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THE CANADA
EDUCATIONAL MONTHLY
AND SCHOOL CHRONICLE.

NOVEMBER, 1881.

BENEFITS OF CLASSICAL STUDY.*

BY PROF. JOHN FLETCHER, B.A., QUEEN'S UNIVERSITY, KINGSTON.

Mr. Vice-Chancellor, Gentlemen of the University Senate and of the University Council, Ladies and Gentlemen,—

HAD I felt myself free to follow my own choice in the matter, I should have declined the Principal's flattering invitation to deliver an inaugural address on the occasion of my first public appearance among you. Such a task is beset with too many difficulties to be contemplated with equanimity or undertaken without hesitation, inasmuch as it seems to imply the survey of a field that has never been entered upon, and the review of work that has never been done. On the other hand, I have some reason for self-congratulation that so early an opportunity has been afforded me of defining my views on classical education, and of lending my testimony to the special educational

value of Classical study—to which subject I propose for a short time to invite your attention—a subject which, if it presents little to please the fancy, may contain something not unworthy to engage for a short time the understanding. Before, however, proceeding to discuss more particularly the subject of classical study, I propose to turn your attention to a brief consideration of the proper end and object of all university education rightly conceived. Whatever notion we may have of the true and primary function of a university, there can be no doubt that its chief function should be, as Mill defined it, "to make capable and cultivated human beings." Schools of Law and Medicine, and Theology and Technology, and Engineering and Agriculture, are valuable institutions in any country. But their work is not the work of the university. The university gives no professional knowledge or training. It only en-

* An Inaugural Address delivered at the opening of the session, 1881-2, of Queen's University, Kingston.

ables professional men to approach their professional work with the light of a liberal culture and the energy of a disciplined intellect. It is the exercise of the intellect in study that makes the capable man; and the average student, who, with a real desire for self-improvement, faithfully applies himself to the subjects of the university curriculum, has all his mental powers called into life or quickened into new growth, and goes forth from his college apprenticeship able to know and do all that is known and done under the sun. And it is the knowledge gained by the way, that acquaintance, as Arnold says, "with all the best that has been known and said in the world," that makes the cultivated man. This is not such knowledge and training, necessarily, as can be turned to account in the callings of after-life; but knowledge and training which equip a man for any calling whatever, preparing and enabling him to turn his attention to any subject, to lay hold of its principles and master its details. In many departments of the university curriculum the subject-matter of study is only an instrument of intellectual discipline—an instrument, it is true, which, if the student is wise, he will not throw lightly away, but will keep bright and furbished even amid the distractions of professional life; but an instrument which has virtually served its purpose when the student crosses, for the last time as a student, the college threshold. The knowledge acquired, elevating and refining though its influence may be, is only secondary, after all. And the common charge of inutility, so often brought against many subjects of the university curriculum, arises from a misapprehension or misappreciation of the use these subjects were intended to serve, and an ignoring of the fact that they realize their highest end when used simply as educational instru-

ments. Among the subjects of university study which have been most vehemently assailed by the utilitarian spirit of the age, the Greek and Latin classics stand forth pre-eminently. And to-night, though conscious that a bad defence is worse than none at all, and almost convinced that the subject needs no defence, but speaks for itself, I intend to attempt a brief justification of the prominent position which has been assigned to classical study in the university curriculum; hoping that such an attempt may be not altogether without interest to any, and not quite unsuggestive to the classical student, as shewing that the subject of his study really possesses in itself a value and authority as a potent instrument of mental culture, quite independent of the demands of the university examinations, and as tending to inspire with fresh interest a subject which many are inclined to regard as irksome drudgery and a waste of time. Without some conviction in the mind of the student that his studies are or may become to him a fruitful source of real culture, and without the guiding motive of a strong desire for such culture, apart altogether from the meaner motives of emulation, ambition, or love of material reward, all studies tend to become aimless and unprofitable. It is not difficult to discover the original reason for the wide-spread employment of the Greek and Latin classics as one of the main and central subjects in university education. At the revival of letters in the sixteenth century, when the human mind began to be stirred with the new ideas then floating in the air, it turned in vain for any literature worthy of the name to the writers of the Middle Ages. Scholasticism, limited and circumscribed by ecclesiastical tyranny, had produced nothing but metaphysical subtleties, and outside of the classical literatures there was neither eloquence, nor poetry,

nor history, nor philosophy. Latin was already the vernacular of the learned in every country in Europe. But now the attention of all whom the great revival had reached was turned toward the masterpieces of Greece and Rome as the only literature deserving the attention of cultivated men. In the absence of a universally diffused literature, such as the newspaper and magazine of the present day, classical subjects formed the one theme of educated thought and conversation. For the encouragement and prosecution of the new learning, colleges and seminaries, such as many of those in Oxford and Cambridge, were founded and endowed. And thus the classical languages soon gained sole possession of the field of literature and education. From the revival of letters to the present day there has been no more powerful influence in moulding European civilization than the diffusion of Greek and Roman ideas. "From the Middle Ages downward," in the words of Gladstone, "modern European civilization is a compound of two great factors, the Christian religion for the spirit of man, and the Greek and Roman discipline for his mind and intellect." To Christianity is due the moral element in our civilization; to Greece and Rome the intellectual. Upon the models of Greek and Roman literature the taste and literary style of the educated world have been formed, and after centuries of emulation the pupil has never surpassed his master. No modern has attained to the perfect art of Sophocles and Virgil, or the descriptive power of Thucydides and Tacitus; to the simplicity and dignity of Herodotus and Livy, or the pathetic tenderness of Euripides and Tibullus. Literature so important and inimitable can never be neglected by the universities of any country that is, or is to be, the home of a class of

literary men. They are interwoven with the whole fabric of our social life and thought and speech, and can never be set aside without lowering the tone of our civilization. They must always be valued as containing a record of the thought and feeling of the ancient world—as the links that connect us with the intellectual efforts of the past—as the repositories of the traditions of centuries of intellectual life. But, more particularly, language and literature in themselves are by all acknowledged to be important subjects of study, and the more important as the languages studied are more and more perfect. Language is the expression of thought, and in studying language we to some extent study the laws of that process by which thought is evolved. And whatever awakens and develops the faculty of language, awakens and develops the faculty of thought. But language cannot be studied without studying also the thought which it conveys, and the student of language tends not only to grasp the form of that language which he studies, but also its matter and spirit. He lives with the great masters of learning, and makes their thoughts his own. From the classical languages, being, as they are, the most perfect instruments ever evolved for the expression of thought, and from the classical literatures, affording, as they do, the most perfect models of literary style the world has ever seen, the student derives the most thorough discipline which can be derived from linguistic and literary study. It is not claimed for classical study that it tends to develop and discipline all the intellectual faculties. There are many other branches of study which ought to occupy an important position in any system of liberal education, both because of their value as educational instruments, and because at least some knowledge of them is necessary to the mental furniture of every educated man.

But it is claimed for classical study that it disciplines and develops more of the intellectual faculties, and disciplines and develops them more effectually, than any other branch of university study. Thus, it cultivates the memory. The classical student, who would become a proficient classic must constantly exercise his memory in keeping ready to hand a knowledge of grammar and vocabulary, history and philology, without which he cannot appreciate or master his author's meaning. It cultivates the reason. The classical student has constantly to discriminate and decide on the proper style, on the proper turn of the sentence, on the proper choice of words he must employ to express his author's meaning. He has to apply general laws in philology and grammar to particular cases. He has to resolve compound sentences and compound words into their simple components, and to trace simple words to their roots. He has to thread some of the most intricate mazes of thought to be found in any literature. It cultivates the taste. The classical student, constantly turning over in his hands those perfect models of literary style, and constantly attempting to attain in some measure to the beauty and power of the original, forms for himself a high standard of literary excellence, and has his own soul filled with a love of the beautiful and true. It cultivates the imagination. The classical student has to follow some of the boldest flights ever taken by the human fancy; and the difficulty of the language only serves to impress the imagery on the imagination. But apart from this discipline of the intellectual faculties, there are other reasons for the encouragement of classical study and other advantages which may be derived from such study by the faithful student—I mean the student who works from a love of his subject and of the cul-

ture it imparts. If he does not, no branch of study will be efficient, though it does not invalidate the efficiency of a study that it is not in all cases efficient. There are, I say, other advantages to be derived by the student from classical study. I will enumerate some of them. They are the stock arguments upon the subject, but none the less true because somewhat old. The cultivation of a good prose style is reasonably considered a part of education. Every author, as Sydney Smith says, be his aim either to please or to instruct, must at least please. If he does not please he will not instruct. This cultivation of style is simply a mastery of those literary forms which literary experience has discovered to be most pleasing. Now, the classical student has in his hands models of style which have pleased in every age. He will not find elsewhere others which he can rely on with the same confidence. And if he really desires to improve his power of expression, throws himself in translating upon his own knowledge of English, and strives faithfully to attain in some measure at least to the beauty and force of the original, he will find that no exercise tends more to enlarge his knowledge of his mother tongue and increase his facility in English composition. Again: From the frequent necessity under which the classical student works, of comparing, for the proper comprehension of his author, text with text, and passage with passage, whether from the same author or from different authors, he obtains by degrees some knowledge of general literature and learns the first principles of literary criticism.

Further: To master thoroughly the grammar of one language is to obtain a conception of grammar in general—a conception, namely, of the laws which regulate the use of those forms by which we express our thoughts.

As instruments for the expression of thought—as pieces of mechanism—Greek and Latin are infinitely superior to any language ever elaborated by the mind of man. And this reason alone is sufficient to justify their selection for educational purposes, as being the nearest approach to a perfect type of language. Again: Without mastering to some extent at least the vocabulary of the Greek and Latin languages, no really precise knowledge can be got either of our own tongue or of any of the Romance languages of Europe—Italian, French or Spanish—to such an extent do the classical languages enter into their structure and composition. And, again: There is no subject of university study around which seem to centre so many subjects of general interest. Around it cluster all the facts of ancient biography and history, geography and philology. With it is associated a knowledge of ancient national life, public and private, of ancient law, of ancient religions. And lastly: The mere fact that a great part of the Holy Scriptures has come down to us in Greek (the New Testament was first written in Greek, the Old Testament was first translated into it), is reason sufficient, if none other existed, why a knowledge of that subject should be kept up in the universities of every Christian country. A knowledge of Greek is therefore indispensable to the theologian. But so is a knowledge of Latin to the lawyer, if he wishes to study some of the greatest works on jurisprudence in the original. So it is to the medical man, if he wishes to avail himself of the ancient medical writers. The scientist will find a knowledge of Greek a practical help both in understanding and forming his scientific nomenclature. The poet, the historian, and the philosopher can serve no better apprenticeship than in studying the masterpieces

of Ancient Greece and Rome; nor the legislator and statesman than in studying Greek and Roman life and laws and institutions. In short, by none of the higher walks and professions of life can the classical languages be neglected or ignored. "But," it is asked by many who acknowledge the value of linguistic study, "if languages are indispensable as educational instruments, why not substitute for Greek and Latin the languages of modern Europe? These languages are more easy of acquisition and therefore more attractive to the student. They are more useful practically, being, as they are, the key to literatures of no mean importance, as well as to much of the best original work, literary and scientific, of modern times; and at the same time they are no less valuable educationally as imparting a discipline, intellectual, literary, and æsthetic, in no wise inferior to the languages of Ancient Greece and Rome."

The literatures and languages of Modern Europe are no doubt too important, for some of the reasons mentioned, not to take a high position in any system of liberal education. But a satisfactory or efficient substitute for the classical languages, as a means of intellectual discipline, they never can be or become. Less difficult of acquisition they are, it is true, demanding little intellectual exertion, and depending for their acquisition almost upon the memory alone. But as educational instruments this is just their weakness. The process of translating French or German is, after the first labour is over, almost mechanical, a matter merely of looking out words in the dictionary; and in course of time it becomes almost intuitive and involves no intellectual effort whatever. But without intellectual effort there is no intellectual training, while the greater the effort the greater the culture received. The difficulty of

the classical languages is one of the chief reasons for their superiority as educational instruments.

As vehicles, too, for the expression of thought, modern languages are vastly inferior in their structure, syntactical and etymological, to Latin and Greek, and are therefore vastly inferior for conveying a general notion of grammar and philology.

Nor, again, will the student find in modern literatures models of literary style either in poetry or rhetoric, or history or philosophy, to place for one moment in comparison with the models of Greece and Rome, models which have pleased in every age and formed every literature in Europe. On the other hand, without the knowledge of classical literature it would be impossible ever to appreciate or understand modern literature, abounding as it does with classical ideas and classical allusions. And, finally, the student who has a thorough knowledge of Latin will require less time in mastering the Romance languages—Italian, French, and Spanish—than if he were to study each of these languages separately and without such knowledge.

Such, then, briefly and I feel most inadequately stated, are the arguments which may be adduced in defence of the old time-honored classical education. Some of the arguments advanced, taken singly, may appear comparatively of little weight; but taken together they seem to justify incontestably the prominent position assigned to Latin and Greek among the subjects of the university curriculum. Most of the objections which have been brought against classical education are valid only as against education exclusively classical. They find no application in a university like this, where the course of study is modified in accordance with the spirit of the time and the wants of the age—where the great discoveries of modern

science, the great facts of modern history and philosophy, and the great truths of modern literature are not ignored, and where every subject is cultivated that seems worthy of cultivation. To one objection, and one only, is it my present purpose to refer. It is the usual objection of the utilitarian: "But what is the use of your classical studies?" implying by the question that these studies are of no practical utility in after-life and have no practical bearing on any of its callings. But such a view is based, as I said before, upon a shallow and superficial notion of what from an educational standpoint the useful in knowledge really is. Knowledge is useful not only in itself, but useful as an educational instrument. "The cultivation of the intellect," as has been well said, "is an end in itself, and a not unworthy one. Health is a good in itself though nothing came of it, and so the culture of the intellect is a good in itself and its own end." If it further such an end, classical study, even if practically valueless in the callings of after-life, is not useless to the classical student. If it has quickened and developed his intellectual powers; if it has given vividness to his imagination, purity to his taste, refinement to his feelings; if it has given vigour to his understanding, soundness to his judgment, accuracy to his reasoning; if it has given him wider sympathies and a more pathetic interest in life; if it has made him wiser, nobler, better than he was before, such knowledge and training is not *useless*, but, in the highest and most ideal sense of the word, *useful*.

In conclusion, I may be allowed, I trust, to say that while I have the strongest faith in the efficacy, as a means of mental culture, of the subject which has been entrusted to my charge in this university, I cannot conceal some secret misgivings as to my own ability to do justice

either to the importance of the subject or to the flattering confidence which has placed me in this chair. My success must in a great measure depend upon the patience and persistence of

the students themselves whose studies it may be my fortune to direct. Excellence in anything is not easily attainable, least of all in classical scholarship.

THE TRAINING OF GIRLS.

