Hamilton authorities may give up the discreditable methods of puffing which they have been practising during the past year and a half. For a Collegiate Institute to issue a monthly advertising sheet; to send out an agent whose ostensible mission is to obtain subscribers, but who is remarkably ready to give advice gratis to those who intend to prosecute a course of study; or worse than all to send out private circulars to good students in various parts of the province; these are certainly unabashed violations of all professional etiquette, most injurious to the dignity of a profession which, more than any other, needs, in order to establish its just claims to social position, what Arthur Hugh Clough calls "the tonic of a wholesome pride."

The fact that Mr. Milton Haight and others, after taking scholarships at the Hamilton Institute, should leave it and go to another, goes a long way to prove the correctness of the contention we have made, that loud boasting is not an indication of excellence in teaching, any more than in any other department of work. It is a confirmation of the principle laid down by Thomas Carlyle that an age of shams is also an age of advertisements, an age when the aim is not to do better work than others, but to assert and publish as noisily as possible that our work is the very best in the world's market.

#### FRECHETTE'S POEMS.

Louis N. Frechette has added to the copious and admirable literature of French Canada two volumes of lyric poetry, both of very high order, the latter of which, *Les Fleurs Boreales*, has obtained the very high honour of being crowned by the Academy in Paris. The French Academy is a literary tribunal whose historic lustre has been fully maintained to the present day; it numbers on its roll all the greatest names in French Literature. Neither political interest nor imperial power have ever been able to sway its decisions, and therefore its award of the highest honour, in its power to bestow, on a Canadian citizen, is for us, as well as our French brethren in the sister Province, a matter for just pride and rejoicing. We are pleased to give our readers as a specimen of Mr. Frechette's lyrics, a translation as literal as may consist with our wish to give the spirit rather than the letter of the original. The following is however a very literal reproduction of the prelude to *Les Oiseaux de Neige*:

##### THE PROLOGUE TO "THE SUN-BIRDS."

When the rude Equinox at length was over,  
And less inclement winter skies became,  
We watched them then our fields in thousands cover—  
Those winged guests whom we the sun-birds name.

No grain of food; no growth of leafage screening  
Their flight from chills that Norway ice-blasts bear;  
The aid of Heaven alone is intervening  
'Twixt these sun-courers and the fowler's snare.

Dear little wanderers! on your joyous wings  
Gleams the first ray of brightness that is Spring's,  
Go! fearless fly where avalanches fall,  
Go! 'mid the snow-drifts take your sportive way,  
'Mid those white walls your snow-white wings display—  
Weak things, whom God makes safe, most safe of all.

O. P. M.

### THE LATE CHIEF JUSTICE MOSS.

The death, while still in the prime of manhood, of Vice-Chancellor Moss has called forth expressions of regret from all the organs of Canadian literature. The late Chief Justice both at school and college gained high academic distinction, and filled with singular grace and fitness the high position of Vice-Chancellor of Toronto University.

### UPPER CANADA COLLEGE.

The announcement made a few days ago in the Local House, by the Premier of Ontario, to the effect that Upper Canada College would undergo some change which would bring it into closer connection with the Province, may mean much or little; some alteration of the existing status of the College is evidently intended. It is an institution which has undeniably done good service in the past, and has a long and illustrious list of distinguished Canadians among its pupils. Still *prestige* is not everything, and the Province has a right to expect some very definite action in explanation of Mr. Mowat's speech.

—The Superannuation question is of all others the most important to those teachers who really make teaching their profession. Its solution depends on a few measures, the common sense of which is evident. 1. Compulsory payment by all teachers, female equally with male. 2. Such payment to consist of a sufficient sum, say ten dollars yearly. 3. Equal payment of superannuation allowance to male or female teachers. 4. A fee, say of ten dollars, to be charged to all who enter their names for examination as teacher. 5. No money refunded to those who fail to pass the examination, or who for any cause leave the teaching profession. To these we would be inclined to add, no superannuation allowance under any pretext under twenty-five years' service, unless the teacher had reached the age of sixty. This would enable the teacher who had served for twenty five years, to retire as a matter of right with a sufficient income. It would at once cut away all sorts of demoralizing and degrading practices and would, more than anything else, raise the standard of the teaching profession.

—We clip the following from the *New England Journal of Education*, a paper which takes considerable pains to keep itself well informed on educational matters in Canada, and deserves the support of Canadian teachers:

"Our friends in Canada (Ontario) are congratulating themselves on the happy effects of their Central Committee of Examiners. Under the vigorous working of this board the high schools, normals, teachers' institutes, and model schools have wonderfully improved, and the wisdom of thorough supervision is once more amply vindicated. We must learn, especially in New England, to trust a few able men with ample powers of supervision before our disheveled and disintegrated public schools can be brought up to the point that will satisfy people who demand the worth of their money, even in the things that pertain to the spiritual side of American life."

—The *London Free Press* ascribes to the *Bystander* the merit of suggesting that Upper Canada College be utilised as a National College for Ladies. This suggestion was in reality originated by the CANADA SCHOOL JOURNAL, in whose editorial columns it appeared a month before the *Bystander* advocated the same idea. Our contemporary ought to give credit where credit is due.

—The Syndicate appointed to consider the higher education of women, has issued its report. It recommends that fifteen students who have kept their residence at Girton or a similar institution, be admitted to the (University) Tripos Examination, and that class lists of the female students be published, and certificates given.

—We learn with pleasure that Mr. L. E. EMBREE, B.A., has been appointed Head Master of the High School at Strathroy, where Mr. MacMichael, who for so long a period has been the successful incumbent of the post, has been compelled by ill-health to resign. Mr. Embree has been for some time in Nova Scotia, where his name stands high as a teacher. His accession to the Strathroy High School cannot fail to produce good results.

—In France, M. Camille See's Bill for the secondary instruction of girls, has passed the Senate. Girls' Colleges, on the system of the Lycees, are to be established by the Republic.

### Contributions and Correspondence.

#### DO THE PRINCIPLES OF THE KINDERGARTEN SYSTEM DIFFER FROM THOSE OF MODERN EDUCATION?

BY WILLIAM CROCKET, A.M., PRINCIPAL OF NEW BRUNSWICK NORMAL SCHOOL.

Within the last two or three years, many of our people throughout the different Provinces have heard more or less about a system of Education known as the Kindergarten system. The great names associated with it and the class of persons who patronize it have excited a desire on the part of many to know more about it. At one time they hear it spoken of as a new system destined to work marvellous changes among the young, at another time its merits are questioned and its founder regarded as an impracticable theorist. It was therefore probably owing to the newly awakened interest and the unsettled opinion or rather uninformed opinion respecting it, that the Executive Committee deemed a discussion of its principles a proper subject at the Institute. Are its principles different from those of modern education? Is the child of the Kindergarten system to be afterwards given over to be worked upon by opposed or similar processes? Is it a related or unrelated part of our school system? These are the questions which the Institute has to consider. We have, therefore, to ascertain (1) What the principles of the Kindergarten system are; (2) What the recognized principles of modern education are.

1. A brief description of the Kindergarten system will help us the better to comprehend its principles. A Kindergarten just means a child's garden—a garden or place where children can expand and grow as plants do in a garden. Froebel, the founder of the system, designed that here children between the ages of three

and seven years should be trained by providing them with occupations suitable to their individual powers and awakening minds. They gradually receive a knowledge of nature and of mankind and are carefully trained in heart and mind by judicious guidance, and not by constraint. The various occupations in which they engage are developed one from another in a natural order. Taken together they satisfy the demands of the child's nature in respect both of physical and mental culture, and their methodical application develops his various powers in accordance with nature's own laws. The series of objects technically called Gifts which Froebel devised for these occupations may be arranged under four heads in the following order:—1. Solids. 2. Surfaces. 3. Lines. 4. Points.

The child's course thus begins with wholes, then descends to the parts in planes or surfaces. From the planes it next descends to lines which are the edges or the boundaries of the surface, and lastly to points which are the smallest parts or ends of the lines. The process is then reversed. The child passes from the point to the line in such occupations as in sewing and drawing; from the line to the surface in weaving and interlacing of threads and slats, and to the solid in the modelling in clay. Thus by a different road he reaches his original starting point, and surveys the same truths from a higher plane.

Let us now enter a Kindergarten—one pervaded by Froebel's own spirit—to witness some of these occupations, with a view of ascertaining, if possible, the law underlying them.

*First Gift.*—Let us first turn our attention to the youngest children. They are engaged in their first occupation with the First Gift called "The Ball," which consists of six soft balls of the colours of the rainbow, three of the primary colours—red, yellow and blue; three of the secondary—green, orange, and violet. Out of the ball they are making endless amusement. They roll it, they toss it, they wheel it round and round. Holding it up by a string, they move it right and left, or round and round, etc. Now they make it spring up like the cat, now they make it fly like the bird. Now in its form and colour they see the fruit and flowers which they know.

*Second Gift.*—Here is another group of children with other playthings, consisting of a *hard ball*, a *cube*, and a *cylinder*. They first take the sphere, or hard ball, to which a string is attached in a small indented eyelet, and similar exercises are gone through with as with the soft ball. Unlike the soft ball, however, it makes, as the children perceive, a noise when it falls. The cylinder and cube differ in form from the ball, the cube much more than the cylinder, which forms the connecting link between them. They roll the ball in every direction, then can only roll the cylinder when lying on its side, the cube does not roll at all. Here the law of contrast is forced upon the children; they begin to learn what a thing is by learning what it is not. As they compare the cube with the ball they become conscious of the flat faces of the former, its sharp edges and corners. The cylinder has no corners, but it has flat ends and has edges.

*Third Gift.*—In the third occupation we see the children placing little cubes in a variety of forms. They make chairs, tables, houses, etc. In this occupation or play the cube is divided in every direction into eight smaller cubes,—the children are thus enabled to grasp the inner conditions as well as external appearances of things and have their natural craving or instinct satisfied by finding out what is inside things.

*Fourth Gift.*—Here we see the children's ingenuity exercised by devising various forms with longitudinal blocks. These are afterwards combined with the cubes of the preceding gift and thus various orders of buildings. This fourth gift is a divided cube also, but its parts are not cubes but parallelepipeds, thus emphasising the three dimensions of space implied in the preceding gift.

*Fifth Gift.*—In the fifth occupation the children are engaged in architectural forms of great beauty and variety. The large cube of this gift is divided into a great number of cubes, and some of the smaller cubes are diagonally divided so as to introduce the triangular form. The children now begin to see that the preceding gifts contained the new elements but they failed to perceive them.

*Sixth Gift.*—The series of Solids is concluded in the sixth gift, which is also a cube but differing in its sub-divisions. Each of the gifts named, it will be seen, is logically derived from the preceding. The various exercises with them are fitted to impress their mutual relations, as we can only fully apprehend an object when its relation to universal law is apprehended, the children must have made great advances in clear, definite conceptions.

Thus far we have seen one great law running through these occupations—each step being derived from and embodying the preceding—the principle of "From the Simple to the Complex."

Froebel did not stop here, however. He arranged his subsequent gifts or occupations so that the child should pass logically from the solid to the surface, line, and point, the limit of the analysis. Here evidently another law determined his procedure,—“From the Concrete to the Abstract.”

But the course did not terminate at the point. A contrary process was adopted. The *solid* was built up from the *point*. This process gave the child the best possible means of embodying in visible form the impressions received through the former process. Herein is the embodiment of another principle: "Analysis before Synthesis."

We have not yet, however, reached Froebel's root-idea. Something else underlies his procedure than what I have announced. Had I minutely described the exercises in connection with the gifts it would have been seen that they retained the best characteristics of childish play. Left as much as possible to his own spontaneity, the child is found shaping the playthings or materials to his fancy, as Wordsworth so happily describes:

"Behold the child among his new born blisses;  
See at his feet some little plan or chart,  
Some fragment of his dream of human life  
Shaped by himself with newly-learned art  
A wedding or a festival  
A mourning or a funeral."

Look at him making his blocks symbolical personages and objects of a story. Even with the eight cubes, five may be a flock of sheep, one a wolf which is seen in the distance, and one the shepherd's dog, which is to defend the sheep from the wolf; during all this time what fun! what interest! what absorption!

How did Froebel hit upon such attractive plans? With an intense sympathy for children he determined to study child nature in all its aspects, to try if it were possible to devise some scheme whereby the activities which they manifested in their play might be systematized, and made the means of the harmonious development of their physical, mental and moral nature.

He brought to his task a theoretical knowledge of Education, a knowledge of human nature as studied in books and among men. He now seeks to penetrate the secret springs of child-action. He takes his place among them; he observes them as they disport themselves in shout and frolic and song. Left to themselves, he sees those of similar ages mingling together. One group he finds here, another there, one group at this game, another at another game, but all bent on happiness, all in careless activity, intense earnestness, complete absorption. What, we may imagine him to say to himself, is evoking all these forces? Play. Play is the motive power. Play is the activity ending in happiness. Play is the birth-right of the true child. Where it is denied him—where the forces within him are denied expression through play, you have in the man the stunted limbs, the pigmy intellect, the moral coward, or

something worse. The story of Robert Falconer, as told by George McDonald, is the case of too many. Robert's grandmother denied him every kind of play or amusement, and compelled him to read, instead, Baxter's *Saints' Rest*, Boston's *Fourfold State*, *Alarm to the Unconverted*—perhaps too little read now—which awoke in him a keen sense of hopeless cold, and led him to feel and to say, "What a terrible thing righteousness is." Had his life been kept parallel with God's thought in his creation, or the natural impulses of his childhood, not been crushed, he would have been more likely to gather sweetly by the way "the peaceable fruits of righteousness."

Play is not busy idleness, but is the effort of souls girding themselves for the realities of life. Children, in their weakness, are not fitted to do our work, but they prepare themselves for it by doing their own, bringing into it all the energy of which they are capable. It is but the childhood of earnest life-work. Through play, in association with his comrades, the child begins to recognize moral relations, to feel that he cannot live for himself alone, that he is a member of a community whose rights he must acknowledge.

Froebel, then, looking at the deep significance of play, thought it worth while to guide and direct it, to fill it with mighty induence, to transform it into work, but work which shall look like play, which shall originate in the same impulses, and exercise the same energies as children employ in their amusements or occupations. He therefore proceeded to organize their play, but so organized it that the structure was strictly related and conformed to the original foundation play.

The Kindergarten system, therefore, regards children simply as beings endowed with faculties of many kinds, that must be developed according to their nature, that must not be urged in this direction or cramped in another, but be placed in the most favorable circumstances to attain their full growth according to the laws impressed upon them by their Creator, as do the plants in the soil and climate that suit them. In a word, Froebel's grand principle was:—A child's powers must be exercised and developed according to their natural order of unfolding, and the processes must be based upon all those activities, that go by the name of play.

