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The Canada School Journal.

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THE CANADA SCHOOL JOURNAL.

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

—o—TERMS.—o—

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CANADA SCHOOL JOURNAL PUB. CO. (Limited)

OFFICE: 423 Yonge St., Toronto.

The World.

☞ *Don't fail to read Publisher's Announcement in this issue.*

The Prohibitionists are making progress. The question has now reached the pamphleteering stage. When a great project of alleged reform has made sufficient headway to bring men of the highest talent into the controversial field it has got far beyond the point at which it can be frowned down, or sneered down. Whether we agree or disagree with the conclusions reached by such writers as Mr. Goldwin Smith we cannot but be glad to see them in the lists. It shows that the great question of how best to combat the terrible ravages of intemperance is engaging the attention of the best minds, a pretty safe pledge that some practical conclusion will be reached in the near future. Mr. Smith's recent pamphlet will no doubt be ably replied to. It is worth the while of every thoughtful person to read the best that is said on both sides of the prohibition controversy and draw his own conclusions.

Prince Alexander of Bulgaria has proved himself possessed of moral as well as physical courage by the protection he has accorded the Jews in his dominions. The full significance of this can be understood only when the intense anti-Jewish prejudices of the people of Central Europe is taken into the account. Prince Alexander has even accepted the military services of a battalion of Jews five hundred strong, a thing which the London *Spectator* says is without precedent in the history of Europe. The event proved the confidence well bestowed. "The battalion covered itself with honor. In the battle of Slivnitza, and the skirmishes which followed, it was literally cut in two, more than two hundred being actually killed on the field, and the number of wounded being great. Prince Alexander has publicly commended the battalion as 'worthy descendants of the Maccabees,' and has decorated the Commandant with a gold medal."

Public school education for both whites and blacks has made wonderful strides in the Southern States since the war. It is said on apparently good authority that in 1850 there were over forty thousand white men and women in Georgia over twenty-one years of age who could neither read nor write. Now every Southern State has a public School system supported by taxation, and providing education equally for blacks and whites. It is even said that industrial education is more advanced, in public interest and enthusiasm, if not in actual school equipment, in the South than in the North. The education of the rising generation of negroes will render any return to serfdom of any description for ever impossible in the "regenerated South."

"Uneasy lies the head that wears a crown," especially if it is the head of a would-be tyrant. The King of Denmark, not content with being for years at logger-heads with his people at home, is now confronted with constitutional demands from his peaceful subjects in Iceland. The Icelanders have for twelve years past had their own Legislative Assembly, but the King of Denmark has appointed twelve members of their Upper House, and retained an absolute right of veto over all their legislation. The spirit of self-government in its rapid march has now reached Iceland, and the people, through their representatives, are now demanding full responsible government, or home rule. Of course the present King and Government of Denmark would do violence to all their principles to grant such a demand, and yet the Icelanders when thoroughly aroused are not a people to be trifled with. King Oscar has made for himself a thorny pillow.

La Plata, or the Argentine Republic, long so famous even amongst South American States for chronic anarchy and perpetual intestine broils, bids fair to enter upon an era of development and progress. This hopeful condition of affairs is the result of the enterprise of a syndicate of English capitalists,

who have entered into an agreement with the Argentine Government for the construction of a system of railroads connecting the capital with the different provinces and the neighboring States. Other internal improvements are also included in the contract and ample harbor accommodations are to be provided at Buenos Ayres. The improvements are to be completed within five years and are to cost fifty-nine millions. The territory of the Republic embraces considerably more than a million of square miles. Although sparsely populated its natural resources must be great, and the result of thus opening them up will be watched with interest.

We are glad to see that the question of what shall be done with our North-West Indians is eliciting some discussion, though it does not even yet get a tithe of the attention to which it is entitled on the ground of national self-interest, as well as of humanity. Several of the newspaper correspondents who claim to speak with some knowledge, advocate the gathering of the tribes together on one great reserve in the Peace River district, or elsewhere in the great North country. Such a proposition cannot be too strongly deprecated for two reasons. First it only postpones and does not solve the difficulty. Any region which can support Indian tribes is sure to be invaded by adventurous whites, who will revive the old issues. In the second place such a scheme shuts once more the door of civilization in the face of the red man and condemns him to continued barbarism. It may be that the combined forces of civilization and Christianity are unequal to the task of transforming a few thousand wild Indians and their descendants into industrious citizens, but we do not believe it.

The United States Senate is treading on delicate ground in its zeal for the eradication of the cancer of polygamy from the Union. The anti polygamy bill, which passed the Senate in 1884 has been reported back from the Judicial Committee, and stands a fair chance of becoming law. Some of its provisions are certainly rather remarkable for the "land of freedom." It provides, for instance, that fourteen persons appointed by the President shall be added to the trustees of the Mormon Church, and it empowers the Attorney-General to extinguish the "Perpetual Emigrating Fund Company," a Mormon organization. The American Government is probably acting within the right of the Government of a free nation in taking proper measures to put down polygamy, which is a palpable violation of the laws of the Union. But how it can claim the right to appoint trustees for a religious society, or to crush out a lawfully constituted immigration company, without trenching dangerously upon its own cherished principles of civil and religious freedom, we cannot conceive.

If you notice your pupils restless and inattentive, allow them to spend a minute in some simple physical exercise.

Make your boys feel that their future success in business depends on their doing their work well in the present.

On no account allow your pupils to do at one time what you have forbidden under the same circumstances at another.

Your chief business is to make pupils think, not to think for them; to make them talk, not to talk for them; to draw out their powers, not to display your own.

The School.

The article on "Our Future Supply of Teachers" (in England), referred to last week, was unavoidably crowded out. We insert it in this issue.

Secretaries of Teachers' Associations, or Inspectors of Schools, will much oblige by sending us notice of the dates of their forthcoming conventions, and where they will be held, for publication in our columns. We shall be pleased to note any special events in programmes; our space does not admit of giving details.

Amongst the things the *Christian Union* would like to see in 1886, is "an industrial workshop introduced into the public schools in every large city, in every State in the Union." The wish is a good one. We should like to see the same thing in Canada, and not only the workshop for boys but the "kitchen garden," or something of the kind, for instructing girls in cooking and house work. The benefits resulting from teaching the waifs of the cities how to use their hands would be simply incalculable. It would transform them by hundreds from helpless weights or social pests, into useful, honorable citizens.

Some of the American papers are commenting on the strange prevalence of the fashion of wearing glasses, especially amongst ladies, and queries whether the practice is a mere fashionable whim, or the natural eyesight is really failing. We have no doubt that both causes are at work. Many are weak enough, we dare say, to wear glasses simply because they imagine they give them an interesting or literary appearance. But such a custom could scarcely originate were the wearing of these helps not a necessity to many of studious habits. There is too much use of text-books in the schools, by both teacher and pupil. It can scarcely be doubted that the eyes of many children are permanently injured by too much poring over the printed pages. The more real mind-work the teacher can elicit without the aid of books, the better. The fault is often not so much that of the teacher as of his conditions. The number of classes to which he has to attend, and the constant high pressure under which he works, make the constant use of text-books a necessity. When parents and the public grow wiser they will so arrange matters that each teacher will have on his hands only such a number of pupils and of classes as may leave him leisure to do more genuine teaching and less rote book-work.

Some of the papers are discussing the teacher who sneers. We wonder if he is to be found in Canadian Schools—the man, or woman, we mean who takes advantage of a position of superiority to launch jeers and jibes at the defenceless pupil. The latter of course cannot retort. To do so would be insubordination. We can think of few meaner little cruelties. And yet we fear most of us have been guilty of it in moments of irritation. Even that we should hold inexcusable at the bar of conscience. It is ingenerous, contemptible. But what shall we say of the teacher who uses this weapon habitually. There are too many such. They do incalculable mischief. Many a

promising pupil has been driven from school and college, deprived of his birthright of education, through dread of them. In many another case the shaft of ridicule has rankled in the sensitive breast until the whole spirit has become poisoned. The teacher who would be respected and beloved by his pupils, or who would influence them for their good in all the future must be careful to save his taunts and sarcasms for those who stand on an even footing and may retort in kind. Even with such they are questionable and dangerous weapons.