BY MISS E. DE ST. REMY, KINGSTON, ONT.

"That our sons may grow up as the young plants, and that our daughters may be as the polished corners of the temple."—
Ps. cxliv.

THE inspired writer in this verse seems to me to have indicated clearly a radical difference in the destinies of the two sexes. Man is supposed by him to stand in the open air, exposed to every change of time and circumstance. As the tree grows strong in the sunshine, drinks in the dew, builds up its sturdy stem and fortifies its spreading branches to withstand the storms of summer and to endure the frosts and cold of winter, so man from his earliest years shows his natural delight in exertion, in struggle, in conquest over outward things—animals, his playfellows, all that his tiny hand can grasp, his active feet chase. But woman, says the psalmist, is to be "as the polished corners of the temple." A wonderfully strong image to those who appreciate the place the temple held in the mind of a devout son of Israel.

The Temple! the heart, the innermost core of all his religious and patriotic love!—that place which was the symbol of his nation's alliance with Jehovah, his pride, his resort in joy or in sorrow. And woman is to be as the polished corners thereof—the corners, that on which the solidity of the whole building depends. They

are to be the clasp and bond to fasten the social edifice, sheltered, fitly finished, polished for beauty and for glory, not their own, but for that of the great structure they complete.

Now, how are we in this nineteenth century to train our girls to reach this ideal—strong to support, quiet to endure, fair and polished, to beautify the corners, where destiny has placed them—each to fit best those circumstances in which she finds herself, and over which generally she has so little control? How fit her, with her more feeble frame, her higher-strung nerves, her quicker sensibilities, to be a strength and help to all those around, not a burden?—to make her presence felt as a refuge, a very present help in trouble, a constant pleasure then and always?

To begin at the beginning and secure health. I think that our habits of family and social life militate against the constitution of our young people generally. They are both too much and too little with their elders. From morning till night they are about—at meals, everywhere. This is bad in many ways. For instance, the food, care in regulating which is necessary to every growing animal. Coming to table with their elders, the children soon learn to want all they see before them; the parents have not the strength of mind to refuse, and the

healthy simplicity of fare which best promotes well-developed bodies and brains is soon laid aside for dainty made dishes, hot cakes, sweetmeats, tea, coffee, etc. After a hearty meal of such viands a child is seldom ready for either mental or bodily work.

Next, the habit of regular outdoor play and exercise is too much neglected. Children are supposed to take care of that themselves, but my experience with girls leads me to think that unless taught they will take very little open-air exercise; in fact, if allowed, girls will avoid physical exercise and the open air altogether. I find few girls, except in the highest rank, who do not look aghast at the proposal of a five-mile walk, and who do not get weary to the verge of illness. after a good long country stroll. I have never met, in my last ten years' teaching, one girl who seemed to know anything of any outdoor game whatsoever except croquet, which, though good in taking those engaged in it out of doors, has not the advantage of inducing active exercise as male sports do, such as base-ball, cricket, racing, etc. These develop all the limbs, teach quickness of eye, and obedience to rule in the most pleasant way, and, like all social games, lead to control of temper. The result of the present nursery training at once reveals itself when the children enter the school-room. One-half of them are mere bundles of nerves, introduced by their mammas with the words, "I am afraid, Mrs. or Mr. So-and-So, that you will find Amelia very backward, but she is so delicate." Poor little mortal! she does not know how to obey, she does not know how to listen, she does not know how to sit still; and she is expected to listen, to sit still, and to be silent for six mortal hours. I do pity her. Generally speaking, there is good stuff in the girls, and if the home influence does not counteract all that the school

teaches, a teacher, worthy the name will get up a love of the work for the very work's sake; but, alas! no sooner is a study of any kind well started, than some one discovers that her daughter has not a taste for that study—as if a decided taste for anything, was not one of the rarest of gifts. So, instead of conquering the difficulty, and of applying all the mental powers to the study in hand, one class after another is dropped, and half the benefit of the school as a means of moral discipline is lost.

Again, there is a tendency to shirk all work that is not interesting. Now, generally, I find no work considered interesting but that to which the pupils are accustomed; and if all else is given up, only the lowest and most rudimentary studies will be pursued.

I hold that a school should afford a *thorough* knowledge of the elementary branches—reading, writing, spelling, arithmetic, grammar, geography, composition, and history—and besides these, such moral training in the way of habits of order, neatness, punctuality, obedience, fair and truthful dealing, kindness and courtesy, as shall make the pupil a pleasant companion, a cheerful, self-contented, rational, human being, and a trustworthy and intelligent friend—one that is able to think and judge for herself; to aid in the home with good humour and unselfish love, because it is the place God has chosen for her; to look abroad and help and sympathize with her poorer neighbours, either with money or with gifts, if her share in life's goods permits the open hand; with her time, with her pleasant words, with her kindly and gentle ministrations, if the means are denied; always with thought and with that charity which "thinketh no evil." It is incumbent, also, that she should be an intelligent, thoughtful, and interested spectator of the changes in the politics, the science, and the progress of the day, so

that her friends may find a pleasure in subjects a little above bonnets, though I think it a weakness if she cannot manage time and place for these as well. As beauty is also one of God's gifts, it behoves us, if we want to do the weightier matters of the law justice, not to forget the mint and anise and cummin—not to disgrace our higher culture by worrying all those with whom we come in contact, by untidy or unbecoming dress, by neglect of forms, by want of order, neatness, and propriety, a lack of which always to my mind conveys a lack of some mental capacity; for surely a well-balanced mind will not root up the flowers of life, and only leave the useful, but will try to finish each trivial task, as the blossom in the field, so perfect in itself, that when we think of either we may feel fully satisfied.

But all women are not polished corners of a home. Well, the temple is more than the private house—it is the national home, in which I would have them polished stones, filling fitly, firmly, faithfully, the sphere in which they perform their work.

I hold that a woman has *no* right to look for support from *any* but a father or a husband. No relation, no brother even, ought to be forced to support such a burden, and, as property is apparently a very uncertain standby, each ought to have, besides the cultivation necessary to secure for her social respect, some definite dependence, some one gift or taste, trained to professional and marketable value. I do not believe that the average woman is naturally a duplicate in everything of the average man; and I am quite sure that the average woman, such as the present nineteenth century makes her, is below the average man of to-day in capacity for sustained mental labour and perseverance. I do believe that the picked woman is above the average man; but with the

picked specimens of humanity I have not to do—they will prove their superiority by their success. It is the average woman in whom I am interested; and in what lines shall her capabilities be developed?

For the lower classes, necessity settled the question long ago. No labourer, thank God! ever dreams of bringing his girls up to an idle life. The needle, the mill, the shop, and domestic service, sweep off the young women of that class as fast, or faster, than they grow up, and as the great laws of supply and demand govern them: they are out of our province.

As we have no privileged, no aristocratic class in Canada, the great middle class is the one to which most of us belong. In this rank nearly every father, to quote Mr. Trollope, hopes to see his son making his way in life, and his daughter safely sheltered in his own home or in that of her husband. If it is in that of her husband, well and good; there is no higher lot for a woman than the primal, God-given one of wife and mother. Let her do her work worthily there, and it will tax all her powers of body and mind to fulfil her ideal.

But in her father's house, has any man a right to condemn his girls to spend their time in that pale, colourless existence, without definite aim or clear plan, which merely passes on from day to day, a routine without duties?—for I will never acknowledge that to get up in the morning, dress prettily, and dawdle through the forenoon with the help of some self-imposed task of needlework, and spend the afternoon in an aimless walk, will make any woman contented. You can see it in the energy with which they pursue any object, no matter to what their attention is directed for a time.

I know that a man feels himself lowered in his own eyes if he cannot

provide for the ladies of his family ; but I think that this idea no longer fits our modern society, at any rate in Canada, where investments are less secure than in older lands ; and that whether he has or has not the prospect of providing for them, they should also possess the power of providing for themselves.

Now for the choice of some means of gaining a livelihood. Hitherto our sex have been limited to three occupations, viz., teaching, house-keeping, and needle-work ; at present, nursing and the profession of medicine are opening new paths for women. Against these I have but to say that if a woman goes in for such a study as medicine, she must fairly look the results in the face, and the first will be the relinquishment of a home (I do not say of marriage, but of home life) ; for the healer, like the nun or the soldier, must be ready at all times to obey the call of duty, to give up all other objects, and to devote her time and attention to those whose life may depend on skilful treatment. But besides medicine, are there not other arts and trades fit for the more nervous, if less powerful, hands and minds of women ? What of engraving, watchmaking, lapidary work,

designing—for all those branches of manufacture which now give employment to whole *ateliers* of Parisian workmen, china painting, wood-turning, plan-drawing, gardening and flower-growing, small fruit culture, modelling, and literary work—all of which can be carried on at home, if systematically pursued, and all of which are healthy and fully within the power of any average girl to acquire in marketable perfection ? And here I would warn all girls that rights mean labours and duties, and that no slipshod, half-finished efforts will ever be aught but a waste of material, time and temper, both to employer and employed. Those who intend to fit themselves in earnest for the battle of life will have to give at least ten hours of trained labour, week after week and year after year, if they intend really to compete with men.

I think if parents would devote the money spent on the last year's school fees to technical education, in whatever branch the girl might choose (and generally, by the time a girl reaches seventeen, she ought to be able to judge for herself the line of life that suits her best), the money would be more profitably employed both for the individual and for Canada.

TO A SCHOOLMASTER.

BY J. LOGIE ROBERTSON, EDINBURGH, SCOTLAND.

Thy work may not be measured—scale and rule
 Are for the tangible and transient ; thou
 With pain of heart, and sweat of brain and brow,
 Pliest thy work with no material tool ;
 Therefore heed not the insult of a fool—
 Whose ignorance of the light would not allow
 Th' existence of the sun that's shining now—
 If to the walls he circumscribe thy school.

But count thy work in every life that springs
 Attentive of thy teaching, wheresoe'er
 On earth it suffers or in heav'n it sings,
 Owning in part its portion to thy care ;
 And think that round thee may be angel wings
 And human hearts blessing thee unaware.

METRES—ANCIENT AND MODERN.—II.

BY THE REV. CHARLES PELHAM MULVANY, M.A., SCHOLAR TRINITY COLLEGE, DUBLIN.

(Continued from page 335.)

THE earliest extant Christian hymns, even of those used in Rome, were Greek. Indeed, as Dean Milman has shewn in his delightful work on "Latin Christianity"—a book which, in passing, we commend to our readers as the only readable ecclesiastical history we have yet met—the early Christians at Rome were Greek, probably Syrian or Hellenic sailors lodging in the Suburra, the cheap boarding-house quarter of Rome. Now the Asiatic element predominated among the Greek or Hellenistic Christians, and they wrote their rude attempts at hymns on the model of the Hebrew psalms, which have no metre, only a rough division into two parts, to correspond with the "Mediation" and "ending" of the ecclesiastical chant used by the Levites. The Christian church, unchanging as became the conservative East, has adhered to this system to the present day. The hymns of the Russian and of every branch of the Greek church are mere prose, with no metrical form. But the Western Intellect of Europe, used to order and law, demanded a higher and more complex form of sacred verse. At first the sacred poems were in the old classical measures—hexameters, pentameters, and sapphics. These are found in the fragments ascribed to Pope Damasus, and in the bulky volume of Prudentius, who may be considered as the earliest Christian poet. His long and dismal hexameter poems on the martyrs, I have read through. Doleful

as the east wind in winter, they contain not one breath wafted from the old summer-bloom of classical poetry, such as one meets in the latest and worst of the pagan poets of the Latin decadence. Writers of the Anglo-Catholic revival school—such as Neale, whose erudition in the study of this unpoetical poetry made him blindly partial—quote here and there a couplet from these poems. But these are no true specimens of its staple. Prudentius and his contemporary, Ambrose, Bishop of Milan, perceived that there was something incongruous in the use for hymns chaunted by ascetics in the cold grey dawn of Christianity, of metres that had been sung to the sun-god and the sea-born queen in the hot noon of paganism. They fixed on a measure that had been used but seldom and sparingly by the classical writers. It consisted of four feet of the kind called an iambus, *i.e.* a short syllable followed by a long. This became the favourite metre of the Christian hymn-writers—from them this rhythm, sung by Anacreon and Horace, became that of the Latin hymn-writers of the fifth century, and at last of good Martin Luther, and of our own Evening Hymn. For Horace's line,

Āmid | thē stārs | of̄ les̄ | sēr light |
is the same as Luther's

Ein fes | ten Burg | hē ist | der Hey ;
or in the Evening Hymn,

Glory | to Thee, | my God, | this night | .
But at first the arrangement into long

and short syllables was arranged in strict accordance with the rules of classical prosody; not as our verses are, merely by ear and accent. There are signs of change in the fifth century hymn-writers which become more and more marked as the Latin language decays; to speak more truly, grows into a new form, that of middle age Latin.

Rhyme begins as prosody ends, and first appears in the hymns of Venantius Fortunatus in the sixth century. He, flying from the Lombard invasion of Italy, found refuge in Gallia, where a dialect of Latin was still the language of the educated classes. Being of pleasant manners and a *bon vivant*, he found favour—scandal whispered too much favour—with countesses and great ladies, to whom he addressed “society verses” and amatory poems of some merit. (See essay on his writings in Thierry’s Works.) In those days literary merit did not disqualify a man from being a bishop. Venantius was raised to the episcopate, and henceforth wrote hymns—some of the best and most spirited yet composed. His was the glorious

Vex illa Regis pro de unt!

(The Royal Standard onward go,)

now sung in the Roman and English churches. (See Hymns Ancient and Modern.) Distinct traces of rhyme appear in this poet, who is the connecting link between classical Latin and the Middle Ages. From his time it becomes more and more an ornament of Latin poetry. It is a subject of dispute from what source and in what manner rhyme came into European verse; probably not, as some have thought, from the Arabian poets. Surely it may have developed spontaneously in the increasing complexity and demand for intricacy of form of the new European verse. It is the great difference between the old classical poetry and the new. Goethe

makes Helen, as representative of the old classical culture, wake to modern life. What astonishes her most is the change in poetry, the two lines having the same ending of rhyme at the end of each—as she puts it, “the two lines kissing each other.”