No books are to be seen in the true Kindergarten. This is in a line with Froebel's root idea; no ideas or facts are to be presented that the child cannot clearly understand and verify. Before coming to books, a child's curiosity must be satisfied about outer objects, and thus be gradually transformed into intelligent interest and desire for knowledge. In his lessons with blocks, the object was not to teach him Number or Geometry, though he learns both, but to lead him to discover facts and truths concerning number, lines, and angles for himself. No half apprehensions, no dim conceptions, no mere formulas of knowledge are allowed; the child is to be disciplined to accuracy in visible things, and the use of concrete terms, so that he will not deceive himself with the semblance of knowledge when the time comes for dealing with abstract things. He learns no long nomenclature of any science, but he learns the exact name of every object that is presented to him. His powers of observation, comparison, and reason are exercised by finding out the relations of the object he sees and knows. Though in his games he is not allowed to do anything mechanically nor at random, he is free to create, to follow his own fancy within the bounds of law which he has himself been led to recognize.

In Froebel's day, as in our own, there was such a haste to get knowledge that little time was given for culture; instruction overlaid education. Pupils came out of schools probably well-informed, but ill-educated. Schools were designed exclusively for imparting instruction, and pupils were not prepared for entering them. It was a sudden transition from their playful joyous sports, where everything was invested with an interest and a meaning, where their physical and mental activities had full play, to a world entirely un-

related to their past condition, where no opportunity was given for the outflow of an inner life, where nothing was to be seen but a strange symbolism, and little else to be heard than an unknown tongue. There must be, said Froebel, a reformation in the schools that give instruction, and there must be a preparation for such schools.

II. What are the principles of Modern Education? Let us first glance at some of the theories of past times:

Among the Ancients I shall only name one—the Socratic theory. Socrates says that no distinction should be made between mind and body in Education. He considers gymnastics as part of the training of the whole man. With respect to mental training, his great aim was to elude truth by questionings and analogies. Truth cannot be seen, however, through distorted media, and Socrates first found it necessary to uproot the simulacra, false conceptions, or semblance of knowledge. There were, in Socrates' day, professional crammers in Athens, men who defended cram on principle. These were the Sophists,—teachers who undertook to furnish their pupils with ready-made talk, which could be produced on any occasion. They could write a leader on either side of any question, without knowing anything about it. Through the teachings of Socrates, the power of the Sophists, whose delusive theories had so long enchained the Greek mind, was broken, and the foundations laid for the reception of truth. He questioned, to expose ignorance and expel error. He questioned to discover facts or draw out the truth. From his practice it is clear that the Socratic theory was the "development of man."

After the revival of learning, till Froebel's time, the prominent educationists were Roger Ascham, Montaigne, Ratich, Comenius, Basedow, and Pestalozzi.

Roger Ascham, in his treatise, *The Schoolmaster*, in giving directions how to teach Latin, says, "Teach the pupil cheerfully and plainly, the cause and matter of his lesson, then let him construe it into English so oft that he may very easily carry away the understanding of it, then parse it over properly." He afterwards adds, Grammar taught by itself is tedious for the master, hard for the scholar, cold and uncomfortable for both." Grammatica itself is sooner and surer learned by examples from good authors, than by the naked rules of grammarians." Queen Elizabeth, he goes on to say, never took a Latin or Greek grammar in her hand, after the first declining of a noun and conjugation of a verb, and that she had such a perfect understanding of both tongues that there were few in either of the two Universities of England or elsewhere, whose knowledge of the tongues was at all comparable to her Majesty's. This is probably an exaggerated statement of the Queen's attainments. It will be remembered that Ascham was her teacher. One more quotation from Ascham. "Let your plan be such that your pupil will always take to his lesson with pleasure. And pleasure allureth love; love hath lust to labor; labor always obtaineth his purpose."

Montaigne, the contemporary of Ascham, but about thirty years younger, may be said to have founded a school of thinkers on the subject of Education, of which Locke and Rousseau were afterwards the great exponents. As far as regards the method of teaching languages, he discarded grammatical teaching altogether, and wished that all could be taught Latin as he had been—by conversation. In ordinary teaching, he says, we suffer ourselves to lean and rely so very strongly upon the arm of another, that by so doing we prejudice our own strength and vigor. He also insists upon the importance of physical education. We have not, he says, to train up a soul, nor yet a body, but a man, and we cannot divide him.

Ratich, Ratichius, or Ratky, for he is known by any of these names, was a Dane, who flourished during the struggle of the Thirty Years' War—amidst much that lays him open to the suspicion of being a charlatan. He propounded many profound principles, among

which are the following:—Everything after the order and course of nature. One thing at a time. One thing again and again repeated. Nothing should be learned by heart. In learning by heart, he says, the attention is fixed on the words, not on the ideas. Knowledge of the thing itself must be given, before that which refers to the thing. Everything by experiment and analysis. Everything without coercion. The human understanding is so formed that it best retains what it finds pleasure in receiving. The use of rules is to confirm and preserve knowledge, not to acquire knowledge. The rod should be used to correct offences against morals only. There is a good deal here, as you will perceive, which has a Froebelian ring about it.

Comenius, of Moravia, during a chequered life, did much to diffuse sound principles. He lived also during the Thirty Years War, and was acquainted with Ratich. Before his time, no one had brought the mind of a philosopher to bear practically on the subject of education. Ascham and Ratich had investigated new methods; but had made success in teaching the test to which they appealed, rather than abstract principle. Comenius was at once a philosopher and a schoolmaster, who had earned his livelihood by teaching an elementary school. Dissatisfied with the state of education as he found it, he sought for a better system by an examination of the laws of nature. His larger work, the *Didactica Magna*, contains the chief principles which he endeavored to work out. In a chapter, devoted to the principles of easy teaching, he lays down, among other rules, that children will learn if they are taught only what they have a desire to learn, with due regard to their age and the method of instruction—and especially when everything is first taught by means of the senses. On the education of the senses he laid great stress, and was the first, I believe, to do so. Education should proceed, he said, in the following order:—First the senses, then the memory, then the intellect, last of all the critical faculty. This method is according to the order of nature,—the child first perceives through the senses; are stored in the memory and called up by the imagination. By comparing the one with the other, the imagination forms general ideas, and at length the judgment decides between the false and the true. By keeping to this order, Comenius believed that it would be possible to make learning entirely pleasant. From what I have selected of his principles, it would seem as if Comenius was preparing solidly the way for Froebel.

Locke has had considerable influence on the theory of education. He was no enthusiast, but a man of calm, good sense, who found himself charged with the bringing up of a young nobleman. He examined the ordinary education of the day, and where it proved unsatisfactory he set about such alterations as seemed expedient. As Locke had studied medicine, he naturally attached great importance to physical education, and begins his work with it. Many of his directions on this subject are, I think, very properly condemned, but still there are some that deserve special attention. He says that all clothes should be loose, and speaks as emphatically as every doctor has done since against the madness of straight-lacing. Give the young pupils plenty of open air exercise, plain diet, no wine or strong drink, and little or no physic. No corporal punishment, he says, is useful where the shame of suffering for having done amiss does not work more than the pain. With respect to teaching, he says the art of teaching is to make the pupils feel that their work is sport and play. In his own quaint way he says that children can be made to dance and fence without whipping, which makes him suspect that there is something strange, unnatural, and disagreeable in the things required in Grammar Schools or in the methods used there, that children cannot be brought to without the severity of the lash. He recommends the reading of Latin by means of inter-linear translations before the pupil should begin the grammar of it, and dryly adds, if grammar ought to be taught at any time, it must

be to one that can speak the language already, how else can he be taught the grammar of it? In short, Locke's aim was to give a boy a sound mind and a sound body. The result was to be brought about by leading, not driving. He was to be trained not for the university, but for the world. Good principles, good manners, and discretion were to be cared for first of all—intelligence and intellectual activity next. With regard to the subject of instruction, those branches of knowledge which concern *things*, was to take precedence of those which consist of *abstract ideas*.

Rousseau, though he wrote much that is fanciful, says much that is profound. He tells us plainly that we err in our practice, because we do not understand childhood. We are sacrificing childhood to the acquirement of knowledge, or rather the semblance of knowledge. We are constantly seeking the man in the child. Childhood has its manner of seeing, perceiving, and thinking, peculiar to itself; nothing is more absurd than our being anxious to substitute our own in its stead. Begin, he says, by studying your pupils better, and if you read my book with that view, it will not be useless to you.

Basedow, a native of Hamburg, had read Rousseau's *Emile*, which directed the attention of his powerful and original mind to the subject of education. He believed, as did Karll and Goethe his contemporaries, that what was wanted in education was not a reform but a revolution. His principal ideas are these—We should attend to *nature* in children far more than *art*. Children should be treated like children that they may remain the longer uncorrupted. A child must be first made acquainted with the world as it presents itself to his senses. The key-note upon which his system rests was, "educate according to nature." The natural desires and inclinations of children were to be directed aright, not suppressed.

Pestalozzi, the father of popular education, from whose great heart Froebel had drawn much of his inspiration, was the first great reformer who made his influence widely felt. The theory of development lay at the root of his views, which led him to regard the imparting of knowledge and the training for special pursuits as subordinate aims. Education, he said, instead of merely considering what is to be imparted to children, ought to consider what faculties they possess as capable of development, and should consist in a continual benevolent superintendence, with the object of calling forth the faculties which Providence has implanted, and not in an incoherent mass of exercises—arranged without unity of principle, and gone through without interest. He regarded instruction, as I have said, only as a means of developing the faculties, and he constantly aimed at methods to secure this end. He took great pains with the cultivation of the senses, and was the first to systematize object lessons. Music and drawing played a great part in his system, and he recommended, though he did not practice, modelling—a hint which as we have seen, was afterwards worked out by Froebel.

Among this long list of reformers, there is a remarkable consensus of opinion as to the principles upon which youth should be trained, and there is, as you will perceive, one fundamental principle underlying all their directions and canons,—and that is, that the law, order, and method of education depend upon the law and order of nature—that the threefold nature of the being upon whom education is to operate, must be considered; the nature of the faculties with which he is endowed, and their order of unfolding must be studied; and that this principle is the only solid basis upon which to rest the methods of instruction.

What are the principles of the present day? As enumerated by Herbert Spencer, shared in by the most distinguished scientific men and endorsed, if not carried out, by the most enlightened teachers they may be summed up in one statement. There is a certain sequence in which the faculties unfold, and a certain kind of exercise which each requires during development. To regulate this exercise



we must proceed from the simple to the complex, from the concrete to the abstract, from the empirical to the rational; i. e. there must be practice and an accruing experience before there can be science. The pupil must be led to make his own investigations and draw his own conclusions. The acquisition of knowledge must be made pleasant.

Spencer very vigorously propounds his principle and very lucidly exemplifies his maxims in plans for exercising the different faculties in early childhood, such as in his object lessons, lessons in drawing, number and geometry. But there is nothing essentially different from the principles I have previously quoted. Spencer's views are now generally known to intelligent teachers and recognized by them; the views of the others were not generally known, they were pretty much confined to the philosophers of the day, but they go to show that what are now recognized principles, were separately thought out at different periods, by men who had studied human nature and human needs most.

These are the principles which this Institute has recognized, and which each member is presumably endeavouring to carry out. The Course of Instruction which you discussed last year and which has since been prescribed by the Board of Education is based upon these principles. Provision is therein made for the exercise of the faculties in the order of their unfolding. The exercises in Form and Colour are only means to the training of the perceptive powers, and the order in which they are arranged accords with the growing strength of these powers. The order of the exercises in number, arithmetic and geometry, leads from the concrete to the abstract. Plant life, animal life, and minerals bring the child in contact with nature, and there is a gradual progression in the exercises till the higher powers are called forth in the reaching of general conclusions and in classification. In fact each subject named in the first grade of the course and continued to the last will be found in consonance with the principles laid down by Spencer.

The fundamental principles of the kindergarten are substantially the same. The faculties are drawn out and exercised in the order of their development. Taking the child earlier, Froebel had necessarily to adopt specific devices to meet child instinct. In the common school we take the child at five years of age and make the burden of the exercises bear on the training of the senses, adapting the methods to his mental development. Though the methods accord in their character and arrangement with many of Froebel's at the same age, there is not the same rigid logical sequence in the exercises nor the same amount of variety, but the grand aim and the pervading principle are the same.

If then the principles of the Kindergarten and of modern education both emanate from the same philosophy, if the faculties whose dawning power we watch and draw out in childhood and youth are the same faculties which in their ripe vigour, the philosopher, the poet, the statesman use for the benefit of mankind; if the will and character which we discipline in childhood are the germ of the same powers that make useful citizens, social benefactors, the leaders and heroes of our race, then school years which are only one stage of that unbroken process of effort and discipline, that we call life, cannot stand isolated, but must be one in purpose, one in spirit, throughout all its phases.

## THE FAILURE OF FREE SCHOOLS.

[SECOND ARTICLE.]

BY REV. DAVID ALLISON, LL.D., CHIEF SUPERINTENDENT OF SCHOOLS,  
NOVA SCOTIA.

Mr. White's second, and if possible, more serious charge against the public school system is that it has contributed to the deteriora-

tion of public morals, which, however, is an assumption or assertion, rather than a demonstrated fact. The logic by which he endeavors to connect the schools of the country casually with this alleged declension in morality is peculiar, and not absolutely convincing. E. Jeavoring to lay a basis of general principles for his argument, he says:—

Ignorance is the mother of superstition, but has no relation with vice, except that of frequent co-existence; ignorance and vice are so frequently found together, not because the former is the cause of the latter, but because both—but chiefly the former—are the common companions of poverty.

The argument based upon this seems to be that if ignorance were productive of vice and crime, as a prime causal agent, and if the schools on the other hand were nurseries of morality, the country should show, as its history is developed, constant moral improvement instead of deterioration. But apparently this reasoning is fatally illogical. Mr. White has shown, no doubt to his own satisfaction, two things; first that the school system as framed and conducted, fosters ignorance, and secondly that ignorance has no tendency to produce vice. Just how many logical fallacies are involved in drawing from these propositions the inference that the (asserted) decline in morals is a product of national education I cannot say, but I do affirm that a more monstrous perversion of all sound reasoning I never met with. If the schools promote ignorance, and if ignorance has no vice-producing tendencies, whatever or whoever, may be to blame for the sad state of things which Mr. White deplures, the Public School System must be held guiltless by all principles of logic and all recognized canons of thinking. Yet he coolly and amusingly concludes that:—The case against the Public School System is proved as clearly and as undeniably as the truth of Newton's theory of gravitation is proved by the calculations which enable astronomers to declare the motions and to weigh the substance of the planets.