Thus far we wrote *currente calamo*. But another question arises and "gives us pause." Does not the same objection in the main apply to every form of punishment a teacher may inflict Whether he withholds a privilege, imposes a penalty, or applies the ferule, is it not by virtue of his superior position that he can do so? In what then consists the difference? Or is the teacher who punishes always and necessarily a tyrant? But no, there *is* a difference. It is in the moral character of the act, as given to it by the motive and spirit of its performance. The teacher may—he will, if a true teacher—inflict any right and necessary punishment in a spirit of kindness, and with a genuine desire for the pupil's good. It is even conceivable that the rod may be applied in such a spirit—though we fear such cases are rarer than angels' visits. But who can conceive of a cutting sarcasm, or stinging sneer, uttered in a spirit of love?

We thus fall back on a first principle in regard to punishment in school. The only justification of punishment anywhere or by any one, must be found in the moral effect produced. But in the sphere of morals it is eminently true that like produces like. We may as well expect grapes from thorns or figs from thistles, as a good moral impression from a punishment administered in a vindictive mood. Herein is the condemnation of corporal punishment in schools. In nine cases out of ten, if we may generalize from our own observations, it is inflicted by an angry master upon an angry culprit. It may be effective in preventing the repetition of a specific offence, but only through the low agency of physical fear. The cases in which the conscientious and high-minded teacher can feel that his own relf-respect is increased by the process, and the pupil morally benefited are, we fear, very rare. The case between parent and child is different. The strong paternal or maternal love in the one flows out to meet the current of filial love which flows back, and by making the necessary act one of pain and self-sacrifice, invests it with a moral power which is often salutary to both parties. And yet, even in the case of parents, it may well be questioned whether a still higher degree and quality of moral power does not, to a great extent, supersede the necessity for the use of the rod, and raise the honored parent to a still higher plane of moral government and influence.

Nor is it altogether unworthy of remark that the fact of being able to resort to physical punishment is in itself sometimes harmful to the teacher by doing away with the necessity for maintaining supremacy by intellectual and moral means. When one's nervous force has been pretty well exhausted and he feels incapable of much exertion, it seems often much easier to subdue a refractory pupil by a muscular than by a mental effort. Thus, by resolving to rule without the rod, a temptation to appeal to the lower rather than the higher motive is taken out of the way, and a new incentive to the cultivation of will-force, and genuine moral power, is substituted. "There is nothing stronger than necessity," says the old Greek proverb. We may, perhaps, without very violently wrenching its meaning, apply it to the case in hand. The sense of necessity is mighty with all of us, and there are probably few who, when brought face to face with the fact that the turbulent elements of the school-room must be subdued, and a reign of order and industry established, by the use of moral, as distinguished from corporal appliances, or an ignominious failure result, will not rise to the demands of the occasion and summoning brain and heart to the work, develop sources of strength equal to the emergency. Many teachers who inwardly resolve to eschew corporal punishment, if they can possibly get on without it, are yet afraid to let their determination be known. They like to hold up the ferule *in terrorem*, and to feel that they have it to fall back upon as a last resort. But such timidity is, we believe, a source of weakness and will prove a hindrance to the success of the better methods. Others more resolute, burn their ships behind them. Such teachers, if possessed of average discretion and mind-force, very seldom, we believe, regret the decision.

The high school teachers of Massachusetts have been debating the question whether admission to High Schools and Colleges should be by examination or by certificate. The majority of the speakers seemed to favor the latter method. It was urged, not without force, that the teacher who had been with a pupil for one, two, or three years, knew more of that pupil's capabilities, habits, and attainments than could be found out by any examination. To the difficulty that at once suggests itself, arising out of the varying qualifications and trustworthiness of the teachers, it was replied that if the teacher wishes to cheat the college he can do it under the one system by cramming, as well as under the other by recommending those not fitted.

Such discussions as that referred to in the preceding paragraph serve to show how unsettled almost everything relating to schools and school systems is amongst our neighbors. Teachers and educators of all grades seem restless, dissatisfied with present attainments and methods and continually looking out for improvements. This may seem in some respects discouraging, but it is doubtless preferable to the easy-going, self-satisfied way of looking at things, which too often prevails. The question arises, however, whether there may not be a disposition to think too much of the method, too little of the men, or women, who have to carry it out. The fact is that the most perfect system on earth will not produce good results in the hands of a poorly qualified, unskilled, or idle workman, while the teacher who is thoroughly awake and abreast of the demands of the time and of his profession will do good work under any system. This is no reason, certainly, for neglecting

to perfect our educational methods. But it is an excellent reason for making it the first and chief aim to secure the very best talent and culture in the men and women who—not the methods or machinery—have to do the real work of education.

Another point worthy of note is the reaction against the examination crazes, and the tendency to fly to the other extreme. One speaker deprecated the loss of time "now utterly wasted in looking over examination papers" and another, a superintendent, said: "No examination discloses the attainments and capabilities of the pupils, and what wise man can make one that will?" No one will perfectly, perhaps, but certainly no other method will make that disclosure with a certainty equal to that of a good examination paper. Even the best teachers will often be surprised as the result of examination to find how little some of those who seemed bright pupils, really understood of what they had studied and talked about. We have strongly declared ourselves against the examination *furor*, which has at times made the life of both teacher and pupil a mind-destroying drudgery. But, on the other hand, we are convinced that the written examination cannot be dispensed with without great loss. Judiciously used it is by far the best method we have found both for testing acquirements and for cultivating that exactness of thought and expression which the pen is the best agent in compelling.

PUBLISHERS' ANNOUNCEMENT.

On behalf of the CANADA SCHOOL JOURNAL PUBLISHING COMPANY we have to announce that the JOURNAL will from this date be published as a Fortnightly instead of a Weekly, as during the past year, and that the price of subscription will be at once reduced to one dollar a year.

Before giving the reasons for making this important change we desire to tender our sincere and hearty thanks to al patrons of the JOURNAL for the very liberal patronage and en couragement we have received from all parts of the Dominion during the past year. The success of the JOURNAL as a weekly has surpassed our expectations. The fact that it has had nearly one thousand subscribers in the Maritime Provinces alone, shows that it is in reality what it has always aimed to be, a paper for the Dominion. The experiment of a weekly issue was made, not without some misgivings, and had the balance at the end of the year appeared on the wrong side of the ledger the publishers would not have been surprised. Thanks to the liberality and appreciation of subscribers and advertisers, this was not the case. The year was, on the whole, as already announced, a prosperous one.

It is due to our numerous readers that the reasons for the change about to be made should be briefly stated. We believe they will commend themselves to the judgment of all.

In the first place we are convinced that it is by no means essential to the success and usefulness of a thoroughly practical Teachers' paper, such as we have always striven to make the SCHOOL JOURNAL, that it should be issued weekly. We believe the larger number of our most intelligent patrons will prefer a fortnightly issue. We mean the CANADA SCHOOL JOURNAL to be not only taken but *read* by the teachers of all Canada. But sixteen or twenty pages per week of practical school matter is more than the average teacher can find time to read, without neglecting other equally important subjects. Of this we have been assured again and again by those whose opinions have weight. The progressive teacher must have time for reading the general newspapers and magazines, which carry him over a much wider field than can be covered by any educational journal. He must, too, reserve a large portion of his leisure for current literature and for the older English classics, to which, happily, the attention of teachers and pupils is now being so urgently directed. In Ontario especially these considerations have double weight, now that an extensive course of general and professional reading has been marked out for teachers by the Department. In view of all these facts we are well assured that a first-class fortnightly paper will meet the wants of the great majority of our patrons better than a weekly.

Another paramount object is to reduce the cost of the JOURNAL to subscribers. Two dollars a year is a low price for a sixteen-page weekly paper, but with the numerous demands from every quarter upon the too small income of teachers, it is more than they generally care to pay. Many, we know, have continued their subscriptions to the JOURNAL because they valued it too highly to part with it under any circumstances, who yet felt that the cost was more than they could well afford. We want to put the SCHOOL JOURNAL within reach of every teacher in the Dominion, and of many students and others who are not teachers. In order to this two things are necessary. The paper must be right in kind and right in price. That the SCHOOL JOURNAL is right in kind as the teacher's friend and helper and the only thoroughly practical teacher's paper in Canada, is already well established, the teachers themselves being judges. The reduction in price to a dollar a year is now made to supply the other requisite, and put the paper at once into the hands of ten thousand Canadian teachers.