The tenth century, which Hallam calls the darkest of the Dark Ages, witnessed a retrograde movement towards the hymns in the form used in the East. With the gladness and opening life of the eleventh and following centuries came the rise of the European Universities, and the flowering forth of Gothic architecture. It was no longer pent into massive arches, to make gloomier the asceticism of the anchorite; the sense of beauty awakened into life; even churches became cheerful with the summer wild-flower carved on their columns, and the colours of rose and violet shining bright in the windows. The poetry used by the hymn-writers partook of this change; to them we owe the beautiful seven-syllable trochaic metre so lovable in some of our most perfect lyric poetry—as in Byron’s “Maid of Athens,” Shelley’s “Lines written among the Euganean Hills,” and Morris’s “In the Merry White-thorn Brake.” It occurs in some lovely lines attributed to St. Hildebert, and quoted in Longfellow’s “Golden Legend.” But enough of the mediæval poetry; it served a purpose of transition; and what life it had faded as illuminating became a lost art, and the colours in the cathedral windows grew dimmer in the coming dawn of the Reformation. During the reaction from the Church in Provence, which the Church in the day of her power was able to stamp out in blood, among the sectaries of Provence arose a new school of lyric poetry, in part derived from the rhymed Latin verse, but with far more intricacy of structure and a cadence of refrain and recurrence of rhyme—key-notes

which developed into the early French *ballade*. The early French and Norman romancers wrote long poems and tales in the eight-syllable iambic metre of the Ambrosian Hymns. Thence this metre passed to England with the Anglo-Norman Romance poetry, to be used in a modern form, first by Chaucer, to be degraded by the Hudibrastic writers, and to be glorified by Scott, Byron, and Words-

worth, with a long course before it in the future of our literature. The (so-called) heroic metre, an iambic line of ten syllables instead of eight, was introduced by Chaucer. In the hands of Dryden and Pope it became the special vehicle for satire. A few words remain to be said on some of the more specialized forms of modern metre, and on the rise and varieties of English blank verse.

(To be continued.)

QUESTIONING AND ANSWERING.

BY W. R. MILLER, PRINCIPAL OF THE MODEL SCHOOL, GODERICH.

IN dealing with the subject of Questioning and Answering, I propose to briefly discuss, 1st, The importance of a proper system of questioning, and how proficiency may be attained; 2nd, To offer some general observations on what I consider to be proper and what to be improper styles of questioning and answering. I look upon questioning as the most important part of the teacher's work, since to this all other parts converge, or from it diverge, and failure here, necessarily, very materially affects his success as a teacher.

To rightly estimate the importance of the art of questioning it is only necessary to consider the different purposes which it serves. What is commonly called Tentative or Preliminary questioning has for its objects, 1st, To discover the extent of the knowledge possessed by the pupil in reference to the subject about to be taught, so that the teacher may adapt his instruction to the child's wants, and avoid wasting time by attempting to teach what the pupils already know; 2nd, That the teacher may utilize the information already acquired as a founda-

tion on which to build additional knowledge.

By a brief series of searching questions the teacher is able to fix the limit between the *known* and *unknown*, and to put the class in a condition to receive and master the knowledge he has in store for them.

The most important objects of questioning are the development and cultivation of the intellectual faculties. These objects are attained principally by what is called Socratic or instructive questioning, which leads the pupil to discover truth for himself. This system carries the pupil along a succession of steps by which he is brought to see the facts we wish him to learn. The principle on which the system is based is that it is what the child does for himself, not what is done for him, that really educates him, and therefore the teacher should not tell a pupil what he can guide him to discover for himself. An important advantage of this system is that knowledge so gained is much more likely to be retained than that acquired in any other way.

The object of examination questioning is to test acquired knowledge. By

it the teacher ascertains how much the pupil retains of information previously given, and whether assigned lessons have been properly prepared. Such questioning should be searching, so that a superficial may not pass for thorough preparation, for which purpose stress should be laid on the more important points in the lesson rather than on those that are most obvious.

Fair, honest, and searching questioning will influence to a very great extent the preparation of assigned lessons. When the pupils know that they will be thoroughly tested and will receive credit for their diligence, they will have a strong motive for exertion; but if the test be imperfect or unsteady it holds out a chance of escape, and thus virtually encourages a low standard of preparation.

Such are the principal forms of questioning and their uses. The teacher has constant occasion, in almost every recitation, to use the three kinds in close conjunction with each other. Examination and instructive questioning, particularly, should be intimately connected. Thus, when a pupil fails to answer a question, or does not answer it correctly, the question should not be passed to another member of the class, as is so frequently done; but in the first case, the teacher should go back a step or two, and by judicious questioning lead the pupil to see the fact for himself, and in the second case the pupil should first be brought to see his mistake and then questioned so as to enable him to arrive at a correct conclusion.

The greatest pains should be taken in dealing with incorrect answers, as they shew the pupil's deficiencies in, and misconceptions of the subject, or, in other words, they indicate clearly where he is weak, and should lead the teacher to make a proper diagnosis of the case, and apply the proper remedy.

How may the teacher attain pro-

iciency in questioning? The most essential requisites are, I think, 1st, Adequate knowledge of the subject under consideration, which knowledge should embrace not only what the text-book contains on the subject, but such collateral matter as can be introduced for illustration and explanation. 2nd, A just appreciation of the capacity of the pupils. And 3rd, Experience as the result of practice.

I need scarcely say that not only extensive general scholarship, but also careful and thorough preparation of each day's work, is indispensably necessary to efficiency in conducting recitations.

Neither aptitude, experience in teaching, nor knowledge of system, can compensate for lack of preparation. The teacher should know the subject so as to be able to entirely dispense with the use of the text-book during recitation. Such being the case, he will be able to give his attention entirely to the class, and consequently conduct the exercise with much more vigour and animation; and, what is also of much importance, he will impress the pupils with that sense of his competence and ability which is necessary to ensure their confidence and respect.

Besides benefiting the pupils, such a system will improve the teacher's own mind, and he will be encouraged, as from time to time he teaches the same subject, at finding that he is able to do it better than ever before, and that instead of being wearied with repetition he becomes more and more enthusiastic on the subject.

The capacity of the class should be considered, so that the use of questions that are either too easy or too difficult may be avoided. The great design of proper questioning is to lead pupils to think clearly; therefore each question should require a distinct intellectual effort, and each answer should be the thoughtful

result of such effort. If the questions are too easy the mental effort is unnecessary, the exercise ceases to be interesting, and consequently the pupils become careless; while questions that are so difficult that pupils cannot reasonably be expected to answer them, lead either to guessing—a most injurious habit—or to the discouragement of the class, which should always be carefully avoided.

With regard to the third requisite, viz., Experience, I will merely remark that questioning is an art, and in this, as in all other arts, proficiency can be attained only by long-continued and careful practice. The teacher should studiously avoid any system which has been found defective, or is not calculated to act advantageously in the education of the pupil, and constantly aim at finding out and using that system which will best promote the educational interests of the class.

I shall now offer some general observations on what I consider defective and what proper forms of questioning and answering. Questions should be clear, concise, definite, and adapted to the capacity of the class. They should be uttered distinctly, so as to be heard by every member of the class, and in order to necessitate close attention should not be repeated by the teacher. They should be correct in form, so that no change of phraseology will be necessary, as such change causes loss of time and tends to confuse the pupil. They should be in plain, simple language, intelligible to the comprehension of the most deficient in the class, and should at once direct the attention of the pupils to the specific point of which they are to speak. Indefinite or general questions, such as "Tell what you know about the Pacific Railway," or "Sketch the reign of John," may do for written examinations, where the pupil is ex-

pected to say all he can on a given subject, but in oral examination it saves time and prevents the introduction of much irrelevant matter to confine the pupils to definite answers by definite questions.

As a series, questions should be logical—should omit nothing—should develop every point in its proper place, and constantly lead to the ultimate fact to be brought out in the lesson.

Ambiguous questions, or those that allow of a choice of answers, should not be used, as they encourage the habit of guessing. They should not suggest the answer, either by the form of the question, tone of the voice, inflection, emphasis, or, as is sometimes done, by contrast, as, "Is the elephant a very small animal?" As a rule, questions should not admit of being answered by a simple "yes" or "no," but should generally require an answer in the form of a complete sentence. Mere assent or dissent does not require much intellectual effort; and questions that admit of such answers do not thoroughly test a pupil's knowledge, as he may know enough about the subject to enable him to answer correctly in this way, and still have very vague ideas regarding it. Another weighty objection to such answers is that they are useless as a means of cultivating language, while the complete sentence form accustoms the pupil to correct and fluent expression and thoughtfulness—shews more clearly the amount of his knowledge, and thus leads to more pointed and suitable instruction—and if, as should always be the case, the teacher requires answers to be grammatically correct, forms one of the very best exercises in composition and grammar; for I firmly maintain that grammar can be far more practically and usefully taught by requiring pupils to speak correctly in the ordinary conversation of the

school-room and playground, than by a slavish adherence to text-books and the memorizing of an indefinite number of definitions and rules.

Unless in the case of definitions, answers should not be required in the words of the book, as by such a method the pupil may easily substitute memory for understanding in preparing and rehearsing his lessons.

Elliptical questioning may be used in the case of young pupils whose vocabulary is limited, but should not be used any longer than is necessary on that account.

Simultaneous answering may be used to encourage the weak and timid—to give animation to a class when the interest begins to flag, or in a hurried recapitulation, at the close of the different points taught in the lesson, but otherwise it should not be used, as it is apt to destroy independence in the pupil by taking away his individuality. It also offers a very strong temptation to indolence, as the deficiencies of a pupil cannot by such answering be made apparent to his teacher and classmates.

I need hardly say that questions should not be given to the members of the class in regular rotation, or to individual members of the class. Each question should be given to the whole class, so that every individual will require to make the intellectual effort necessary to the preparation of the answer, and, after a slight pause, some member of the class should be called upon to answer without any previous intimation as to who such person will be.

Questions should be properly distributed, so that no member may feel slighted or neglected, and the attention of careless pupils may be obtained by frequently calling upon them to answer.

Answers should indicate thoughtfulness, and be given in such a manner as to admit of their being distinctly

heard by every member of the class; if not so given, the answer should be repeated by the pupil—not by the teacher. The manner of dealing with incorrect answers, as already indicated, refers only to instructive questioning. In reviews, of course, the pupils should receive credit for correct answers only, but the mistakes should be noted and corrected at the close of the review.

In conducting a recitation, the teacher's manner should be lively, animated and encouraging. No pupil should be ridiculed on account of deficiencies; and judicious praise should be given when deserved. I am afraid that we, as teachers, are apt to use censure too lavishly and praise too sparingly.

"Timothy Titcomb," in his "Lessons in Life," very aptly says: "The desire for approbation is as legitimate as the desire for food. I do not suppose it should be much used as a motive for action, perhaps it should never be; but when a person, from a good motive, does a good action, he deserves the approval of the hearts that love him, and he receives their expressions of praise with grateful pleasure. Nay, if these expressions of approval are denied him, he feels in a certain sense wronged. He feels that justice has not been done him, and that there is something due him that has not been paid. When a pupil takes pains to do well, he feels himself paid for every endeavour by praise, and the most unsophisticated child knows when praise is justly due."

The least defective form I propose noticing is the "drawing-out process," which consists in asking what the lawyers call *leading questions*.

It is so well described by Page, in his "Theory and Practice of Teaching," that I cannot refrain from giving his words.

An arithmetic class is called up, and the following dialogue takes place:—

"Where do you begin?" said the teacher, taking the book.

Pupil—On the 80th page, 3rd question.

Teacher—Read it, Charles.

Charles—"A man being asked how many sheep he had, said that he had them in two pastures; in one pasture he had eight; that three-fourths of these were just one-third of what he had in the other. How many were there in the other?"

Teacher—Well, Charles, you must first get one-fourth of eight, must you not?

Charles—Yes, sir.

Teacher—Well, one-fourth of eight is two, isn't it?

Charles—Yes, sir, one-fourth of eight is two.

Teacher—Well then, three-fourths will be three times two, won't it?

Charles—Yes, sir.

Teacher—Well, three times two are six, eh?

Charles—Yes, sir.

Teacher—Very well. Now, the book says that this six is just one-third of what he had in the other pasture, don't it?

Charles—Yes, sir.

Teacher—Then if six is one-third, three-thirds will be—three times six, won't it?

Charles—Yes, sir.

Teacher—Then he had eighteen sheep in the other pasture, had: he?

Charles—Yes, sir.

Teacher—Next, take the next one.

At this point I interposed, and asked the teacher if he would request Charles to go through it alone. "Oh yes," said the teacher; "Charles, you may do it again." Charles read it again and looked up. "Well," said the teacher, "you must first get one-fourth of eight, mustn't you?" "Yes, sir," "And one-fourth of eight is two, isn't it?" "Yes sir." And so the process went on as before, till the final eighteen sheep were drawn out as before. The teacher looked around with an air which seemed to say, "Now I suppose you are satisfied." "Shall I ask Charles to do it again?" said I. The teacher assented. Charles again read the question and again looked up. I waited and he waited; but the teacher could not wait. "Why, Charles," said he impatiently, "you want one-fourth of eight, don't you?" "Yes, sir," said Charles, promptly, and I thought best not to insist further at this time, upon a repetition of *Yes, sir*, and the class were allowed to proceed in their own way.

Comment is unnecessary. Of course no teacher in West Huron adopts such a method, but I fear something similar may still be heard in *other* districts.

PARENTS AND THE SCHOOLS.—Some time ought to be taken, at home, to talk with the children about what they are learning and doing at school. Such talks are what children naturally expect and like. Your children are not turned away to school to shift wholly for themselves, or to be taken care of wholly by the teacher, without any thought of your own for them. You ought to know what they are studying, and how they are

getting on. No matter if you find out something about their plays and playmates, and the way they spend their recess. No matter, either, if the teacher finds out that you know something of what is going on in and about the school-house; and if she comes to understand that without your keeping any close and sharp watch upon her, you have an eye at least for all the good work she is doing.—*Congregationalist*.

INCENTIVES TO STUDY.

BY J. CONNOLLY, HOLMESVILLE, WEST HURON.

NO subject at the present time is having more said or written about it, by literary men of the highest attainments, than that of education. If this be the case, how difficult is it for us to find a theme in relation thereto that has not already been given every opportunity to divulge its secrets.

I, in my own simplicity, thought such a subject not altogether exhausted. It had presented itself to me as one on which I could dilate at pleasure without treading on the corns of any one, but no sooner had I commenced to dig and delve in search of some matter to help me in the amplification of my skeleton, than I found the subject under consideration, in all its various branches, had been fully treated before I was born. Consequently, anything which I present before you to-day may be found little more than gleanings, if you allow me the expression, out of the full sheaves of those who have written so ably on the matter before us; yet I would fain hope that what I do bring before you may not be entirely void of interest, but that, on the contrary, it may lead some to read more on this important subject, and others to practise what they have already read.

Those who have been engaged in the profession of teaching will have observed that the pupil's attention to study, unless guided by a master hand, or a natural inclination amounting to pertinacity, is as changeable as the wind on the seaboard, though, perhaps, not so regular.

It therefore devolves upon us, as

teachers, to devise some plans or schemes, and prove them by experiment; or better, if already proven and at our disposal, to use them in such a way that the youth under our charge may be as steady in the pursuit of knowledge as a vessel under the favouring breezes of the trade winds.

