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# The Canada School Journal.

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## THE CANADA SCHOOL JOURNAL

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

### —TERMS—

**THE SUBSCRIPTION** price of THE CANADA SCHOOL JOURNAL is \$1.00 per annum, strictly in advance.

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CANADA SCHOOL JOURNAL PUB. CO. Limited,  
OFFICE: Toronto, Ontario.

PROF. WOODWARD, of the St. Louis School of Manual Training, describes the object of the new primary education to be "to put the whole boy to school." "In other words," as the *School Bulletin* says, "it trains his hand, his eye, his nerve, his muscle, his judgment, instead of simply cramming his brain with a great mass of facts, mostly rubbish."

We are glad to note in our exchanges indications of activity in the formation and working of literary societies in connection with many of the schools. A well conducted literary society is in itself an excellent educator. Teachers will do well to aid and encourage them. They can do much, unobtrusively, to give them a bent in the right direction.

IN reply to inquiries, we desire to say that we are always glad to receive items of educational news from teachers and others. We want to fill our columns with just the kind of matter that will be of most interest and profit to our readers. We shall be thankful, too, for suggestions and criticisms,—anything that will help us to find out weak points in the JOURNAL.

WE are thinking and planning with a view to making the JOURNAL the coming year still better than it has ever been. We think we see our way to several improvements. We want our friends to help us, especially in the way of practical methods, tried and proved, for the school-room. Will not teachers of experience give us these for the benefit of their less experienced brothers and sisters? The JOURNAL was first in the field. We mean it to be last, and it shall not be for want of pains on our part if our readers do not pronounce it best.

THE ventilation of school-rooms, especially in winter, is one of the teacher's most serious difficulties. The importance of good ventilation can scarcely be over-rated. Neither teacher nor pupil can do good work, or preserve the cheerful, elastic frame of mind which is one of its conditions, in an atmosphere vitiated as that of every room containing a considerable number of pupils must become in a short time when doors and windows are closed. Time will be saved and health and good spirits promoted by frequently throwing open doors and windows for a few minutes, and having the children form into line and march briskly around the room until it is thoroughly charged with fresh air. No wise teacher will neglect to do this.

Much attention is being given in these days to the teaching of temperance in the schools. There is reason to hope that by the knowledge imparted of the effects of alcoholic stimulants upon the physical system, and especially upon the brain and nerve apparatus, a powerful impetus will be given to the cause of temperance. The next generation should be a much more sober and healthful body than the present. But how about tobacco? Few will deny that it, while of course a lesser evil, is yet one of the vices of the day. The narcotic poison can be only less injurious than the practice is disagreeable and disgusting to those who do not use the weed. These, including the ladies, are the great majority, a fact which is too often forgotten. On which side is the influence of the schools? How many teachers in Canada are slaves of the habit?

MRS. FAWCETT, in her opening address to the students of Bedford College, England, rightly rebuked the too prevalent notion that the value of education can be computed on a commercial basis. Commenting on Mrs. Lynn Linton's assumption in a recent article that money spent for the higher education of woman was thrown away if it did not increase their power of making money, Mrs. Fawcett said that some people would always take that view of education, but it was a false one. The value of education was not to be computed in pounds, shillings, and pence; but, even viewed in that sordid light, the professional careers open to women to-day show that a high education has its pecuniary value. So it undoubtedly has, but it is a degradation of the very notion of education to estimate it, in woman or man, wholly or chiefly in reference to its money value.

WE are requested by the Educational Department to announce that the following selections from the Literature prescribed for third class teachers non-professional examinations, will be repeated for 1887-8:

*Prose.*

No. XV.—Addison—The Golden Scales, pp. 88-92.

No. XXII.—Goldsmith—From "The Vicar of Wakefield," pp. 127-133.

No. LXIII.—Thackeray—The Reconciliation, pp. 308-315.

No. LXXIV.—George Eliot—From "The Mill on the Floss," pp. 356-359.

*Poetry.*

No. LXVII.—Longfellow—The Hanging of the Crane, pp. 336-342.

No. LXXIX.—Tennyson—The Lord of Burleigh, pp. 370-372.

No. LXXXI.—Tennyson—The Revenge, pp. 373-377.

No. CV.—E. W. Gosse—The Return of the Swallows, pp. 437-438.

PRESIDENT DWIGHT says that he cannot help feeling that "the great defect of the past and the present education lies in the want of personal and individual intercourse between the teacher and his pupils—inmediate contact of the mind of the former with the mind of the latter—in such a degree as is to be desired for the pupil's highest inspiration. Our system of education, which has been growing in popularity of late in all our higher institutions of learning, places the student far too much in a kind of great machine, where his individuality is lost in the working of the machinery. It is the mind and the man which we need to develop, and to this end something more than textbooks and examinations are necessary." This is a most important truth. The main cause of the defect lies in the fact of the great disproportion in numbers between teachers and pupils. The ideal system of education, whether in school or college, would be, to our thinking, that in which each educator had to do with not more than from half a dozen to a dozen pupils at once. In the crowding and confusion of the fifties and the hundreds, the individuality of the pupil is in a large measure lost sight of, and the power that would be engendered by close personal contact is dissipated. Moreover, in the Public Schools an immense amount of time is lost to both teacher and pupil in the management and movement of the ponderous machinery. We do not know that there is any help for it, save in the case of those who are able and willing to pay for more and better teachers. It is better that the masses should have these imperfect advantages than none at all.

QUITE a little war is being waged by some of our United States contemporaries over the vexed spelling-book question. The radical reformers condemn, as behind the age, every form of the spelling-book which requires children to spell "words from columns, words which are out of their connections, and which mean nothing to the speller." They contend that the art of spelling is to be learned from the reading-books, where the meanings of words are indicated by their connection and use. This is going to the extreme. We have no doubt that the ordinary pupil learns both the forms and the meanings of words

mainly from reading. The philosophical teacher will make a note of this fact, and so conduct his class exercises as to cultivate the habit of observation in this direction. Spelling is learned chiefly by the eye, and the ease with which some pupils learn to spell is, no doubt, mainly attributable to their keen perceptive faculties, using that term in its literal rather than figurative sense. But these faculties can be trained and sharpened, and the series of exercises which compels a pupil to observe closely both the forms and meanings of words in the printed page is the most valuable lesson in both reading and spelling.

If it were true, as some of the iconoclasts contend, that the ordinary reading of the pupil will cover the vocabulary which he will need to use in after life, we should join them in crying "Away with the spelling-book in every form." But is this true? Far from it. It will be admitted that in order to be an average English scholar, one must know how to spell the whole vocabulary in common use in books, letters, and speech. Now it is well known that every writer has his own peculiar vocabulary, and that the vocabulary of even the most versatile master of the language includes but a small part of the words in actual use. Hence it follows that the pupil whose knowledge of words is confined to the range of his reading-books must fall far short of having a knowledge of the language. Moreover, each writer is likely to use a number of words which can scarcely be said to be in common use, and reason would suggest that the time of the average pupil would be much more profitably employed in acquainting himself with a well chosen list of words in common use, than in fixing in memory the uncommon few which may appear in the pages of a few individual writers.

BUT how about the columns? We are strongly disposed to draw a line here. We confess to a horror of the long, dry, lists of words in columns, dissociated from all connection with other words, which appear in the ordinary spelling-books. We can think of few drearier tasks than conning by rote such lists. And it is as unintellectual as dreary; no mental power, save memory, is necessarily called into play. Instruction in spelling is as capable of being reduced to a science as any other pedagogical work. The model speller is the book which combines in sentences and paragraphs, either borrowed from a great variety of authors or constructed for the purpose, the whole vocabulary of English words in common use by good speakers and writers—all those words, we mean, which present any orthographical difficulty. Nor should such a book be put into a pupil's hands to be pored over and have its contents painfully memorized. As before said, the main thing is to cultivate the power and habit of observation. In order to do this let the pupil be asked to read over the paragraph or the page carefully once or twice, and then let him be asked to reproduce it, sometimes from memory, sometimes from dictation. The child of average ability will soon learn to detect by his eye anything wrong or unusual in the spelling of a word. When the habit is formed it will be carried with him in all his reading and writing—and every pupil should be required to do much of the latter—and he will

be on the only high road which leads to correct spelling and a correct use of language.

WHILE we are on the subject of spelling, another point should be noted. As most of us know by painful experience, there is a formidable army of words in the language which are identical or similar in sound, but different in spelling. These are not generally words "of learned length and thundering sound," but little, unobtrusive words, which are constantly appearing and which every one is expected to use correctly. It may possibly be advantageous to have these arranged in lists for oral practice, though we doubt it. Our observation has been that, in three cases out of four, the child who has learned these lists to perfection, and can gallop from end to end of a column orally, without a mistake, will misapply half the troublesome words in his letters or composition exercises. Nor have we much faith in those sentences artfully constructed to bring the words of like sound but varying meaning into juxtaposition. The pupil may learn to apply them infallibly in such sentences, but fail ignominiously when he needs to use one of the words apart from that to which it is thus related. It is only by diligent practice in the writing of exercises such as above indicated, in which such words recur frequently in various uses and connections, that the victory can be assured.