The thoroughly practical character of the JOURNAL will be maintained, improved upon, if possible. The one aim will be to supply just what is needed to aid the earnest teacher in the daily duties of the school-room. Information, counsel, experience, practical methods, hints on government, &c., will be carefully gleaned from every quarter. Above all the conductors of the paper appeal to the members of the profession to help each other by free interchange of ideas, methods and experiences. Suitable contributions from practical teachers everywhere will always be welcome to the columns of the JOURNAL.

To sum up in a word. The aim of the publishers in making the change is first to make the JOURNAL still better adapted to the wants of all Canadian teachers and second to put it within reach of all.

As a matter of course subscribers who have paid in advance for the JOURNAL as a weekly will have the unexpired time of their subscriptions doubled. Should any prefer it their money will be refunded on application.

The JOURNAL will henceforth be issued on the 1st and 15th of each month.

All communications of whatever kind should be addressed as heretofore to Business Manager of School Journal Publishing Co., 423 Yonge St., Toronto.

Special.

ELEMENTARY CHEMISTRY.

WATER.—*Continued.*

Relation of Water to Heat.

(1) *Expansion and Contraction.*

Exp. 3.—Take a small thin flask, fit it with a cork, through which passes a small glass tube about 2ft. long. Fill the flask with cold boiled water, insert the cork, taking care that there are no air-bubbles entangled beneath it, and press it into the bottle until the small tube is about half full. Now heat the flask, and the liquid slowly rises in the tube *Water, therefore, expands by heat.* This property water shares with other substances. It may be said to be a law of nature that inorganic substances expand when heated.

Next immerse the flask in a mixture of snow or pounded ice and half its weight of common salt; or a mixture of sulphate of soda (Glauber's salt) and hydrochloric acid will do equally well, the salt being just covered with the acid. As the water cools the liquid sinks in the tube, becomes stationary, and then begins to rise. If a thermometer could be plunged into the water in the flask it would be found to mark 4°C. or 39·2°F. when the water began to rise. The expansion of the liquid goes on till a sudden check is observed; if the flask is then examined it will probably be found to be cracked and to contain ice. *Thus water when cooling contracts till the temperature of 4°C. or 39·2°F. is reached, and when further cooled it expands.* If similar experiments are made with other liquids, such as alcohol, oils, etc., they will be found to contract, but not to expand again as the temperature is reduced. Thus water is the great exception to the general law, and in this respect stands alone amongst liquids hitherto examined.

But water not only expands in this unique way before it freezes, but in the act of freezing, it undergoes a large and further expansion. This expansion, exerting an almost irresistible force, plays an important part in the disintegration and splitting of rocks during the winter. The same cause leads to the bursting of water-pipes. Water shares this property with a few other substances, such as cast-iron, bismuth, and antimony. This property of water is of the greatest moment to mankind. If it obeyed the ordinary law, our lakes and rivers would become masses of solid ice, and all animal life in them would perish. The heat of summer would be unable to undo the effects of the winter's cold, and the climate would be so altered as to render any but equatorial regions almost uninhabitable.

(2) *Boiling.*

At ordinary temperatures water is continually giving off invisible vapor, which diffuses into the surrounding atmosphere. *When the temperature is reached at which the pressure (tension) of its vapor is equal to that of the atmosphere at the time, it is said to boil.* This temperature is 100°C. at 760° mm. pressure, or 212°F. at 30 inches barometric pressure. Since the boiling point depends on atmospheric pressure, it will be lowered at high elevations. It has been found that in ascending mountains the boiling is lowered 1°F. for every 590 feet.

(3) *Latent Heat of Water.*

When ice at 0°C. melts it absorbs *without elevation of temperature* as much heat as would raise the temperature of an equal weight of water from 0°C. to 79°C This quantity of heat is required to change the state from solid to liquid water, and is spoken of as its *latent heat.* When water freezes, or becomes solid, this amount of heat, which is necessary to keep the water in the liquid form, and is, therefore, termed the *heat of liquidity,* is evolved or rendered sensible.

(4) *Latent Heat of Steam.*

When water is converted into steam a large quantity of heat becomes latent, since, notwithstanding the continuous action of the fire the temperature remains constant. Water, like all other bodies, requires more heat for its existence as a gas than as a liquid. One gram of steam at 100°C. passed into ice-cold water can raise the temperature of 536 grams of the latter 1°C. *The latent heat of steam is, therefore, 536 thermal units*—a thermal unit being the *amount of heat required to raise a unit weight of water through 1°C.* When water evaporates or passes into the gaseous state, heat is absorbed, and so much heat may thus be abstracted from water that it may be made to freeze by its own evaporation.

Water as a Solvent.—Water is the most valuable known solvent, there being few substances solid, liquid, or gaseous, which are absolutely insoluble in it. As a rule, the power of water to dissolve liquids increases with the temperature, while the solubility of gases is greater at low than at high temperatures.

Impurities in Water.—Natural waters are never free from dissolved impurities. They contain gaseous, liquid, or solid impurities, varying according to the source from which they are derived, and the nature of the soil or rocks over which they have flowed. If water containing carbonic acid percolates through cretaceous rocks, the carbonic acid combines with the insoluble calcium carbonate, forming soluble calcium bicarbonate (Art. 132). Of the solid matter dissolved in drinkable waters, the greater part is usually made up of calcium salts, generally accompanied by small quantities of magnesium salts.

Lime in Water.

Exp. 4.—Half-fill a test-tube with water, add a little lime-water, and pass carbon dioxide through it; it first becomes milky and then clear again. Now add a solution of ammonium oxalate, $(NH_4)_2C_2O_4$, or oxalic acid, $H_2C_2O_4$; the water becomes turbid. Again, half-fill the test-tube with water, and add a little plaster of Paris, $CaSO_4$, shake well and filter. Now add ammonium oxalate or oxalic acid, and the water becomes turbid. *Hence, ammonium oxalate or oxalic acid is a test for lime.*

Six grains of lime per gallon will yield a slight turbidity, 16 grains a distinct precipitate, and 30 grains a large precipitate soluble in nitric acid.

If the water contains calcium bicarbonate the reaction is—

$$H_2Ca(CO_3)_2 + (NH_4)_2C_2O_4 = CaC_2O_4 + 2NH_4HCO_3$$

Calcium bicarbonate. Ammonium oxalate. Calcium oxalate. Ammonium bicarbonate.

OUR FUTURE (ENG.) SUPPLY OF TEACHERS.

There is much in the present state of Elementary Education in this country that ought to afford satisfaction to all who are interested in the nation's welfare. The need of additional school accommodation that existed a few years ago is practically satisfied. We have now in our Elementary Schools accommodation for more than a million and a-half of children in excess of the average attendance. We have a useful curriculum of subjects taught in our schools. We have a large body of teachers, most of whom have been carefully trained for their work, though it is somewhat alarming to find that only 61·8 per cent. of our schoolmasters and only 42.6 per cent. of our schoolmistresses have been trained for two years. But a wise legislator will never be content with the present, however satisfactory for the time it may be. He will look to the future, and we are bound to say that when we look to the future supply of teachers for Elementary Schools we feel no inconsiderable anxiety. The old supply is falling off very rapidly. In 1876 the total number of our pupil-teachers was 32,231; in spite of the enormous increase of average attendance since that date, amounting to over a million and a-quarter of children, the number of our pupil-teachers in 1884 had fallen to 25,087. We have only about 600 male pupil-teachers more now than we had in 1870, before the new Education Act came into operation.

The question naturally arises, What is this falling-off owing to? Immediately, it is owing to departmental legislation, which has in various ways discouraged the employment of pupil-teachers; but the Education Department is generally behind, not in advance of, public opinion, and, when it acts, only gives practical expression to that opinion. The pupil-teacher system has been assailed ever since it was introduced, but the attacks upon it did not assume a virulent form until after the establishment of School Boards. The enthusiastic amateurs who formed the majority on the first Boards, and whose acquaintance with education dated, in most cases, from their election, were not satisfied with the employment of novitiate teachers, and, in their eagerness for splendid results, did their utmost to get pupil-teachers superseded by trained teachers. Voluntary Schools were compelled to follow the example of Board Schools, and the constant "screwing-up" of the Code seemed to render such action inevitable. The interests of head-teachers, whose salary in a large number of cases depended on the Government grant, led them also to favor the employment of trained teachers in preference to pupil-teachers.