"Surely," says one, "this is a summation devoutly to be wished. I am afraid your standard is too high." Too high it may be, but I protest that in this case it is better, yea, a great deal better, to err on the side of a high standard than on that of a low one. It is a good horse that never stumbles, and it is about as safe to be thrown from his back clearing a fence as when he stumbles on a stone; in the former you are on your guard—not so in the latter.

But what are those incentives by which we may incite our pupils to study? First, let me direct your attention to that of Approbation, and its opposite, Disapprobation. See that boy, as he wends his way along the public thoroughfare, by the side, it may be, of a brother or a sister. It takes not the eye of a close observer to discern the troubled countenance. He has reached the school. The tear glistens in his eye. Mark the look of yonder teacher. Tenderness is in that face. That glance is friendly. Sympathy is depicted there. Note the effects. The child is assured no harm can befall him. That approving smile has removed from his youthful mind the horror of the strap, so glibly rehearsed at home, never more to be reinstated unless by that monster,

Incompetence, which rules by fear and not by love.

A small matter, indeed, is this to the superficial observer, but not so to him that understands a little of human nature. That boy, on leaving home, was resolved to learn—was determined to win honours deserving of praise from a kind and affectionate mother, who had fitted him out with care on this important morning, and watched with pride his receding form as it vanished in the distance.

With such a reception shall his hopes not be realized? Our answer must be in the affirmative, unless his talents at this stage are far below the average. On the other hand, if instead of that attractive and winning smile beaming on the teacher's countenance, a sour look, a reproachful eye, meet the gaze of the lad; count the cost, all happiness gone, his castles built in air are fled. No place like home, if not in so many words, is the substance of his thoughts. What a toil is the task, which might have been a pleasure! And do I overshoot the mark in stating that half as many years are consumed in mastering "the Primer" as under genial influences months would have accomplished? Beware, I say, how you meet that timid one, as for the first time he crosses the threshold of the school.

"Speak gently to the little child;
Its love be sure to gain;
Teach it in accents soft and mild;
It may not long remain."

Now, presuming that the child has entered school and commenced its studies under the most favourable circumstances, what cheaper incentive, from the teacher's standpoint, can be used than that of praise, or a more effective one, so far as the child is concerned? A little of it suits very well for the best of us; and, if too much be not taken, acts as a gentle medicine, invigorating and restoring our languid faculties to a normal condition; but

how much the more that pupil's? Have you tried it? What a beam of light illumines the face as that six-year-old takes in the situation, and understands that he is the recipient of such kindness! How he takes his seat, looking here and there all over the room to see if those present have not heard the burning words, or seen the look, the cause of his felicity!

While laying so much stress on the approval of attention to study, I would have you to understand that this word or these words of praise are to be spoken in season and not out of season. You are not, on every occasion, to lavish your commendations on him. Lord Dufferin, as often as he threw the turf into the Geyser, had a rise out of him. Not so in the case before us. Time your rewards.

The opposite of Approbation is Disapprobation, also a powerful factor towards urging some, and perhaps all, at times, to gain a little knowledge. We are all prone to become weary in the pursuit of any game—to hang fire; the old stimulant is not sufficient to arouse us from our lethargy. For the present its efficacy is gone, and we resort to another course of procedure as a matter of necessity. What shall it be? Disapprobation? Yes. But how? that is the question. Your reproachful look comes in now—not the look of anger—put it on. Your word of correction, not the rod of correction, is admirably adapted for the occasion. Not, as I said, at our last meeting, that the birch is a thing of the past; by no means. "A place for everything, and everything in its place," is my motto. In the dismissal of this part of my subject let me say, your reproachful look, your word of correction, should, if possible, be given, in the first place, in private, and if not sufficient, as publicly as your praise.

Emulation will now engage our attention as an incentive. I mean pro-

gression without envy. "Let nothing be done through strife or vain-glory," saith the Scriptures; and if this command be broken, surely the golden rule, to prefer another to yourself, is also transgressed, in which, says Dr. Wilson, "the whole essential essence of true gentlemanly conduct lies."

Having thus defined emulation, let us examine how it serves duty as a motive to influence our desire for information. A more common phrase than "getting on" I cannot think of. Every man you meet, be he rich or poor, learned or unlearned, is desirous of "getting on" in the world. Is there anything wrong in this desire? Certainly not. What a world this of ours would be if we were content with our present acquisitions, thoroughly conservative in all our actions, not an iota of go-a-head in our nature! Truly, a Sleepy Hollow it would be. But such is not our constitution. We are either progressing or performing a retrograde movement. The majority incline to the "getting on." How is it done? In an upright manner? Is the tendency of our teaching to make men love the golden rule—to prefer another to oneself? I am afraid not. When boys and girls, young men and maidens, can be found who rejoice at the blighting of the hopes of their companions—who glory in their own success, and openly proclaim, "None is like unto me"—when we find this not confined to individuals alone, but displayed in the family, is there not "a screw loose" somewhere—something wrong that requires to be set right? No wonder that a gentleman said to me the other day, that "the total sum of the work done in our schools, Public and High, is intellectual culture, the social and moral element being entirely ignored." This I consider due to emulation, meaning rivalry and envy. The whole powers of our pupils are applied that

they may head the list on examination day, crow over the result, and bring into contempt those who are unsuccessful. A story told by Sir Walter Scott of his school days may illustrate the point, though far-fetched. "There was," said he, "a boy in my class at school who stood always at the top; nor could I, with all my efforts, supplant him. Day after day came, and still he kept his place, do what I would, till at length I observed that, when a question was asked him, he always fumbled with his fingers at a particular button in the lower part of his waistcoat. To remove it, therefore, became expedient in my eyes, and in an evil moment it was annexed with a knife. Great was my anxiety to know the success of my measure, and it succeeded too well. When the boy was next questioned, his fingers sought again for the button, but it was not to be found. In his distress he looked down for it: it was to be seen no more than to be felt. He stood confounded, and I took possession of his place; nor did he ever recover it, or ever, I believe, suspect who was the author of his wrong." Does not the same principle live to-day? Should this be the case? I could take you to a house not a thousand miles away; thither the weekly papers were carried, that certain names might be displayed, knowing well that the members of the household were conspicuous by their absence on this printed sheet. We talk about questionable advertising. Is not this questionable advertising? Judge for yourselves. What is published? Is it entirely the result of perseverance? Is it entirely the result of effort or of worth? You will surely not say it is; nor yet would I affirm that they are absent. But of one thing I am certain, viz.: that some hard-working student's name is not there, and we do him an injury by its absence. Let us do right, encourage our pupils to do..

right, and be careful about the means we employ to incite them to win preferment.

I say this not in the way of complaint; for I am proud of our system of education—proud of the rapid progress being made towards perfection—proud of being associated to-day with men and women who are coveting the best gifts, that they may discharge their duties faithfully. We are not engaged in a game of chance, but may, by the judicious use of our talents, discard that which is of no service to our calling—a calling next in importance to the Christian ministry, and as broad in its influences. Pardon this digression.

I was saying we must be careful about the means we employ to kindle and foster the desire for preferment. We must educate them, not forgetting that part of a liberal education, as laid down by Huxley, viz., "To love all beauty, whether of nature or of art, to hate all vileness, and to respect others as himself;" and the same writer says: "I protest that if some great power would agree to make me always think what is true, and do what is right, on condition of being turned into a sort of clock, and wound up every morning before I got out of bed, I should instantly close with the offer. The only freedom I care about is the freedom to do right; the freedom to do wrong I am ready to part with on the cheapest terms to anyone who will take it of me."

There is sufficient evil in our natures without education nourishing it. We want a few more Arnolds in the profession—men and women who will sacrifice a little cheap popularity for the more valuable gratitude of their pupils in after-life. We want promotion, but not at too high a figure. These talented pupils will get on in spite of us. Help those who are unfortunate, for the time being. "In the roughest nugget of human gold

there is a wealth to be developed that can carry a blessing with it wheresoever it may go." Depend upon it, they are the boys and girls, as a rule, who, in the future, will be our leading men and women in the various avocations of life.

Again, education is profitable—profitable unto all things, spiritual and temporal. No trait of character should be more sedulously cultivated than that of being useful. To be useful in our day and generation should be the aim of all, and by what better means can this principle be inculcated than by the medium of our schools? We are brought into contact daily with childhood, when the mind is more easily moulded than at any later period—when the mind is more susceptible, more capable of receiving lasting impressions. "Education is not mere scholarship. It is not mere book-craft. It is thought led on to reflection. It is reflection developed into purpose. It is purpose consummated by action." By nature we are selfish, yet in children, by times, we see a desire to be of service to superiors, and occasionally to inferiors. Would there be any harm, when occasion offers, to tell the story of John Howard, the philanthropist—to picture to the plastic mind of youth the undying zeal, the obstinacy in overcoming difficulties displayed by this great, good, and noble man, that he might alleviate the suffering of those incarcerated in English gaols, and at last dying in harness, far from home? Would it be wrong to dwell for a short time on the life of Wilberforce, as we pass his name in history, to tell of the large soul in a small body—of a life spent with a purpose, "The Emancipation of the Slave?" Who can tell what benefits would accrue from an occasional glance at Livingstone, the greatest of missionaries, though it be in imagination—a word about Faraday, Miller, and

others too numerous to mention, not alone on the score of usefulness, but on that of acquisition, our next incentive?

We read of "The Old Curiosity Shop," by Dickens, but what youth is not full of curiosity? What youth so dull, who does not ask questions difficult of being answered? Should we satisfy the thirst for knowledge? By all means. I go further: cultivate it. At times you will be amply rewarded by their peculiar logic. Witness the following dialogue: A little barefooted four-year-old said to his papa last summer, as he was hoeing in the garden: "Does God make everything grow?" "Yes," he replied. "Does God make thistles grow?" "Certainly, my boy." "Well," said the little fellow, "He is a curious kind of a man; if He had one in His foot He wouldn't."

Permit your pupils to ask questions, whatever the subject is under consideration. If you cannot fully explain it at the time, defer your answer. I know some do not like this plan, fearing that they will sink in the estimation of their pupils. Not a bit of it! Our heads are not like Thackeray's hall, seventy feet in length, fifty-six in breadth, and thirty-eight feet high, capable of holding everything, and knowing everything. I give our pupils credit for knowing that much. Once more, I say, cultivate this habit of asking questions, that the desire of acquisition be not stunted. It might be well termed the true "Educational Habit." How many, when they leave school, forget all that they ever acquired, and have no desire to push onward? How many of our acquaintances have any taste for literature, outside of those who find it necessary for the battle of life? Should this be the case? No, a thousand times no! "Life itself, from the cradle to the grave, if used aright, is education; for education is the due development

of our powers of mind and heart by exercise. But yet there are multitudes of men who, as it were, stand still as the crowd passes; they stand where they did ten, twenty years ago; they have made no progress; the world has breathed, and thought, and acted, and great hearts have done nobly while the sluggards have been like men without eyes, without ears, without motive, end, or aim, with life scarcely pulsating at their hearts." A sad picture is this, but too true. A farmer said to me the other evening, "I wish we could get our young folks to read more." Yes; a wonderful world is this we live in when intelligent young men and women go to sleep rather than buy a book and read it. Let us see to it, then, that we curb not the curiosity of youth.

A word about prizes. I feel that I am on disputed territory; bringing before you a burning question—an incentive about which everyone should be informed. Is it right to give prizes? I refer to the system of giving two or three prizes to a class, and also the giving of one prize for a certain subject, when an examination is in the near future. I have tried the latter and found it a failure; not so far as the examination was concerned. By no means. Everything there was a success. But I look for something more than that to satisfy my mind. The plan is wrong, radically wrong. Out of a class of twenty pupils, only two were striving at the last; the rest saw clearly that they had no chance, and dropped off one by one. Shall I recommend to you what I cannot approve of myself? Impossible. Refrain from such a practice. Do not permit your love of show to overcome your better nature. What we do, let it be done with the sole object of drawing out all the talent under our care, and not that of the few. Two or three prizes are somewhat better, but still deficient. Even under this

stimulant some feel that they cannot be successful, and are therefore left out in the cold under the blighting influences of a sense of incapacity. Page, after treating this subject fully, says: "I may venture to add, as a scholium to what has already been said, that the teacher who has not yet learned to call into exercise these higher motives, viz., the desire to do right, etc., and to rely for success mainly upon them, and who dares not abandon the system of exciting stimulants for fear of a failure, has yet much to learn as a true educator of the young."

Is it not a fact that our honor men do not head the list of the successfuls in after-life? And if I be not mistaken, a large number succumb in their endeavour to win honors, or have their constitutions so shattered as to be utterly unable to compete with those who have taken the easier course, and are, in Spencer's phraseology, better animals.

Moreover, some come to maturity earlier than others, and shall we neglect the remainder that they may have a surfeit, and consequently the right to hold us up to scorn the remnant of their days? Let us be strong men, having a purpose, ever remembering that there are no gains without pains. Carlyle once said "there was no good in the world." I question his sincerity on the occasion; but be that as it may, if there be any good, and men instruments of doing it, where may men have greater oppor-

tunities of accomplishing their purpose than in the profession to which we belong?

I leave the matter of giving a book to every child an open question, as at present I have my doubts as to whether it be an incentive under the circumstances. Think over the matter, and if not fully persuaded of its utility, cast it overboard; if satisfied, let it have a place among your incentives.

I have already exceeded the time I intended to occupy, but let me say, that I do not wish anyone to agree with me in all I have said. Yet one thing I desire: that every teacher present shall think of the responsibility that rests upon him or her, as the case may be; make a struggle to understand the proper incentives, and having done so, to use them.

"The man whose mind is not well stored with accurate knowledge—with facts digested and made available—is not likely to 'wear well,' or to say and do much worth saying and doing. He may be a keen, cutting tradesman, able almost to cheat the devil, and to come on his legs in every sort of transaction, and to get a profit out of anything, everything, or nothing:—he may be an ingenious inventor, a profound mechanist, or an adroit manufacturer, and become rich! rich! rich!—a millionaire! But if he is nothing more, he might, so far as the higher—the highest—ends and purposes of existence are concerned, have been born an idiot."

EDUCATION that extends no further than to develop conceit because of some petty superiority is hardly worth an intelligent person's time to acquire. Education should develop the whole mind and extend to the whole department of knowledge; and not only make the individual man better and nobler, but through this nobility influence that which surrounds him. We must have

specialists, but because a man is a specialist he need not be narrow-minded; neither should education make a man exclusive, and cause him to have no thought for the happiness and well-being of those about him. The higher his education, the more he should delight in doing good and making the world better in all departments that tend to elevate the race to a higher sphere.—*Elson*.

ARTS DEPARTMENT.

ARCHIBALD MacMURCHY, M.A., MATHEMATICAL EDITOR, C. E. M.

Our correspondents will please bear in mind, that the arranging of the matter for the printer is greatly facilitated when they kindly write out their contributions, intended for insertion, on one side of the paper ONLY, or so that each distinct answer or subject may admit of an easy separation from other matter without the necessity of having it re-written.