ONE other hint and we dismiss the spelling-book. Every teacher will have noticed that there are certain words not necessarily included in the classes above described, which the average boy or girl habitually, perversely, almost infallibly mis-spells. The fact is a suggestive one for the advocate of spelling-reform, but let that pass. It is a fact none the less, and one not always easy to account for. One is examining, for instance, a set of answers furnished to examination questions. A certain word necessarily appears in each of the papers. It seems no harder than either of a hundred other words which all or nearly all spell correctly. Yet for some occult reason more than half the writers mis-spell this particular word. Every teacher, by a little careful attention in looking over the various exercises handed in by his pupils, can make a list of such words. We have found it a good plan to write such upon the blackboard, in conspicuous letters. Not more than three or four, perhaps better not more than one or two, should be exhibited at once. It will be unnecessary to call particular attention to them; that will be surely given. Leave them standing for two or three days, or a week, and the probabilities are that those words, at least, will be correct in all future exercises.

#### WRITTEN EXAMINATIONS.

"MANKIND," says Arthur Helps, in one of his "Hints for Essays," "is always in extremes." This is certainly the case with teachers, or at least with some classes of teachers. The vagaries that have been propounded within the last ten years in the shape of educational theories would make some interesting volumes for the study of the Evolution of Pedagogy by educators a hundred years hence. A curious collection might already be made, if one could but collate what has been said and

written on the one subject of Written Examinations within the period named.

That the written examination has been grossly abused, and has in many cases been made an instrument of torture for both pupil and teacher, is beyond question. That within its proper sphere it is, and must always remain, one of the most effective educational agencies, is, we believe, equally true and scarcely less demonstrable. And yet, strange to say, an educational writer and practical teacher, Anna C. Brackett, can find it in her brain to write as follows in the *American Journal of Education*, and "stranger still, the editor of that Journal apparently approves such hasty generalizations. Referring to the child, who wrote in reply to "Describe the position of the liver," "The liver is situated south of the stomach and a little to the right," Miss Brackett says that she is quite positive that it was the answer of an imaginative girl and not of a boy; and she thinks she should like her for a pupil.

She then proceeds:—"If she were my pupil, however, she would never have a written examination to pass, for we have long ago abolished them, as not only a snare and a delusion, but also as a grinding up of the working power of the teacher, which seems to me far more profitably employed in class work. My teachers can give their whole attention to their recitations, as they do not have to consider how to express the mind-growth of the pupil by an arithmetical figure, and they do not know what it is to sit up late at night over a pile of examination papers, consequently they come in every morning fresh, and ready to arouse, guide, and lead the minds of their girls. The girls are relieved from all the nervous tension inseparable from set examinations, and their minds are bent only on the matter of the lesson, and not on the possible marks which they may receive for it."

The writer defines the object of an examination as follows: "If an examination is to test anything, it is to test the *real* knowledge of the pupil of the real facts of Mathematics, Natural Science, History, etc. I am not aware that any teacher has the power of altering these," and proceeds after a little to dispose of the matter in this summary fashion:

"I most emphatically agree with Prof. Woodward in saying that no entire stranger can properly examine a class. The ways of looking at a subject are legion, and a class who really do know what they have been studying can easily be made to appear ridiculously ignorant by the clumsy way in which a question is put by an inexperienced teacher, or even by an experienced teacher who has been in the habit of looking at the subject from a different point of view.

"Now I wish to posit one other statement, and that is that it is a great waste of time for a teacher to give her own class a written examination. Does not every teacher know how much her class knows by their daily recitations? She examines them orally every day, and that gives her the best possible chance to find out what they know. What a ridiculous farce it is to see a teacher, who has examined a class every day for six months, sit down and prepare a set of written questions to find out what they know!

"But, thirdly—for I think there is no 'excluded middle' in the case—if it is useless for a stranger to examine the class, and useless for its own teacher to examine it, what is gained by a written examination? Will somebody tell me?"

There is a good deal of force in what is said of the tendency of written examinations to grind up the working power of the teacher. This, however, by no means settles the question of the educational value of the examinations, unless we take with

it as an axiom what the writer asserts as an opinion, that the teacher's time would be "much more profitably employed in class work." That is begging the question. Another might *per contra* say, "Your teachers, it seems to me highly probable, do altogether too much of what is called class-room work. The girls would make more real progress and acquire more strength if left much more to their own resources." If within certain limits answering questions with the pen is a better mental exercise than answering them with the lips, then the teacher will do better work by giving less time to the latter in order to give more to the former.

We should be disposed, too, to dispute the position that the best or sole use of an examination is to test the pupil's *real* knowledge of any set of facts. There are other things that it is at least of equal importance to have tested, *e.g.*, the pupil's power of clear thinking, precise expression, orderly arrangement of ideas, etc.

But even as a test of a pupil's real knowledge, we fancy the examination is not without use. In fact we think the experience of that teacher will be singular who has not often found himself compelled, on examination of a batch of papers, to modify very materially and in both directions, his preconceived opinions as to the acquirements of certain pupils. The written examination affords a means of applying a more exact test than can possibly be had in any series of oral examinations, especially of large classes.

The statement that no entire stranger can properly examine a class suggests one of the strongest arguments in favor of such examinations. It directs attention to the well-known fact that every teacher has his peculiar modes of putting things, and is pretty sure to have a more or less one-sided and limited range of vision. Very often the examination by a stranger is very serviceable to both teacher and pupils, as showing that there are other sides to questions, and other points of view from which they may be looked at. No one can be said to have mastered a subject till it has been studied from different points of view and on all sides.

This suggests further that the highest value of the written examination is not in its use as a test of knowledge, or of any thing else, but as a class-exerciser. It compels precision of thought and of expression; it enables each pupil to find out for himself, as well as exhibit to others, the extent and accuracy not only of his knowledge of facts, but what is of vastly greater importance, of his thinking in regard to the subject in its various relations. It is of especial value to the many pupils who are timid and less ready in speech than their companions. Bacon's well-worn aphorism, "Writing makes an exact man," applies with full force to boys and girls in school.

The summing up of the whole matter is: Do not make a fetish of the written examination; do not weary yourself and run the risk of doing injustice to your pupils by attempting the impossible task of giving to every answer its exact percentage of relative value, but, on the other hand, do not fail to put the written examination to its legitimate use as one of the best possible class-room exercises for the pupil, as well as an invaluable aid to the teacher in discovering the weak points both in his own and in his pupil's work.

## Special.

### DISCIPLINE AS A FACTOR IN THE WORK OF THE SCHOOL-ROOM.

BY DR. J. P. WICKERSHAM.

*Read before the Pennsylvania Teachers' Association.*

(Concluded.)

But to what extent can a discipline of consequences be applied in the school-room? Is it possible at all in the little world called a school to link together as cause and effect, punishment and offence as is done in the great universe in which we live? The answer is best given by examples. For all injuries to the school property, the natural punishment is its repair. When a boy has replaced the glass broken in a window, removed the cuts or stains from a defaced desk, repaired the palings knocked off from the yard fence, he has done about all that should be required of him. A pupil who has displaced the school furniture or cluttered the school-room floor, has paid the proper penalty when he has restored everything to its former condition. A pupil who plays on his way to school, may be denied the privilege of playing at recess or noon-time. One who idles away his time, and therefore does not know his lessons, may be made to work while his schoolmates are at play in order to learn them. One who disturbs his school-fellows that sit near him, may be assigned a seat by himself. One who is quarrelsome, quarrelsome, or selfish on the playground, may be detained in the school-room at play-time or given a recess by himself. The habit of using profane or vulgar language will be soon broken up, if the teacher require any one who indulges in it to remain apart from his school-fellows, lest his example contaminate them. He can say to one who has erred in his way: "You have used bad language and must remain in the school-room here with me while the other children play, for, of course, I cannot suffer innocent boys and girls to hear such words. I am sorry, but it cannot be helped." In the case of open disobedience to the teacher or incorrigibly bad conduct, it may be proper to resort to force, or to dismissal from school. These examples do not cover all cases of school discipline, nor does what has been said exhaust the treatment that may be proper in any one of those mentioned; but as a whole they will serve to exemplify a kind of school discipline infinitely superior to that in use in hundreds of thousands of schools. It is rare indeed that a judicious administration of such a system will not secure order in a school, and what is more important, healthy moral growth among the pupils.

The advantages of a discipline of consequences over a system which involves arbitrary punishments such as whippings, tasks, and bodily tortures, are beyond calculation. It is the rule of law in contrast with a rule of passion, caprice or blind volition. Such a discipline enables the teacher to remove in great measure his personality from his administration. Instead of a monarch governing according to his own will, he becomes a judge passing sentence according to law. He discards all personal feeling in punishing wrong-doers, but as the head of the school, simply sees to it that those who violate the law shall incur the natural consequences of their acts. The discipline of force often leaves behind it a feeling of resentment. Some of us who were brought up under this old regime still feel the sting of the injustice done us; and it would not be difficult to awaken in our bosoms even now the spirit of revenge we once entertained towards masters who in their way were as arbitrary in their government and as tyrannical as Nero or Caligula. A discipline that makes the government of the school impersonal could not be attended by any such bad results. A discipline of consequences in school prepares the way for a discipline of consequences in life. When a child reaches the age of responsibility he finds himself hedged about by a complicated system of laws. Order must be preserved in society, the state must be governed, and to secure these ends laws must be enacted. To the violation of these laws are affixed penalties designed to be just and to grow naturally out of the offences. Among these penalties are restitution of property, fines, imprisonment, death. The whole system of jurisprudence is, as far as human wisdom can accomplish it, a discipline of consequences. The state establishes and supports the school, and in return the school should train up good citizens. Its discipline therefore should be in accord with that of the state. God rules the universe, and as far as we can see He rules by laws to which are attached as sanctions rewards and punishments. It is

much to be a good citizen living in harmony with the laws of one's country; it is infinitely more to be a man living in harmony with the laws God Himself has stamped upon the creation. The school like the family should prepare for both, and a great step in this direction is taken when children are accustomed to a kind, considerate, but rigid discipline of consequences.