Public morals depend on various conditions and influences. If in the United States, the contention of Mr. White be true, that the standard of morality is being lowered, why does not this quixotic reasoner proclaim Christianity "a failure," seeing that it has a most direct connection with the promulgation and maintenance of pure morals, rather than the schools of the land, which, according to his own reasoning, have, as fosterers of ignorance, no responsibility in the matter at all!

"The case against the Public School System" has broken down."

## PHYSICAL TRAINING AND MORAL CULTURE IN SCHOOLS.

BY JOHN E. BRYANT, M. A.

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A very serious practical question then arises. If, as is above stated, our national system has very wisely omitted to impose upon our teachers the duty of formally teaching practical morality, and if with still better reasons it omits from our school curriculum the teaching of positive morality, is no attempt to be made to inculcate on our children and on our young people the truths—for we cannot say that they are not truths—of conduct? Are the grand, time-honoured principles of justice, truthfulness, sincerity, honour, integrity, manliness, mercy, temperateness, sympathy, to be unnoticed; are our children to grow up uninstructed in the duties of kindness, filial and fraternal affection, love of home and country; regard of authority, and veneration for the holy and good? Every

lover of his race, every follower of Christ, every one who wishes the world to grow better as it grows older, will emphatically answer no. Let our intellectual faculties be trained as much as may be till they are almost divine in their neatness and in their scope; let the physical powers be so developed that men shall be as gods upon earth; but above all, let that best and noblest outcome of human development—character, receive the closest and tenderest care; let every influence be thrown around it that in beauty, nobility, and grandeur it may ever remain the richest, choicest flower of our civilization. But character, like every other product of human activity, is a thing of development and growth. It is not inborn. It is not got as a gift. It is a result of constitutional proclivities and antipathies, wisely regulated by parental and scholastic control, fixed and made habitual by the discipline of reward and punishment, i.e. by the sensations of pleasure and pain, influenced by reason when reason is able to assert itself, and finally directed by conscience or the moral sense when that sense,—which whether it be innate or acquired, or partly one and partly the other, we shall not stop to ask,—has attained that permanence and activity which give it the predominance among the faculties of the mind. But whether the moral sense be innate or not, there can be no doubt that it becomes very much more active and acute by exercise than disuse; and that it is possible for it to become perverted is almost equally undoubtable: therefore we see that the early years of childhood are of the greatest importance to moral character, for it is then that those influences which go towards forming character, which I have named above, are most easily felt, and the impressions that are made are most lasting. For, as we have seen, among the influences, are scholastic control, natural discipline, reason, and the moral sense, of which reason and the moral sense, are matters to a great extent of education and training. Hence for the development of character, and its permanent existence there is no time which is of such prime consequence as the years of childhood and youth; for though education may go on through a life-time, its quality is fixed in the years of adolescence. Nothing then would be more lamentable, nothing would be so fatal to the character of our people, nothing would be so prejudicial to their real happiness, than that moral education should be eliminated from our educational system.

I may say here that I was led to the more particular consideration of this question of moral education by an opinion expressed to me by one of our leading educationists;—that it seems as if morality were being pushed out of our education, and as if it were disregarded as a thing of no value, and that by consequence our people are growing up characterless, unprepared to resist evil, indisposed to the good, possibly disposed towards the bad; with no ideals of truth and goodness which always could be retained as beacon lights to direct them in what would otherwise be a dark and perilous course. Now I have endeavored to show that while there is every apparent ground for the formation of such an opinion, while there is every reason to think that the fear thus expressed is not without foundation, yet no one is blamable for this; that it is nothing more than may be looked for in a system of public education. The question then comes pressed home with double earnestness, is there no hope? Can nothing be done? So much impressed have some been with the force of this objection to our public school system, so keenly have they felt its incompleteness, its failure in this the most essential of all the elements of education, that there have been special educational institutions established, with the object, not of securing better intellectual education, or better physical education than our government affords (for that would be, perhaps, impossible, at least at present) but for the purpose of supplying that defect in moral education existing in our national system, which is by none more

noticed, or more lamented than by those who love our school system most sincerely. And as I am personally connected with such an institution, I hope I may be pardoned for saying that I think every well-wisher of his fellows should be willing to bid such institutions God-speed. They may be doing it not wisely, but at least they are making the attempt; and it is only by trials oft repeated that a working system can be established; and the hope may be felt that when the experience that shall have been gained by their failures and their successes, there may be reared a system of moral training which perhaps, in the not too distant future, shall be incorporated in our national system; and besides it may happen that within their walls are some who are acquiring that stability of character, that bias toward the good and true, that strength of will and firmness of habit which, in the conflict of life, may save them from what might otherwise be irretrievable disaster. Only I should like to say that wise parental care which good government should bestow upon all its subjects, should be extended to the patrons of these institutions also, so that while such private schools might, in accordance with the wishes of their founders, do their special work without let or hindrance, they should, in matters of intellectual education, have the privilege of government inspection, and of having the government stamp set upon their efficiency or inefficiency as intellectual educators.

But, from the nature of things, such institutions are likely to be few. Their existence at the present time, at least in this country, is merely tentative. And in no way can their countenance, and the special work which they do, considerably influence the totality of moral education. The great masses of our people, the entire nation, one may say, must be educated in accordance with the provisions and curriculum of our national system, and the great question comes up again—can nothing be done by which this deficiency of moral education, which we have noticed in our system, may be made up? It would be inexpressibly sad if this question were to remain unanswered. But, fortunately, there is an answer. And the answer has been seen by the framers of our system, in that they have intended that the greatest care should be taken in the selection of teachers, that none should be employed except those of unexceptionable character; in that they have left the choice of teachers to local boards, to those most interested in the matter, whose sons and daughters are to come under the influence of the teachers engaged by them; and in that they have instructed all teachers to use their influence for the lasting good of their pupils, in respect of character especially. This does not seem very much, as we have said before, but if the spirit of the regulations be carried out, and not the mere letter, there would be little ground of complaint.

The first requisite is *character* in the teacher. And for this requisite it is not sufficient that he is of good reputation, or to use common phrases, that "he is well spoken of," that "no one has a word to say against him." These are essential, it is true, but they are far from being all. The teacher must not possess character alone, but, what is of great consequence, he must have *the love of character*; that indefinable something by which a man's influence for good is exerted by his mere existence among others. His goodness must be of the nature that is *leavening*, that it works by contact. The value of even intellectual instruction depends upon the moral character of the man who imparts it. There must be, in the minds of pupils, a sense of respect for the man, a conviction of the earnestness of the instructor, of the genuineness of his instruction; there must be an admiration for the underlying moral character, his truthfulness, honesty, sincerity, his candour, his modesty, his temperateness. If these sentiments do not exist in the pupils, there is great loss; there is the loss of example, there is the hurt of contact with moral weakness, or what is worse; and there is in their minds that dissociation of intellectual worth and moral work, and that

association of intellectual cleverness with moral inferiority which are sure to result, according to the bias of the pupils, either in contempt for moral worth, because it is seen that it is not necessary to intellectual superiority, or for intellectual worth, because it is seen that it may co-exist with depraved character, which will greatly tend either to intellectual stagnation, or to bring about moral shipwreck in after life.

On every ground, then, *character* should be the fundamental element in a teacher's qualification. But, though the character indicated above is absolutely necessary, it is not enough. In addition to irreprouchableness of conduct, and force of character, there must be something more. There must be *the enthusiasm of a soul aglow with love for his fellow men.*

This is a high ideal, but for the work of character building it is not too high. Think what destinies the teacher holds in his hands! How all those moral forces which affect, for weal or woe, individuals and communities, receive their life-long direction from him! Of the vast difference between the possibilities which may ensue, when in the hearts of young men and women have been implanted noble ideas, sound principles, worthy motives, and when ideals, principles, and motives have been implanted the reverse of these, or when there has been no tilling of the moral soil. It is not too much to say that upon the teacher depends the character of the nation. His influence transcends all others, except the mother's. And should the profession be entered upon with a proper preparation and spirit, it is the grandest in the world. The possibilities for doing good, for giving the proper bias, for forming enduring and correct habits, for inspiring noble purposes and motives, are such as no religious teacher or philanthropist, who deals only with adults, can ever hope to possess. He can form, in fact he does form, the character of; the generations of the world, more potently than any other influence. Their after life is coloured by the reflection of his character upon them, nay, more, it is founded upon his principles, and is imbued with his very nature. His power is limited only by the constitutional predilections of his pupils, and these he has a better chance of modifying than any one else can have. No one who recognizes personal accountability for influences possessed as a ruling factor in his own character, should enter upon the profession of teaching without a due sense of his responsibility, and without a full determination to put his influence on the side of right, and to make of his charge the noblest result possible. It often happens, I am sorry to say, that the teaching profession is entered upon, like many another, with the sole object of earning money. But, though the laborer is worthy of his hire, yet no man should be a teacher, and, especially, remain a teacher, who does not feel that while, for the daily hours he may devote to the ordinary duties of his profession, he should receive pay as any other worker, yet his interest in his pupils, in their well-being now and in the future, is beyond all payment, and that this chief reward for the work he does, lies in the satisfaction there is in doing it. This would give him a conscientiousness in the discharge of his duty which would regard no personal sacrifice or self-denial too difficult. It would inspire him with an earnestness in the achievement of his great purpose, the upbuilding of character, which would set all difficulties at defiance, and turn the dull routine of school life into a labour of love. It would give him that untiring patience, which certainly none need more than he who has to deal, as the teacher has, with the frailties and perversities of our human nature, and would have fruit borne for it in altered lives, and bettered habits, and exalted purposes. It would fill his soul with an earnestness which would ennoble alike his profession and his life, and make him the compeer of the greatest benefactors of humanity everywhere. His occupation, then, would be no longer a mercenary trade, but a *mission* in which his

aims would compare with the philanthropic of every profession, and he would be enrolled in that noble army, whose battle's aim is the implanting of love and truth and right, and of reverence for God, and sympathy with man, in every human heart.

But it may be asked, how is this work of character-building to go on, if no formal teaching of morals be attempted? The question might as well be asked of the mother, how she is able to teach her children to love her, to respect her authority, to be gentle and truthful and good, if she does not give them set lessons on character and conduct. The good man does good by living, and the teacher whose character has in it the elements of loveliness will have an influence for good which will flow from his acts and inspire his pupils to noble conduct, as unconsciously as perfume distils from the rose and fills the summer air with delicious fragrance. But the teacher, whose character is such as we have seen it should be, will not rest content with this unconscious influence. Despite all the controversy of theologians and philosophers, there still remains enough of indisputable truth, to impart to character stability and texture, and to give to conduct such guidance as will tend to the lasting good of every one who will abide by it. The obligations which truth, and duty, and justice, and mercy, impose upon mankind, are eternal, and derive little sanction from the philosophic basis upon which they rest. Sympathy with our fellow man, a duty which has received a sacred authority from that Great Teacher who taught us to love our neighbour as ourself, may still be included as a duty and as a source of supreme pleasure, with an abiding faith in its obligatoriness and its blessedness, despite the multiform interpretations which have been set upon much that has come from the same lips. And so honour, and good-will, and integrity, and sincerity and kindness, and forgiveness of injury, and a host of other beautiful elements and adornments of character, may be impressed upon the growing minds and hearts of childhood, with an unquestioning faith in their lasting utility and loveliness. Selfishness may be shown to be a source of unhappiness, a curse which comes in but a thin disguise. It, and every form of evil, every disposition to badness, every budding vice, may be checked and restrained, if not altogether eradicated. But to do all this, there must be the enthusiastic glowing soul, the earnest heart, the determined purpose, the intelligent and discerning mind. In short, the teacher must be the near approach to that ideal which he should continually hold up to his pupils. He must labour in season and out of season. He must ever be ready with wise counsel and example. He will be quick to find time, in the intervals of his more systematic occupations, to present with emphasized directness some phase of character or element of moral beauty, which may have been suggested by a chance incident of school life; or perhaps on some occasion of less frequent occurrence, as it may be, in the last hour of the week, he will dwell more particularly on some point of character of prime importance, and illustrate it by examples from the history of good and great men, whose lives he thinks are useful lessons to the purpose. He will constantly think that those young souls entrusted to his keeping, are getting, not only their intellectual, but their moral aliment from him; and that should he fail to supply them, they are sure to be fed upon husks, or worse. And recognizing this, he will be conscientiously careful that the source from which they are supplied, is pure; and that what he gives them, either in precept or in example, is the truest, noblest, purest he can make it. Should this exalted purpose be recognized by the teacher, there will be little doubt that ways and means will be found for its fulfilment. Moral truth, when thus presented and, illustrated is attractive. The young mind easily assimilates it, and the teacher will find that his work will not go on unrewarded, but that it will soon have its best fruition and richest guerdon in the development

of character in his pupils, and the blossoming out in their souls of all the noblest virtues of boyhood and girlhood, of manhood and womanhood.

Furthermore, should the teacher pursue his work with this exalted aim, he has even a more precious reward. This devotion to character, building will re-act upon himself, and he will feel that though he make many a stumble, that though often he may grievously err, that though at times his life will seem to him to belie all that he has taught, and that no duty is so hard as that of presenting a noble ideal when he fails to realize it in himself, he will feel, despite all this, that his own character is growing stronger and better, and that with him the paths of duty and of pleasure are coming nearer, and that by a steady approximation, he is attaining to that completeness of life which is enjoyed by the Great Teacher who commands us to be "perfect even as our father in heaven is perfect."

This, then, seems to me to be the true remedy for what cannot but be acknowledged as a great deficiency in our national system. But it is a remedy which legislation is unable to supply, it lies beyond the effect of ordinance and act of parliament. It must come from a general recognition on the part of teachers that theirs is indeed a noble profession—that they must not work with eye-service merely, but as in the sight of God, striving to the uttermost to discharge the trust which they have assumed. They have entrusted to them the most precious of all trusts,—the possibilities of human souls; let them then with loving sympathy, with earnest hope, with wise discernment and with untiring energy labour to quit themselves like honorable men, and return these trusts to the world with the best of all possessions,—hearts quickened to a realization of the responsibility and the earnestness of life, consciences made sensible to the last demands of truth and duty, and purposes and aims ennobled by a forgetfulness of self, and a devotion to the well-being of others. When this duty is recognized by every teacher in the land, as it is now, I hope, by very many, and when it is conscientiously and earnestly discharged, then no longer shall any one have reason to lament that in our national system moral education is neglected.

THE SUPERANNUATION FUND.

BY C. H. ASHDOWN, SANDWICH.

(Continued from the January Number.)