PROBLEMS AND SOLUTIONS

by JOHN H. BALDERSON, B.A., Mathematical Master, Port Hope High School.

205. If S = the sum of the m^{th} powers, P = the sum of the products m together, of the n natural numbers $a_1, a_2, a_3, \dots, a_n$, shew that $\lfloor \frac{n-1}{n-m} S \rfloor > \lfloor \frac{n}{n-m} \rfloor m P$.

$S = a_1^m + a_2^m + \dots + a_n^m$; and we know from the theory of inequalities that

$$a_1^m + a_2^m + \dots + a_n^m > m \left(\frac{a_1 + a_2 + \dots + a_n}{m} \right)$$

$> m(a_1, a_2, \dots, a_n)$; and the number of combinations of n things taken m at a time is

$$\lfloor \frac{n}{n-m} \rfloor m$$

each of these will occur $\frac{m}{n}$ times the number

of combinations; \therefore each term shall occur

$$\frac{m}{n} \lfloor \frac{n}{n-m} \rfloor m \text{ times;}$$

$$\therefore \frac{m}{n} \lfloor \frac{n}{n-m} \rfloor m S > m \text{ times product taken } m \text{ at a time;}$$

$$\therefore \frac{m}{n} \lfloor \frac{n}{n-m} \rfloor m S > m P;$$

$$\therefore \lfloor \frac{n-1}{n-m} \rfloor S > P.$$

206. A point is taken in an equilateral triangle, and the distances from that point to the angles are respectively 10, $7\frac{1}{2}$ and $12\frac{1}{2}$ chains; find the area of the triangle.

Problems in Arithmetic by W. S. ELLIS, B.A., Math. Master, Cobourg Coll. Inst.

I. A and B buy the apples in a barrel for \$2.25. B pays 75 cents of this price, A paying the rest. It costs B 25 cents to get them home, and A gives 15 cents for the barrel, which B keeps. When they settle who owes the other, and how much?

Ans. B owes A 40 cents.

II. Three times the sum of two numbers is 312, and half their sum multiplied by quarter their difference is 104. What are the numbers? *Ans.* 48 and 56.

III. What multiplier will change miles per hour to yards per second. *Ans.* $\frac{2}{3}$.

IV. Given that the diameter of a circle is $\frac{1}{2}$ of the circumference, that the driving wheel of a locomotive is 7 feet across, and that when this wheel is turning $1\frac{1}{2}$ times a second the locomotive is 3 minutes going one mile; find what fraction of the distance travelled was lost by slipping. *Ans.* $\frac{1}{3}$.

V. In the previous problem, what would have been the rate of moving in miles per hour had there been no slipping?

Ans. $22\frac{1}{2}$ miles.

VI. Given that the diameter of the driving wheel is 6 feet, and that the piston has a stroke of 20 inches, through what distance backward and forward does the piston move while the locomotive is going 4 miles?

Ans. $\frac{7}{3}$ miles.

VII. A Canadian who bought a set of volumes in Boston got $\frac{2}{5}$ of the marked price thrown off, but he had to pay a duty of 15

cents on every dollar that the goods cost, and also express charges amounting to \$1.45. This whole cost was $77\frac{1}{2}$ cents more than the marked price of the books. What was the marked price, also the amount of duty collected? *Ans.* \$30 and \$5.82 $\frac{1}{2}$.

VIII. There are six numbers whose G.C.M. is 18, and whose L.C.M. is 1260, find them. *Ans.* 36, 90, 126, 180, 252, 630.

IX. An article is sold at a price which is $\frac{1}{4}$ above cost. Had the cost been $\frac{2}{3}$ of what it really was, and the selling price remained the same, the gain would have been \$3; find the first cost. *Ans.* \$4.50.

X. The length of a picture is to its breadth as 5 : 4, and it costs \$4.10 to get it framed with a moulding every 3 inches of which is worth 10 cents. If the workman charge 50 cents for making and fitting the frame, find what it will cost to varnish the picture at \$1.25 per square yard. *Ans.* 69 $\frac{1}{2}$ cts.

XI. How much should a man, who wishes to make 10 per cent. on his money, pay for a note drawn for \$160 with interest at 7 per cent. per annum, the note having already run 4 months, and becoming due in 5 months from the time of purchase? *Ans.* \$161.664.

XII. A house is 40 feet long, 25 feet wide, the walls are 12 feet high, and the ridge of the roof rises 10 feet above the walls. The roof extends beyond the walls one foot all around. In the walls there are 2 doors each 7 ft. by 5 ft., and 6 windows each 5 ft. by 3 ft. How much money will be required to buy material to "close in" this house and lay down the lower floor, under the following conditions:—The roof to be covered with shingles each 18 inches long, 4 inches wide, and 5 inches exposed; the walls to be covered with siding 6 inches wide, each piece overlapping the one beneath it one inch; and the floor to be laid down of boards $1\frac{1}{2}$ inches thick; the shingles to cost \$1.75 per bunch of 500, the siding to cost \$12.50 per thousand feet, surface measure, and the flooring to cost \$16 per thousand feet of one inch thick? *Ans.* \$61.68.

UNIVERSITY OF TORONTO.

Senior Matriculation, 1881.

ARITHMETIC AND ALGEBRA.

1. Given £1 sterling = \$4.86 $\frac{2}{3}$, obtain short methods for the conversion of sterling into currency and currency into sterling, and illustrate by examples.

2. The issue price of certain railway shares was \$50, to be paid in five instalments of \$10 each, the first on application. After a "call" or second payment of \$10 the shares stood at \$1 a share premium. A person then invested \$756, and after paying a further call of \$10, a dividend was declared of $8\frac{1}{2}$ per cent. per annum on the paid-up capital. What is the amount of his dividend, and what interest does he get for his money?

3. Explain the metric system of weights and measures, and give the English equivalent of each metric unit.

4. Simplify

$$\frac{bc(x-a)^2}{(a-b)(a-c)} + \frac{ca(x-b)^2}{(b-c)(b-a)} + \frac{ab(x-c)^2}{(c-a)(c-b)}$$

5. If $\frac{y+z}{3b-c} = \frac{z+x}{3c-a} = \frac{x+y}{3a-b}$

shew that $\frac{x+y+z}{ax+by+cz} = \frac{a+b+c}{a^2+b^2+c^2}$.

6. If $p+q+r=0$, $p^3+q^3+r^3 = \frac{3}{2}(p^2+q^2+r^2)^2$.

7. Divide by Horner's method

$$x^4 + 5x^2 - 189x^3 - 162x^2 + 486x - 2187 \text{ by } x^2 + 3x + 27.$$

8. Three boats started at the same moment, at intervals of 100 yards apart; in 6 minutes the third overtook the second, and in 2 minutes more it overtook the first. How soon will the second overtake the first?

9. Solve

$$\begin{cases} y\sqrt{(a-x)(x-b)} + x\sqrt{(a-y)(b-y)} \\ = 2b\sqrt{(a-x)(a-y)} + 2a\sqrt{(x-b)(b-y)} \\ xy = 4ab. \end{cases}$$

10. When are four quantities said to be in proportion? What value must be given to x to make $1+x$, $2+x$, $8-x$, $10-x$ proportional?

TEACHERS' ASSOCIATIONS.

CHRONICLE OF THE MONTH.

NORTHUMBERLAND TEACHERS' ASSOCIATION.—The regular semi-annual meeting of this Association was held in Cobourg, on Thursday and Friday, the 6th and 7th of October, Mr. D. C. McHenry, M.A., presiding.

At the preliminary session the sum of \$30 was voted to supplement the subscription of members for the *School Journal* and the **CANADA EDUCATIONAL MONTHLY**. A discussion ensued as to whether the County Associations throughout the Province are, after all, rendering the best possible results to the profession in return for the great expense necessarily incurred in their management. A resolution was unanimously adopted instructing the Secretary to correspond with the Secretaries of other Associations, requesting them to unite with us in memorializing the Honourable the Minister of Education on the matter of securing the services of some competent person to conduct Teachers' Institutes throughout the country, to take the place of the present Associations. The following subjects were discussed:—"English Grammar: The Verb,"—G. E. R. Wilson; "How to Conduct a Recitation,"—D. E. Stephenson; "Use and Abuse of Text-Books in Teaching,"—D. I. Johnston; "Elementary Physiology,"—R. K. Orr, B.A.; "Question Drawer,"—Messrs. Orr, Ellis, and Ash; "Uniform Promotion Examinations,"—Inspectors Tilly and Scarlett. The addresses and the discussions on these subjects were of the usually interesting character.

The following were elected officers for 1882:—President, G. Dowler; Vice-President, J. E. Flewelling; Secretary and Treasurer, D. E. Stephenson; Management Committee, Messrs. Scarlett, I.P.S., Hey-

ward, and Ellis, B.A., B.Sc.; Auditors, Messrs. Ellis and Black.

An extremely interesting and instructive lecture was delivered on Thursday evening by the Rev. S. S. Nelles, D.D., President of Victoria University; subject, "Mistakes in Education." The next meeting will be held in Brighton early in May, 1882.

NORTH HASTINGS TEACHERS' ASSOCIATION.—The semi-annual meeting of the North Hastings Teachers' Association was held at Madoc, October 6th and 7th. The usual routine business was disposed of, and a motion to purchase a sufficient number of copies of the Minutes of the last meeting of the Provincial Association, to supply each paying member with a copy, was carried. The Treasurer was instructed to publish a detailed statement of the receipts and expenditures in connection with the promotion examinations. A short discussion took place on how to improve those examinations, and examiners were appointed for the Christmas examination.

The following subjects were discussed during the Convention: Reading to 2nd, 3rd, and 4th classes; Grammar; and Canadian History, introduced by Mr. J. H. Smith, I.P.S., Hamilton and Wentworth, to whose assistance much of the success of the convention is due; English History, introduced by Mr. Kirk, Principal M. S., Madoc; The Railroad System of Ontario, by Mr. Rowe, Marmora; Writing, for the discussion of which the Association was fortunate enough to obtain the services of Mr. Robinson, Commercial College, Belleville; Spelling, introduced by Mr. Mackintosh, I.P.S., N. Hastings, who also delivered an address to teachers.

A hearty vote of thanks was accorded to Mr. Smith for the valuable assistance he had given in making the convention a success; and also to Mr. Robinson for his instructive address on Writing.

On the evening of the 6th, Rev. Dr. Jacques, Albert College, Belleville, delivered an interesting lecture on "Professional Enthusiasm" to a large and most attentive audience.

WENTWORTH AND HAMILTON TEACHERS' ASSOCIATION.—The half-yearly meeting of the above Association was held in the Examination Hall of the Collegiate Institute, Hamilton, on Friday and Saturday the 21st and 22nd of October. About two hundred teachers were in attendance, making it one of the most successful meetings ever held in the county. The Association was opened on Friday morning at 10 o'clock by the President, W. H. Ballard, M.A. The morning was taken up principally with routine work. In the afternoon the President gave an interesting and instructive lecture on "Units." "Arithmetic" was taken up by Mr. D. E. Sheppard, of the Collegiate Institute, who

briefly reviewed the work required for entrance to High Schools, explaining many short methods and points of interest. Mr. Sheppard's lecture provoked a lively discussion upon the subject. In the evening a very able and interesting lecture was given by J. H. Smith, I.P.S., on "The Aims of our Public Schools." Mr. Smith was listened to with a great deal of pleasure, and at the close of his address received a hearty vote of thanks.

On Saturday morning "Geography" was taken up by Mr. John McInnes, who gave many useful hints on the teaching of the subject. He thought that too little importance was attached to Physical Geography, and blamed the Intermediate examination for being the cause of it.

Mr. T. C. L. Armstrong, M.A., of Toronto, gave an eloquent address upon "English in our Public Schools." At the close of his lecture Mr. Armstrong was presented with a beautifully engrossed address by the members of the Association, as a recognition of the valuable services rendered by him in the past. The Association then rose.

HORÆ HORATIANÆ.—III.

BY GEORGE MURRAY, B.A. (OXON.), SENIOR CLASSICAL MASTER, HIGH SCHOOL, MONTREAL.

(Continued from page 69.)

HORACE—BOOK II., ODE III.

Maintain an even-balanced mind,
When Fortune frowns; if fate be kind,
Be not with pride uplifted high,
For, Dellius, thou art doomed to die:
Whether thy life hath all been sad,
Or festal days have found thee glad,
Couched on the turf, with cup in hand,
Quaffing Falernum's choicest brand.
Where poplar pale, and soaring pine
Their hospitable boughs entwine,
And the swift streamlet toils along
Its winding channel with a song,
Thither let wine and perfumes rare
Be brought, with roses frail but fair,

While chance permits, ere youth be fled,
Or the Three Sisters cut life's thread.

Thy woods, amassed on every side—
Thy villa, washed by Tiber's tide—
The heaped up treasures that are thine,
These to an heir thou must resign.

Kinsman to Inachus of old,
Or beggar, shivering in the cold,
It matters nought—for thou must go
To ruthless Pluto's realm below.

All flock to Hades: from the urn
The lot of each leaps forth in turn:
All in the same dark boat are sent
To everlasting banishment.

CONTEMPORARY OPINION.

THE BEST IS THE CHEAPEST.

THE ranks of women-teachers are filled up principally by young persons who, residing at home, teach as a means of lightening the burden to their parents of supporting them. There are a few who devote themselves heroically to their profession from a pure love of it, but the majority teach because they needs must do something.

In any proper theory of social advancement, the instruction of youth should be the most honourable of the professions. It should be set apart exclusively for the most refined, affectionate, conscientious, and intelligent men and women. For such persons teaching has many attractions in itself. These would be added to by making the profession remunerative, and hence honourable. It should afford a better career than law or commerce, authorship or preaching. At present, most of the talent and energy of the country is to be found in counting-houses; some of it has been diverted, by a college education worthy of the dark ages, into courts, scribblers' garrets, and the pulpit. There seems no reason why much of it should not be induced to enter the school-room and fashion the rising generation to nobler and grander views than are entertained by many now on the scene of action.

The importance of having teachers of the very highest qualifications cannot be over-estimated. Ten parents out of twelve of those who send to the public schools are unfit to serve as examples to their children. Slovenliness in dress, infirmity of temper, rudeness of manner, disposition to tyrannize, sullenness, impatience, under-bred deportment, narrowness of prejudice, and defective education are common enough in families to

need a corrective elsewhere. That corrective can only be found in neat, sunny-tempered, impartial, polite, well-bred, and thoroughly educated teachers. Constant intercourse with such persons will insensibly mould the character of youth and counteract the evil influences of a defective home education. The child imitates, unconsciously, those with whom he is brought into contact; and is injured, rather than profited, by being sent to teachers inferior to his parents.