In pleading for the maintenance of our pupil-teacher system it must at once be admitted that a pupil-teacher is not so efficient as a trained teacher; and, if the present efficiency of our schools were the only consideration we had to entertain in this matter, there would be no question that the pupil-teacher system ought to be swept away; but we must think of future efficiency as well as present efficiency, and even members of School Boards are beginning to find out that we must pay some regard to economy also.

Where are our teachers to come from if the pupil-teacher system is extinguished? We shall return to the condition of things that prevailed before 1846—a prospect that cannot be regarded with much satisfaction by those who are old enough to remember what that condition was. Large numbers of the head-teachers in those days had never been trained; and, even of those who had been trained, large numbers had been trained for only short periods and had gone to college too ill-grounded to derive much benefit from college instruction. Many of the students of that time had been previously engaged in trade; some had been clerks; some gentlemen's servants, and so on; few had had any systematic instruction. As a consequence, they possessed widely varying degrees of attainments; many of them were ignorant of the most elementary subjects, and it was next to impossible to teach them profitably in classes. Occasionally a student of remarkable power and attainments was to be found, but the majority of the students could not be compared, as regards calibre, attainments, or practical skill, with the ex-pupil-teachers who are passing through the Training Colleges at the present time.

Are we to return to this class of teachers? Are we to return to the class of men described by Dr. Craik as having turned to the work of teaching "because all other work had turned from them"? The Report by the Committee on Education in the Blue-book for this year incidentally directs attention to "the number of duly qualified persons who yearly enter the profession through other recognized channels, and to the probable effect of the recent changes in the Code in attracting a superior class of teachers from the Universities, and in improving the education of the uncertificated assistant-teachers employed by School Boards." It may be worth while to consider these sources of supply.

The number of non pupil-teachers who presented themselves at the Examination of Candidates for Admission into Training Colleges in England and Wales in 1884 was 588, as against 4,234 ex-pupil-teachers. The number of acting-teachers who passed the certificate examination last Christmas was 2,459, as against 1,568 students who had completed their two years' training and 20 students who had left after one year's residence. How many of these acting-teachers had been pupil-teachers is not stated. A large proportion of them consisted, doubtless, of ex-pupil-teachers who had failed to get admission into Training Colleges, or who were too poor to incur the expense of training. We have not heard of many University men or University women who have been attracted into Elementary Schools, and we feel confident that this source of supply will never prove very productive until University Education is much cheaper and commoner than it is at present. Persons of ability, who can afford to go to the University, are not likely to be drawn to the laborious work of Elementary Education, and University failures would not constitute that "superior class" to which the Report looks forward. University women may hereafter enter the ranks of Elementary Teachers more numerously than hitherto, there being fewer spheres of occupation for educated women than for educated men; but, until Middle-Class Schools have been supplied we do not anticipate any large supply of Elementary Teachers, even from among University women. Highly educated women will be naturally drawn to the same class of schools as those in which they were educated, and in which they will be able to teach those subjects in which they take most delight. As to the provision made by School Boards for educating uncertificated assistant-teachers, we regard it as most unsatisfactory. Possessed, as a rule, of inferior powers and inferior attainments to start with, these poor teachers will have to be educated under the most unfavorable conditions. They will have to attend classes and carry on their private study at a part of the day when they will be exhausted with their exertions in school; they will have no high standard of attainments constantly before them to stimulate and direct their exertions.

What we want is not the abolition of the pupil-teacher system, but its improvement. At present it enables us to retain some of the most promising pupils in our schools, who would otherwise most certainly be lost to Education altogether. If pupil-teachers do not get enough time for study, let us give them more; if they fail to show any aptitude for the teacher's profession, let us get rid of them at an age when they will be able to enter on some other calling without any serious disadvantage. But do not let us throw away the enormous advantage of drawing our teachers from a class possessed of superior powers, early initiated into the difficult craft

of teaching and maintaining discipline, and carefully prepared for the course of instruction and training given in our Training Colleges. Do not let us sacrifice, as seems likely, the schools of the future to the schools of the present.

We would point out to masters that one effect of the discouragement of the pupil-teacher system has been already to displace male teachers by more cheaply paid female teachers. In 1869, out of every 100 certificated teachers 48 were females; in 1884 the number had risen to 59. The number of female pupil-teachers had simultaneously increased 148 per cent.; while the male pupil-teachers had increased only 27 per cent.—*The School Guardian, England.*

OUR COUNTRY SCHOOLS.

Read before the Darke County Teachers' Association, at Versailles, Ohio, Nov. 20, 1885, by J. H. W. SCHMIDT.

In the education of man there are three agencies at work, the home, the church, and the school. The first teaches the child the duties and obligations it owes to others as a social being; the second instructs it in those things that pertain to its standing towards its God; and the third fits it to assume those relations and responsibilities which devolve upon it as a member of a community as a citizen of the State.

Of all these the influence and teaching of home have the greatest bearing upon the future of the growing mind. The words and example of parents stamp themselves indelibly upon the dawning intellect of the child and give the direction for weal or woe in time and eternity. Happy the child that can say of its home, there's no place like it.

Next comes the church to lend her aid in teaching the child how to fit itself for citizenship in that land beyond the stars. She shows it where it stands morally, and what relation it should sustain to the Omnipotent. She points the way to Him who "has sown his name on the heavens in glittering stars, but upon the earth he planteth his name by tender flowers."

Hand in hand with the home and the church goes the school, "The Hope of Our Country." The hope of Our Country! This expresses in the most fitting words the relation it sustains to our country's future, and the important mission it has to fulfil in teaching the growing mind the duties of citizenship in a great republic.

Although the school, in general, is of so much importance to us, we wish to deal especially with the country school, its importance, advantages, disadvantages, and needs.

Among those to whom the country school is most important is the farmer. Thousands of the sons and daughters of farmers never see the inside of any other school than this, and those that do attend higher institutions of learning get their start in knowledge within this, the Farmer's Academy. We have only to look around us to be impressed with the necessity of elevating the intellectual standing of the tillers of the soil, and, as they are dependent on the district school, this school is certainly of very great importance to them. Some writer has said, that "he who shows how to raise two stalks of corn where only one grew before, is a benefactor to mankind;" the ability to do this, to take advantage of every opportunity in the struggle for existence, can only be acquired by education. When we compare our land to-day with what it was a century ago, we cannot but be impressed with the progress made in the contest with unreclaimed nature. Where a century ago the "wild fox dug his hole unscared," now are farms that cannot be surpassed for fertility. Where a century ago the wild Indian trod the shades and solitude of the forest, and his footsteps awakened no echo as he tracked the bear to his den or followed in the wake of the swift-footed deer, the sun is reflected from hundreds of beautiful farm houses, and the sounds of civilization are echoed from far and near. All this was brought about by education, by the hand trained to use the instrument of labor, the head educated to devise ways and means to help in the contest with nature, and the heart taught to rely upon Him who is ever the help and the shield of his people. And yet, although so much has been accomplished in the past, there are still grander possibilities for the farmer, and to appreciate and take advantage of these, his education must be abreast of the times.

But not alone to the farm, to the city also, the country school is important. Statistics prove that the leading men of the cities have, in most instances, come from the farm. They show that the successful workers in this line of human industry have received in the country the training that made them do and dare. In the history of the cities we find that those men, noted for their business capacity, have been trained to a sturdy self-reliance, to a depending upon a "heart within and God o'erhead," upon the old homestead in the country. They learned there those lessons in perseverance that helped them to bring to a successful issue everything they undertook. How important, then, that the means of early education are the best that can be obtained, that the country school keep pace with its city sisters.

But we can go still farther, and looking at the names of those that have stood up for their country in times of trouble, we will find that the State is also interested in the country and its school. A Washington, Jackson, Lincoln, and Garfield, were trained in the country and received their introduction to life after a schooling on the farm. And not alone those who are at the head of affairs, but also many of those who constitute the rank and file of her citizens are in the country. In troublous times the bone and sinew of her defenders were taken from those hardy sons of toil who win their bread from Mother Earth by hard, persistent labor. How necessary it is, then, that these of her citizens should be so educated as to be worthy of their grand position as defenders of her honor at home and abroad.