The law says:—"Every teacher or inspector who complies with the preliminary conditions as to contribution to the fund is absolutely entitled, on reaching the full age of sixty years, to retire from the teaching profession at his discretion, and to receive an allowance at the rate of six dollars per annum for every year of teaching service in this Province. The Education Department must, however, be furnished with satisfactory evidence of such teacher possessing a good character, as to his or her age, and the length of service as a teacher or inspector, as the case may be.

"Every teacher or inspector who is under sixty years of age having contributed as aforesaid, and is disabled from practicing his profession, is entitled to the like allowance on furnishing the Department, from time to time, with satisfactory evidence of his being so disabled.

"In the case of any applicant under sixty years of age, on the ground that he or she is disabled from practicing his or her profession, the particulars contained in the form furnished by the Department must be given, together with evidence thereof to the satisfaction of the Minister; and in all applications of this nature, the applicant is required to submit himself or herself for examination touching his or her disability before such one or more registered

medical practitioners as the Minister may appoint; and the applicant will not be entitled to any retiring allowance unless the Minister, upon such an examination, is satisfied that such disability, exists.

"Any retiring allowance is liable to be withdrawn in any year, unless the disability continues; and the recipient is annually to present himself to the inspector in order that he may report thereon to the Minister."

The reader's attention is now invited to a few figures bearing upon this question of "under sixty years of age."

Year	Total		RECIPIENTS												Amount paid	Per cent.	Of	
	Under 60 or over	Under 60 or over	under.....years.....or over.....						years of age.									
			30	35	40	45	50	55	60	65	70	75	80	85	90			
1872	18	123	1	1	1	1	1	1	5	21	30	29	25	14	4	\$1454	12	\$11,942
1873	141	25	2	3	1	1	1	8	6	21	30	29	25	14	4	10,488	88	"
1874	153	128	2	3	1	1	1	8	25	29	25	31	12	5	1	2,681	14	18,995
1875	167	139	1	1	4	8	10	17	18	26	33	30	30	15	2	5,030	86	"
1876	162	169	2	1	4	8	10	17	25	28	42	35	29	20	3	17,772	78	22,802
1877	184	229	2	1	2	11	13	26	27	33	47	42	33	20	4	6,917	26	26,509
1878	225	293	2	1	2	14	15	30	30	33	47	42	33	20	4	26,509	74	"
	339	380	1	4	8	11	22	33	40	50	63	46	31	23	8	9,217	29	31,768
	839	880	1	8	11	22	33	40	40	50	63	46	31	23	8	22,621	71	"
	839	880	1	8	11	22	33	40	40	50	63	46	31	23	8	31,768	28	35,325
	839	880	1	8	11	22	33	40	40	50	63	46	31	23	8	10,000	72	"
	839	880	1	8	11	22	33	40	40	50	63	46	31	23	8	25,325	31	41,192
	839	880	1	8	11	22	33	40	40	50	63	46	31	23	8	85,325	68	"

An inspection of the preceding table shows there was a steady increase in the number of those under sixty deriving benefit from the fund. In 1872, they were only 12 per cent. of the whole, but in 1878, they represented 83 per cent. of the recipients.

And the question is, were all these persons under sixty years of age disabled from practicing their profession? Was the medical examination as thorough as it should have been? Did they present themselves annually to their several inspectors? And did the inspectors correctly report thereon to the Minister of Education?

This teaching must be killing work indeed, when so many have to fall out of line before they reach five and forty or fifty years, and yet a glance at the preceding table shows a goodly array of those who passed the "three-score and ten."

For those who, owing to a poor constitution and over-taxed energies, are broken down, I have the greatest sympathy, and would be the last to object to their receiving substantial aid. But when men retire from the profession to enter the Civil Service or other walks in life and receive larger incomes than when teaching, and at the same time draw their superannuation allowance, is it not high time for an investigation.

I wonder, was it Goethe's Mephistophiles, the mischief-worker, who whispered in my ear as I busied myself in preparing my facts and figures for this paper: "Party," "Politics," "Favoritism," "Local influence," "Minister of Education," sounds grandiose for a people numbering less than two millions, but I am not so sure the step was a wise one, which substituted the portfolio of the Minister, for the tenure of office during pleasure.

Party is party, and I care not who the minister may be, nor what his political bias, from the very nature of his position private judgment, and that broader view of great questions granted to those placed above the turmoil of faction, can never be the lot of him who is a player in that game of political chance "the Ins and Outs."

My reason for dwelling upon the injustice of so large a number of those under the prescribed age participating in the fund, is, because I understand the Legislature feels too large a call is being made upon the public purse in aid of this fund, and contemplates introducing certain changes into its sources of revenue and its administration. The sources of revenue should be (a) an annual tax and (b) an examination fee.

The annual tax should be levied upon all teachers in active service irrespective of sex. When men and women are engaged in the same work they should share the same responsibilities and enjoy the same privileges. When woman enters any field of labor as a competitor with man, let the fight be a fair one and no favor. Let us hear nothing of the "weaker vessel" theory.

In the teaching profession we find there has been a vast increase of the female element since the year 1859 as the following table will show:—

OF THE FEMALE ELEMENT.				EXCESS OF	
Date.	Number of Males.	Number of Females.	Total.	Males.	Females.
1859	3115	1120	4235	1995	
1860	3100	1191	4291	1919	
1861	3031	1305	4336	1726	
1862	3115	1291	4406	1824	
1863	3094	1410	4504	1694	
1864	3011	1614	4625	1397	
1865	2930	1791	4721	1139	
1866	2925	1864	4789	1061	
1867	2849	2041	4890	808	
1868	2777	2219	4996	558	
1869	2775	2279	5054	496	
1870	2758	2412	5165	341	
1871	2641	2665	5306	.....	24
1872	2626	2850	5476	.....	224
1873	2581	3061	5642	.....	480
1874	2601	3185	5786	.....	534
1875	2645	3373	6018	.....	728
1876	2780	3405	6185	.....	625
1877	8020	3448	6468	.....	428
1878	8060	3413	6473	.....	853

Had the annual tax of four dollars been levied upon all teachers beginning with 1872, an examination fee of four dollars charged all applicants for certificates, and a more rigid investigation made of the claims of those under sixty, there would to-day be at least a hundred and thirty thousand dollars to the credit of the fund.

	Number of Teachers.	Number of Applicants for Examination.	Amount of Annual Tax.	Amount of Examination Fees.	Total Amount to the Credit of the Fund.	Amount Paid to those of 60 Years or Over.	Surplus to the Credit of the Fund.
1872	5476	4053	\$21,904	\$16,212	\$38,116	\$10,488	\$27,628
1873	5642	3633	22,568	14,532	37,100	16,314	20,786
1874	5736	2498	22,944	9,992	32,936	17,772	15,164
1875	6018	3879	24,072	15,516	39,588	19,592	19,996
1876	6185	4487	24,740	17,948	42,688	22,521	20,167
1877	6468	6288	25,872	25,152	51,024	25,325	25,699
1898	6473	4679	25,892	18,716	44,608	28,180	16,469
Total.			\$167,992	\$118,068	\$286,060	\$140,151	\$145,909

I think the above table contains sufficient evidence to show that the Superannuation Fund could be made self-sustaining.

With respect to the administration of the fund, I would offer the following suggestions:

1. That no moneys be refunded to those retiring from the profession.
2. That the regulation relative to deceased teachers remain as at present.
3. That after a female has taught for not less than five, or a male not less than ten years, a certificate of deposit be granted to such, which certificate shall entitle the holder—upon attaining the age of sixty years—to (a) an annual pension of—dollars for every year taught, or if preferred by the holder, (b) to the payment in one sum of all moneys paid in, with compound interest at the rate of 6 per cent per annum.
4. That in each inspectorate at the annual meeting of the Teachers' Convention, a committee of not less than six be appointed by the vote of the teachers then present, with the inspector as chairman *ex officio*, the duties of this committee to be the thorough investigation of the cases of all applicants for aid under sixty years of age.
5. That a list of all those under sixty receiving aid be published annually in the educational papers of the Province, giving specific information as to (a) name, (b) age, (c) county, (d) cause of inability to teach, (e) name of inspector, (f) name of medical examiner, (g) number of years of service (h) amount of aid.

6th. In the event of the death of the holder of a "Certificate of Deposit" before reaching the age of sixty, the face value of such certificate shall be paid to the representative of the said holder.

7th. That no allowance be made for any years taught prior to 1872 after the First day of January 1884, unless all arrears of tax are paid up by that date.

From the above it will be seen that the only persons who may be said to suffer from the superannuation scheme are those who, after teaching two or three years, try something else; and those who utilize the profession as a stepping-stone to one more lucrative. And these are the very parties who should suffer. It is they who lower the salaries and stand in the way of better men. The fact is it is yet too easy a thing to become a teacher, and it is to be hoped that the legislature now in session will, before its close, do something to protect the interests of those who, from inclination and fitness for the work, desire to make teaching their profession for life.

To the Editor of the Canada School Journal:

DEAR SIR,—I have taken your magazine since it was first established, and can honestly say that it has done a great deal for the profession generally, and for the educational interests of the country. I therefore make free to call your attention to a way in which you can put the teachers of Ontario under still greater obligations, and that is by protesting, in their behalf, against the authorization of text-books for use in the schools till they are found to be free from errors that can be easily avoided by a reasonable amount of care being taken. The chief offender at present I believe to be an authorized Geography. If you examine its map of Ontario you will look in vain for Orangeville, Paisley, Lucknow, Dresden, Brussels, Mitchell, Harriston, Durham, Parkhill, though many smaller places are given, some of which, if they have any existence at all, are not found in the list of post offices. Coming towards the east, Port Perry is not thought worth naming; Campbellford is placed in the County of Hastings, about where Stirling should be, and the Kingston and Pembroke Railway is represented as completed to the latter place, though its promoters would be much pleased, if they could find the means to extend it from the Mississippi, where it now terminates, to Renfrew, the proposed terminus. Though the Canada Central has been running to Renfrew for five years, and has lately been opened forty or fifty miles further, this map leaves it at Renfrew.

I desire you to publish this, to the end that the pupils in our schools may find some protection against misleading text-books, when the proper authorities have failed in their duty in this respect. At every Entrance Examination I find Geography to be a subject in which the great majority of candidates are deficient, and I attribute this largely to the former text-book of Lovell's, and the maps issued by the Department.

I remain, yours sincerely,  
HEAD MASTER.

Mathematical Department.

Communications intended for this part of the JOURNAL should be on separate sheets, written on one side only, 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, and must be accompanied by the correspondents' names and addresses.

EXAMINATION PAPERS.

SOLUTIONS.

I.

1. (1)  $a-b$ , and  $(a-b)^2 + x(a+b)$ .  
 (2)  $x^2 + ax + b$  and  $x^2 - ax + c$ .  
 (3)  $a-2b$ ,  $a^2 - ab + b^2$ ,  $a$ , and  $a^3 - 3ab + 3b^2$ .
2. Bookwork.
3. (1) Bookwork.  
 (2)  $(x+3y)(x-3y)(x^2+4y^2)$ .
4. (1)  $\frac{1}{yz}$ .  
 (2) 0.
5. First expression should contain  $qx^3$ . Then on actually dividing, remainder is  $\{(q-1)-p(q-p)\}x^2 + \{p-p(q-p)\}x + 1-q+p$ , all the terms of which vanish if  $q=p+1$ .
6. (1)  $x+y+z = x(a+1)$ , &c.  
 $\therefore \frac{1}{a+1} = \frac{x}{x+y+z}$ , &c.  
 and  $\frac{1}{a+1} + \frac{1}{b+1} + \frac{1}{c+1} = 1$ .  
 (2)  $x^2(y+z) + \dots = 0$ , if, (since  $y+z = -x$ )  
 $x^3 + y^3 + z^3 - 3xyz = 0$

if  $(x+y+z)(x^2+y^2+z^2-xy-yz-zx) = 0$   
 if  $0 \times (\dots) = 0$ .

7. (1)  $a^3 + b^3 > a^2b + ab^2$   
 if  $a^3 - ab + b^2 > ab$ , since  $a+b$  is positive  
 if  $a^2 + b^2 > 2ab$ .

2. True if  
 $3a^2 + 3b^2 + 3c^2 - 2ab - 2bc - 2ca > ab + bc + ca$   
 if  $a^2 + b^2 + c^2 > ab + bc + ca$ .  
 Now  $a^2 + b^2 > 2ab$   
 $b^2 + c^2 > 2bc$   
 $c^2 + a^2 > 2ca$   
 $\therefore a^2 + b^2 + c^2 > ab + bc + ca$ .

8. Bookwork.

9. (1)  $= \frac{2+\sqrt{2}}{\sqrt{2}+1-\sqrt{2}} + \frac{2-\sqrt{2}}{\sqrt{2}-1-\sqrt{2}} = 2\sqrt{2}$ .  
 (1)  $= \frac{1+\sqrt{2}-\sqrt{3}}{1+2+2\sqrt{2}-3} = \frac{\sqrt{2}+2-\sqrt{6}}{4}$ .

II.

1. (1)  $x^3 + 2xyz + y^2z^2 = 1 - y^2 - z^2 + y^2z^2 = (1-y^2)(1-z^2)$   
 $\therefore x+yz = \{(1-y^2)(1-z^2)\}^{\frac{1}{2}}$ , &c.

and adding, required result is obtained.

(2) From above

$$\frac{x+yz}{(1+y)(1+z)} = \left\{ \frac{(1-y)(1-z)}{(1+y)(1+z)} \right\}^{\frac{1}{2}} \&c.$$

And adding, given expression will equal

$$\frac{x+y+z+xy+yz+zx+xyz+x^2+y^2+z^2+2xyz}{(1+x)(1+y)(1+z)} = 1.$$

2. (1) Adding the first two equations

$$2xy = x^2 + y^2 - a^2 - b^2$$

$$\text{or } \sqrt{x^2 + b^2} = x - y, \&c.$$

$\therefore \sqrt{a^2 + b^2} + \sqrt{b^2 + c^2} + \sqrt{c^2 + a^2} = 0$ . And the equations are not consistent unless this relation holds.

(2) Adding  $(x+y)(a^2 + b^2) = x+y$ , or  $a^2 + b^2 = 1$ . The equations are not consistent unless this relation holds, and if it does hold there is but one equation, and the ratio of  $x$  to  $y$  can alone be found.

3. (1)  $= \frac{n(n+1)(2n+1)}{6}$ . See Todhunter, § 660.

(2) Series is convergent, for ratio of  $n+1^{\text{th}}$  term to  $n^{\text{th}}$  is  $\frac{n+1}{n} \cdot \frac{1}{3} = \left(1 + \frac{1}{n}\right) \cdot \frac{1}{3}$ , which as  $n$  increases indefinitely, tends to  $\frac{1}{3}$  as its limit,—a quantity less than unity. See Todhunter, § 559.