4. *The discipline of conscience.* From the discipline of consequences some steps higher bring us to the discipline of conscience. A school may be kept in order and made to work by a discipline of force; the same result with infinitely more satisfaction may be accomplished by management, a discipline of tact; not less effective in the same way and much more fruitful in moral results is a discipline of consequences wisely administered; but none of these methods of governing and training the young touch directly the moral nature, or go far towards promoting moral growth. A child may be forced to do right, may be managed into doing right or do right in view of the consequences of wrong-doing, and still the fountains of his moral nature from which issue all that affect his higher life, remain uncleansed, unsweetened, a stagnant pool ready to sicken and destroy with its poisonous waters. Conscience is the light God has placed in every human breast to enable us to know right from wrong—a monitor that gives us peace and joy when we have done our duty, and fills us with sorrow and remorse when we have come short of its requirements. Or, in the language of another, "Of the infinite counsels of the Eternal was conscience begotten. The law of conscience founded on the Deity is immutable, and like God himself, eternal. What is right to-day ever was and ever will be right; and what is wrong to-day ever was and ever will be wrong." But the gift as it comes from the Divine hand is only a germ that requires quickening, culture, enlightenment; and the world has no tasks so delicate and difficult as that of directing its growth. All other education is introductory and may be carried on with comparatively moderate skill—this requires the hand of a master. Rightly conducted at home, in the school, by the church and the state, and the land would be freed from misery and crime, and the lost image of his Maker, after which he was created, would be restored to man.

The discipline of the conscience is the culmination, the fruition of all kinds of school discipline. Indeed, it is the ultimate end of the school itself and the school life. The boy who receives punishment in school must be made better by it, or the punishment is misapplied if not immoral. The mere suppression of the bad through fear should have as an end no place in school government. The teacher who studies to remove temptation to wrong-doing from the school-room, to win his pupils to right ways by nice management, to make the whole environment of the school as favorable as possible to the purpose of education, must keep in view as the crowning object of his work the awakening and strengthening of the conscience. So, too, the great lessons to be learned from a discipline of rewards and punishments, the discipline of consequences, is one that concerns the eternal principles of right and wrong. A reward in school as in nature should be the sign and seal and measure of right-doing, and in like manner a punishment should be the sign and seal and measure of wrong-doing. The effect of the whole should be to lift up to a higher plane of life. The centre and soul of the work of every properly conducted school is the discipline of conscience. This is the pole to which every needle should point—this the *El Dorado* towards which all efforts and all hopes should be directed. The teacher who knows how to touch and quicken the conscience of the young is a master of the educational art, for in this is involved all else in the line of his profession.

The teacher who would make conscience the guiding principle of school work must enthrone it as the sole arbiter and judge of all conduct. The straight line that runs between right and wrong must be clearly marked, and he who loses sight of it must be made to feel the rebuke that comes from a voice within his own bosom. As educators of the young, we err profoundly in not appealing more constantly, but always reverently, to that inner light which was given by God Himself to every human being wherewith to direct his life. We throw overboard our compass and expect to find our way. We break the rudder of our ship and vainly think we can continue our voyage in safety. We refuse to recognize God's finger-board in the soul or shut our eyes to its directions, and thereby become blind leaders of the blind. We have much to do with the intellects of the children committed to our charge; we rake some attempts to direct their feelings; but unable to touch the conscience with our unskillful methods, or wholly ignoring this deeply hidden but most important element of our nature, we are apt to leave them helpless to resist the temptations that beset their pathway, and fill

the world with men and women, learned it may be, but without that clear sense of duty which guards the soul from danger, and is necessary to make life truly successful.

That a child may be trained to love virtue and hate vice, no one acquainted with child-nature can doubt. This kind of training, indeed, is the great object of the school. The school is the agent the State uses to make good citizens. But all moral training is mechanical—mere shallow formalism—unless based upon or springing out of an enlightened conscience.

The discipline of conscience, conscience-culture, is the most difficult part of the teacher's art. To conduct the process wisely requires the most profound knowledge of human nature and the rarest skill in using it for the purpose. Where hundreds succeed in other departments of education, only one succeeds in this; for he it well understood, no clumsy hand can touch for good the conscience of a child. It draws back instinctively within itself at the approach of the ungentle, the unsympathetic, or the impure. Almost anybody may teach a child how to read, how to write, how to keep accounts; but it requires skill of a much higher order to train him morally in the way he should go; and such training is simply impossible to the rude, the selfish, or immoral. The conscience is the centre of the whole moral life, deeply seated, carefully guarded, highly sensitive, shrinking away at the touch of the profane, the very holy of holies of the soul; and none but a divinely anointed High Priest can enter within its precincts or minister at its altars. An appeal to the conscience of the child must be made through the conscience of the teacher. This is the only language which it understands, the only voice to which it will respond.

Moral precepts have some place in the discipline of the conscience, but only a subordinate one. They may not reach their mark. They may lie cold in the intellect without moving the feelings or taking deep root in the heart. It is even quite possible for a complete system of ethics, like a complete system of mathematics, to exist as a content of the understanding and the reason, and the conscience remain a Sahara, dry and fruitless. It is examples of virtuous conduct, living acts of right and wrong, that touch the conscience and quicken its life. Nothing stirs the moral nature of the young like the story of men who have upheld the truth, defended the weak, relieved misery and distress, led lives of integrity amid temptation, sacrificed themselves for their country or the common good, suffered death rather than dishonor, or become martyrs to the cause of truth. Let our children go with Florence Nightingale as she ministers to the sick and wounded soldiers; follow John Howard on his errands to dismal dungeons that he may bring a ray of light to the darkened souls of hardened criminals; listen to the brave words of Luther as he faces death before the Imperial Diet at Worms, "Here I stand, I cannot do otherwise, God help me;" or hear the Revolutionary patriot, Joseph Reed, spurn with indignation the proffered bribe—"Poor as I am, Great Britain has not money enough to buy me,"—and their hearts will begin to feel a thrill of moral heroism, and resolves will be made to act a manly, noble part in life. Biography and history may be so taught as to keep the hearts of the learners ever turned upward, and the story of the Man of Sorrows speaks as nothing else can to the conscience of the whole world.

The statement must now be made more emphatic that none but a conscientious teacher can administer in a school-room a discipline of conscience. As well might the dead undertake to arouse the dead. No pretense will answer, words will not deceive, hypocrisy will soon be detected; a teacher must love the right and hate the wrong, must have the courage to do right and avoid doing wrong, if he expects to make any progress in the moral training of children. No degree of scholarship, no skill in teaching, no tact in management, will suffice to so perfect the character of a child by quickening his sense of right and wrong, that it will permeate and control his life. For this the teacher needs intrinsic worth, pure as gold. There is a shallow morality, a morality of custom, a morality of form, that may come from a source less pure; but this is not the morality of which we speak, a morality that does right because it is right, because it is in accordance with God's will and Word and the voice He has implanted in our souls.

The teacher's example, his daily walk and conversation, has a powerful influence upon the young of whom he has the care. We all grow like our ideals. The ideal of a child is the teacher he loves. On his soul is stamped the teacher's image, and the impression deepens day by day. Silently, unconsciously to either party, the teacher's life settles down upon the child's life and moulds it in its own likeness. Without a spoken word, the exam-



ple of the true teacher is a continuous sermon sinking into the young hearts about him and working marvelous results in forming character and shaping life. The great teachers of the world have not been its famous scholars, but those who by example, by word and deed, were able to influence for good the young of whom they had charge—those at whose magic touch all that is best in human nature is evolved and made ready to serve mankind and to honor God. What rare men were Socrates, Comenius, Pestalozzi, Fröbel! Dr. Arnold has done far more for England than Wellington; France could better afford to blot out the history of Napoleon than to lose sight of the work of Fenelon; Germany owes its greatness more to Stain and his schools than Bismark and his wars and intrigues; and here at home Horace Mann, the school master, has left an influence that will long outlast that of Daniel Webster, the statesman.

No excuse need be offered for dwelling at this length upon the character and results of the discipline of conscience as applied in the school-room. The times demand better moral training. Our schools have improved in order and in methods of teaching; but it is a question whether the great art of forming character in school has advanced to-day much beyond the point attained in years long by-gone. Is there not danger that in working of our huge school systems and our vast school machinery, we are overlooking that individual training which alone can develop the moral nature? Grades and classes may be advantageous for intellectual instruction, but do they not crush the heart with forms rather than quicken it with life? Is not the individuality of the conscience so marked, its structure so delicate, that its tender chords can be struck only by the fingers of love in the quiet communion of teacher and pupil? But whatever the cause of the neglect, the times demand more effective moral training in our schools.

Conscience is sadly wanting in these days in the markets of trade, in store and shop and office. Too few of our mechanics when left to themselves do an honest job for a fair price. Elements of shoddy are apt to be found in the clothes we wear, the houses we build, the furniture we use to make ourselves comfortable. The salesmen in our mercantile establishments are sometimes tempted and sometimes instructed to misrepresent the goods they handle. Sugars, teas, coffees, spices, are seldom exactly what one pays for. Wines and drugs are systematically adulterated, and deception grows rich by the manufacture and sale of spurious jewelry and articles made of counterfeit gold and silver. The man who is your professing Christian brother and worships with you at church on Sunday, on Monday morning will cheat you in his store, shop or office, without the twinge of a conscience that has grown callous under what he deems the necessities of business. Neighbors try to outwit one another in buying and selling, and sharp practice in making a bargain has come to be reckoned a merit, if not a virtue. Even the Church seems to forget that Sunday morality will not answer for all the week, and that no one can be a true Christian who is not honest at all times, in every thought, and word and deed.