As it is with city and state, so it is with the church. She also must depend, in a great measure, upon the country for her numerical and moral support. Although selfishness can be found in the country as well as in the city, it has not taken such a hold upon the people at large as it has in the city. In the city most people are so taken up with their own affairs that they do not make that practical application of the Golden Rule that they should. While in the country, when a heavy hand of trial is laid upon a household, every one is willing to lend a helping hand. In the country, that spark of celestial fire called conscience has also a better chance to glow, as the waters of skepticism and infidelity do not have the same opportunity to inculcate a veneration for the Holy Sabbath, as its violation is not so frequent there as in the city. How often have I attended services in a large city when grand, magnificent churches were nearly empty, while in the country the churches are almost filled to overflowing. The district school is one of the means through which the country people can be raised to a still higher plane, and the great desideratum is to bring it up to the very highest point of excellence, and use it as one of the factors in solving the great problem of human happiness.

Although at first sight the district school seems inferior to its city contemporary, it enjoys some advantages over it, one of which is that the pupils are not cramped by so much machinery. We would by no means cry down system, but some of our city schools are burdened by so much of the proverbial "red tape" that the pupil's originality is almost entirely destroyed. In them the old Spartan idea, that the child should be educated for the state, is modernized to the extent that the child is educated for the system. The system treats the child as the Procrustean bed of old did its victims; if it falls short of the requirements, it is (mentally) stretched, while if it is too long a decapitation takes place. In the country school this is avoided. There is no cast-iron mould to which it must adapt itself, but it can work on the "go-as-you-please" plan, and its powers and capabilities can develop to their fullest extent.

In the country the classes are smaller also, and the teacher can give more individual instruction. In the city the classes are sometimes so large that that individual attention that some children demand cannot be given, while in the country the teacher comes in contact with the individual pupil, and can so modify the instruction to suit his wants.

Another important advantage is, that the surroundings are such that the body has a better chance for a healthy growth and development. In the city, the play-ground is restricted in limits, while on

the play-ground of the country school the muscles of the body have plenty of room to stretch themselves. Here the child can run and play without fear of jostling his playmate unpleasantly, and return to his work refreshed and invigorated by the exercise. Besides having elbow room, he has also an opportunity to play in God's sunlight and to breathe the pure air of heaven, uncontaminated with the poison exhaled by a thousand chimneys. If these two blessings of Almighty God, sunlight and air, are taken pure and in proper quantities, and other right conditions of growth are observed, the body cannot but be strong and healthy.

Besides the free development of the body, there is another weighty consideration not to be overlooked, and that is the danger of moral contamination arising from association. Although the city school systems are the embodiment of the ideal in education, it must be admitted that vice of all description holds high carnival in the city itself. Every one conversant with childhood in the city, knows that among children, even of a tender age, there are adepts in vice, and by their association they deal out death and destruction to their playmates. Some of our cities have tried to remedy the evil by abolishing the recess, but this does not help the matter, as there is danger in association at any time, and this cannot be entirely prevented. In the country school, although the pupils are by no means saints, there is not so great a danger in this associating with one another. One reason, the children do not have the same opportunity of becoming acquainted with vice; another, that the school being smaller, the teacher can keep a better watch over their associations, and by a few words of earnest council often win back an erring pupil to the path of rectitude.

(To be continued.)

Examination Papers.

EDUCATION DEPARTMENT, ONTARIO.—JULY EXAMINATIONS, 1885.

THIRD AND SECOND CLASS TEACHERS.

LATIN GRAMMAR AND COMPOSITION.

Examiner—J. E. Hodgson, M.A.

1. Give the gender and the genitive singular of:—Sermo, senectus, sensus, senex, nix, cupido.
2. Mention any peculiarities in the declension of:—Sol, meus, artus, filius, nemo, sitis.
3. Give the other degrees of comparison of:—Gravius, frugalior, vitiosius, similis, junior, audax.
4. Give the principal parts of:—Ardeo, mordeo, jubeo, cingo, mico, divido, cupio, vendo.
5. Write the results of the following combinations:—A with fugio, condo, javio; de with habeo, ago; ad with habeo, ago; ob with facio; inter with lego; bellum with gero.
6. Give two adverbial derivatives from each of the following:—Hic, is, ille. Hic, iste, and ille are said to be demonstratives of the first, second, and third persons respectively; explain and exemplify what is meant.
7. Give two examples, with explanations, of each of the following:—Words differing in meaning according to number, words admitting of two constructions, words whose meaning is distinguished by the quantity of the penult.
8. Express in oratio obliqua:—

Etenim (inquit) quum complector animo, reperio quatuor causas, cur senectus misera videatur: unam quod avocet a rebus gerendis . . . Earum, si placet, causarum, quanta quamque sit justa unaquaeque videamus.

9. Turn into Latin:—

(a) For a Roman, he was quite learned.
(b) And, indeed, even youth often meets with those things that it does not wish (to meet with).
(c) When he was seventy years old, he used-to-put-up-with poverty and old age in-such-a-way, that they almost seemed to be a source of pleasure to him.
(d) While these things were being done, Titurius reached the territories of the Unelli with the troops that he had received from Cæsar.
(e) Cæsar sent a messenger to his lieutenant to enquire (percontor) why the reserves (subsidium) had not yet advanced, as they had been ordered (impero).
(f) What difference does it make to me, whether his deeds be good or evil?
(g) Your friends say that you are not the same as you used to be.

WRITING.

Examiner—J. Dearness.

(To be written but once.)

1. Copy these lines:

A thing of beauty is a joy forever:
Its loveliness increases; it will never
Pass into nothingness; but still will keep
A bower quiet for us, and a sleep
Full of sweet dreams, and health, and quiet breathing.
Therefore on every morrow we are wreathing
A flowery band to bind us to the earth.

2. Copy:

Llanfyllin, Feb. 25th, 1885.

Messrs. Ardagh, Gligg & Co.,

Dr. To Messrs. McGillivray & Houghton,

Jan. 19th.	175lbs. Java Coffee - - - -	@ $0.28½	$49.87½
	225lbs. Eleme Figs - - - -	@ 12½	28.12½
	2bbls. Zante Currants - -	@ 12.00	24.00
Feb. 7th.	3 half chests Mucol'd Japan Tea, 165 lbs. - - - - - - - - -	@ 37½	61.87½
	1 bbl. Bordeaux Vinegar - -	@ 10.00	10.00
	2 bags Rio Coffee		

Gross.	Tare.			
142	— 13			
139	— 12			
281	— 25=256	@	.38	97.28
				$271.15½
		Less 3%	-	8.13½
				$263.02

Received payment,
McGillivray & Houghton,
per Keighley.

3. Write as for titles in a Ledger (half text hand):
Mdse., Bills Receivable, H. K. McKenzie & Co.
4 Write on ruled spaces (five): flighty, glyph, tryst.

FRENCH AUTHORS.

Examiner—J. E. Hodgson, M.A.

Candidates for III take A *and* B. *Candidates for II take* B *and* C.

A.

1. Translate:—

Hoche donna une organisation nouvelle à son armée, sans tenir compte ni de la hiérarchie, ni des droits de l'ancienneté; l'ardeur guerrière et patriotique, le talent, le courage tiennent lieu des années ou des grades; il forme de nouvelles divisions, tire des rangs des officiers subalternes et leur subordonne leurs supérieurs; des sergents deviennent capitaines, des lieutenants sont faits colonels. Une commotion électrique passe ainsi dans tous les rangs, et une fièvre d'ambition que rien ne modère s'empare des chefs et des soldats; l'exaltation est à son comble. Hoche, qui l'a excitée, la partage: son langage s'en ressent, et elle communique à ses paroles fortement accentuées une certaine enflure imitée du jargon des clubs, qui est le cachet du style officiel de cette époque. C'est ainsi que le 12 novembre 1793 (21 brumaire), après avoir réorganisé son armée prête à agir dans les Vosges, de concert avec l'armée du Rhin, commandée par Pichegru, Hoche écrit à l'adjoint du ministre de la guerre: "Veuille le génie de la liberté être propice à nos armes! Les mesures sont prises, et, si j'en crois mes pressentiments, la meilleure cause triomphera. Je survivrais avec peine à un revers. Si j'avais ce malheur, j'enverrais à Paris nos dépouilles sanglantes. Patriotes, montrez-les au peuple; qu'il batte son arrière-ban, et que son dernier effort soit le coup de grâce des tyrans."