If women teachers perform the same work as men, what solid reason is there against their receiving equal remuneration? Ought the first lesson taught children to be one of social injustice? Ought the teacher herself to be an illustration of the willingness of the "leading influence" to keep back the wages of the labourer? What effect must it have on the youthful mind to see that society thinks it right to pay a woman only half or three-fourths as much as a man for the same work? Is it right to infuse into the next generation injustice by example, while we endeavour to teach them justice by precept?

What teacher who does not thoroughly love her profession can work with her whole heart while she is conscious all the time that her services are inadequately remunerated, and that she must turn and twist her finances in every conceivable way in order to preserve a respectable and lady-like appearance? If they have others besides themselves to maintain—as is often the case—this is almost impossible, and they have the bitter consciousness that society visits upon them the narrowness of their resources in a corresponding depression of respectability.—*By Florence H. Birney, in New-England Journal of Education.*

THE SCHOOL TEACHER'S
SOLILOQUY.

BY A SCHOOL MA'AM.

To teach, or not to teach, that is the question :
Whether 'tis better in the school to suffer
The noise and bother of four dozen young-
sters,
Or to take up arms against a sea of troubles,
And, by marrying, end them? to love—
to marry—
No more ; and by marrying to say we end
The heart-ache, and thousand petty troubles
That teachers are heir to ;—'tis a consum-
mation
Devoutly to be wished ; to love—to marry ;—
To marry ! perchance to be miserable ; ay,
there's the rub ;
For in that state of wedlock what troubles
may come,
When we have shuffled off our happy girl-
hood,
Must give us pause ; there's the respect
That makes teaching of so long life ;
For who would bear the anxieties of exami-
nations,
The scorn of High School teachers, the care-
lessness of trustees,
The weariness of mind and body, the criti-
cism of inspectors,
The insolence of children, and the care
That patient teachers with unworthy pupils
take,
When they themselves might their quietus
make
By simply marrying? Who would all this
bear,
And grunt and sweat under a weary life,
But that the dread of misery after marriage,
That untried state, into which if you once
enter,
You can never return, puzzles the girls,
And makes them rather bear the ills they
have
Than fly to others that they know not of !

—Ex.

GOD has endowed us with a quality of
mind—an inner sense—that yearns for more
and more growth and development ; with an

intense desire to investigate nature—an in-
clination, as it were, to travel on toward
Him. He who is wise will ponder these
things, and his desires, like the depths of
nature, will never lose interest or become
shallow so as to give no more satisfaction.
The more we look into nature the better we
are repaid for our trouble. The weak man
may grow weary at the accumulations of the
wisdom of ages, but to the strong man no
such weariness will occur. He will continue
in seeking that which is valuable to himself
and others so long as the physical power
within him will permit, and when this
fails he will see in this physical and well-
earned weakness not an evil but a wisdom
that passeth the understanding of weak men.
—Elson.

OWNERSHIP IN BOOKS. —Ownership in
a good book adds to the power of a book.
A hundred well-selected books owned by a
child will exert a far greater influence over
him than the same hundred books will if bor-
rowed from a public library. The best way
to protect a child from the influence of bad
literature is to invest him with the owner-
ship of that which is good. The parent who
fails to interest his child in good reading by
securing for him a small but well-selected
library, fails to do his duty and foregoes a
high privilege. When a book can be bought
for five cents, but few have any excuse for
this neglect.—Supt. J. H. Smart, Ind.

THOSE who are sometimes troubled to
know how to pronounce the termination
“ough”—so troublesome to foreigners—
may see how simple and easy the following
makes the task :

“ Wife, make me some dumplings of dough,
They're better than meat for my cough ;
Pray let them be boiled till hot through,
But not till they're heavy and tough.

“ Now I must be off to my plough,
And the boys (when they've had enough),
Must keep the flies off with a bough,
While the old mare drinks at the trough.”

THE BEST SCHOOL.—That school is not considered the best in which the machinery of government is most prominent, and the pupils behave like mere automatons, exhibiting no individuality, but a total absence of natural freedom; but where the spirit of investigation is rife, where all are actively employed in legitimate work, where a natural development of the best faculties of the mind is progressing, where pupils understand that they themselves have a great work to do, and not many years in which to accomplish it—there is the place to look for results which will be valuable and lasting.—*Hon. W. Richardson, Supt. Schools, Chillicothe, O.*

HOW TO TEACH.—If an educated man wants to learn a foreign language, he begins, as soon as he can read at all, with something that he expects to find interesting. He reads a novel, unless he has a distaste for novels, and then he reads poetry or some author whom he has hitherto known only by repute or by a translation. The motive is the same in all three cases. He wants to have the necessary drudgery of mastering a foreign language lightened, and he chooses books which he thinks will lighten it. Precisely the same course should be taken with children in elementary schools.—*London Saturday Review.*

CONTRIBUTORS' DEPARTMENT.

A HIGH SCHOOL AND ITS MORAL.

To the Editor of The Nation.

SIR,—I have taught in a High School two months. In that time I have made several discoveries—I mean they were discoveries to me. I came out of college last June, knowing that I was to fill this position. I had no "experience" nor "methods" when I entered "the work;" I had done some thinking, and had a few notions about teaching. The chief one was that if I made the studies interesting, other matters would right themselves. I worked hard, and succeeded in getting thoroughly enthusiastic myself. I found, however, that my classes were by no means unanimous in *their* enthusiasm. I was puzzled; I did not consider myself wholly to blame; for there were a number who had been listless at first who were most animated now. I went to old teachers who had had "wide experience." I stated as clearly as I could my trouble, and asked for an explanation. With a smile that made me feel as if they had patted me upon the head and addressed me as "Sissy," I was told that I should soon "get used to that—all teachers did;" "there were some children that could never be interested in anything;" after I

had had more "experience" I should learn to accept this as an unavoidable evil. I was sceptical; I tried a little harder to be entertaining. My History class were studying about Egypt. It was dry for me, very stupid to them. Lessons dragged. We began to read aloud from Ebers's "Egyptian Princess." We had only half an hour a day for this, but it produced a marked change in the majority of the class. They were not suffered to take the book outside, and I found that the text-book lessons were recited with an astonishing velocity, so that a few minutes might be secured for the "Princess." However, there were several of the class who sat dreamy-eyed and passive, smiling in polite amazement when the rest of us became excited over our reading.

I have also a Natural Philosophy class. One day we learned that "nature abhors a vacuum." I thought of the minds of some of my nonchalant scholars. I concluded that nature must abhor a mental as well as a physical vacuum. Still, believing that these young people were interested in something, I set myself to find out what that something might be. One of my notions was, that the way I used to write compositions was all wrong. Like most chil-

dren, my subjects, if not abstract nouns, were reversed and revised quotations from cyclopædians and histories, cradled in a few moralizing ideas abstracted from my mother or big sister. I spent much time talking with my scholars out of school hours, and as I like things that boys and girls like—such as jig-saws, base-ball, china-painting, and the *St. Nicholas*—I soon found what was nearest the hearts of many of my boys and girls, and I made them write of these things.

I was still baffled by the same *dolce far niente* scholars. Light was poured in upon my dim understanding one day in the shape of a pink-tinted, gilt-edged, perfumed note, breathing words of love from a girl of fifteen to a boy of seventeen. I was no longer mystified. How could a girl of fifteen have any room for the pyramids of Egypt when her mind was overflowing with an absorbing passion? Had we not advanced a step further in physics, and learned that no two bodies can occupy the same space at the same time? I took observations, and convinced myself that here was one source of my trouble. I thought: "If this matter begins in the High School, I must find some way to nip it in the bud." I began to investigate. The grammar grades seemed familiar with the "old, old story;" it did not appear to be a new thing in the intermediate departments. I had occasion to leave the building one noon earlier than usual. The primary school had just been dismissed. A group of small boys, averaging seven or eight years of age, were leaving several small girls. One youth of six, holding up a scrap of paper covered with a child's scrawling attempts at printing, called out, "Say, what 'd you give for your *love-letter*?" A blushing maiden of five turned around and in somewhat indistinct accents expressed her displeasure. At the same moment another young gallant rushed up, tore the letter from the hand of the first boy, administering a vigorous kick, and valiantly inquired if "he'd bother 'his girl' any more?" Two other small girls were walking lovingly side by side. One was overheard to remark: "Who's *your beau*? Mine is," etc.

Now, I do not believe that this "childish nonsense" is harmless, and that girls and boys get "over it." I know that it will do no good for me to enter the lists against my high-school Cupid; but won't somebody with a wiser head than mine try to convince the fathers and mothers that our public schools—of which we are justly proud—are nourishing an evil that it does seem to me is one great cause for a great part of the useless lives and loose morals in the country? I mean the primary grades as at present managed in many schools. I have taken some pains to get statistics, and in the majority of the public schools I find that the most crowded departments are the primaries, frequently averaging sixty children from five to nine years of age. It is plain no teacher has time to find out each child's character. It is no new idea that one "knowing" child can instruct a dozen innocent children in matters concerning which they should remain in perfect ignorance until instructed by their mothers. I could give dozens of conversations that I have heard among the children themselves that shocked me, and, I cannot but think, would surprise these babies' parents were they to become aware of what their little children were talking about.

If our lowest grades were turned into Kindergarten, with a carefully chosen teacher for every fifteen or twenty children, who were with these children constantly until they were safe in their respective homes; who played with them, studied with them, watched their talk, and, more important still, found out what the little ones thought about—would not that do something towards making the matter right? Of course it would make the school-tax larger, for larger salaries would be required for such fine work. But if there must be retrenchment anywhere, abolish or lower the grade of the High School, I think, rather than spoil the children. Let the "old" teachers of "wide experience" go into the lower grades, and let us girls fresh from college teach where any mistakes we may make will not cause irreparable harm.—Respectfully,

L. M. F.

Owosso, Mich., Oct. 26, 1881.

SCIENCE DEPARTMENT.

CHEMICAL PROBLEMS WITH SOLUTIONS,

By GEO. ACHESON, B.A., Science Master,
Toronto Collegiate Institute.

I.—PROBLEMS RELATING TO GASEOUS VOLUMES.

1. A certain quantity of hydrogen at normal temperature ($0^{\circ}\text{C}.$), and pressure (760 m.m.) measures 50 c.c. What will be its volume at a temperature of $15^{\circ}\text{C}.$, and pressure of 780 m.m.?

Solution.—The law according to which gases alter their volume with changes of temperature may be thus expressed: "A gas expands $\frac{1}{273}$ of its volume at $0^{\circ}\text{C}.$ for each increment of $1^{\circ}\text{C}.$ of heat." Boyle's law referring to alterations in the volumes of gases with changes of pressure upon them, is stated as follows: "The volume of a gas varies inversely as the pressure upon it." Now, if the gas measures 50 c.c. at $0^{\circ}\text{C}.$, at 15° it will measure $50 + \frac{1}{273} \times 50$; and if it measures 50 c.c. under a pressure of 760 m.m., then its volume under a pressure of 780 m.m. bears to 50 c.c. the ratio of 760 to 780. Uniting both these in one fraction we get as the expression of the required volume $\frac{50}{1} \times \frac{760}{780} \times \frac{273}{273}$. This fraction worked out gives as the required volume 51.39 c.c.

2. A certain quantity of hydrogen at a temperature of $15^{\circ}\text{C}.$ and a barometric pressure of 750 m.m. measures 50 c.c. What would be its volume at normal pressure and temperature?

Solution.—50 c.c. is equal to its zero-volume plus $\frac{1}{273}$ of that volume; and its volume at 760 m.m. pressure bears to 50 c.c. the ratio of 750 to 760. The fraction then becomes $\frac{50}{1} \times \frac{760}{750} \times \frac{273}{273}$, which, worked out, gives as the required volume 46.77 c.c.

3. A glass globe, having a capacity of 2 litres, is filled with oxygen under a pressure of 879 m.m. of mercury, and at a temperature of $20^{\circ}\text{C}.$ How much will escape when

the pressure is increased to 894 m.m. and the temperature to $25^{\circ}\text{C}.$?

Solution.—First reduce the volume to standard pressure and temperament, the expression for which will be $\frac{2}{1} \times \frac{879}{894} \times \frac{273}{273}$. Then find out what the volume would be at a temperature of $25^{\circ}\text{C}.$ and pressure of 894 m.m., thus, $\frac{2}{1} \times \frac{879}{894} \times \frac{273}{273} \times \frac{273}{273} \times \frac{894}{894}$. This fraction gives as a result 2. Therefore the volume at the increased temperature and pressure is just the same as at first, and so none would escape, the increase in volume from the rise of temperature being exactly counterbalanced by the diminution owing to increased pressure.

4. A gas measures 1 litre at $100^{\circ}\text{C}.$ and under a barometric pressure of 740 m.m. At what temperature will it measure 1.5 litres when the pressure rises to 760 m.m.?

Solution.—First find its volume at standard temperature and pressure,

$$\frac{1}{1} \times \frac{740}{760} \times \frac{273}{273} = .7479.$$

Now, as a litre contains 1,000 c.c., the volume at standard temperature and pressure will be 747.9 c.c. The difference between 1,500 c.c. (= 1.5 litres) and 747.9 c.c. = 752.1 c.c. = the amount of increase there must be. The pressure being 760 m.m. in both cases may be disregarded. Then the amount of increase is $\frac{752.1}{760}$ of the volume at $0^{\circ}\text{C}.$ A rise of 1° will increase it $\frac{1}{273}$; a rise of 273° will increase it 1; a rise of $273 \times \frac{752.1}{760}$ will increase it $\frac{752.1}{760}$.

$$\frac{273 \times 752.1}{760} = 274.5.$$

Therefore the required temp. is $274.5^{\circ}\text{C}.$

Will some reader send solution to the following question?—

5. The observed volume of a dried gas, measured in a tube over mercury, was 48 c.c.; the height of the mercury in the tube above that in the trough was 20 m.m.; the barometer stood at 754 m.m.; and the temperature of the room was $16^{\circ}\text{C}.$ Reduce the observed volume of the gas to standard pressure and temperature.

PUBLIC SCHOOL DEPARTMENT.

[Contributed to, and under the management of, Mr. S. McAllister, Headmaster of Ryerson School, Toronto.]