Let  $S = \frac{2}{3} + \frac{4}{3^2} + \frac{6}{3^3} + \dots$

$\therefore S \times \frac{1}{3} = \frac{2}{3^2} + \frac{4}{3^3} + \dots$

subtracting  $S \times \frac{2}{3} = \frac{2}{3} + \frac{2}{3^2} + \dots$

$$= \frac{2}{3} = 1$$

$$1 - \frac{1}{3}$$

or  $S = 1\frac{1}{2}$ .

4. (1) Bookwork.

(2) The total number of numbers that can thus be formed is

$$\frac{|m+n+\dots|}{|m| |n| \dots}$$

Hence the number of times that  $a$  will be found in any assigned place is

$$\frac{m}{m+n+\dots} \times \frac{|m+n+\dots|}{|m| |n| \dots}$$

Hence the sum of the digits in any assigned place is

$$\frac{ma+nb+\dots}{m+n+\dots} \times \frac{|m+n+\dots|}{|m| |n| \dots}$$

And this sum of all the numbers formed will be this multiplied by 1111..... $m+n+\dots$  places; i.e., by

$$\frac{10^{m+n+\dots} - 1}{10 - 1}$$

$$5. \left(\frac{x}{x-1}\right)^{\frac{1}{2}} = \left(\frac{x-1}{x}\right)^{-\frac{1}{2}} = \left(1 - \frac{1}{x}\right)^{-\frac{1}{2}} \\ = 1 + \frac{1}{x^2} + \frac{x+1}{|2|} \cdot \frac{1}{x^4} + \frac{(x+1)(2x+1)}{|3|} \cdot \frac{1}{x^6} + \dots$$

6. (1) Todhunter, § 530.

(2) The coefficient of the middle term is the coefficient of  $x^n$ . From  $\{1+x(1+x)\}^n$

$$= 1 + C_1^n x(1+x) + C_2^n x^2(1+x)^2 + \dots + C_{\frac{n}{2}}^n x^{\frac{n}{2}}(1+x)^{\frac{n}{2}} + \dots \\ + C_{\frac{n-1}{2}}^n x^{\frac{n-1}{2}}(1+x)^{\frac{n-1}{2}} + C_n^n (1+x)^n. \quad n \text{ being even.}$$

Picking out the terms involving  $x^n$  and remembering that  $C_n^n = 1, C_{n-1}^n = C_1^n, \&c.$ , we get for coefficient of  $x^n$  the first expression given.

If  $n$  be odd we obtain the second expression.

$$7. x = a^{\frac{x}{a}} = a^{(1+x \log a + \dots)} = a^{x \log a} = a^x \dots \text{approx.} \\ = \{1+x(\log a)^2\} \text{ approx.}$$

$$\therefore x = \frac{a}{a - (\log a)^2}$$

8. Series is greater than

$$\frac{1}{1^p} + \frac{1}{2^p} + \frac{2}{4^p} + \frac{4}{8^p} + \dots$$

$$\text{than } 1 + \frac{1}{2^p} + \frac{1}{2^{2p-1}} + \frac{1}{2^{2^p-1}} + \dots$$

$$\text{than } 1 + \frac{1}{\frac{1}{2^p}} = 1 + \frac{1}{2^p-2} = \frac{2^p-1}{2(2^{p-1}-1)}$$

It is also less than

$$1 + \frac{2}{2^p} + \frac{4}{4^p} + \frac{8}{8^p} + \dots \\ = 1 + \frac{1}{2^{p-1}} + \frac{1}{2^{2p-2}} + \frac{1}{2^{2^p-2}} + \dots \\ = \frac{1}{1 - \frac{1}{2^{p-1}}} = \frac{2^{p-1}}{2^{p-1} - 1}$$

9. Area of one of the triangles of which the circumscribed figure is composed is ( $a$  being radius of the circle)

$$a^2 \tan 18^\circ$$

Of one of those of which the inscribed figure is composed is  $a^2 \sin 18^\circ \cos 18^\circ$ .

$$\text{Hence ratio} = \frac{1}{\cos^2 18^\circ} = \frac{8}{5 + \sqrt{5}} = \frac{8}{7 + (\sqrt{5} - 2)} = \&c.$$

We unavoidably hold over our correspondence until next issue.

## Practical Department.

### HOW CHILDREN SHOULD BE TAUGHT TO READ.

MR. EDITOR,—Believing that no subject is so badly taught in the schools of Ontario as Reading, I propose, with your permission, to conduct a discussion in your columns on the methods of teaching it with a view of learning which of them is the simplest and most philosophical. During the past two years, I have had the honor of advocating at the Provincial Teachers' Convention, and at several County Conventions, a *self-consistent phonic system*; that is, a system which gives the child the *sounds* and *powers* of the letters at once, and at first gives it but **ONE SOUND FOR EACH**. During the past year, Professor Meiklejohn, of the University of St. Andrew's, has published a little work, advocating precisely the same system. This *One Sound System* I purpose to expound and defend.

With reference to other systems of teaching reading, my position will be friendly to the various phonetic methods; respectful to a sentence method as an *introduction* to the process of learning to read; indifferent to the alphabetic method (if there can be such a thing) and decidedly antagonistic to the word method as understood and taught in Ontario.

I hope that every statement I make may be fairly criticized, and if necessary corrected. I desire to reach the truth, and I am quite willing to be hurt a little while climbing.

JAMES L. HUGHES, P. S. Inspector.

### HOW TO TEACH READING.

#### III.

In learning to read English a child has two great discoveries to make. He has to learn, in the first place, that the marks which he sees on the printed page in some way serve to represent the sounds or words which he utters when he speaks; and in the second place, he has unfortunately to find out that the same letter or combination of letters does not always stand for the same sound. In teaching by any but a phonic or a self-consistent phonic method, these two difficulties are presented to the poor child at the same time, and he necessarily becomes confused. By the combination of the two troubles, the greatness of each is increased.

The process of learning to read consists of two parts: *word recognition* and *expressive reading*. The confounding of these parts has given rise to a large amount of misunderstanding concerning the method of teaching the subject. In order that a discussion in regard to it may be properly understood, it is essential that the distinction between *word recognition* and *expressive reading* be clearly made and constantly kept in view. All teachers agree that the only way to teach *expressive reading* to young children, is by giving them a correct example for imitation. Unfortunately, however, many teachers throughout Ontario, even in the more prominent schools, have understood this statement to mean too much. Imitation is everything with them. The teacher begins at the first

page and continues till the last by speaking the sentences as they occur in as correct a manner as he can, and his pupils imitate him, looking at him quite as often as at the sentences they are supposed to be learning. It is quite amusing to see half the members of a class look in the face of their teacher and say, "I see an ox," or a "hen," or some of the other animals mentioned in our primers. The result of such a method of teaching naturally is that pupils learn a string of sentences by rote, and associate them with the pictures at the top of the cards. A carpenter teaches his apprentice that running his plane in a certain way over a rough board will make it smooth, he never tells him that moving his plane will make a board and render it smooth at the same time.

Making a board and polishing it are vastly different things; so also are learning to read and the art of reading. The various discussions in regard to methods of teaching children to read, refer only to the ready and accurate recognition of words. All writers agree as to the method of teaching them how to read expressively.

Keeping these distinctions constantly before our minds, we may now proceed to the

#### FIRST LESSON IN READING.

Many writers urge that this should consist chiefly of a conversation regarding some common object or thing. A cat is frequently selected as the victim, and what is mis-named an "object lesson" is given on the unfortunate cat to the more unfortunate pupils, who already know more about the cat and its habits than their teacher, so far as a child's knowledge of a cat ought to extend. All this is done to interest them in the lesson. What an unnatural effort! The trouble is that the children are certain to take more interest in the frisking, mischievous, singing, natural old cat they know so well at the beginning of the lesson, than in the mystical thing with "latin parts" that the teacher talks about. Conversational exercises in connection with any lesson are very valuable, as language lessons, and they are quite allowable as such in connection with any reading lesson *but the first*. In that the teacher should labour to interest the children in *reading*, not in what they are to read about. With this end in view he might appropriately read to his class a very short story, calling special attention to the fact that it is in the book, and that there are many other pretty stories printed in books, and that every boy and girl may learn to read these stories for themselves. There is no other way in which pupils can be so directly interested in learning to read as by this means. So far as interesting the pupils in the subject of the lesson is concerned, the teacher need not make any special efforts. Every boy and girl is interested in so many things that there need be no difficulty on that score. In arranging the first lesson, three things should be kept in view:—

1. The subject should be one with which the pupils are familiar, and in which they are interested.
2. The sounds of the letters used, should be easily made.
3. The vocal arrangement necessary in their formation, should be simple and easily illustrated.

Having regard to all these objects, as well as to the use that can be *immediately* made of the letters by the children, I would in the first lesson teach the letters *p*, and *a*. How should they be taught? Here is the rock on which we may be wrecked. This is the point at which discussions may be expected on *analysis* and *synthesis*. Here we shall be deluged with opinions to the effect that children "proceed from wholes to parts," etc., etc. I do not propose to enter into the discussion—willingly. Writers are divided nearly equally on the question. On the whole I am inclined to agree with Mr. Hailmann in the opinion that regarding teaching generally, "instead of being opposed to each other as two *different* methods to accomplish the same ends, they are only the necessary

parts of the *same* method, the method of intellectual life." If the study of a subject calls into exercise the observant faculties only, then by all means the method should be *analytic*. If, on the contrary, it calls the constructive powers into play, as I hold the teaching of reading should do, then the *synthetic* method is preferable. Children six years of age are quite able to form many things out of their elements; and those wise men who assert the contrary, forget that a boy of three will form patterns, and shapes of things, with a few sticks, houses with blocks, etc.

#### P

1. Let each child place a small piece of paper on its open hand.
2. At a signal given by the teacher, let each one blow his paper from his hand. This should be done three or four times.
3. Let each one pretend to blow off a paper without really having it on his hand. In doing this they should carefully watch the action of their lips.
4. With the papers again on their hands let them get ready to blow them off—pressing the air forcibly against the lips, but keeping them tightly shut until a signal is given.

5. With all eyes fixed on the teacher, the pupils should be led in repeating the action of closing the lips, pressing the air against them, and then opening them suddenly. By moving his hands, the teacher can lead as many pupils as can see him in this exercise. When his hands are brought together, all lips should be shut and the air pressed against them; when the hands are separated, the lips should be opened so as to allow the air to escape.

In this way, every pupil will learn the *sound* of *p* in from one to two minutes, in such a way that they will *never forget it*.

#### A

As this letter has so many sounds, it becomes a question which one should be given to it. As already explained, only one sound must be given to the pupils, and no words should be found in their first primer in which it should have any other sound. This letter has three sounds which are pretty closely related, in (1) an, (2) ask, (3) ah. Professor Bell, in speaking of the intermediate sound, says, "The extreme pronunciations, 1 and 3 are, at the present day, comparatively rare. The precise quality of the intermediate sound cannot be correctly noted, for it ranges, among different speakers, within every practicable shade of sound within these limits." This statement has an underlying current of philosophy that may not be at first noticeable. It accounts for what is really a fact, that a child who is taught one of these three sounds will change it insensibly to either of the others in use. This gives a latitude in regard to *a* which can not be found in connection with the other vowels. In teaching the other vowels, the *short* sound should be given. In the case of *a*, the *short* sound requires a vocal formation of such a kind that the sound can not be prolonged without considerable effort, and, therefore, the Italian sound, as in *ah* is the best to give, as it can be sustained by the pupils without any difficulty, provided that they can breathe properly. In forming this sound, three things should be attended to:

1. The mouth should be opened well.
2. The lips should be drawn back at the sides.
3. The tongue should lie at the bottom of the mouth, without being arched at all.

The pupils will make the sound readily by imitation, if they are warned to open their mouths properly. After the class has repeated the sound a few times, to impress it on their ears, and to give the teacher the opportunity of correcting any tendencies to *aw* on the one hand, or too sharp a sound on the other, the lesson should proceed in the following manner. Placing the letters on the board thus:—





fortunes of birth, situation or any other accident, these favorable conditions are denied, then it is the duty of society to become the foster-parent of our boys, to step in and secure to them their natural and inalienable rights. The cupolas of our schools and the spires of our churches, unite their voices to demand for our boys deliverance from intellectual starvation. Better stunt the body than dwarf the soul; better tamper with the mortal, than blight the undying; better for boys to die of hunger, than to live with nothing higher than savage instincts and brutal passions. The sage of Chelsea has said "That there should one man die ignorant who had a capacity for knowledge, this I call a tragedy. What I mourn over is that the lamp of his soul should go out; that no ray of heavenly, or even earthly knowledge, should visit him; but only in the haggard darkness, like two spectres, Fear and Indignation bear him company."

III. And now, permit me in the third and last place, to conclude with an application and an appeal. Parents, who could well afford the expense, frequently cut short the school days of their sons before they have mastered even the elements of real education; before they are far enough advanced to become their own teachers, and carry on the great life-task of self-education. Even before the boy has reached the upper classes of the public school, he is removed to learn, as quickly as possible, the art of bread-winning and money-making. Dear friends, this was excusable 35 years ago, when this district was largely forest, the settlers poor, and educational facilities extremely meagre. It is quite the reverse of excusable in the year 1891. You can now better afford to spend \$200 on your son's education, than they could afford to do without his help among the log piles and bush heaps for a single summer. Those days of ox-carts and corduroy roads have vanished forever from these counties. The conditions of life are greatly changed, All honor to the men by whose patient labor the forest has become a smiling field! But let us imitate their worthy example and push on to higher results. We plead with you, not for an earlier start, but for a later ending. It is but once in a life-time; let the boy stay a couple of years longer. Do not be impatient and expect miracles. Education is not a thing to be bought and sold by *avoir-dupois*. There are great differences. Many of the best minds mature rather slowly; all the better for them if they develop slowly, gradually, naturally. Let us have by all means "first the blade, then the ear, then the full corn in the ear." We want boys, not little old men, whose precociousness is their ruin. The effect of two years' thorough drill between 15 and 18, will be life-long. Let the boys go to school. Give them the benefit of a higher training than the elementary school supplies. Let them spend their days with Todhunter and Milton, and their nights with Cicero and Demosthenes. You can now do this for your children better than the early settlers could give their children bread, when the nearest mill was at Galt, and the only means of communication through the swamps was an ox-sled. Parents, bequeath your sons higher education rather than broad fields, or large balances at the bank, which may do them more harm than good. At the present time every man may, with a little effort, leave his sons the legacy of a sound educational training, a legacy which no mortgage can imperil, and no sheriff can seize. It will always exalt the aims and enjoyments of its possessor, and generally be a passport to respectability, to influence and the highest usefulness. These boys are worth ten Pacific Railways; let us spend money on them freely, with the understanding, if need be, that they will inherit nothing more, that they must rely on their own resources. When they are turned adrift into the world, they will give a good account of themselves in the battle of life. They will be blood worthy of this young nation, and give a history worthy of its parentage.