Then how common has become the disregard of public trusts. Every day we hear of frauds, embezzlements, and defalcations. Saving funds are robbed by their officers, banks are defrauded by their cashiers and presidents, even the money of widows and orphans is embezzled by those into whose hands trusting friends have placed it for safe keeping. Every penitentiary in the land contains numerous swindlers and defaulters, and if all who have escaped to Canada were brought back the penitentiaries would hardly hold them. The failure of a firm like that of Grant and Ward, in New York, reveals a degree of iniquity that is hardly human—almost devilish. What a consummate villain a man must be to sit down and coolly plan the robbery of trusting friends! Corporations, big and little, all over the land, set traps to entice the money of the unwary, and when obtained, use it to fill the pockets of the few who have planned them for that purpose. If the inside history of the frauds practiced in constructing some of our railroads, the water issued as stock, the unearned dividends declared for purposes of deception, the modes by which the management and their favorites grow rich while those who have in good faith invested their money in what they deemed an honest enterprise see it dissolve in worthless stocks or dishonored bonds, it would be enough to make one conclude that honor and honesty had departed from among men.

But nowhere do deception, falsehood, and fraud flourish so luxuriantly as in the domain of politics. Men who in the ordinary affairs of life scorn to do a wrong, will in a political campaign lie and cheat and defraud. The excuse is that the opposite party will do it, and they must be fought with their own weapons. That must be a dull conscience that finds a reason for wrong-doing in the

wrong-doing of another. Is a lie any less wicked on election day than at any other time? Is fraud made right because it secures the election of a political friend, or the triumph of the party to which we belong? It is lamentable to what extent our elections have become a matter of money. At every general election votes are bought by tens of thousands. Not long since one of the shrewdest politicians in this country, a man who had served as chairman of the central committee of his party in one of the great States of the American Union, told me that on an average there are ten votes in every election district throughout the country that can be bought for less than three dollars apiece. This awful fact would seem to indicate that our whole system of government is rotting in the core. And yet these corruptible voters have attended our Public Schools, have for the most part learned to read, write, and keep accounts in them; but how terribly neglected has been their moral nature, leaving dead in their bosoms all love of country, all sense of honor, all the high obligations that grow out of a quickened conscience!

Thank God, there is a brighter side to the picture I have drawn. The dark side has been shown for the purpose of calling attention to the time to the great necessity of better moral education for the youth of the nation. The Republic is not yet lost. Free institutions have not yet been overthrown. The diseases that afflict our social and political condition have not yet reached the vital parts of the body politic. There is still hope for the suffering patient, and my mission here is to press you most earnestly to make the discipline of your schools a discipline of conscience, in order that the rising generation may be so trained that they will become upright citizens and honest men. Remember that the chief function of the American Public School is not to make scholars, but to send forth men and women who will be useful to society, and in whose hands the free institutions established by our fathers may be forever safe. Where all vote, where all participate in the affairs of the government, where every hand is on the helm of the ship of State, universal education becomes imperative, with conscience as a central principle and a guiding light.

That accomplished Englishman, Archdeacon Farrar, in his "Farewell Thoughts to Americans," spoken in Philadelphia a few months ago, said: "America is God's destined heritage, not for tyranny, not for privilege, not for aristocracy, but for the schoolmaster." And I add, not for the schoolmaster as an accomplished scholar or as a skilful instructor, but as a man full-grown morally as well as intellectually, a man whose life is a concrete Gospel, a living system of ethics, whose eye can reach deep down into the hearts of the young committed to his care; and if he should find, as he will, at least a spark of good in the most unpromising child in them, whose skill can fan it to a flame, and who can so teach that the conscience will come to be recognized as God's highest and best gift to the children of men, and that to deaden it or to violate its dictates is to commit eternal suicide.

## Examination Papers.

### DRAWING PAPERS.

BY W. BURNS, B.A.,

South Kensington Certificated Art Teacher.

The questions given will be arranged thus: 33 and 34 Freehand Pencil; 35 and 36, Model—these can also be done by the student in Crayon, on coarse paper, to a larger scale; 37 and 38, Geometrical Drawing; 39 and 40, Perspective. In every case it is requested that the whole working be shown, and the answers lined in more heavily. As the object more especially to be attained is to prepare students for examination work, the papers should be worked as would be done at an examination, except in the matter of using books of reference. The answers are to be promptly sent to Mr. William Burns, Box 326, Brampton, and if the fee for examination of the answers for the course of ten papers (\$1.00) is enclosed, the papers will be mailed, when corrected and noted, to the student's own address, which should be annexed to each set of answers.

33. Describe a square of 3 in. wide. Draw its two diameters, and draw parallel lines  $\frac{1}{2}$  in. on each side of these lines. Describe two concentric circles within the square, with radii of 1 in. and  $\frac{3}{4}$  in. Strengthen the picture so as to show the whole of the concentric circle.

34. Give patterns of ivy and maple leaves conventionalized—extreme length, 3 in.
35. Give model of book-shelves, with four shelves, standing to right of the spectator and below the line of sight.
36. Give view of ordinary egg-cup, containing egg. Height, 2½ in.
37. Given two circles of 1 diameter, whose centres are 1½ in. apart. Draw another circle of ½ in. radius to touch them externally, and another of 2 in. radius to include one and exclude the other.
38. Given an ellipse whose axes are about 3 in. and 1 in.; show how to find these axes by a geometrical construction.
39. Give perspective view of a cylinder whose height is 3 in. and diameter of base 2 in., and its position 2 in. to right and 1 in. within the picture plane.
40. Give, at angle of 45°, perspective view of a plinth, 4 in. square base and 1 in. high, with a cubical block standing upon it of 2 in. side and parallel to the sides of the plinth; 2 in. to left. Height of eye, 4 in. Distance of spectator, 10 in.

(To be Continued).

EDUCATION DEPARTMENT, ONTARIO.—MID-SUMMER EXAMINATIONS, 1886.

THIRD CLASS TEACHERS.  
FRENCH GRAMMAR.

Examiner—J. E. HODGSON, M.A.

1. (a) State the rules for the formation of the feminine of adjectives ending in :—*e* (mate), *x*, *eil*, *eur* (from pres. part.). (Value 2).  
(b) Give the feminine singular of :—*gouverneur, discret, supérieur, caduc, las, traître*. (Value 3).
2. Mention three peculiarities in the French use of numerals. (Value 3).
3. Give the feminine, singular and plural, of the French possessive pronouns. (Value 4).
4. Write a note on, and illustrate the use of :—*dont, où, lequel, cela*. (Value 4).
5. (a) Name the primitive tenses. Why are they so called? (Value 3).  
(b) How are the following tenses formed.—*fut. abs., imperf. indic., imperf. subj.*? (Value 3).
6. Write the third pers. sing. of the pret. def. indic., and of the pres. subj. of :—*revenir, reprendre, se lever, voir, s'ouvrir, vouloir, sentir, faire, bâtir, apercevoir*. (Value 10).
7. Translate into French :—  
(a) That victory procured him the staff of a marshal of France. (Value 3).  
(b) The cannon beat down the walls of the fortress. (Value 3).  
(c) She believes only what she sees, and that is little. (Value 3).  
(d) Napoleon was born in Corsica on the 16th of August, 1769. (Value 3).  
(e) Take the first street to the right and walk to my house, which is a large white one. (Value 3).  
(f) We never rise before seven o'clock in winter. (Value 3).  
(g) Those arguments are conclusive: I see no reply to them. (Value 3).  
(h) He who chooses badly for himself, chooses badly for others. (Value 3).  
(i) Alexander lost some three hundred men when he defeated Porus. (Value 3).  
(j) It is the same sun that gives light to all the nations of the earth. (Value 3).
8. Translate into French :—  
One evening he halted (*s'arrêter*) at a hermitage to ask for hospitality. The hermit welcomed him and shared with him his frugal meal. The wit and character of the young man pleased him. This meeting was the most fortunate thing that could have happened the young orphan. The good hermit took pleasure in teaching his pupil how to read, and the latter made such rapid progress that he was soon as learned as his master; that is to say that he could read fairly and write a little coarse-hand (*en gros*). (Value 38).

WRITING.

Examiner—J. DEARNESS.

Value 40 marks—10 for each number.

1. Copy : When the teacher looks at Writing from these points of view (the mental faculties exercised and the incidental effect on the formation of intellectual character), he sees that it may be a training in accuracy of eye, steadiness and flexibility of hand in obedience and in cleanliness, and that every time a scholar receives a writing lesson his habits are either improved or deteriorated in these respects.—*J. G. Fitch*.
2. Copy the following table; draw the lines freehand :

PROVINCE.	CAPITAL.	POP. OF PROVINCE.
British Columbia.....	Victoria.....	Whites.... 23,798
Manitoba.....	Winnipeg.....	".... 65,954
Ontario.....	Toronto.....	".... 1,923,228
Quebec.....	Quebec.....	".... 1,393,027
New Brunswick.....	Fredericton.....	".... 821,233
Nova Scotia.....	Halifax.....	".... 440,572
Prince Edward Island..	Charlottetown...	".... 108,891
Northwest Territories..	Regina.....	".... 6,000
		Indians.. 50,000

3. No. 79. PARKHILL, Ont., 2nd July, 1886.

Exchange for £59 10s. 0d.