WE glean the following particulars from the Annual Statement of the Chairman of the London (England) School Board:—The total population of London by the recent census is 3,832,441—or, out of seven inhabitants in England and Wales one lives in London. About one-sixth of this number, or 689,240, are children between the ages of three and thirteen years, who have to be provided with school accommodation. The School Board provides room for 236,024, and voluntary schools make up the number to 502,095; so that, as Mr. Mundella said in his Budget speech a few weeks ago, there is great deficiency of school accommodation still in London. There is a gradual migration of school population from the centre of the city to the outskirts, some districts, such as Fulham, Hampstead, and Wandsworth, shewing an enormous increase. The standard of education is improving; for while in 1878 less than one in five children attained to the fourth standard, corresponding to our Third Book classes, the proportion has now risen to one in three. The gross cost per child in average attendance in 1880 was £2 19s. 3d., or \$14.42. With regard to the number of pupils to each teacher, it is the rule in London to allow the head teacher or a pupil-teacher thirty scholars, and an assistant adult teacher sixty. The average salary paid to male teachers is £144, and to females £108. The Board placed 3,078 children in industrial schools; and the report thus speaks of the effect of these schools: "Ninety-two per cent. of the scholars turn out well and become orderly and useful citizens, instead of leading lives of crime. The result of a wide application of the Industrial Schools Acts in London is shewn in the steady reduction of juvenile

crime since 1870—the number of commitments in that year having been, for boys 8,619 and for girls 1,379, while for last year the numbers were 4,786 and 793 respectively. The Truant School at Upton House is in fact a penal school for children over whom their parents have lost control. The term of detention is short—on an average three months—the discipline sharper and the lifeless agreeable than in our other Industrial Schools—drill, for instance, being substituted for a portion of the ordinary play hours. The object of sending boys to this school being to cure them of persistent truanting, and to prevent them from sinking into worse courses, it is satisfactory to find that this end is attained. A record is kept of the average attendance of the boys after undergoing their term of detention, and from this it appears that, up to the Midsummer recess, they make an average of 92 per cent—*i.e.*, higher than is usual among the best class of children. Nor is it to be supposed that the deterrent effect is confined to those who have endured the punishment. The conditions of life in Upton House are well known, and are the subject of wholesome dread."

AT the last annual meeting of the Ohio Teachers' Association Mr. Henry N. Mertz read a paper on School Examinations, which is worthy of particular notice. He said an examination should be a test of the training imparted as well as of the stock of facts acquired. Promotion should not merely depend upon an examination at the end of a term, but upon the results of all the examinations held during the term. The average of several examinations is likely to present a fairer exhibit of a pupil's attainments

than a single test will afford. Each examination should not only cover the work done since a previous one, but should be a review of old work. There should be questions in each examination to test the thinking powers of the scholars, as well as to test their memory. Examinations should be largely used to direct pupils' attention to new and important subjects, as well as to the best methods of dealing with old ones. Questions are better prepared by one who is not a teacher of the class, as by this means points that may be in danger of being overlooked receive attention. If, however, the examination is to be a test merely of the work the class has gone through, then the teacher should prepare his own questions. If monthly examinations are held, the questions should be prepared alternately by the teacher and by someone else. The teacher should read the papers of his own scholars, so that he may see clearly where they may have failed. One good result of examinations is the power they have of fixing facts and principles in the mind; for pupils are not likely to forget either their success or their failure in answering certain questions. They are very likely to hunt up the answers after the examination, and this should be encouraged by every teacher. Every set of questions should be carefully gone over with the class after the examination, and all principles involved thoroughly discussed and explained. Neatness of work should be encouraged by sending the answers for the inspection of the parents. Nine questions are probably enough for one subject of examination, and the value of one question should be allowed for neatness of work.

QUESTIONS

used in the examination of candidates for Third Class Professional Certificates at the Goderich Model School, Oct. 28; furnished by the courtesy of Mr. J. R. Miller, P.S.I.

MENTAL ARITHMETIC.

The amount of a certain sum of money at simple interest for 6 years and 3 months at

8 per cent. per annum is \$960. Find that sum.

What number is that which being increased by its half, its fourth, and 18 more, will be doubled?

If 10 men can do a piece of work in 18 days, how many men will be required to finish a piece of work twice as great in 24 days?

A cistern has 3 cocks. One will fill it in 6 hours, another in 8 hours, and the third will empty it in 10 hours. If the cistern be empty and the 3 cocks opened at the same time, in what time will the cistern be filled?

The true discount of a certain sum of money payable 5 years and 9 months hence, allowing discount at 5 per cent. per annum, is \$345. Find sum discounted.

A, *B* and *C* enter into partnership for trade. As often as *A* puts in \$4, *B* puts in \$5, and *C* \$7. They gain \$240. Find each one's share of gain.

$9647 + 369 - 9966$, divide by 2, extract square root, multiply by 6, square that, then $\frac{3}{4}$ of the result is greater by 450 than $\frac{1}{2}$ of a certain number. Find that number.

If 5 yards of cloth cost \$7.50, what will be the cost of $1\frac{1}{2}$ yards worth half as much again per yard?

\$63 is $\frac{1}{2}$ part greater than $\frac{2}{3}$ of a certain number of dollars. What is that sum?

Having $2\frac{1}{2}$ hours at my disposal, how far may I travel on horseback at 10 miles an hour that I may return in time, walking at the rate of 4 miles an hour?

Bought a certain number of sheep for \$600. If I had bought 10 more at \$1 less a head, my entire outlay would have been \$640. How many sheep did I buy?

A bankrupt who pays 30 cents on the dollar divides among his creditors \$6600. What was his total liability?

EDUCATION.

What several principles should govern the proportion of a time-table?

Discuss the value of emulation as an incentive to study.

How would you deal with the following?—
(a) Irregularity, (b) Neglect of home work,
(c) Copying, (d) Want of punctuality.

"The attention of the class should be voluntary, undivided, continuous." Discuss this statement, and state how you would secure such attention.

Describe in detail how you would commence to teach reading, arithmetic, and grammar.

Give notes of (I.) Lesson on tense, (II.) First lesson on interest, (III.) Object lesson on "a loaf of bread."

Tell (without regard to the number of lessons required) how you would teach the physical geography of Europe.

How may a teacher best promote the moral welfare of his scholars?

What different methods of questioning may be used in school? Discuss the value of each. What are the characteristics of good questioning?

Name and describe the different kinds of education. Also describe fully how you would give due prominence to each in the conducting of your school work.

Describe minutely your method of calling up and dismissing a class (1) in reading, (2) in arithmetic.

HYGIENE.

Name the organs of circulation, and trace the circulation of the blood from the time it leaves the right ventricle until it has returned to it.

Name the principal impurities of the atmosphere, and state how the organs of the body are affected by (a) cold air, (b) damp air, (c) foul air.

You are placed in charge of a school of 50 pupils. Draw up a set of rules to guide you in securing as far as possible the health of the class.

Name the organs of digestion; trace in full the process of changing a potato into pure blood.

Give what you consider the requisites for a properly ventilated room capable of accommodating 50 pupils.

How would you proceed in case one of your pupils (1) fainted, (2) was apparently drowned?

Name the different kinds of food; give the distinctive characteristics of each state, when and how each principal constituent is digested.

How can the teacher best secure the health and comfort of the pupils (a) in the schoolroom, (b) in the playground?

QUESTIONS

used at the Model School Professional Examination at Lindsay, October 21st and 22nd, 1881.

HYGIENE.

1. State the chief evils arising from breathing impure air.

2. Describe the structure of the human ear, and tell the rules to be observed in the care of it.

3. State fully the precautions that should be taken to prevent the spread of contagious diseases.

4. What method would you take to restore a person apparently drowned?

5. Name (1) the principal, (2) the accessory organs of digestion.

6. Give at least six rules, the observance of which would conduce to proper digestion.

EDUCATION AND SCHOOL ORGANIZATION.

1. Construct a Time-table for a school of 50 pupils in 1st, 2nd, 3rd, and 4th classes.

2. What Arithmetic should be taught in the 3rd class, and what Geography in the 4th class?

3. How would you begin to teach (1) Dictation, (2) Composition, and (3) History?

4. Discuss the daily marking of recitations.

5. How would you encourage cleanliness, punctuality, and honesty in pupils?

6. What rules would you adopt with respect to pupils, when not reciting, in order to secure quietness?

7. What purposes, besides teaching spell-

ing, may Dictation serve? And how may these purposes be accomplished?

SCHOOL LAW AND REGULATIONS.

1. What are the essential points of an agreement between trustees and teacher?
2. Name the vacations and holidays in Public Schools.
3. Under what conditions may the summer vacation be shortened?
4. For what offences may a pupil be suspended?
5. What business should be transacted at an Annual School Meeting?
6. What should the half-yearly report contain?
7. Describe the General Register.
8. What are the regulations respecting (1) presents to teachers, (2) contagious diseases, (3) punctuality of pupils?

MENTAL ARITHMETIC.

1. Quotient 1250, Divisor 12, Remainder 8; find Dividend.
2. MDL + LXI + XIX.
3. *A* can do a work in 2 days, *B* in 3 days. In what time can *A* and *B* do it?
4. Exchanged 11 tons of hay for 15 sheep at \$6 each, and 4 sheep at \$5 each. What was the hay per ton?
5. What number multiplied by 9 = 7236 × 5?
6. Bought cloth at '27 and sold it at '24; what did I lose per cent.?
7. $\frac{1}{3}$ of 100 is $\frac{3}{4}$ of $\frac{1}{2}$ of what number?
8. Reduce £3 3s. 3d. to dimes, and divide equally among 23 boys.
9. If $\frac{3}{4}$ of a herring cost $\frac{1}{2}$ of a dime, how many herrings will 90 cents buy?
10. Reduce 15 days to minutes.

HIGH SCHOOL DEPARTMENT.

"INTERMEDIATE" APPEALS.

It has been stated on good authority that no less than five hundred appeals have been made against the results of the late "Intermediate." Nearly 3,500 wrote at the examination, of whom about 1,000 were passed by the Committee; so that no less than one-fifth of those who failed have regarded themselves as the victims of injustice. There must be something wrong here. It is well known that a large number of these appeals have been sustained, many candidates having succeeded in obtaining a higher grade than that awarded at first, and many who were reported as having failed having proved successful. We pointed out some time ago in what respects the mode of conducting the examination is defective, and we prophesied—truly it seems—that there would this year be a plentiful crop of appeals. The conclusion anyone will come to is, that these de-

fects must be remedied, and that more time and care must be spent in reading the papers at the Department Examinations. It is well, of course, that the results should be announced as soon as possible; but there are few who would care to sacrifice for any reason the reliability of the results of an examination which above all others should be such as to command public confidence. Money and reputation have hitherto depended on them, and nothing that can ensure accuracy should be neglected. It is very likely that many who have not appealed would have been successful had they done so. This is the natural result of any such resurrectionary process as the Committee are now engaged in. If the standard has been lowered in considering the appeals, the same measure of leniency should be dealt out to all. It is said that the Minister has instructed the Committee to deal mercifully with the appeals. This, we assert, should not

be necessary. If the examination is to be maintained, the standard should be fixed and kept. No examiner should be allowed to alter it, and the Committee which reviews the results of the sub-examiners should decide this point finally. We were promised, on the adoption of the principle of Rotation of Examiners, that each paper would be set by two examiners. This promise has been kept neither in the letter nor the spirit of the Regulations. Had it been, there might have been less trouble with the results. Look at the "Intermediate" in any light we may, it has been nothing but a wretched series of blunders since it was founded—now nearly six years ago.

SHOULD THE "INTERMEDIATE" BE CONTINUED?

We propose this month to state briefly—for the last time, we trust—the prominent objections to the "Intermediate," omitting those that hold against any mere written test of the condition of a school:—

1. Intended to serve as a promotion examination which an ordinary High School pupil might pass after a two years' course of study, it has never been so. The rigidity of its tests and the impossibility of preparing ordinary pupils in the time for the examination, has prevented this. A clever boy or girl may possibly pass after two years' study, but the average High School pupil, for whom the schools are specially intended, cannot do so. Further, it ignores some very important subjects of study and gives undue importance to others. Reading, Writing, Drawing and Music have no examinational value, and are practically dead in our High Schools. It has been said by one of the High School Inspectors, that the examination craze has gone so far that in teaching French many Masters do not trouble themselves about the pronunciation, on the ground that it does not pay. Then again, as Messrs. Marling and Buchan have stated, too much attention is bestowed on Mathematics, and English Composition, English Literature, and the *Litteræ humaniores* generally, do not receive the proper amount of attention.

Many pupils, too, fail at this examination who are more worthy of promotion than many who pass. The Master must, therefore, ignore the examination in his arrangement of his classes, or keep his pupils for another year at the same work, whether their parents wish it or not. In the former case, the school will lose part of the Grant on Upper School attendance, and in the latter the pupil's education will be retarded. As the Master's ability is appraised according to his success at the "Intermediate," we say deliberately that he will be a most Quixotic man if he do not consider his own interests. In a large school the evils are becoming simply unbearable. To the knowledge of the writer, some Institutes have been forced to adopt the following plan:—The Master makes up the number the public expect him to pass, by foraging for and securing candidates for Second Class Certificates, and, if his High School pupils proper fail to pass, he promotes them without regard to the examination. We hold that the Master should be allowed to arrange his school without any regard for examinations other than the Entrance and Leaving Examinations. The "Intermediate" would be less objectionable if it were at the end of the High School course, as the High School Entrance one practically is in the case of Public Schools; but its infliction when it now takes effect, is a most unjustifiable interference with the Master's liberty of action.

It is perfectly true that, so far as the subjects it embraces are concerned, the "Intermediate" may in some respects suit schools that do not attempt higher work than it entails upon them. It is their Leaving Examination; but it is a most serious injury to the schools that take up the present Upper School Programme. The "Intermediate" is not a promotion examination, and the Department has not succeeded in making it one after nearly six years' experience. The Department has, therefore, no right to throw the schools into confusion for two or three months in the year.

2. The "Intermediate" seriously interferes with classical culture. It has done a good

deal for English and Mathematics—for the latter in particular; but anyone who examines the University Matriculation Class Lists will see, that, if Classics are not being less attended to than they were, they are not advancing *pari passu* with other subjects. This cannot be justified. Few men who have not had a good classical education can have real culture. Many men, indeed, who have not the former think they have the latter; but this is quite a natural mistake under the circumstances.

If the Minister of Education continue the "Intermediate," he will seriously impair classical education in Ontario. Greek is not one of the subjects prescribed for the examinations, and, consequently, its study must be deferred until the pupil has reached the Upper School, or he must run the risk of being plucked at the Intermediate. In a properly organized school Greek should be begun after from six to twelve months' study of Latin. As matters stand, it cannot be taken up until the pupil has reached the "Intermediate" stage; for we seldom find a boy able to take Greek and keep at the examination point all the English and Mathematical subjects. The fact of the matter is, when the "Intermediate" was devised, it was intended mainly to promote the interests of an ordinary English education, with Latin as a Modern Language. English and Mathematics alone are all very well in their way; but the man who knows little of the ancient Classics can have but a poor appreciation of the former; and most people believe, with Holmes, that "the power of dealing with numbers is a kind of 'detached lever' arrangement, which may be put into a mighty poor watch." The difficulty we are discussing is no imaginary one. It affects the best schools, and Masters who try to do a good deal of classical work find the "Intermediate" a source of great embarrassment.