2. Parse :—*écrit, veuille, en (si j'en), j'enterrais, batte.*
3. *Tiennent.* Write this tense in full.
4. *Son armée.* Why not "sa"?
5. *L'a excitée.* Account for the concord of the participle.
6. *Le 12 novembre 1793.* Substitute words for the numerals 12 and 1793 Explain *brumaire.*
7. *Des clubs.* What peculiarity in the use of this expression?

1. Translate :— B.

Après avoir entendu cette lecture, Hoche dit froidement, avec une indignation contenue : "Pardon, général, j'ignorais que vous fussiez un gendarme ; j'allais me mettre au lit, j'ai besoin de repos, et ma conscience me permet de dormir : demain matin je serai à vos ordres."

2. *Fussiez.* What mood and why?
3. "*Pardon* général, j'ignorais que vous fussiez un gendarme." What is the character of this speech? What was Hoche's object in making it?
4. Mention some of the differences between the English and the French use of the indefinite article.
5. Translate each of the following, (*a*) literally, (*b*) idiomatically :—

(*a*) Hoche demanda qu'il lui fût permis d'écrire.
(*b*) A peine arrivé il se fait conduire à comité.
(*c*) Avec laquelle il s'était rencontré à la poison.
(*d*) Je ne puis me plaindre de mes malheurs, puisqu'ils m'ont appris à connaître quel ami j'avais en toi, toi mon libérateur.

6. Translate :—

Elle avait été faite sans la participation de Hoche, qui ne la crut pas durable. Cormatin et les chefs chouans connaissaient trop ses justes méfiances, et, redoutant le perçant regard du jeune général de l'armée de Brest, ils avaient exigé qu'il fût exclu des conférences dans lesquelles cette paix trompeuse avait été préparée.

(*a*) *Redoutant.* Write a note on the concord of the pres. part.

7. Indicate, as clearly as you can, the pronunciation of :—Dix hommes. dix femmes, nous faisons, notre pays, les enfants.

1. Translate— C.

L'Opposition, vaincue en vendémiaire, attendit son succès des élections nouvelles et de la marche légale des événements : elle dominait dans le corps électoral, mieux composé alors qu'il ne l'a été peut-être à aucune époque de notre histoire. Les élections étaient à deux degrés, et les électeurs unissaient à l'autorité du nombre l'autorité non moins nécessaire de la capacité présumée. Leurs choix furent, en l'an IV, comme l'année précédente, l'expression fidèle de l'opinion dominante, celle de l'esprit de réaction contre les terroristes et les montagnards, et du parti constitutionnel et modéré, ami des principes de 1789 et qui voyait avec effroi le pouvoir exécutif toujours entre les mains des conventionnels et des révolutionnaires.

2. Write a full note on the position of French adjectives, and illustrate by examples.
3. *Vendémiaire, en l'an IV.* Explain.
4. *Les terroristes et les montagnards.* Explain.
5. Translate—

Ce dernier effort l'avait épuisé ; il congédia ses lieutenants, et vers le soir il s'endormit. Après quelques heures de repos, il s'éveilla en suffoquant. Il ne parlait plus : il eut une crise terrible et, le 19 septembre 1797, il expira doucement entre les bras de sa femme et du général Cebelle, son beau-frère.

6. Parse s'endormit, suffoquant, beau-frère.
7. *Le 19 septembre 1797.* Substitute words for the numerals 19 and 1797.

School Journal only $1.00 per year. Read Publishers Announcement.

ORTHOËPY AND PRINCIPLES OF READING.

1. Be good, dear child, and let who will be clever ;
Do noble things, not dream them all day long ;
And so make life, death, and that vast forever,
One grand sweet song.

Copy this stanza:
(*a*) marking the pauses, longer and shorter, ‖ and | respectively ; and
(*b*) underlining the emphatic words.
(*c*) Give reasons for the pauses and the emphases in the second line.

2. Abou Ben Adhem—may his tribe increase !—
Awoke one night from a deep dream of peace,
And saw within the moonlight in his room,
Making it rich, and like a lily in bloom,
An angel, writing in a book of gold.
(*a*) With what quality or tone of voice should this be read?
(*b*) How should the connection between "saw" and "angel" be shown?

3. *Shy.* Signior Antonio, many a time and oft,
In the Rialto, you have rated me
About my moneys and my usances :
Still have I borne it with a patient shrug ;
For sufferance is the badge of all our tribe.
You call me misbeliever, cut-throat, dog,
And spit upon my Jewish gaberdine,
And all for use of that which is mine own.
Well then, it now appears you need my help :
Go to, then ; you come to me, and you say,
Shylock, we would have moneys : you say so ;
You that did void your rheum upon my beard,
And foot me as you spurn a stranger cur
Over your threshold : moneys is your suit,
What should I say to you? Should I not say,
Hath a dog money? is it possible
A cur can lend three thousand ducats? or
Shall I bend low, and in a bondman's key,
With bated breath and whispering humbleness,
Say this,—
Fair Sir, you spit on me on Wednesday last?
You spurn'd me such a day ; another time
You call'd me a dog; and for these courtesies
I'll lend you thus much moneys?

(*a*) To what predominant feelings or passions should expression be given in reading this passage? How may they be expressed?
(*b*) Distinguish between Pitch and Force, and show where they should be varied in reading this passage.
(*c*) Give directions as to the reading of ; line 5, "Well then" l. 9, "Go to" l. 10, "You", l. 12, and lines 16 and 17.
(*d*) Mark the inflection of "Antonio", l. 1 ; "Shylock", l. 11 ; "say", l. 15 ; "or", l. 17 ; "this", l. 20 ; "day" l. 22 ; "dog", l. 23 ; "moneys", l. 24.
(*e*) Illustrate Stress by reference to line 13.

4. Divide the following words into syllables, and mark the quantity of the vowels, and the accent :
Gaberdine, ducats, Wednesday, dynamite, trichina, menengitis, gladiolus.

5. What is the sound of :
(*a*) *u* in *column, blue, rule.*
(*b*) *th* in *with, withe, beneath.*

Practical.

DRAWING.

BY WILLIAM BURNS, DRAWING MASTER, HIGH SCHOOL, BRAMPTON.

(The Editor of this Department will be glad to answer questions for information addressed to him in care of the SCHOOL JOURNAL.)

The last entrance examination has brought most prominently forward the defect in the system of Drawing instruction at present adopted by the Education Department. According to the regulations the pupil has to furnish a certified copy of the Canadian Drawing Book, and also to answer a paper on Drawing, and equal marks are allotted to each of these tests. Now what is the practical result of such an arrangement? for this is the point to which our teachers will necessarily look. Any one who has compared the work done by the same candidate in these two tests, will see at once that there is too great a discrepancy in the quality of the work, merely to be explained by nervousness or hurry of examination.

The books are often excellently done, the work is neat, and the copying most careful, but this is all that can be said for it;—it is mere copying—and the slight differences of proportion as given in the book are, in themselves, no preventive of this. The work is, also, too often done by mechanical aids, such as compass and ruler, thus rendering the fact of its being "free-hand" a misnomer. Consequently, when the candidate is set down to the examination paper, he is quite bewildered, and his answers show that he does not know how to set to work—in fact, he has no copy! This defect can only be remedied by the teachers themselves: let them use the "Drawing-book" chiefly as a text-book for furnishing them with black-board examples—then let these be copied into a blank-book, and be made certain definite sizes,—in no case too minute—the construction lines, &c., being all drawn by the pupil to the scale selected for the example. There must then be a certain amount of attention and knowledge exhibited, and the figures will be drawn in the correct method, at any rate; we have noticed pupils doing the figures in the books used at present, without any regard to the method, doing the answer before the construction lines, the only aim being to show a correct copy when the figure is completed. Every practical teacher must see the absurdity of the present method of instruction; and, perhaps, at some future examination when marks are to be given only on the paper set, he will be painfully convinced of its uselessness. We do not pursue the same method in any other branch of study, why should it be thought necessary, then, in this one? What success would any teacher have in his Arithmetic Class, by giving the pupils a sum completed, then asking them to merely copy it, and as an exercise have a trifling alteration, of a figure or two, made in the question; no further examination or variety of question being given?