Three days after sight of this First of Exchange (second and third of same tenor and date unpaid) pay to the order of Messrs. Glynn & Co., Fifty-nine pounds ten shillings sterling, value received, and charge the same to the account of

ARBUCKLE BROTHERS.

MESSRS. WYLD, MILLICHAAMP & WYLD,  
Edinburgh, Scotland.

4. Write : *see, oesum, itdl, uxyz, ffgkfy*, and the capitals from A to H inclusive; join the small letters in each group.

BOOK-KEEPING AND COMMERCIAL TRANSACTIONS.

Examiner—CORNELIUS DONOVAN, M.A.

1. What are the advantages of Double Entry compared with Single Entry? How would you change Single Entry into Double Entry Books? (Value 10).

2. TRIAL BALANCE.

	Dr.	Cr.
Stock.....	\$ 881'00	\$ 5000'00
Bills receivable.....	1500'00	1000'00
Cash.....	5794'67	4800'00
Merchandise (Amt. unsold, \$1200).....	3500'00	2759'50
Bills payable.....	1500'00	1750'00
John Mason.....	300'00	175'00
Peter Smith.....	4000'00	1500'00
Robert Pendergast.....		384'00
Charles Ryan.....		483'00
Expense.....	375'83	
	\$17851'50	\$17851'50

(a) Make out (from the foregoing) a statement of Losses and Gains.

(b) Make out (from the foregoing) a statement of Resources and Liabilities.

(c) Explain the terms: Stock, Bills Receivable, Expense. (Value 25).

3. Journalize :

(a) Bought a quantity of Broadcloth in company with John Smith, \$250; paid cash for my half, \$125.

(b) Commenced business with Cash, \$1000; Notes against sundry persons, \$500.

(c) Thomas Jones has made a draft on me at 30 days, which I have accepted, for \$140. (Value 20).

4. Post the entries in No. 3. (Value 20).

5. What is a Bill of Exchange? What are its chief legal requisites? (Value 10).

6. Name and describe the books that are admitted as evidence in Courts of Justice, and state the facts that must be proved to entitle a person's books to be received in evidence. (Value 15).



## BOTANY.

Examiner—J. C. GLASHAN.

1. From what does the root of an exogenous plant originate? What are the chief functions of roots? How may roots be distinguished from underground stems? (Value 12).

2. From what do stems originate? Compare, in appearance, transverse sections of the stem of an elm and of a stalk of maize? How do these stems differ in their modes of growth? (Value 12).

3. What are the functions of foliage-leaves? Describe briefly the general structure and appearance of the leaf of (a) the Sugar Maple (*Acer saccharinum*); (b) the Indian Turnip (*Ariseum triphyllum*). (Value 12)

4. Name the parts of a complete flower and briefly describe the chief modifications due to cohesion, adhesion, and suppression of parts. (Name illustrative examples of each modification you describe). (Value 20).

5. Contrast a strawberry, a raspberry, and an apple, and compare a gooseberry, a lemon, and a melon. (Value 24).

6. What are the general characters of the Cruciferae, the Leguminosae, the Liliaceae and the Gramineae? (Value 20)

## Practical.

## HINTS IN ORTHOEPY.

Why—hwī, not wī.

Communist—com mu-nist.

Communism—com mu-nism.

Cayenne—kī-en', not ki-an'.

Gallows—gal'lus, not gal'loz.

Bouquet—boo-ka', not bō-ka'.

Etiquette—et-e-ke't', not et'e-ke't.

Benzine—ben'zine, not ben-zené.

Finance—fi nance', not ff'inance.

Museum—mu-ze'um, not mu'ze-um.

Bitumen—bi-tu'men, not bit'u-men.

Desperado—des-pe-rá'do, not ra'do.

Apparatus—ap-pa-rá'tus, not ra'tus.

Acoustics—a-ko-w'stics, not koo'stics.

Matutinal—mat'u-ti-nal, not tu'ti-nal.

Acclimate—ac-clí'mate, not ac'cli-mate.

Gla tiolus—gla-dí'o-lus, not gla-di-ō'lus.

Coadjutor—co-ad-ju'tor, not co-ad'ju-tor.

Condolence—con-do'lence, not con'do-lence.

Aspirant—as-pí'r'ant rather than as'pir-ant.

Address (noun and verb)—ad-dress', not ad'dress.

Had as lief, had better, had best, had like, had as good, and had rather, are sometimes criticised, but they are idioms which have been in use from early times, and are abundantly supported by the best authorities. *Would as lief* and *would rather* are also used by good writers.—*Exchange*.

## THE ATTRIBUTE IN GRAMMAR.

From the Educational News.

The construction in grammar called by modern grammarians the *attribute construction*, or the *attribute complement*, or the *predicate adjective*, *predicate noun*, etc., is one that often puzzles the brain of the teacher as well as that of the student. The attribute is defined as that word, phrase, or clause which completes the predicate and refers to the subject.

The predicate of a sentence may be a verb, as the "Corn grows," which is called a complete predicate; or it may be an incomplete predicate when it requires a noun, a pronoun, an adjective, or a participle to complete its meaning, as "Corn is yellow;" here the predicate is composed of the two parts, the *copula* and the *attribute*; the neuter verb *is* unites the two ideas *corn* and *yellow*, and the word *yellow* expresses the quality which is attributed to the corn; hence we say the predicate of the sentence is *is yellow*, of which *is* is the copula, and *yellow* the attribute; and in the analysis the two words must occupy the place of the complete predicate. In parsing, the copula is made to agree in number and person with the subject, and the attribute *yellow* is parsed as a common descriptive adjective relating to the subject *corn*.

Neuter verbs, intransitive verbs, and verbs in the passive voice, are used as copulas; as,

(1) The boy was attentive at church.

(2) The boy became a man.

(3) The boy was made president.

The following are examples of

## ADJECTIVES USED AS ATTRIBUTES.

(a) The teacher felt *bad* because the class was not promoted.

(b) The moon looks *calm* and *beautiful* to-night.

(c) He feels *bitter* towards his opponent.

(d) The hunter arrived *safe*.

(e) The child lay *quiet* upon the floor.

(f) Stand *firm* in your opinion.

(g) The fruit tastes *sweet*.

The same words used adverbially.

(a) The boy behaved *badly* in the class-room.

(b) The moon looks down *calmly* upon the battle-field.

(c) She wept *bitterly* at the disappointment.

(d) The invalid arrived *safely*.

(e) The burglar entered the house *quietly*.

(f) Stand *firmly* upon both feet.

(g) The canary sang *sweetly*.

In (a 1) *bad* is adjective of condition; that is, it expresses the mental condition of the teacher.

In (a 2) *badly* is adverbial of manner.

In (b 1) *looks* is used in the sense of *appears*. The moon *appears*, or *is*, calm and beautiful.

In (b 2), by the figure of Personification, the moon *looks* down calmly upon the battle-field, and *calmly* is adverbial of *looks*.

In (c 1) *bitter* is an adjective, and expresses the condition of his mind towards his opponent.

In (c 2) *bitterly* is an adverb of manner.

In (d 1) *safe* is an adjective, and has reference to the bodily condition of the hunter upon arrival.

In (d 2) *safely* is adverbial of the manner of conveyance. The invalid may have been in a very critical condition, and yet the manner of conveying him may have been perfectly safe and comfortable.

In (e 1) the child *was quiet*.

In (e 2) *quietly* is an adverb of manner.

In (f 1) the meaning is, Be *firm* or unchangeable in your opinion.

In (f 2) *firmly* has reference to rigidity of muscle.

In (g 1) the fruit *is sweet*.

In (g 2) *sweetly* is an adverb of manner.

It will be noticed that whenever you wish to express *quality* or *condition* the adjective must be employed, and the principle laid down on page 101 of Raub's Practical Grammar.

When ever you can substitute any form of the verbs *to be* or *to become* for the verb in the sentence, the word following it is an adjective, covers every construction of the kind. It is perhaps as easy to remember that *with verbs signifying action or motion the adverb is required, and with verbs signifying mere being or state the adjective is employed*.

The following illustrates the use of the different parts of speech as attributes:

## NOUNS USED AS ATTRIBUTES.

1. He returned a *friend* who came a *foe*.
2. He turned out a *worthless man*.
3. Garfield died a *martyr*.
4. The burglar fell back a *corpse*.
5. The eye is the *window* of the soul.

## PRONOUNS USED AS ATTRIBUTES.

1. This is *he* of whom we spoke.
2. The book is *his* who bought it.
3. It is not *he* who you thought it was.
4. I am sure it could not have been *they*.
5. Let him be *who* he may.

## PARTICIPLES USED AS ATTRIBUTES.

1. The city lies *sleeping*.
2. The boys came *running*.
3. He went *singing* through the hall.
4. The kite was seen *flying* over the houses.
5. He kept *praying* aloud.

## PREPOSITIONAL PHRASES USED AS ATTRIBUTES.

1. We have been *in the habit* of sending books.
2. His friend is *in bad health*.
3. Shall I be *in time*?
4. We know that he is *in the right*.
5. If you are *about to go*, take with you peace and joy.

## INFINITIVE PHRASES USED AS ATTRIBUTES.

1. Our greatest ambition is to succeed in our efforts.
2. He seems to be grateful.
3. She is to go at a moment's notice.
4. The work is to be done at once.
5. To be great is to be good.