## A MORAL LESSON.

BY ALICE COOPER.

The lesson was in language, on words and their elements.

"What is the *greatest* word in the English language?" said the teacher, at the close of the exercise. No reply. "Suppose I were to ask the name of the greatest man you ever heard of."

"Alexander the Great," said one of the boys.

"Well, Alexander the Great was a mighty conqueror, but he had an enemy stronger than himself that conquered him. Alexander was buried in a golden coffin, but he died from drunkenness. What was his enemy.

"Strong drink," said the boys.

"I told you last week about a man in England who murdered his two children and their mother. Do you remember what he said before his execution?"

"'After I took to drink, everything went wrong with me,' were his words.

"Yes, the ancient Spartans used to make their slaves drink till they were intoxicated, that their children might see what a beastly, wretched object a drunkard is."

"I will never be a drunkard," said one boy.

"My brother says taking a little will do no harm," said another.

"The Duke of Orleans was the eldest son of King Louis Phillippe. He was a noble, generous young man, and everybody liked him. He thought it was no harm to take a little wine occasionally, but one day he drank a little too much; in getting out of his carriage he staggered and fell; his head struck the pavement; he was carried into a beer shop that was near and died there. Owing to his death, the Orleans dynasty was overthrown, his whole family were sent into exile, and their property, over one hundred millions of dollars, was taken from them. Write in your blank-books, "Wine is a mocker, strong drink is raging, and whosoever is deceived thereby is not wise." 'War has slain its thousands, but rum its tens of thousands.'"

"I think Washington was the greatest man I ever heard of," said one.

"I think Greene, the Rhode Island blacksmith, was as great," said another.

"Adams and Jefferson," said a third.

"Why not say Benedict Arnold" said the teacher. Was he not brave? Was he not one of the first to raise the flag of freedom Think of Ticonderoga, and Quebec, and Saratoga."

"He was a traitor; he could not be trusted."

"Yes, he was not *honest* was he? Well, what made Washington, Greene, Adams, and Jefferson great?"

"They were brave, and true, and honest."

"Write in your blank books, 'An *honest* man is the noblest work of God.'"

"I think the greatest word in the English language is *honesty*," said a thoughtful boy.

"Well, boys," replied the teacher, "let us think about honesty; let us practise it, and love it; and if you find a greater word than *honesty*, let me know.—*National Journal*."

## DRAWING.

1. All children who can be taught to read, write and cipher, can be taught to draw.

2. Drawing, by the law of Massachusetts, is required to be taught to every child as an element of general education, like reading, writing and arithmetic.

8. As an elementary subject, it should be taught by the regular teachers, and not by special instructors.

4. The true function of drawing, in general education, is to develop accuracy and to exercise the imagination, thereby tending to produce love of order, and to nourish originality.

5. Educationally, drawing should be regarded as a means for the study of other subjects, such as geography, history, mechanics, design. In general education, it is to be considered as an implement, not as an ornament.

6. The practice of drawing is necessary to the possession of taste skill and industry, and is, therefore, the common element of education for enjoyment of the beautiful, and for a profitable, practical life.

7. In the primary, grammar and high schools, drawing is elementary and general; in the normal and evening schools, advanced and special; for teaching purposes in the first, and for skilled industry in the second.

8. Good industrial art includes the scientific, as well as the artistic element; science securing the necessity of true and permanent workmanship, art contributing the quality of attractiveness and beauty. The study of practical art by drawing should, therefore, comprehend the exactness of science by the use of instruments, as in geometrical drawing and designing; and the acquisition of knowledge of the beautiful, and manual skill in expression by free-hand drawing of historical masterpieces of art and choice natural forms.

9. From this study so undertaken, we may expect a more systematic knowledge of the physical world, in history, and at the present time; for, through the sensitiveness to appreciation by the eye, and power of expression by the hand, of its phenomena, may become a knowledge of nature's laws, a love of the fit and beautiful, and that ability to combine these in our own works, which alone produces the highest form of art—originality.

10. Drawing may now take its legal place in the public schools as an element of, and, not as before, a specialty in education, at as little cost as any other equally useful branch of instruction, with the prospect that, at a future time, as many persons will be able to draw well as can read or write well, and as large a proportion be able to design well as to produce a good English composition.—*National Journal of Education.*

#### HISTORY AS A PART OF THE SCHOOL CURRICULUM.

Miss O'Connor, Head-mistress of the Clapham Middle School, read the following paper on this subject, before the Stockwell Branch of the Education Society in England:—

The objections to this study during school life may be classified as (a) Objections to History as history;

(b) Objections to History as too commonly taught in schools.

Objections of the first division are of two sorts: the subject is rendered a difficult one for schools by religious and political differences. It is not so difficult but that it may easily be taken up in after life. But difficulty ought not to exclude a subject, and History teaches invaluable lessons of liberality and impartiality; while the ignorance of modern politicians and the party spirit of the day are proofs of the way in which History learnt in after life may be misapplied. Great evils were wrought by party spirit in past days; but, in reading partisan history from an antagonistic point of view, impartiality may be cultivated.

(b) Objections to History as taught in schools are—

1. That it is a mere mechanical effort of memory.
2. That it is a dry skeleton, repulsive to young minds.
3. That it is a mere lists of dates, names, and battles.

4. That it affords no guidance to our duties as citizens.

5. That, even if interesting, History is not useful.

6. That the study of the lives of kings is useless.

The first three objections refer to generally condemned and dying-out systems of using cram-manuals and learning by rote.

The fourth and fifth may be answered by recalling the lessons of self-devotion and patriotism learnt from History, the political and social experiences there recorded, and the warnings afforded by those experiences.

The lives of kings have affected the social and political state of their people. Witness the Charter issuing from John's hands, not from William the Conqueror's or Henry the First's; the municipal privileges gained from warlike kings; the religious changes wrought by Henry VIII.; and the welding into one of English parties under Elizabeth. The advantages of historical study may be summed up as—the strengthening and development of the intellectual memory, and the training of the mind to discern the relation of cause and effect; the awakening and sustaining of interest in mankind generally; the introduction it gives to literature; the encouragement it affords to, and the interest it awakens in, unselfishness; and the necessity it imposes on us to suspend our judgment.

In a school course of History, English History should be taken as a basis, and its early periods first, since the state of modern English political affairs, domestic or foreign, is not to be grasped by the childish mind, which is easily interested in the epic form of early History.

Suggested Scheme of History for a school. Two weekly lessons.

FORM I.—Ages from seven to eleven. Teaching oral. Stories from English History, beginning at the early periods and taken chronologically.

FORM II.—Ages nine to twelve. Lessons oral, but written out from memory and given in to the teacher. Narrative History.

FORM III.—Ages ten to thirteen. Lectures on English History, including the literature of the period. Lectures to be written from memory, with use of notes. Pupils to do some reading.

FORM IV.—Ages twelve to fifteen. Lectures on the Junior Cambridge course. Lessons to be written from memory after reading Green and Bright.

FORM V.—Ages fifteen to seventeen. Senior Cambridge course. Lessons partly by lecture, partly by giving headings and requiring the class to read up the necessary information, writing down the important parts. Criticism of the views of historians.

FORM VI.—Age from seventeen. Leading constitutional points are considered, and general views of the subject discussed, but the members of the class are expected to study for themselves.

In the discussion following, all the objections before stated were again urged; and the additional criticisms brought forward—that the young could understand the biographical element only in History; that it was impossible to teach all the history of a country in story form; that food for the imagination and moral training could be better drawn from other sources; and that the early teaching of History not only caused children to dislike it, but to form prejudiced opinions, rarely if ever got rid of in later life. Patriotism was condemned as leading to "Jingoism," and it was gravely proposed to omit History altogether—sacred and profane—from the school course.

The answers to these objections were, in substance, as follow:—

Children can grasp the idea of a community earlier than most objectors suppose; historical facts, other than those purely biographical, can be and are taught in story form, and are found interesting; children's dislike to History arises from the system of teaching by rote, long lists of dates and unexplained facts; children form prejudices, even if not taught History, and wise teaching counter-

acts such prejudices; patriotism, instead of teaching a love of war, might be the stepping-stone to beneficial cosmopolitanism. On this side the question was put, "What shall we substitute for History as a training in the suspending of the judgment?"

The German method of teaching History was said to be—(1) The instruction of the child first in the History of its own locality, and the connexion of this History with that of other and neighbouring parts of the country; (2) the History of the country as a whole; (3) History of Classic nations; (4) Modern Foreign History. The youngest child's notions were formed from scattered stories about individuals, afterwards gathered up, and gone through chronologically.

The Chairman said no decisive general principles had been laid down for the pursuit of this study. Skeleton biographic and philosophic history had been mentioned, but other sorts might have been noticed, such as Gibbon's, Macaulay's, and the History furnished by the old chroniclers. He had himself taught History to very young boys in Henry of Huntingdon's Chronicle and early ballads; to older ones in passages from Herodotus; to still older pupils, who were reading Chaucer and Shakspeare, by sending them to the Cyclopædia for authorities, and to the authorities for details, and thus teaching them to weigh evidence. In this way a general taste is formed, interest is aroused, and the study is fairly introduced, and can be profitably pursued in later life on philosophical principles. He added, too, the further plea for introducing History at an early age, that children would have some sort of exciting reading, and History was a safeguard against sensational fiction.

### PHYSICAL EDUCATION.

REPORT OF THE COMMITTEE OF THE LINCOLN TEACHERS' ASSOCIATION,  
ADOPTED OCTOBER 22ND, 1880.

The Committee of the Lincoln Teachers' Association, appointed to consider means of promoting the physical well-being of the children attending our schools, begs to report as follows:—

The means within the reach of teachers, trustees, and parents for the improvement of the physical condition of the children, are, at best, but partially employed, and, in the great majority of schools, almost wholly neglected. In order to direct attention to this important branch of education, and to encourage those responsible for the well-being of the children to use those rational and easy means of physical development, without which mental training is not only useless but injurious, it seems to us desirable that this Report, accompanied by a few simple rules on School Hygiene, should be printed and distributed, with special reference to (1) The ventilation, heating, and cleansing of the school-room, as directly affecting not only the health but also the mental activity and brightness of teachers and scholars; (2) The careful oversight of the physical condition of the children with reference to the observance of the ordinary rules of health in their habits and amusements, and to the age at which children should begin school, as well as the length of their daily application to study; (3) The use of physical exercises calculated to develop symmetrically every part of the frame, and to give grace and vigor to its movements, thus preventing habits of stooping and other imperfections in form and gait.

#### VENTILATION.

The manner of ventilating a room depends somewhat on the position and surroundings of the room itself, on the state of the weather, and on the direction of the wind. Hence it is difficult to lay down rules that will apply in every case. Still, there are general principles that will apply in all cases, among which we may mention the following:—

1. Cold air is not necessarily pure air.
2. Windows should always open from the top for purposes of ventilation.
3. Drafts should be avoided. Though bad air may poison slowly, a blast of cold air is more immediately dangerous.
4. When the outside temperature is much lower than that of the room, a slight lowering of the windows will secure a constant change of atmosphere; but when the two temperatures are nearly the same, unless the wind blow directly against the windows, very little exchange of air will take place even if the opening be quite wide. Hence the danger of bad ventilation in the cool weather of spring and autumn.
5. Measures that will suffice to ventilate a room one day may be altogether insufficient on another. Hence the teacher must be constantly on the watch.
6. Impure air in a room is not easily observed by those in it, but much more readily by any person coming in out of the fresh air.

Besides these general principles, the following rules are recommended:—

1. To open all the windows and doors for three or four minutes during each recess, so as to effect a complete change of air.
2. Have them closed and the room warmed before calling school. To this end it is important that the teacher be in his place fifteen minutes before nine, and five minutes before school in the afternoon, as the law directs.
3. Overheating should be avoided, as it causes restlessness, and increases the danger of the pupils taking cold on going out.
4. Trustees in building school houses should construct in connection with the chimneys, ventilating flues with registers opening near the floor.
5. Floors should be frequently scrubbed and walls whitewashed.

#### OVERSIGHT OF THE PHYSICAL CONDITION OF CHILDREN.

The evils to be guarded against under this head are:—

1. Sending children to school at too early an age, particularly delicate children in need of fresh air and freedom more than the unnatural confinement of the school-room. The teacher should never fail to point out the injury such children suffer, and urge their withdrawal on their parents. As a general rule it may be safely asserted that no child is benefited by an attendance at an earlier age than six years, and many should not attend for a year or more later.
2. Making the daily session for children from five to seven years old as long as for older pupils. This evil is so apparent that in towns and villages, such children are now generally dismissed at 11 a.m. and 3 p.m.; but in rural sections though this cannot be done, yet a judicious framing of the time-table so as to allow longer and more frequent intervals of play, will give vent to the activity and restlessness of children at an age when nature calls more for bodily than mental growth.
3. Requiring children of from ten to fourteen to study too many subjects, and giving them too many and too long lessons for home preparation. We are aware that this matter is not entirely within the control of the teacher, and that in order to preserve his reputation he may almost be compelled to take part in this forcing process; but, though he cannot remove the evil, he can do much to mitigate it.
4. Allowing children to disregard the laws of health in their habits or amusements. Many constitutions are permanently injured by children sitting in school with wet feet, by careless exposure when overheated in play, or by other means, all of them preventable by a little careful oversight on the part of the teacher. No one will question for a moment that neglect of these duties, and the ills that flow from that neglect, can never be compensated by

the most careful cultivation of mind—a sound mind in a sound body being the true standard of a complete education.

#### PHYSICAL EXERCISES.

The following simple physical exercises suitable for the school room have been carefully selected, and are highly recommended not only as a means of physical culture, but also as a pleasant variety in the ordinary school exercises.

It is of the utmost importance that the windows be opened to admit fresh air before commencing work, and that before each exercise the proper "position" be insisted on. In graded schools, where the pupils remain seated during the greater part of the day, it is recommended to take one or two of the given exercises after each lesson; and in rural schools the whole set twice a day—in the middle of the morning session, and again in the afternoon.

The exercises are calculated to develop the chief muscles of the body, and they are so arranged that too continuous a strain on any part is avoided. They may be gone through with simultaneously by the class and teacher counting in concert to each stroke, or the teacher counting alone. Easy exercises, accompanied by singing, for little ones, can be found in Hughes' "Drill and Calisthenics"; and "How to get strong," by Blaikie, contains a great variety of exercises suitable for school purposes, besides much other valuable information.