But we must not attribute all the blame to the much-abused teacher. In the first place the books set are badly graded, far too difficult for the classes to which they are appointed, and contain more matter than can possibly be properly taught in the short time that can be devoted to the work. To those numerous teachers who understand the subject, the books are a positive hindrance, and to those who do not know anything of this branch, they are a temptation to allow of mere copying. If drawing is ever to take its place in our schools as a practical training, it must be done in some other way—it must be done not merely with the hand but also with the mind. Should any of our teachers hold the same opinions as we do on this subject, we hope they will not neglect to air their grievance at the conventions during the year. As an old teacher remarked lately—we are now going through the drawing-craze at present—well, let it be a 'craze'—but by all means let the craze be of some use and not a mere deception.

WILLIAM BURNS, Brampton.

DO YOU READ EDUCATIONAL PAPERS?

The best evidence that a teacher is trying to better himself in the work of teaching is the fact that he reads educational works and learns what others are doing to improve themselves in their noble undertaking.

The teacher owes it to his pupils, his patrons, and to himself to keep abreast of the times. To-day our public schools are receiving more attention from the best class of our people than ever before. Their faults and weaknesses, as well as their excellencies, are brought out in their clearest light. Our schools must be better taught in the future than they are now or have been in the past. If the teachers of to-day would do this better teaching they must become better teachers. To do this they must know their faults, and correct them, and know what will be expected of them in teaching better schools which an awakened public opinion will demand.

The successful manufacturer has his daily reports from all parts of the country, the successful merchant each day reads the quotations of merchandise for the previous day, the successful stock broker receives hourly reports of changes that occur in the market; the successful teacher, he who educates the manufacturer, the merchant, the broker, and the farmer, reads his educational papers.

It is as necessary to keep posted in school work as in any other business.

The worthy teacher, the one preparing to do this better work, is not without his educational papers.—*Normal School Instructor.*

Writing must be taught by its principles. The pupils should be made familiar with the analysis of the letters, also, their up or down strokes and curves, and by constant drill in these they can be made proficient in the art of writing. Before an exercise is put into the copy-books, let the pupils practise it upon loose slips of paper. Let every stroke be made simultaneously by the whole school, the teacher keeping time audibly for them, *one, two,* or better, *up, down,* for the strokes, and *right, left,* for the curves, *mentioning them in their* proper order. One of the most serious faults in teaching writing is the endeavor to make pupils write as much as possible like the copy in the book. If a child can learn to make the letters neatly and legibly, it is not of the slightest consequence whether they look like the copy or not. Children do not naturally walk alike, or speak alike; why then should they all write alike? Besides, the thing is impossible, for when the pupils leave school and undertake the business of life, their writing assumes distinctive characteristics—so distinctive that in a thousand men, all taught by the same copy-books, it would be hardly possible to find two whose penmanship is so very similar that the one would be likely to be taken for the other. Teach children to practise writing outside of their copy-books, by copying short poems or articles, and by committing their thoughts to paper. They will thus be far more likely to take pleasure in their writing exercise, and will improve much more rapidly.

Educational Notes and News.

The Normal Schools at Toronto and Ottawa open on Tuesday the 19th inst.

Mr. R. Lane, teacher of the public school, Enfield, has been re-engaged for 1886.

F. H. Sykes, B.A., has accepted the modern language mastership of Port Perry High School.

The Guelph High School is to be raised to the rank of a Collegiate Institute on the 26th inst.—*Dufferin Advertiser.*

Mr. Ralph Ross, of Oxford, has been appointed assistant teacher in the Dundas High School.—Dundas *True Banner.*

Bismarck public school opened on Monday with Mr. Higley as principal, and Miss McColl second teacher.

Mr. D. McGill, of Wallacetown, has been engaged as head teacher in the Dutton public school for this year at a salary of $425.

Mr. Geo. Hogarth, of Solina, has accepted the position of teacher in Strathroy Collegiate Institute for the present year. He will leave for there shortly.—*Canadian Statesman.*

Mr. A. W. Aytoun Finlay, late high school headmaster at Chatham, comes to London for a short time. Mr. Finlay will go into the practice of law.—*Free Press.*

Mr. Alex. McMillan, of Granton, is an applicant for the Inspectorship of South Huron. He is well qualified for the position. For ten or twelve years he taught in East Middlesex.—*Free Press*

Miss Langford, of Hyde Park, took charge of the public school S. S. No. 14, Westminster, for the present year, and Miss Eagan, of St. Mary's, of the R. C. Separate school, at Glanwerth.

Mr. Wm. Anthony, who has been teaching as principal in the Forest public school for the last three months, has been successful in obtaining a situation in S. S. No. 12, Plympton.

Mr. Butchart, formerly teacher of the Kingsmill public school, has been engaged as teacher of the senior department of New Sarum school, at a salary of over $400.

Mr. Ward, B.A., gold medalist in classics, of McGill University, and late headmaster of Brighton High School, has been appointed to the vacant classical mastership in Brampton High School

It is "a sign of the times" when we see "The American Teacher" printing the music of songs for the school-room in both Staff and Tonic Sol-fa notations.

Mr. W H. Liddicatt has been re-engaged for the third year as teacher of the Thorndale Public School, at a salary of $600. Mr. Liddicatt is an excellent teacher.—St. Mary's *Argus.*

James E. Glenn has re-engaged in S. S. No. 13, Ameliasburgh, making the tenth consecutive year for him in that school section. He has also been elected 1st Deputy Reeve for the Township of Ameliasburgh for the year 1886.

At a meeting of the St. Mary's Collegiate Institute Board held on Tuesday night, Mr. Wallace A. Macpherson, of Warkworth, was appointed assistant master for the first half of 1886, at the rate of $500 per annum.—London *Advertiser.*

County Norfolk Teachers' Association meets at Simcoe, Feb. 4th and 5th. South Essex Teachers' Association is announced for Feb. 18th and 19th, place not determined. It will be either Kingsville or Essex Centre.

The following changes have been made in the teaching staff of the Orillia Public School:—Miss Cooke, promoted to Grade V.; Miss Green to Grade VI.? Miss Pirt appointed to Grade VII.; and Miss E. Chase, to Grade VIII. Others as before—*Orillia Packet.*

At a meeting of the High School Board of that place, Mr. N. Kellet, of Vigs, County of Simcoe, holding a first class grade B certificate, was engaged as second assistant teacher of the Petrolia High School. Mr. Brebner was appointed first assistant.

Miss Annie Bush re-opened the Arden school on Monday. She is well liked by her scholars and the residents of the section; her quiet and ladylike manner have, as well as her efficiency as a teacher, made her very popular, and she has hosts of friends.—Napanee *Standard.*

A meeting of the (St. Mary's) Collegiate Institute Board was held on Monday evening last. Applications were received for the position of classical master. Mr. F. P. Riddell, B.A., of Port Dover, received the appointment at a salary of $800 per annum.—St. Mary's *Argus.*

Dr. Forrest, head master of the Bradford High School, has been re-engaged for the incoming year, at an increase in salary of $100 per annum. Mr. Bean has also been retained for another year, salary $800. The tution fee in future will be $3 instead of $2 as formerly.—*Dufferin Advertiser.*

Miss McKay, teacher, S. S. No. 7, Lobo, was presented by her pupils and other young people in the locality with a silver cake basket and gold ring as a token of the good will and kind remembrance of her friends in that section. The recipient cannot but feel gratified with such a magnificent gift.

Reading circles have been organized in Prince Edward, and Essex counties. Hopkins' "Outlines of the study of Man," Fitch's "Lectures on Teaching" are the works that will be discussed at the forthcoming conventions of these Associations.

Last September a kindergarten was opened in connection with the Toronto Normal School, under the management of Miss Hallmann, an eminent kindergartner. A similar department will be opened next summer in connection with the Ottawa Normal School, under the charge of Miss Bolton.

Neil McEachern Esq., B.A., of Argyle, Victoria Co., late Fellow in Toronto University, has accepted the position of Science Master in Toronto Collegiate Institute. Mr. McEachern has by his own indomitable pluck and energy, pushed his way through the University, and now fills a position on the staff of an Institute of which he was once a pupil. His younger brother, Mr. Peter McEachern has for some years, been on the staff of the same school as teacher.