## CLAUSES USED AS ATTRIBUTES.

1. The greatest folly of the student is that he attempts to accomplish too much in a short time.
2. This is where they met before.
3. Hamlet's exclamation was, "What a piece of work is man!"
4. The latest theory is that the earth is a sphere.
5. The rebellious boy's defiant remark, "I won't submit to your discipline."

NOTE.—The prepositional attribute phrase construction is one of the most difficult, perhaps, for the student, but in teaching it the teacher should use adverbial constructions at the same time, so that the pupil may see the difference for himself; as,

He is in the room tells where he is, and is adverbial of place.

He is in good health tells the condition he is in, and stands for the adjective healthy.

When it is difficult to decide whether a prepositional phrase is adjective or adverbial, the teacher may require the pupils to substitute a word for the phrase which will convey the same meaning, and if a correct word be substituted, it will generally decide the question in the mind of the pupil. For instance, in the sentence "He was in doubt about the solution," by substituting *doubtful*, which is an adjective, the meaning becomes clear, and the prepositional phrase is disposed of, just as the word *doubtful* would be if it were put in its place.

H. F. S.

## TEACH PUPILS TO OBSERVE.

Young pupils may be trained to observe carefully the common things around them by having such problems as the following given them from time to time, with the regular arithmetic work. But one problem should be given at a time, and that at the season of the year when the animal may be secured and examined by the pupils. The teacher should do no "telling," but encourage pupils to examine for themselves:

1. How many wings have three bees?
2. How many wings have five flies?
3. How many wings have four butterflies?
4. How many wings have seven mosquitoes?
5. How many wings have two potato-bugs?
6. How many legs have six flies?
7. How many legs have three spiders?
8. How many legs have five bumble-bees?
9. How many legs have two craw-fishes?
10. How many legs have three turtles?
11. How many legs have four fleas?
12. How many legs have seven tomato-worms?
13. How many toes have three boys?
14. How many toes have two hogs?
15. How many toes have nine horses?
16. How many toes have six hens?
17. How many toes have three dogs?
18. How many toes have five cats?
19. How many fingers have four girls?
20. How many ribs have two men?

I have used similar problems in different communities, and have ascertained that even old people, who have been surrounded by these animals all their lives, do not know how many wings a bee or a fly has, or how many legs a butterfly or a spider has. Most people do not know whether *thumbs* are fingers or not. (Direct them to the dictionary).

C. M. PARKER.

## GRADING COUNTRY SCHOOLS.

How should a country school be graded? JAMES R.

By a country school we suppose is meant the ordinary district school, consisting of but one room and employing but one teacher.

It was formerly, and may be still in some places, like resolving order out of chaos to attempt such a thing as grading a country school. The smartest boy had ciphered through his arithmetic, another had gone half through, another had skipped around and done

what he could, one took up book-keeping, another wanted algebra, and so on. But the experiment need but be tried to show that very successful results may be attained in grading. It will be necessary to have about five grades in a so-called ungraded school; the A grade, comprising the 5th reader, A arithmetic, A geography, A grammar, and such other studies as the teacher may see fit to introduce; the B grade, comprising the 4th reader, B arithmetic, B geography, and B grammar; the C grade, comprising 2nd and 3rd readers, C arithmetic, C geography, and language work, and so on down to the chart class. There will be crossing of grades to be sure, a great deal at first, but by patient, persistent work, almost every child can become identified as belonging to some grade, and it will be his joy and pride to keep up with that grade, to take up any studies that the others may, and to pass out with them at the close of the year.—*N. Y. School Journal*.

## Educational Notes and News.

Petrolca has built a new ward school on Eureka street. It cost \$2,500.

A fine new school building has been built in S. S. No. 16, Woodhouse, Norfolk.

Mr. A. Bridge has resigned his position as head teacher in the Delhi Public School.

Mr. H. Forester has been re-engaged as principal of the Springfield schools for 1887.

The Pembroke Public School has been closed owing to the prevalence of diphtheria.

All the teachers in the Central School, Goderich, have been re-engaged at their present salaries.

John Paton, who is teaching in Campbellton this year, has been engaged for the Largie school for 1887.

McLean & Wilson, architects, have prepared plans for a new \$2,000 schoolhouse, to be erected at Pain Court.

Mr. D. Bentley has been re-engaged as teacher, for 1887, at the Birnam School, Warwick, at an increased salary.

Mr. E. W. Bigg has been re-engaged as principal of the Parkhill High School at the same salary as before, \$850.

G. B. Watson, B.A., Ph.D., has been appointed Modern Language Master in the Woodstock High School.

Mr. Colin Johnston has been engaged to teach for another year in S. S. No. 5, Ekfrid. Salary same as last year.

The present teachers of Napier School, Mr. W. H. Shrapnell and Miss E. Lightfoot, have been re-engaged for 1887.

The trustees of School Section No. 4, Adelaide, have engaged Mr. Roberts, of East Williams, as teacher for the ensuing year.

The Public School trustees have re-engaged F. M. Hicks as principal of Wycombe School for 1887, at an increased salary.

Misses Ruth Dibb, Selena McWhorter, and Jennie Sinclair, have been added to the staff of Public School teachers at Petrolca.

Mr. J. F. Kennedy, principal of the Dundas schools, handed in his resignation as teacher and principal at the last meeting of the Board.

A. Nugent, B.A., ex-Mathematical Master of Woodstock H. S., is one of the managers of the International Commercial College in Ottawa.

Mr. Gilbert has been re-engaged as principal of the Parkhill Public School, with Miss Cluness, Miss McLeod, and Miss Shoults as assistants.

Miss Sutherland, formerly of Horning's Mills, has been engaged in the Shelburne Public School in the place of Miss Wright, who has resigned.

Mr. Joseph Martin, teacher, who has been seriously ill at his home in Aylmer for several weeks, has recovered and again taken charge of his school in Bayham.

Mr. J. G. Carruthers, principal of the DeCewsville Public School, has been appointed headmaster of the Cayuga Public School, in the place of Mr. J. A. Morphy, recently appointed jailer for Haldimand County.

The *Plaindealer* is advocating the establishment of a Model School at Ridgetown. Well, if Ridgetown will undertake the task, Chatham School Board and the Chatham teaching staff will gladly

give way to them. There is neither profit nor pleasure connected with its establishment here.—*Chatham Planet*.

Mr. J. E. Wetherell, M.A., principal of Strathroy Collegiate Institute, has had his salary increased to \$1,500 per annum, in consideration of his new duties in connection with the Training Institute.

The trustees of Plattsville Public School, county of Oxford, have engaged Mr. John Robinson and Miss Maggie Cole for another year. Miss Minnie Brown, teacher in the junior department, has sent in her resignation.

Mr. J. F. Kennedy, Public School headmaster at Dundas, has purchased the *Dufferin Advertiser*, Orangeville, an 8-page weekly published in the interests of the Reformers of Dufferin County and the Scott Act.

The Public School building in Oil Springs was totally destroyed by fire on Thursday last. It was a two-storey frame structure and burned like paper. It was no doubt the work of an incendiary.—*St. Thomas Times*.

Mr. Angus Martyn, who has been principal of Bath Public School for four years, has resigned that position to become assistant teacher in Newburgh High School. Mr. Martyn filled the same position during the years 1881-2.

Miss Alexander, one of the Public School teachers, Tilsonburg, has resigned her position, and will give up teaching at the end of the year. Miss C. Thompson, who is now teaching at Delmer, has been engaged to take Miss Alexander's place.

Petrolia School Board has decided to increase, after January 1st, the salaries of Third Class teachers from \$240 to \$250, and will reduce the salaries of teachers holding Second Class Normal School Professional Certificates from \$340 to \$272.

In 1880, there were in the United States, in round numbers, 10,000,000 voters. Of this number 2,000,000, or  $\frac{1}{5}$  of the whole number, were illiterate. One in every group of five could not write his name; one in every six could not read his ballot.

Kansas school-teacher: "Where does all our grain go to?"

"Into the hopper."

"What hopper?"

"Grasshopper," triumphantly shouted a scholar.

The Minister of Education has promised to raise the Woodstock High School to the rank of a Collegiate Institute if, upon inspection by himself or deputy, it is found to meet all the requirements of the law, the change to date from the September opening this year.

The number of teaching days in the second half-year is 94, not 95, as stated in a distributed circular. The discrepancy in the latter arises from counting 22 teaching days in November, thereby not excluding Thanksgiving Day, which is a legal school holiday.

The teachers of Perth met in convention on Thursday and Friday last in St. Mary's, and the meetings were a great success as well from the number of teachers present as also from the exceedingly large number of town people who attended the different sessions.—*St. Thomas Times*.

The degree of Bachelor of Music was conferred on Rev. W. Roberts, Miss H. E. Gregory, and Miss E. S. Melish, at Trinity College, Toronto, at the recent convocation. This is the first occasion on which a degree of music has been conferred by a Canadian university.

We can teach, in the common schools some elements of botany, zoölogy, mineralogy, physics, and chemistry, not only without detracting from the thoroughness of the work done in teaching the ordinary branches, but with manifest advantage to that work.—*Prof. W. E. Wilson*.

A small boy surprised his teacher at one of the grammar schools, yesterday, by asking her how far a procession of the Presidents of the United States would reach, if they were placed in a row. On her expressing her ignorance, he calmly announced: "From Washington to Cleveland." *Springfield Republican*.