*Position.*—Pupils standing in the aisles single file, three feet apart, heads and necks erect, heels together, toes out at an angle of 45°, hands down at sides, with palms to the front.

1. Raise the hands directly over the head, and as high as possible, until the thumbs touch, the palms of the hands facing to the front, and the elbows being kept straight. Now, without bending the elbows, bring the hands downward in front towards the feet as far as can comfortably be done, generally at first about as low as the knees, taking care to keep the knees themselves absolutely straight—indeed, if possible, bowed ever back. Now return the hands high over the head, and then repeat, say six times. This number twice a day for the first week will prove enough; and it may be increased to twelve the second, and maintained at that thereafter, care being taken to assure two things: one, that the knees are never bent; the other, that after the first week the hands are gradually brought lower down, until they touch the toes. The end sought in this exercise is to make the pupil stand straight on his feet, and to remove all tendency towards holding the knees slightly bent, and causing that weak, shaky, and "sprung" look about the knees, so very common, to give way to a proper position.

2. *Position.*—Arms akimbo, heels four inches apart, toes pointing outward, body erect. *One.*—Raise the heels off the floor, till the whole weight of the body rests on the soles and toes of the feet; pause a second. *Two.*—Lower the heels slowly till they rest on the floor. Repeat six times twice a day for the first week, double that number the second week, and maintain at that. This exercise strengthens the muscles of the legs from the knees down, giving firmness and elasticity to the step in walking.

3. *Position* as in No. 1. Raise the hands above the head, elbows straight, till the thumbs touch. Now never bending the body or knees a hair's breadth, and keeping the elbows unbent, bring the hands slowly down, not in front this time, but at the sides just above the knees, the little finger and inner edge of the hand alone touching the legs, and the palms facing straight in front. Now notice how difficult it is to warp the shoulders forward even an inch. The chest is out, the head and neck are erect, the shoulders are held low, and the knees straight. The whole frame is so held, that every vital organ has free scope, and their healthier and more vigorous action encouraged. If steadily practised, it is one of the very best known exercises, and not only gives strength, but a fine erect carriage. Carry the hands slowly back through

the same line till again over the head. Then bring them down to the sides again, and do six of these movements twice each day the first week, and twelve afterward

4. *Position* as in No. 2. *One.*—Bend the knees gradually, bringing the body down in a stooping posture, as low as possible, taking care to keep the back straight all the while. *Two.*—Now rise till the knees are straight. Repeat six times twice a day for the first week; for the second week and thereafter, double that number. This exercise strengthens the thighs, and permits continuous walking and standing without fatigue.

5. *One.*—Hands clenched and thrown forcibly back as high as the shoulders, elbows near the sides, nails to the front. *Two.*—Throw them as high as possible. *Three.*—Bring them back to the shoulders as in *One.* *Four.*—Bring them to the sides. Continue 1, 2, 3, 4, at least five times. The whole exercise should be performed with considerable energy. This movement develops the chest and arms, and is one of the most important. If the hands are tightly clenched in *One* and thrown open in *Two*, shut again in *Three* and opened in *Four*, this additional work will be found to tell directly on the shapeliness, and strength of the hands.

This set of exercises will take only five minutes if gone through with properly.

J. B. SOMERSET, P. S. J.  
JOHN H. COMFORT, M.D. } COMMITTEE.  
W. F. RITTENHOUSE,  
LOUISE DANCHE,

### THIRD CLASS TEACHERS' PROFESSIONAL EXAMINATION HELD AT LINDSAY.

DECEMBER 17TH AND 18TH, 1880.

#### MENTAL ARITHMETIC.

EXAMINER—H. REAZIN.

*Time—One minute for each question.*

1. Find the least number whose factors are 4, 3, 12 and 15.
2. One half of a number plus 24 is 4544. Find the number.
3. The quotient is 1360, divisor 12, remainder 8. Find the dividend.
4. MDL+XL+XIX+255.
5. How many minutes from 9.45 a.m. to 5.15 p.m.?
6. Find the sum of all the even numbers between 111 and 121.
7. How many pence in 5,214 shillings?
8. To the L.C.M. of 21 and 48 add the G.C.M. of 143 and 187.
9.  $\frac{1}{2} + \frac{1}{3} + \frac{1}{4} + \frac{1}{5} + \frac{1}{6}$ .
10. How many more five cent. pieces than 25 cent pieces in \$28.
11. Simplify  $3\frac{1}{2} + \frac{\frac{1}{2} + \frac{1}{3}}{\frac{1}{12}} + \frac{\frac{1}{4} + \frac{1}{5}}{\frac{1}{15}} - 1\frac{1}{2}$ .
12. How many men can do a work in 2 days which 3 men can do in 18 days?
13. At \$1.96 per gallon, what will be the cost of 2 quarts, 1 pint, and 1 gill?
14. Find the interest on \$360 at 10 per cent. per annum for 13 months.
15. Simplify  $\{ \sqrt{(14+15+16)^2 - 2000} + \frac{1}{3} \} \times 5\frac{1}{2}$ .

#### EDUCATION.

EXAMINER—J. H. KNIGHT.

1. In what classes should the following subjects be taught, viz.: Geography, Drawing, Object Lessons, Grammar, and Canadian History?
2. What Arithmetic should be taught in the Third Class?
3. How should you conduct a class in Dictation?
4. In some schools pupils frequently lie, steal, swear, backbite, copy and injure property. In other schools these offences are rare. How do you account for the difference?
5. Discuss "good and bad definitions."

3. What are the defects of Grammar as generally taught, as a step to Composition?
  7. How would you teach Comparison of Adjectives?
  8. How would you deal with bad grammar in the conversation of pupils?
  9. Define "cramming," and give examples.
  10. When is a person "over-educated?"
- Value 100—10 marks for each question.

## HYGIENE.

EXAMINER—JAMES WHITE.

1. Describe briefly the structure of the heart and the manner in which the blood is purified.
2. State the effects of pure air, sunshine and exercise upon the health of the individual.
3. Classify foods, and state the kinds best suited to young pupils and sedentary persons.
4. Show the necessity for proper light and ventilation, and state the means you would take to secure them in your school.
5. What are the functions of the skin? What directions about bathing would you give your pupils?

## SCHOOL LAW.

EXAMINER—O. J. BROWN.

1. What is the law relative to compulsory education?
2. From what sources do we derive school grants?
3. What are the chief duties and powers of head masters of public schools?
4. Who are recognized as school visitors?
5. When are school trustees elected? Who are legal voters? How are the elections conducted?

## THE YOUNG IDEA SHOOTING.

Some rather peculiar answers were given to several questions propounded to candidates for entrance to Goderich High School at the recent examination. The following are some of the most amusing:

"Self-taxation," means the trying of one's brain, means getting confused. "Self-taxation" is the king taxing the people himself. "Self-taxation" means to pay their respects. "Self-taxation" was a rule that every man held his land from a lord or chief, whose man or vassal he became.

"To do homage," is that the king should give his people homes and was not to tax for it. "To do homage" is to visit their own country. "To do homage" is to do good. "To do homage" is to put anybody on the throne.

"Ministers of the Crown" are those who preach to the sovereign or ruler. "Ministers of the Crown" are the chief persons that flourish while the country is being governed. "Ministers of the Crown" are those who minister to the wants of the king.

"Prime Minister" is one who stays at the same church all the time.

In accounting for the trouble between Charles I. and the Parliament: "Then Charles revived the system of benevolence by calling rich subjects before him, and granting them large presents, which they dared not refuse."

"Limited Monarchy" is when it is at an end.

"Free Trade" means when they have laws to prevent them doing what they liked. "Free Trade" is the trade for fishing along the shore, or selling whatever they like, and can do what they think best. "Free Trade" is that a man buys a piece of land, and pays for it and receives a deed for it and is subject to nothing but the taxes of the country. "Free Trade" is trade carried on without any money to pay for it.

"The Whig party" was an army which tried to skirmish every

town. "The Whig Party" is the Conservatives. "The Whig Party" are the ones that wish for progress, and they don't in general dress so gay as the Tories.—*Huron Signal*.

## Notes and News.

## ONTARIO.

Miss Fergie, who has been teacher in the public school at Lanark for six years, was presented on Christmas evening with a handsome writing-desk and a work box. During Miss Fergie's residence in Lanark she has been an active worker both in church and Sunday school matters, having had charge of a class since she went there. An address accompanying the presentation expressed the appreciation of her many friends of the earnest, indefatigable and self-denying service rendered the children under her charge.

The examination of U. S. S. No. 5, Ellice and Downie, was held on the 23rd ult. There was a fair attendance of parents and visitors. The pupils were examined by Messrs. Ryan, Macgregor, Ludwig and Thompson, and Misses Thompson and Milne, and acquitted themselves creditably. At the close of the examination of the junior division, the pupils presented Miss Louisa Johnston, who has discharged the duties of assistant teacher in the school for the past three years, with a neatly worded address, a gold locket and a toilet set. Miss Johnston feelingly acknowledged the gifts. The address was read by Miss Dollie Pigeon and the presentation made by Miss Louisa Kline. Miss Milne, of Downie, takes charge of the junior classes of our school for the present year.

Forty-two pupils passed at the recent entrance examination to Brockville High School. Perth passed thirty-three out of seventy-one, and Smith's Falls twenty-nine out of thirty-two.

Miss Annie Sawyer, who has been employed by the Public School Board of Chatham during the past three years, was presented with a handsomely bound copy of Tennyson's poems, as a mark of the appreciation in which they held her services. Miss Sawyer's services were appreciated by parents as well as by the children, and the fact that the School Board had retained her services for so long a time shows that they had not been blind in that direction either. Miss Sawyer is going to attend the St. Catharines High School during the ensuing year with a view of studying for a second-class certificate.

The Education Committee of the Carleton County Council have thrown out the charges preferred by John Duncan against the Rev. John May, County Inspector.

A handsome gold chain has been presented by the pupils of S. S. No. 1, Minto, to Mr. Cameron, the teacher.

After much patient waiting, the Perth High School has at last been converted into a Collegiate Institute, as will be seen by the official notification from the Educational Department, Toronto, received on January 5th, and dated 30th Dec., 1880:—"The Committee of Council advise that the name of the Perth Collegiate Institute, with all the privileges conferred by the law and regulations on Collegiate Institutes, be conferred on the Perth High School." The Perth school, therefore, ranks as a Collegiate Institute from this date, with an additional government grant of \$750.

Of the 140 candidates who wrote at the recent High School entrance examination, at London, 45 per cent. of the pupils from the Central School, and 42 per cent. from the separate and county schools were successful.

On Friday morning preceding Christmas day, Mr. Bisset, the head master of L'Orignal schools, was waited on and presented with a very handsome and valuable china tea set, comprising 42 pieces, by the scholars. An appropriate address was read and presented by Masters J. D. Cameron and Geo. Fulford, on behalf of all the scholars, and much enthusiasm was manifested. It must be gratifying to Mr. Bisset and his friends, as such tokens always indicate the feeling of esteem and respect which should at all times exist between master and pupils.

We regret to learn that Mr. D. A. McMichael, Principal of the Strathroy High School, has been compelled to resign, owing to ill health. This gentleman has been head master of this school for some seven years, and has during that time proved himself one of the most successful teachers in the Province. Indeed it can be truly said that he raised the Strathroy High School to such an exalted position that for the past two or three years it has stood in advance of all the high schools in Ontario. Knowing this gentleman from the first day he entered upon his duties in the town

spoken of, we can heartily endorse the words of the *London Advertiser*, when it says that Mr. McMichael has "proved himself to be a perfect gentleman in his intercourse with his pupils and with society, a consistent Christian, and a most thorough, painstaking and successful teacher." We sincerely hope he may be speedily restored to good health.

The following items about the Chatham Separate Schools will be read with interest. The total number of pupils on register, 340; boys 140, girls 200; pupils in 1st reading book, 144; in 2nd reader, 50; in 3rd, 61; in 4th, 64; in 5th, 21; number of pupils in spelling and dictation, 250; number in writing, 400; in arithmetic, 340; in geography, 226; in vocal music, 200; in grammar and composition, 115; Canadian history, 13; English history, 16; general history, 12; domestic economy, 180; book-keeping, 5. The trustees visited the school twelve times during the year, and there were forty other visits. The boys' department is under the control of two male teachers. The principal holds a 2nd class provincial certificate, and the assistant holds a diploma from the Jacques Cartier Normal School, Montreal, and from McGill College. The female department is under the control of the nuns of the Ursuline Convent.

Rev. Mr. Mulvany, of the *School Examiner*, delivered his lecture on "Three Types of English Literature," at Pickering College, before a large audience, in spite of the storm which drifted the roads. He visited the various departments of the College and was pleased to observe the excellence of the arrangements and the courtesy of all connected with the College.

#### NOVA SCOTIA.

The Board of School Commissioners for Halifax city has filled the vacancy in the chair of Mathematics and Science in the high school by the appointment of Alexander McKay, Esq., for the past ten years Principal of the Dartmouth high school.

At a meeting of the Dartmouth town council, called to consider the subject of Mr. McKay's resignation, his honor the Warden expressed, in the strongest terms, the regret of the community at losing so faithful and successful a Principal of their public schools. Councillor Russell, in moving that Mr. McKay's resignation be accepted, took occasion to refer to the long period of his service, his educational zeal, his organizing faculty, his sound scholarship and remarkable skill in imparting knowledge. Other councillors spoke to the same effect. Mr. McKay's mathematical and scientific attainments are of a high order.

In the death of Mr. McMillan, teacher of the highest department of the public schools of the town (below the Academy), the school system of Pictou has suffered a serious loss. Mr. McMillan was confessedly one of the best teachers in the province, and Pictou Academy owes somewhat of its fame in later years to the excellent preparation which its students received while in his (preparatory) department.

At the Christmas entrance examinations of the Halifax high schools there were twenty candidates for Honor (or Free) scholarships, of whom eighteen were successful.

Arthur W. Armstrong, A.B. (Acadia, 1879), has left the select school at Port Hawkesbury, C.B., and assumed the Vice-Principalship of the Horton Collegiate Academy.

A very full and interesting meeting of the Senate of the University of Halifax, was held on the 29th and 30th of December. The Chancellor, the Rev. Geo. W. Hill, D.C.L., delivered an exhaustive address, dealing most fully with the present status of the university, and its prospects for the future. Want of space prevents us from giving more than a bare summary of the arguments alleged. A statement in full was given of the services rendered to education by the University of Halifax, and its claim to be the central examining body for the various colleges of the province. This was criticised by Messrs. Reid, Ambrose, Ross and others, to whom D. Allison replied. We hope to give a fuller account in our next issue.