The Stratford Model School made an excellent record this last term, under the management of Mr. Chadwick. Every scholar in attendance (with the exception of one who had not a non-professional certificate) was successful in passing the final examination. The list is an unusually large one, and reflects much credit on all parties concerned.—St. Mary's *Argus.*

At the last meeting of the Board of Education, Carleton Place, the following teachers were engaged: Miss McCallum, Miss Empey, Miss Sinclair, and Miss Wilson. These with those previously engaged, viz.:—Mr. J. A. Goth, Principal; Mr. McDonald, Miss Burke, Miss Girouard, and Miss Drynan, will comprise the staff for this year.—*Carleton Place Herald.*

Teach the pupils to think. That is the great point. Any system or method that neglects the proper development of the reasoning faculties—that neglects to get at the why, and how, of every lesson, is a poor one. We have erred too much in this direction. Spend less time in cultivating the memory and more in developing the reasoning powers.—*Central School Journal.*

Mr. John McDonald, principal teacher in the Eganville public school, was on Tuesday last made the recipient of a handsome dressing case by the pupils of the school previous to his departure for Embro, where he has received the Principalship of the Embro public school. Mr. McDonald was universally liked and respected by all who knew him, and his absence from Eaganville will be sadly missed. The progress made by the pupils under the tuition of Mr. McDonald is astonishing, inasmuch as several of them have passed the necessary examinations to entitle them to teacher's certificates. We join with his many friends here in wishing him abundant success in his new quarters.—Eganville *Enterprise.*

For Friday Afternoon.

THE DEATH OF THE OLD YEAR.

Full knee-deep lies the winter snow,
And the winter winds are wearily sighing;
Toll ye the church bell sad and slow,
And tread softly and speak low,
For the old year lies a-dying.
Old year, you must not die;
You came to us so readily,
You lived with us so steadily,
Old year, you shall not die!

He lieth still; he doeth not move;
He will not see the dawn of day;
He hath no other life above,
He gave me a friend, and a true, true love.
And the new year will take them away.
Old year, you must not go;
So long as you have been with us,
Such joy as you have seen with us,
Old year, you shall not go!

* * * *

He was so full of joke and jest;
But all his merry quips are o'er,
To see him die, across the waste
His son and heir doth ride post haste;
But he'll be dead before.
Everyone for his own;
The night is starry and cold, my friend,
And the New Year blithe and bold, my friend,
Come up to take his own.

* * * *

His face is growing sharp and thin;
Alack! our friend is gone!
Close up his eyes; tie up his chin;
Step from the corpse, and let him in
That standeth there alone,
And waiteth at the door.
There is a new foot on the floor, my friend,
And a new face at the door, my friend,
A new face at the door.

—*Alfred Tennyson.*

EXAMINATIONS.

BY W. M. G.

(At the end of each verse, the reciter draws a deep sigh and exclaims "Examinations!")

The other night I went to bed,
But not to sleep, for my poor head
Was filled with a most awful dread.
Examinations!

I thought of this, and then of that;
Of set and sit; which goes with sat?
I fear my brain has run to fat.
Examinations!

Next came the base and rate, per cent.,
Of money to an agent sent,
And with that word all of them went.
Examinations!

Then my lessons I try to spell;
Which words have two, and which, one L?
Oh, my poor brain! I cannot tell.
Examinations!

Where is Cape Cod, and where Pekin?
Where do the rivers all begin?
A high per cent. I cannot win.
Examinations!

Who was John Smith? What did he do?
And all the other fellows, too?
You must tell me, I can't tell you.
Examinations!

Oh, Welcome sleep! at last it came;
But not to rest me, all the same;
For in my dreams this is my bane—
Examinations!

—*N. Y. School Journal.*

THE CHILD AND THE YEAR,

Said the child to the youthful year:
"What hast thou in store for me
Oh, giver of beautiful gifts: what cheer',
What joy dost thou bring with thee?'

"My seasons four shall bring
Their treasures. the winter's snows,
The autumn's store, and the flowers of spring,
And the summer's perfect rose.

"All these and more shall be thine,
Dear child,—but the last and best
Thyself must earn by a strife divine,
If thou wouldst be truly blest.

"Wouldst know this last, best gift?
'Tis a conscience clear and bright,
A peace of mind which the soul can lift
To an infinite delight.

"Truth, patience, courage, and love,
If thou unto me canst bring,
I will set thee all earth's ills above,
Oh, child! and crown thee a king!"—*Celia Thaxter.*

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School Journal. the oldest school paper in Canada, now issued 1st and 15th of each month. A live, practical paper, suited to the wants of every Public School Teacher in the Dominion.

Literary Reviews.

GRAMMAR SCHOOL ARITHMETIC, *Ginn and Company, Boston, Mass.*

Of all the subjects taught in our schools arithmetic should receive as much, if not more, attention than any of the others, for there is nothing more essential to the business of every-day life. In order to stimulate the pupil to further efforts the book must be both attractive and practical In these respects this "Arithmetic" takes a prominent position, the problems being such as the business man meets with at all times. The exercises are so arranged as to follow each other in the natural order; this we can say of few arithmetics. The chapter on interest is especially deserving of commendation, while pages 241 and 242 are a great boon to the student. Again, mensuration is dealt with so thoroughly as to be a credit to any author. It is a work which should be in the hands of every teacher, and pupils preparing for commercial pursuits would derive much benefit from it.

TOMMY'S FIRST SPEAKER. Edited by Tommy himself.—*W. H. Harrison, Jr., 315 Wabash Avenue, Chicago, Ill.* Price 50 cents.

This book claims to be a "Speaker really suitable for very little children," and contains 250 pieces, short and easily learned. The editor—Tommy—is not, as may be supposed, the astrologist who explained the mystical legends of the signs of the zodiac in "Grip's Almanac" for this year; he is a gray-haired philantrophist, of Chicago, who remembers his fondness for juvenile literary pleasures, and has embodied, in an extremely appropriate collection, an amount of matter that is specially interesting to little folks of both sexes. In catering for Friday afternoon exercises there is, we believe, too much thought of the older pupils. Why not provide some entertainment also for the younger ones? When you do, seek 'Tommy" and you will not regret his acquaintance.

THOSE DREADFUL MOUSE BOYS.—By Ariel. A Story for Old and Young. *Ginn & Company, Boston, Mass.*

At first glance this attractive book may seem to be a nice story for children, merely to interest them for the moment, but beneath the surface older readers will detect a skeleton garlanded with fancies which may be the story of human lives. There is a deep, moral lesson conveyed in the history of the "*Mouse Boys*" *that cannot be without a lasting effect on the* minds of juvenile readers; selfish desires and deeds are contrasted with generous motives and acts. The whole spirit of the fable is humorously instructive. The illustrations are quaint and numerous. The book, a small quarto, is neatly bound in cloth, gold lettered, and will be mailed for $1.00.

THE KING OF THE GOLDEN RIVER.—A Legend of Stiria. By John Ruskin, M.A. "Classics for Children" series. *Ginn & Company, Boston, Mass.* Price 20 cents.

We congratulate the enterprising publishers on having gotten up a series of "Classics for Children" which provides our young folks with pure, wholesome, supplementary reading. The idea is admirable, and the plan is happily carried out. The banishment of such destructive reading as is furnished in cheap, sensational trash, is sure when literature of the nature provided in this series is placed in the hands of the "rising generation,' and the effect must be beneficial to society.

ASTRONOMY FOR BEGINNERS. In thirty-two lessons, with illustrations By Francis Fellowes, M.A. *New York, John Wiley & Sons. Toronto Williamson & Company, 1883, 135 pp.*

Here we have a little book on an immense subject. If this book were a mere compilation of facts it would be as interesting to the public as the nautical almanac for 1883, now published. But it has no resemblance to an almanac, or to Collier's History of England, or to Hodgins' History of Canada, or any such soul-inspiring compilation. Not that the method is a new method, Bacon having invented it or stolen it several centuries ago, its watchword being. "Observe and know!" In this book the young student is advised, and as he proceeds is fairly forced, to leave the printed page and see for himself what is going on in that diamond-studded dome under which our little lives are spent. He is thus led to a true appreciation of the phenomena and the laws of the heavens, not without something of the feeling of joy that must have thrilled the breast of Galileo when nature's eternal verities first dawned before him. Mr. Fellowes is evidently a writer of excellent taste, a man of literary culture, and his book is full of choice classical allusions and stories, fittingly indicative of the poetic charm interwoven with the study of the heavens by national and individual youth in all ages of the world. The star maps and other illustrations are well designed and beautifully executed. We can confidently recommend this little volume to all who wish to begin the study of astronomy.