A scholar in a country school was asked: "How do you parse 'Mary milked the cow?'" The last noun was disposed of as follows: "Cow, a noun, feminine gender, third person, and stands for Mary." "Stands for Mary! How do you make that out?" "Because," added the intelligent pupil, "if the cow didn't stand for Mary, how could she milk her?"

Friday afternoon the school teachers in town, with few exceptions, attended the second of the series of monthly meetings in the Central

School building, Mr. Smith occupying the chair. The time was devoted to a discussion of the best methods of teaching. Such meetings should not fail to be of great benefit, not only to the teachers, but also to the educational interests of the town.—*Peterborough Examiner*.

Mr. M. S. Clark, M.A., of Strathroy Collegiate Institute, has been appointed principal of the Georgetown High School, and Mr. E. Longman, of the Madoc Model School, assistant. The appointments are, there is every reason to believe, excellent. From a long personal acquaintance with Mr. Clark, including several years of association in teaching, as well as from a knowledge of the very superior educational advantages he has enjoyed and faithfully used, we predict for him a highly successful career.

The following resolutions, amongst others, were adopted at a recent meeting of the Sarnia Board of Education. They have the right ring:

1. That the High School teachers be all engaged at their present salaries, with the exception of Mr. Evans, and that an addition of \$50 be made to his salary, making it \$850.

2. That all the Model and Public School teachers who are in a position to re-engage, be engaged at their present salaries, with the exception of Miss Patterson, Miss Brebner, and Miss Sitlington, and that \$25 be added to each of their salaries, as a recognition of special attainments and success.

Bayham Teachers' Association met in the High School on Oct. 29th. Among those present were Inspector Atkin, W. W. Rutherford, of Aylmer High School, C. Sheldon and W. M. Parke, of Houghton. An interesting and instructive programme occupied the attention of the teachers during the day. The High School entertainment took place in the evening. Owing to the state of the weather the audience was not very large, but it was highly appreciated. The programme was well carried out. While all did well, it will not be amiss to mention the brilliant performances of Miss Reilly, of Port Burwell, whose skill in manipulating the keys of a piano is something phenomenal. Miss F. C. Young and Miss Selena Taylor were presented with their diplomas on the same evening by Inspector Atkin, who briefly addressed the audience and congratulated the people of Vienna on the success and present efficiency of the High School under its present staff of teachers.—*Southern Counties Journal*.

The Rev. Joseph Cook, who has recently been lecturing in Toronto, is responsible for the following song of science:

Trilobite, Graptobite  
Nautilus pie,  
Seas were calcareous,  
Oceans were dry,  
Eocene, Miocene,  
Pliocene, tuff,  
Lias and trias,  
And that is enough.

O, sing a song of phosphates,  
Fibrine in a line,  
Four and twenty follicles  
In the van of time,  
When the phosphorescence  
Evolved brain,  
Superstition ended,  
Man began to reign.

The Public School teachers of Wentworth opened their semi-annual meeting in Hamilton a week or two since. Among those present were: Mr. J. A. Ballard (President), Inspector Smith, Mr. J. F. Kennedy (Secretary), Messrs. M. Sharp, A. J. Hewson, E. B. Howard, R. W. Vollock et al. The afternoon session was devoted to the reading of papers. A. Kneeswater presenting one on Entrance Arithmetic; F. Lee one on the Tomc Sol-fa System of Music; W. Campbell one on History, and J. Young one on Moral Culture. Saturday morning's session was opened with a paper on Primary Arithmetic by Mr. S. B. Sinclair, of Hamilton. Miss Jessie Robertson read an excellent paper on Canada at the Indian and Colonial Exhibition, in which she gave a fine description of the Canadian exhibit. The following officers were elected: President, Mr. D. Bell; Vice-president, Mr. R. G. Marshall; Secretary, Mr. W. N. Stevenson; Treasurer, Mr. J. F. Ballard. Mr. J. H. Smith gave a valuable address on the overcrowding of our schools. He strongly advocated the establishing of schools during the winter months to be devoted to the study of agriculture and subjects pertaining thereto.

At a recent meeting of the Senate of Toronto University, Mr. Houston gave notice that he would move at next meeting of session that English texts by authors prior to Chaucer, including selections

from the Anglo-Saxon, should form part of the honor class in the third and fourth years, also that a graduating department be created which shall include Latin and the Romance languages, with such additional subjects as will make it a fair equivalent for the present graduating departments of classics and modern languages respectively. The following motion by Mr. Houston was lost:—"Resolved, That whosoever English is prescribed as part of the pass course in arts, it shall include the critical reading of prose texts for rhetorical purposes." On motion of Dr. Oldright, seconded by President Wilson, a statute received its final reading which provides that undergraduates pursuing an honor course who had failed in pass subjects, but have obtained honors, may be permitted to present themselves in September in those subjects in which they have failed, and, on passing in such subjects, be allowed to proceed in honors in the following year; provided, that no such undergraduate shall be classed in honors in the year in which he shall have so failed.

The annual conversazione of the Canadian Institute was held in the Institute building in Toronto a week or two since, and proved a very pleasant and successful affair. The rooms were brilliantly lighted, and objects of interest to naturalists were displayed on every hand. The lecture-room was devoted to specimens in natural history, living and dead, the reptiles being among the most admired, and the birds and mammals gaining the next share of approval and admiration. The reading-room contained the microscopes, with an unusually large and interesting collection of settings. The Institute hall contained a collection of Esquimaux skins brought from Ungava Bay. Among the most interesting curiosities exhibited this year was a French cannon 200 years old, brought from Hudson Bay by Lieut. Gordon. In the course of an interesting address, the President, Prof. W. H. Vandersmissen, reviewed the history of the Institute and showed the practical benefits which it had conferred upon the country in being more or less instrumental in bringing about the progress in scientific spirit which had found an outcome in the establishment of the observatory in Queen's Park, the signal service, and other scientific institutions, of which the public are every day reaping the advantages. The Institute, he pointed out, was an instrument by which the governmental and civic authorities were continually prompted to preserve the historical and scientific features of the country. There was now being prepared an Act to make all prehistoric monuments, such as the mounds on Rainy River, public property, and to make it a misdemeanor to dig in or disturb them.

The Syracuse School Bulletin gives an interesting account of the success of Warden Brush's efforts to establish an evening school for the prisoners in Sing Sing. He started the school in January, 1884, with Chase, of Brooklyn, for teacher, who was serving a term for bigamy. The Warden can now boast that no one is now discharged from the prison who cannot read, write, and cost up ordinary accounts. The *World* says that, aside from the benefits the convicts derive, the school has been of incalculable benefit to the prison officials. The restless spirits have been given something to occupy their minds. There is less loud talk than formerly, and disturbances of all descriptions are infrequent. The worst class to deal with in an institution of that kind are the ignorant men who have nothing to do to amuse themselves and distract everybody else in all manner of ways. Once having started on their lessons, they all take to them eagerly. Where the incentive to learn is lacking, they regard it as a means of killing time. But it has been noticeable from the beginning that, no matter how depraved a convict might be, there comes to all the ambition to learn. No doubt this is fostered by the practice of having 30 or 40 together, including a fellow-convict somewhat advanced. This produces a spirit of rivalry, as no one, even among people of that class, cares to be thought too stupid to learn, or is content to be eclipsed by his companions. A *World* reporter visited the prison a few days ago. There he saw 32 as desperate-looking convicts as could probably have been picked from among the 1,513 who are in the prison. They were seated on rough benches at one end of the platform in the chapel and were poring over their books studiously. They were not all of the same grade. One was just learning to read words of three letters after being connected with the class seven days, others were able to do a little better in first-reader lessons, while the remainder were divided into four sections for the second, third, fourth, and intermediate readers. An Italian who knew nothing but evil and crime when he was sent to Sing-Sing last September, and could only speak his native language, but not read it, read quite as well as his mates in the Third Reader, and spoke English fluently with only a slight accent. In the book of every scholar is a pen-

manship copy, and they practice this with pencil and slate in their cells and bring their work into the class for inspection. Besides this, there are blackboard exercises in both penmanship and arithmetic. It speaks well for the discipline of the prison that the management dare trust 32 of their worst criminals in a remote part of the prison for an hour and a half. A guard is always near and watching over them, and the approaches to the chapel are closely guarded, but nevertheless it would be regarded as a dangerous experiment for so many men to meet together night after night. Still no harm has ever come of it. A system which contributes to the moral and intellectual elevation of a dangerous class of people, and creates in them a certain amount of self-reliance that they can go out into the world and make a living honestly, deserves some sort of recognition from the State. So far the only cost to the State has been less than \$25 for books and slates.

Question Drawer.

Questions relating to matters of fact are answered by the editor. All others are left, as a rule, for correspondents.

QUESTIONS.

Can any one obtain circular No. 19 (Education Department), which gives notes on subjects for second and third-class certificates for 1887?

(a). What books should be read in order to prepare the grammar, composition, and algebra required for first-class teachers' examination, grade C?

(b). In what order are the rules in algebra supposed to be taken to get "to the end of Binomial Theorem" as stated in the Regulations?

(c). Where or how could I get copies of the papers set for the two last examinations for honor matriculation, or for grade C teachers' certificates?

If a teacher should be engaged the first six months of the year at a certain rate per annum, may that teacher claim pay for the summer vacation?