We would refer our readers to the advertisement of Dalhousie College and University, Halifax, N.S., which offers attractive Exhibitions and Bursaries for competition at the winter sessions of 1881, 1882 and 1883. These have been presented by Geo. Munro, Esq., of New York, U.S., and should be a stimulus to candidates.

Quite an interesting discussion, or controversy, has sprung up in the Halifax papers on the "Higher Education" question, originated apparently by the address of the Chancellor of the University of Halifax.

Dr. McGregor, Professor of Physics in Dalhousie College, has published in the *Herald* and *Mail* an elaborate series of letters

discussing almost every phase of the college problem. He takes ground against an examining university, and outlines a scheme for the consolidation of King's and Dalhousie Colleges. Rev. Dr. Sawyer has called in question the accuracy of one of the Professor's allusions to Acadia College.

Prof. Smith, of Sackville, has published several letters in reply to Prof. McGregor's series.

#### NEW BRUNSWICK.

The new edition of the "Manual of the School-law of New Brunswick," has recently been issued by the Education Department and distributed to trustees and others. It contains chapter 65 of the consolidated statutes, relating to schools, with the acts of 1878, 1879 and 1880 in amendment thereof and in addition thereto, and also the revised regulations of the Board of Education, accompanied with references and remarks, as heretofore.

James Hannay's "History of Acadia," which is supplied to the teachers of New Brunswick by the Board of Education at \$1.00 a copy, has been republished in London, England.

On Thursday, the 13th of January, according to statute, the annual school meetings were held throughout the country. So far as known, the results were favorable, the districts generally voting sums adequate for the support of the schools. In many districts there were expressions of satisfaction in reference to the rank assigned to their schools by the Inspector on his annual visitation.

In reference to the special claims of teachers, who, during the year ended Oct. 31, 1880, taught in two different districts, and whose schools were in consequence not ranked by the Inspector in both terms, the Board of Education has allowed such teachers a claim for bonus either according to the rank received by the school under his charge at the time of the Inspector's visit, or according to the rank assigned to the school taught by him during the other half-year, as may be most favorable to the teacher. Of course this applies only to the year past, as hereafter the regulations already quoted in the *JOURNAL* will be in force.

Through some failure on the part of the Inspector for Dist. No. 6, some schools were not inspected last year. In view of this fact, the Board of Education has ordered that such teachers shall be entitled to bonus according to the rank that may be assigned to them or their school when first inspected.

The coming session of the Legislature will be held in the Normal School building, at Fredericton, as last year. During that time, a portion of the classes will be accommodated, as well as circumstances will permit, in the old stone barracks, now the "Reform Club" building. This will subject the instructors and the student-teachers to great inconvenience, but it appears to be unavoidable.

#### MANITOBA.

The total number of children, from the ages of five to fifteen years inclusive, in the 113 Protestant school districts from which census returns were made, was 5,631. The school population in all the Protestant districts is estimated at 7,000, and there are several settled localities in the province not as yet included in school districts.

All the teachers in the city schools have been re-engaged, with the exception of Mr. P. C. McIntyre, who has retired from the profession. His brother, Mr. W. A. McIntyre, takes his position, the salary being \$800 per annum; and Mr. E. A. Ganatt, who, at the last examination headed the list of successful candidates in the second class, has been chosen to fill Mr. W. A. McIntyre's position as the third male teacher, at a salary of \$700. The head teacher, Mr. J. B. Ferguson, gets \$1,000, and the female teachers \$480 each.

Mr. A. J. Belch has just resigned the position of Chairman of the Protestant Board of School Trustees for the City of Winnipeg, on account of having to take charge of the Dominion Lands' office at Birtle, N.W.T. He has filled the position in a very admirable manner. Mr. Stewart Mulvey, Collector of Inland Revenue, has been unanimously elected to the vacancy. Mr. Mulvey, who came to Manitoba as an officer in the Red River expeditionary force, in 1870, has been a school trustee in the city since the organization of the Public School system in 1871. No man has done more to bring the city schools up to their present prosperous condition than Mr. Mulvey. For the past five or six years he has been one of the most zealous and efficient members of the Provincial Board of Education.

There are twenty applicants for the position of Inspector of the city schools. The appointment will probably not be made until after the trustee elections, which take place on the first Tuesday in February.

The village of Portage la Prairie, having recently become incorporated as a town, the limits of the school districts are to be made to correspond with those of the town, so that advantage may be taken of the special clauses in the school law, which relate to cities and towns. A large number of new school districts have been organized lately.

St. John's College and St. John's Ladies' School re-open on Monday, 17th inst.

Rev. Professor Bryce, M. A., LL.B., has returned from his trip to Ontario.

One of the greatest drawbacks to the advancement of this country, in the past, has been the want of schools, caused by the difficulty in maintaining them in sparsely settled districts. To-day, we have the pleasure of announcing that, in compliance with the urgent representation of His Honor the Lieut.-Governor, the Dominion government has decided to grant aid to such schools in the territories as comply with very simple conditions. It will now be within the power of every settlement to establish within its borders, schools for the education of its youth, as the Government, with commendable liberality, agrees to pay one half of the salary of the teachers of every school at which there is an average daily attendance of fifteen pupils.

Additional aid is also to be given to schools on Indian reserves, the maximum amount of salary to be paid to teachers being raised from \$800 to \$500—this sum, however, only to be paid where the average daily attendance is large enough to call for it at the *pro rata* allowance of \$12 a day, for each pupil over the minimum number required to entitle the school to any aid. In this connection there are also some provisions made with a view to secure efficiency in the teachers, by requiring them to pass an examination as to qualification.

We trust that every settlement in the territories will at once avail itself of the means now placed at their disposal for further education, and would urge upon them the advisability of, as far as possible, securing well-qualified teachers to begin the good work upon a solid basis, for it is a great mistake to suppose that any other than a well-qualified person is "good enough" for the schools of a new country.—*Saskatchewan Herald*.

## Readings and Recitations.

### DRIFTED OUT TO SEA.

Two little ones grew tired of play,  
Roamed by the sea one summer day,  
Watching the great waves come and go,  
Prattling, as children will, you know,  
Of dolls and marbles, kites and strings,  
Sometimes hinting at graver things.

At last they spied within their reach  
An old boat cast upon the beach,  
Heeter-skelter, with merry din,  
Over its sides they clambered in—  
Ben, with his tangled nut-brown hair;  
Bess, with her sweet face flushed and fair.

Rolling in from the briny deep,  
Nearer and nearer the great waves creep;  
Higher and higher upon the sands,  
Reaching out with their giant hands,  
Grasping the boat in boisterous gleo,  
Tossing it up and out to sea.

The sun went down, 'mid clouds of gold;  
Night came with footsteps damp and cold,  
Day dawned; the hours crept slowly by;  
And now, across the sunny sky,  
A black cloud stretches far away  
And shuts the golden gates of day.

A storm came on with flash and roar,  
While all the sky is shrouded o'er,  
The great waves rolling from the West,  
Bring night and darkness on their breast,  
Still floats the boat through driving storm  
Protected by God's powerful arm.

The home-bound vessel, "Seabird, lies,"  
In ready trim, 'twixt sea and skies.  
Her captain paces restless now,  
A troubled look upon his brow,

While all his nerves with terror thrill—  
The shadow of some coming ill.

The mate comes up to where he stands,  
And grasps his arm with eager hands;  
"A boat has just swept past," cried he,  
"Bearing two children out to sea,  
'Tis dangerous now to put about.  
Yet they cannot be saved without."

"Naught but their safety will suffice,  
They must be saved!" the captain cries,  
"By every hope that's just and right;  
By lips I hoped to kiss to-night,  
I'll peril vessel, life and mon  
And God will not forsake me then."

With anxious faces, one and all,  
Each man responded to the call;  
And when, at last, through driving storm,  
They lifted up each little form,  
The captain started with a groan,  
"My God!" he cried, "they are my own."

—By the author of "Curfew Must not Ring To-night."

### THE JOLLY OLD PEDAGOGUE.

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

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

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

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

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

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

—George Arnold.



## ANSWERS TO QUERIES.

A correspondent sends us the following answers given by a Candidate at the last Entrance Examination:—

*Question.*—"What was the cause of the trouble between King Charles I. and his Parliament?"

*Answer.*—"When King Charles had a Parliament he wanted some money and they wouldnt give him any unless he signed them a law they wanted him to and he wouldnt signe it and he got mad and layed down upon the floor and roled over and kicked, screarzed and tumbled around in a great rate and at last he signed it and they granted him some money."

*Question.*—"Show how England and Scotland came to be one kingdom?"

*Answer.*—"They was a man who used to stop in this castle and he had a girl he used to go and see at the foot of the castle and he used to go in the night and he had a road down the rocks which he new quite well and he told the English that he good take about 30 men up those rocks at night when they were all asleep and take the castle and he done it and took the castle of Edinburgh and so Scotland and England becamd one kingdome."

## Official Department.

1. Under sub-section 22 of section 4 of chapter, of the Revised Statutes, the Education Department is empowered to examine, and at its discretion to recommend or disapprove of text-books for the use of schools.

2. By section 11 of the Public School Act the use of foreign books in the English branches of education in any model or public school is prohibited, unless with the express permission of the Education Department; and by section 12 the portion of the legislative school grant may be withheld from any school in which any book disapproved by the department is used, when public notice of such disapproval has been given.

3. The authority over text-books includes those for high as well as public schools, and such text-books as foreign books in the English branches of education, and those disapproved of by the Education Department, are excluded.

4. While regulations of the department have been framed from time to time with the view of accomplishing these objects, those of the late Council of Public Instruction were revised by the undersigned, and in July, 1877, effect given thereto by order-in-council, and experience since has shown that further amendments in these, respecting text-books in the public schools, were desirable, in the following amongst other particulars:

(1) To confine the text-books approved, to the several subjects in the public school course of study, except in any subject in which no text-book was necessary, owing to the personal instruction of the teacher therein being chiefly relied upon.

(2) The editions of the Readers and many other authorized text-books heretofore printed and published were not examined by the department as thoroughly as can be done under improved machinery for this purpose.

(3) Upon a personal examination the undersigned found that the editions of Readers published by several publishers were poor in paper, printing and binding, and that the requirements for this were not sufficiently defined to ensure a satisfactory uniform standard, and the public was unable to discriminate between books deemed sufficient by the department as to mechanical execution and those which were not.

(4) The maximum retail price of several text-books was also fairly the subject of consideration, owing to the benefits arising from authorization notwithstanding the increase under the present tariff of cost of material used in printing and publishing, such as in type of 15 per cent. and in five articles formerly free 15 per cent., also an increase of one cent per lb. on Canadian paper owing to the increase of duty of 20 to 25 per cent. on imported paper. The reduction now made in the maximum retail prices are, according to per centage: in the Readers about 30; Fleming's Analysis, 2; Abbott's How to Parse, 40; Elements of Etymology, 16½; Arithmetics, 20; Orr's Accountant, 25; Pott's Geometry, 33½; in others, 5, and in several they remain the same. Besides the increased cost of production, the element of profit from larger or smaller sales has also been considered. In the case of the two text-books, published only in England, it has been found necessary under the present tariff to increase the equivalent in Canadian currency to 30 cents for one shilling sterling.

(5) In the new arrangement it can be readily seen what text-books are approved of in each subject of the public school course, and the opportu-

ity is thus afforded of choosing any one from the several text-books so approved.

(6) The requisites now prescribed in order to secure the proper mechanical execution of each copy of every edition to be printed hereafter are clearly defined in the new regulations, and the public will now be fully informed, both as to such editions as have been approved by the undersigned, and as to the retail price to be paid therefor.

(7) Each printer or publisher is required to allow of an examination of his stock on hand from a time to time, by an officer of the department, and to execute a covenant to conform to the regulation.

(8) The regulations may be reconsidered as to further reductions in the retail price as future circumstances may warrant.

## REVIEWS.

*MOFFATT'S EXPLANATORY READER, No. 5. Moffatt & Patze, London.* The explanatory series is a very good series of readers throughout. The paper and type used are so good that a school boy in Ontario would hardly believe that this book was intended for a school reader. The selections aim to combine practical information with literary merit.

*WITMEN'S PHONETIC ORTHOGRAPHY. Egertville, N. Y.* This little work is intended to show how phonetic spelling might be adapted to English and German.

*THE GRAMMAR SCHOOL WORD-BOOK. By Edward Altham. New York: Daniel Stote & Co.* This is a spelling book, combined with a selection of the most important Greek and Latin prefixes, affixes and roots. Both the words and the etymology are arranged in suitable divisions for the various grades of pupils. The selections of words are good for drill.

*FIRST STEPS IN READING AND LEARNING. By A. K. Isbister, M.A., LL.B. London: Longman, Green & Co.* This book is designed by its author to "utilize the time of those learning to read by presenting in a series of easy lessons a first course of English and Scripture History, Geography, Grammar, Spelling and Arithmetic, with moral lessons and simple poetry for repetition." In addition to this extensive programme writing lessons are given. The book may be regarded as a cyclopaedia of all that a young pupil should have to do in school, and an outlook over what is to come in the future. The lessons are arranged in Mr. Isbister's practical style. Multiplication and Division tables, for instance, are combined in a way that would be suggestive to most teachers of primary classes. The same remark applies to the arrangement of the lessons throughout the book.

*THE NATIONAL HYMN AND TUNE BOOK. By Luther W. Mason, late Superintendent of Music in Boston Schools. Boston: Ginn & Heath.* This collection of sacred music is intended for use in public schools. There is no reason why only secular pieces should be sung in public schools, and Mr. Mason has done a great good for the profession by selecting the best unsectarian hymns of all ages, and adapting to them the grandest of the standard tunes. Mr. Mason's long experience eminently fits him for preparing a work adapted to the tastes of boys and girls, and without containing anything trashy or degrading to the taste, either literary or musical.

*SCHOOL MANAGEMENT. By Amos M. Kellogg. New York: E. L. Kellogg & Co.* This work is written by a successful, practical teacher, who has no mere theories to advocate. Mr. Kellogg was for some time in charge of the practice department of the Albany State Normal School, and is now editor of the *New York School Journal*. The book is a compendium of suggestions regarding the best method of dealing with all kinds of difficulties that present themselves to teachers. These difficulties are treated in the light of experience, not merely in the haze of opinion. Inexperienced teachers will find this book one of the approximately "royal roads to learning" how to "keep school."

*THE PINK GUIDE and THE GRAY GUIDE* are handbooks in pamphlet form, useful to those preparing for examination in musical knowledge, instrumental and vocal. They are compiled by Frederic Clark, Secretary to Trinity College, London, and published by W. Reeves, 185 Fleet Street. They contain excellent hints, sets of examination questions in music, and not a few points of useful, practical instruction.

We have received two additional volumes of Hudson's series of Shakes-