As you mention in *JOURNAL* of November 1st that the police of Whitby were about to be called upon to enforce the compulsory clauses of the School Act in the cases of some children who are perpetual disturbers of the peace on the public streets, I write to ask would you kindly state in your columns what is the law on this point, and how can such disturbances be stopped; or in what way should the parents be hindered from allowing their children to be a public nuisance. Please answer through the *JOURNAL*, and oblige,

Please publish easy solutions for the following questions:—  
(a). Explain how you would find all the divisors which a number has. Find those of 1800.

(b). Add together  $\frac{1}{17}$ ,  $\frac{2}{7}$ , and  $\frac{1}{17}$ , and find what is the least fraction with denominator 1000, which must be added in order that the sum may be greater than unity.

(c). Simplify  $16 \left( \frac{1}{5} - \frac{1}{3} + \frac{1}{5^3} + \frac{1}{5} - \frac{1}{5^3} - \frac{1}{5} \times \dots \right) - \frac{4}{239}$ .

(d). A commission merchant receives 125 bbls. of flower from A, 150 bbls. from B, 225 bbls. from C; he finds on inspection that A's is 10 per cent. better than B's, and C's  $5\frac{1}{4}$  per cent. better than A's; he sells the whole lot at \$7 per barrel, and charges 4 per cent. commission. How much does he remit to each?

(e). The product of four consecutive numbers is 73440; find the numbers.

ANSWERS.

Z. Apply to the Secretary of the Education Department.  
W. M.—(a). Mason's Grammar and High School Algebra, supplemented with McLellan's Hand-Book of Algebra.  
(b). The order followed in the authorized text-books, no doubt.  
(c). Write to the Registrar of Toronto University.

L. O.—Divide the amount of the yearly salary by the number of teaching days in the year; multiply the quotient by the number of days of actual teaching during the period; the product will be the amount to which the teacher is entitled.

L. D. STERLING. - By the provisions of the Public School Act, the parent or guardian of every child not less than seven or more than thirteen years of age, is required to cause such child to attend a Public or other school for not less than one hundred days in each school year, unless the child is under efficient instruction in some other manner, or prevented by sickness from attending. Boards of Trustees are authorized to appoint officers to enforce the foregoing provision, and the Police Magistrates in cities and towns, and Justices of the Peace in villages, etc., are empowered to investigate and decide upon any complaint made by Trustees, or any person authorized by them, against any parent or guardian for failure to comply with the provisions of the Act in this respect. As to the other part of Mr. Sterling's question, it is, we suppose, matter of local concern. Any parent who permits his children to become disturbers of the peace, or a public nuisance, may be proceeded against in due form of law. Incurribles may be sent to reformatories, or otherwise punished according to the provisions of public or municipal statutes, on complaint made to the police or other local magistrates.

### Correspondence.

Editor CANADA SCHOOL JOURNAL:

Sir, - In your last issue I noticed a comment on the action of Mr. Bigg, headmaster of Parkhill High School, in giving a slight punishment to a boy belonging to the Public School. You are right in saying that authority should not be delegated, but your application in this case is unjust, as our teachers do not delegate their authority. Mr. Bigg merely acted as a private citizen, who, seeing a boy assaulting a little girl, justly punished him. If he were wrong legally, he was right morally, and to show that this opinion was held by our citizens, I wish to inform you that the School Board offered to pay the fine, but the High School pupils, having confidence in Mr. Bigg's impartiality and justice, desired the honor and obtained it.

Yours respectfully,

W. F. MAY,  
Mathematical Master, Parkhill High School.

[This, of course, quite alters the case. We took the account from some local paper. Thanks for the correction. - Ed. SCHOOL JOURNAL.]

### Literary Chat-Chat.

"Mark Twain's" profits of the Twain-Cable readings last season are reported at \$30,000.

Readers of Mr. Vandersmissen's edition of Grimm's "Märchen" will be glad to see that Messrs. D. C. Heath & Co. have in preparation another work edited by the same writer. - Hauff's *Märchen. Das Kalte Herz.*

W. H. Vandersmissen, M.A., of University College, Toronto, has edited, with English notes, etc., Grimm's Märchen, the selection including eight of the tales. The book is for the use of students in German, and has met with the approval of many teachers of that language throughout the States and Canada.

When Miss Louisa May Alcott is writing a book she writes fourteen hours in twenty-four. At such times she leaves her home in Concord, goes to Boston, hires a quiet room, shuts herself up and waits for "an east wind of inspiration, which never fails." In a month or so the book is done. She never copies, and seldom corrects.

The author of that juvenile classic "Alice in Wonderland," is about to publish, through Messrs. Macmillan, a book entirely different in design from anything he has ever written. It is to be called the game of logic, and will describe a new game which he himself has invented, and which promises to "combine instruction and amusement."

Some queer literary partnerships have been formed, but none of less congeniality apparently than that of Mrs. Oliphant and Mr. Aldrich. The lady has in later years become so mystical, psychological, spiritual, and Mr. Aldrich now, as ever, so witty, sharp, practical, and modern, that the fusion of characteristics will be a literary curiosity. Their coming story to appear in next year's *Atlantic* will create especial interest. - *Current.*

*Forest and Farm* is the name of a new eight-page paper, devoted especially to the interests of the Canadian sportsman - not "sport-

ing man," as the editor is careful to explain. The new journal proposes to tell the true sportsman "when to go, where to go, and how to secure the greatest amount of sport" in a limited period; also "an amount of valuable information pertaining to the farm, not to be found in any other publication." It is published every Saturday morning by Chas. Stark, 59 Church street, Toronto.

The frontispiece of the December *St. Nicholas*, "In Christmas Season, Long Ago," is a charming representation of a scene of the olden time, illustrating a pleasant descriptive poem by Helen Gray Cone. "The Story of Prince Fairyfoot," by Frances Hodgson Burnett, commenced in this number, will be a great attraction during the coming year. Among other contributors are Frank R. Stockton, J. T. Trowbridge, Alfred Brennan, Theodore Davis, and other skilful purveyors to the tastes and wants of the hundreds of thousands of young readers, to whom the monthly appearances of *St. Nicholas* make twelve red-letter days in each year's calendar.

### Literary Reviews.

IVANHOE: A Romance. By Sir Walter Scott, Bart. (Boston: Ginn & Company.)

This neat and attractive edition of this immortal romance is the last which has come to hand of Ginn & Company's admirable series of "Classics for Children." It contains foot notes and a glossary which, no doubt, contain everything necessary for the elucidation of any obscure allusions and local or antiquated terms which occur in the text.

LES TRAVAILLEURS DE LA MER. By Victor Hugo. Adapted for use in schools. With Notes, Life, etc., by James Boicelle, B.A. (Univ. Gall.), Senior French Master in Dalhousie College, and Examiner in French to the Intermediate Education Board, Ireland, etc. (Ricingtons, Waterloo Place, London.)

The popular French classic is neatly bound and well printed. The Notes indicate learning and care, and seem sufficiently full for school purposes.

DETERMINANTS. By Paul H. Hanus, Professor of Mathematics, University of Colorado. (Boston: Ginn & Company.)

In this, the only American book on the subject, the theory is given with sufficient fulness for all students who desire to use determinants as instruments of research, and to enable them to read the works of modern mathematicians, most of whom employ the determinant notation. Prof. Hanus' work differs from that of Muir, especially in the first chapter, which shows how and why determinants came to exist and their importance, in having a chapter on applications, and in presenting the special forms in connection with the cases that give rise to them. It differs essentially from Scott's, in which the theory is presented with the help of Grassman's alternate units, and the discussions are not elementary. Principles and propositions are abundantly illustrated, and a plenty of well graded examples are introduced.

A FIRST GREEK WRITER, with Exercises and Vocabularies. Fourth edition, revised.

LECTURES ON GREEK PROSE COMPOSITION, with Exercises. (Livingtons, Waterloo Place, London.)

The above works are both by A. Sidgwick, M.A., Fellow and Tutor of Corpus Christi College, Oxford, Late Assistant Master at Rugby School, and Fellow of Trinity College. From such cursory examination as we have been able to give them, we should think them admirably adapted to initiate the young student into the general constructions and idioms of the classic Greek. They will also be valuable aids to the teacher in carrying his pupils over the earlier stages in the acquisition of the language.

MELBA, with notes by M. G. Glazebrook, M.A., Assistant Master at Harrow School. (Ricingtons, Waterloo Place, London.)

This is a neat and beautifully printed edition, forming one of the series of the Plays of Euripides being published by this firm. An innovation is made by the editor in the division of the play into Acts and Scenes, after the style of the modern drama. The object is to increase the intelligent interest of the pupil in the plot by erecting a series of "sign-posts," to mark the stages in what looks like one long, dreary scene. The introduction is full of helpful information, historical, grammatical, and critical, and the notes sufficiently copious for class purposes.

QUEER QUESTIONS AND READY REPLIES. By S. Grant Oliphant. (Boston: New England Publishing Company, 1896.)

This is a collection of four hundred questions in History, Geography, Biography, Mythology, Philosophy, Natural History, Science, Philology, etc., with their answers. It is claimed that the information covered by the questions and answers is not generally known, even by intelligent and educative readers, and that much of it has never before been published in a form accessible to the great mass of readers. No doubt many of the items will be found interesting, and some of them useful additions to the readers' stock of information.

### A Hard Fate

It is, indeed, to always remain in poverty and obscurity. He enterprising, reader, and avoid this. No matter in what part you are located, you should write to Hallett & Co., Portland, Maine, and receive free, full particulars about work that you can do and live at home, at a profit of at least \$5 to \$25 and upwards daily. Some have earned over \$50 in a day. All is new. Capital not required. You are started free. Either sex. All ages. Better not delay.