3. The "Intermediate" renders it impossible to teach Natural Science as it should be taught. Chemistry in our schools is little better than hybrid arithmetic; and Botany has neither a local habitation nor a name. To the knowledge of the writer, pupils have

often obtained 75, 80 and 90 per cent. who have never seen a single experiment. Under these circumstances they cannot be induced to study it practically. Experiments they value merely as aids to the memory. Before the inauguration of the present system, Chemistry and Botany were taught well in at least a few of the schools. Now the case is different. In one school we know of there was for a time a class of young boys who had been so trained that by the blow-pipe as well as by wet tests they could analyze ordinary substances. The "Intermediate" killed this, the only true method of study. There are few better instruments of education than Natural Science, but the mongrel article that now exists amongst us has little value.

4. The public have been led to judge of a school's efficiency by the number the Master succeeds in passing at the "Intermediate," and the evils resulting from this have been intensified by attaching a money value, in which Trustee Boards are directly interested. This state of matters is directly chargeable to the Department. The High School Inspectors, in the report they made to the Council of Public Instruction, say in regard to the examination: "It will shew the country what schools are really doing High School work. It will stimulate the Masters by a direct pecuniary result." The press, and the *Globe* in particular, have aided this movement. For some years after the inauguration of the "System," the half-yearly results were paraded and commented on by the Government organ. Even the total number examined and the proportion passed were supplied for the information of the public and the delectation of the Masters. From this state of matters, we assert, the following evils amongst others have arisen:—

(2) A wrong ideal of what High School work should be, has to be set up and worshipped by the Masters. Many direct all their energies to preparing for this examination, and have refused in some instances to take up work beyond it. From a statement submitted by the Minister to the Executive Committee of the High School Masters, we find that out of 105 High Schools and Collegiate

Institutes, only *ten* for the first half of 1880, and *fourteen* for the second half, had an Upper School average attendance of ten and over. This speaks volumes. There is reason, too, to believe that the number of High Schools sending Honor candidates to the Universities is diminishing. The total number of candidates is not less, but they come from fewer schools.

(b) The tendency is to neglect pupils whose intelligence is a little less than the ordinary "Intermediate" *quantum*. The Master is driven to concentrate his energies on those who are likely to pass. That this spirit prevails is an undoubted fact. How can it be otherwise? One of the High School Inspectors, at a meeting of the High School Committee held in Toronto about four years ago, referred to these results, and, to the amazement of all who heard him, justified this grotesque and immoral application to education of the Darwinian doctrine of Natural Selection. We take another view of the question. Apart from the religious aspect of the matter, we hold that it is man's chief end to benefit his fellow-men, and that the Master's duty is to do all in his power to help the stupid and energize the indolent. The clever boy can take care of himself. The larger proportion of our pupils are of very ordinary ability. It is not one in four hundred that has really good mental powers, and no system of education should be tolerated for a day that puts on the teacher the pressure we object to. It would be worth the Minister's while to find out how many genuine High School pupils pass the "Intermediate." The statement of results does not separate them from the teachers. We have taken the trouble to find out the proportion in a good number of schools, and we have reason to believe that from sixty to seventy per cent. of those who pass are teachers. The exceedingly small number who remain for Upper School work would shew this, if there were nothing else to justify us in our view of the case. In estimating the good effects of the "Intermediate," it should not be forgotten that, after the first examination, the Second Class Teachers' Examination

was combined with the High School Promotion Examination. We maintain, therefore, that the boasted progress of our High Schools is more apparent than real. Not more than 150 or 200 of the 700 who really passed last July were genuine products of the High School system.

(c) The candidate for a Second Class Certificate has become an object of absorbing interest to the Master, who knows that a teacher who has been ordinarily diligent since he obtained his Third Class, can take on the required amount of polish in about six months. Crowds of this species of "Intermediate" candidates enter the schools at Christmas, and "go in for a regular cram" till July. The boy and girl of tender years and immature intellect are classed with them, and either fall back discouraged or run the risk of mental injury. Experience shews us that the High School Masters were wrong in desiring the amalgamation of the two examinations. The class of pupils for whom the schools were designed suffer in the struggle. The preparation of candidates for Teachers' Certificates must be made a subordinate element in the Masters' calculations, not the chief one as it now is.

(d) The Masters must teach for the examination, and the pupils must study for it. It is a stimulus, there is no doubt whatever. But it prevents the proper kind of teaching from being done, by confining the Masters' efforts to the narrow rut worn out from year to year by the Examination papers; while the pupil generally falls back into lethargy when it is withdrawn. It is very difficult to get pupils to continue their studies now, unless some examination be held up as the motive for exertion. Love for learning is practically non-existent in our High Schools. Ask a boy to study, and he will tell you he doesn't want to pass any examination. "What's the use? I don't want to be a teacher. I don't want to go to the University."

(e) Not the least deplorable result is that this examination, which is no test of the real condition of a school, and no test of the ability of the Masters, is regarded by the

public as *the* Test. The only way to cure this is to abolish the cause, for it cannot be modified so as to meet the objections. No examination can possibly be devised that will gauge the results of honest educational effort.

(f) We hold that the moral tone of both Masters and pupils has been lowered. It is notorious that copying and other irregularities are largely practised in many localities, winked at by the sub-examiners, and undetected by the Department. The Investigation now going on at Owen Sound shews this clearly, and we fear there can be little doubt that the condition of school morality in many other places is little better. Examination frauds are the natural outcome of this state of affairs. The Master, too, is often "up to all sorts of games" in publishing the results. The local paper abets him, and jealousy, ill-will, and misrepresentation prevail.

The "Intermediate" has certainly done good; no one will deny this. We maintain, however, that the evils we have pointed out (and more might be added) far more than counterbalance the advantages. The Education Department theory seems to have been that the High School Master is an arrant knave—a man of undoubted acumen, but "for ways that are dark and for tricks that are vain," a regular Heathen Chinese—a development of the species Schoolmaster that must be carefully watched and hedged in—a man who must be made honest by compulsion and moral by Education Office Regulations. We would suggest that the time has come to give him a chance. The High School Master is just as moral as most men and just as faithful. He has at any rate proved himself to be a better judge of what our schools need than the officials who have brought about the present wretched mess; for the Masters as a body opposed "Payment by Results" from the very first, mainly on the grounds we have urged.

The advocates of this so-called "system" point to the general advancement of education as the result of the "Intermediate." We have shown that the results are more

apparent than real, and we maintain that the recent changes are due mainly to the provisions of the Revised School Act, that gave High School Boards the right of taxation. This is what gave the impetus to our schools. The High School Entrance Examination has also done much, for the School system is now a series of gradations, and a very large proportion of our High School pupils are doing little more than Public School work. Omitting a smattering of French, German, and Latin, what difference is there between the First and Second Forms of our High Schools and the Fifth and Sixth Forms of the Public Schools? The schools have settled into their present relations since the inception of the "Intermediate," and it is since then that the "utilization" of the High Schools has taken place.

As a solution of the difficulties we propose the following changes, the latter of which has already been advocated by the High School Masters' Section.

We may observe parenthetically that it is true that, by a vote of ten to nine (many not voting at all), the same Section asked for a grant of \$3 in case of each pupil that might succeed in passing the "Intermediate." This, however, would not have passed in a full meeting, and was agreed to by the above vote on the supposition that the Department had determined to maintain the Examination, and that in this way some of the smaller schools, which would have no chance of the Collegiate Institute Grant, would receive a larger share of Government support.

PROPOSED CHANGES.

I. *The abolition of the "Intermediate" as a High School Promotion or "Inspectoral" Examination, and its retention for Teachers' and Primary Professional Examinations.*

In this form it may still do a great deal of good—more, probably, than any other examination we have, for it would be more general in its operation. It would be an important agency in the advancement of education in all our schools, and particularly in those whose highest limit is this examination, while it would not interfere with the sym-

metrical development of those institutions that aim at still higher work. In our High Schools and Institutes there are many pupils in the most advanced classes who do not intend to present themselves for examination, and whose sole object should be to obtain a good education. The fact that there are pupils in these classes who do intend to compete at the University, affects the character of the work, and provides for the Master the stimulus which the Department has always maintained he stands in need of. This examination will have the same effect on what is now called Lower School work. It will still be an object of the Master's ambition to pass a good number for Second Class Certificates, but it will be an optional matter with both him and the pupil whether the latter pass it or not, and the former will be at liberty to allow that gradual development of his pupil's mind which is so desirable. Overwork and Cram—the present curses of our system—need no longer exist. Classics and Natural Science may be taught, as they should be taught; and High School Inspection, which many now regard as a delusion and a mockery, may acquire some real value. The Inspectors will have to do their own "Inspectoral Examinations," and will be afforded a chance to justify an office which at present does not recommend itself on account of its public usefulness. The Inspector's function should be an important one; but, under the operation of the "Intermediate," it has become "an airy nothing."

II. *The Distribution of the Legislative Grant on the basis of the amount paid as Teachers' Salaries.*—As we stated last month, this varies in the long run, directly as the quantity and quality of the work done. We think there should be both a minimum and a maximum grant. The instability there has always been in the amount of Government aid would in this way be remedied, and Boards would feel that their efforts would meet with proper recognition. Sala-

ries would undoubtedly go up—not necessarily in the best schools, but in those where an increase is most needed. Any defects in the administration of a school would be remedied gradually, and subjects that are now neglected would be attended to. If a Board thought well to employ a music-master, a drawing-master, or a drill-sergeant, it might rest assured that its expenditure in this direction would cause a proportionate increase of Government aid.

The objection, too, would be met, that for some reason or other is now being urged in one quarter, that there is a marked discrepancy between Government aid to some High Schools and the population of the counties in which they are situated. If a county received only \$800 from Government, all it would have to do would be to increase its teaching power, and this it would not do unless there were a real necessity. No Board would spend \$1,200 to get \$700 or \$800 from the High School fund. We hold that no grant should be given on average attendance. The Legislative Grant should be distributed under regulations of the following nature: A school with two masters should receive at least \$400; a school with three, at least \$800—and so on—with a prescribed *maximum* attendance in each case. The minimum may be disregarded. Boards do not err on the side of giving their teachers too little to do.

Briefly stated, the principle that should guide the Department is this: Education should be left as much as possible to local control. We have had too much of the bureaucratic system. We may also add that the High School Masters as a body do not propose to tolerate the unjust treatment to which this pestilent system has subjected them. The question will not be allowed to rest until the Minister rectify abuses for which, it is but fair to say, he will be responsible only if he allow them to go on. They are a legacy which he inherited, not creations of his own.

CONTEMPORARY LITERATURE.

EDUCATION, Vol. II., No. 11, November and December, 1881. Boston: New England Publishing Co.

WHEN the first number of *Education* reached us, we felt it our duty to criticise on its merits this magazine which came into the world with somewhat of a flourish of trumpets, and at a cost of four dollars a year—beyond the means of most teachers. We are glad, therefore, to tell our readers that we notice great improvement in *Education*, whose current issue contains a number of essays of which we are glad to give some account to our readers. The first is an article covering twenty pages, on the functions of the American Public School as a political, social and moral educator. The writer shews how the radical conceptions which imply Freedom, Equality and Brotherhood, are involved in the existence and conditions of Common School life. He has some valuable remarks on the possibility of a non-sectarian religious training as a basis for moral teaching:—

“The delicate question of the relation of the instruction in school to the inculcation of principles of morality and natural religion, to say nothing of revealed religion, must not, therefore, be passed in silence. Between the conception of a purely theological basis for the Common School, and a proposed foundation which excludes Bible, prayer, and allusions to the soul's alliance with its Maker, there lies for the average citizen the middle ground of opinion, which is a standing-place for those favouring a reasonable degree of religious teaching, the clear enunciation of morality, and devotional exercises which are not the expression of doctrine so much as a setting forth of the feeling of dependence on God, and the need of asking for his aid. The immutable distinction between right and wrong—where is greater reason for the declaration of it than among the young characters who are to taste and are tasting of the bitterness of wrong-doing, and the content of minds conscious of recti-

tude? It would be a narrow and perverted view that would oppose the simple ethical instruction which the child will find of lasting advantage.”

Such reasoning shews the relation between moral teaching (on a religious basis) and rational discipline; it dwells on the need of some more intelligent system of teaching, with a large prominence given to the study of nature. The next paper is “On the Application of American Education to the Needs of American Life,” a thoughtful essay which does not shrink from owning what is unhealthy in American society. One instance (according to the author) is want of reverence; another is sensationalism. Both ought to be met by the earnest effort to teach a true morality, just political ideas, and a humanizing and enlightening art and literature. On the need of the latter, surely much stress ought to be laid in Canada, where the Government education-mill turns out batch after batch of machine-made teachers, with textbooks of arithmetic and manuals of mathematics inserted as by a surgical operation in their brains, and not a sympathy cultivated that could enable them to educate in any true sense of the word.

We quote from another essay a pregnant condemnation of the present Arithmetic-worship, which a vicious system of routine maintains amongst us, and will maintain until there is a change in our educational administration. What we want is a good *English* education, embracing the history of our race, the nature of the world around us, and especially of our own country, and an appreciative knowledge of some of the noblest thoughts which our great writers have put into the noblest language. But a mere sum-doing machine is incapable of anything of the sort. It is quite out of his line. Says the author, at page 143 of *Education*:—

"Here it is necessary, from the absolute necessity of brevity, to consider the subject with special reference to practical wants rather than to develop any preconceived theory. We shall therefore make direct reference to existing systems and current methods. Let us observe, then, that the generally accepted plan of Common School education is based upon the *mathematics*. The traditional three R's have a deep meaning. A child must learn to *read* and to *write*, that he may be able to "*figure*." "I want you to learn my boy 'rithmetic,' and then he won't get cheated," has a more profound signification than at first sight appears. Besides, the philosophy which it hints at is deeper seated, and the results broader and of more general application, than may at the outset be apparent.

"It is often assumed, either consciously or unconsciously, that the study of arithmetic has a greater power of expanding the reasoning faculties, and that it produces a greater and more rapid growth of mind, than any other branch of study. Again, in general practice, it is undoubtedly true that the schools are graded and the pupils ranked more by their progress in arithmetic than in any or all other studies. A pupil changes from one school to another. The first question asked of the new-comer is, "How far have you advanced in arithmetic?" and he is placed in a class in accordance with his proficiency and evident ability in that branch of study, with but very little reference to what he has done or can do in reading, writing, composing, or understanding the English language, or whether he has studied geography or natural history or other branches.

"Upon the theory advanced above, this is totally wrong and indefensible. Arithmetic, like the other branches of mathematical study, improves the reasoning faculties only to a limited extent and in certain directions. There is a broader and a better way."

In an article on the "Study of Language," an amusing *exposé* is made of some of those pretentious "fads" which certain School Inspectors bring forward as new ways of saving a child's labour in learning to spell—new ways that are not found to work in practice, and are on principle inconsistent with the history and growth of our language. We commend the perusal of *Education* to all who have it within reach. It is philosophical,

and requires intelligent effort to follow some of its articles, but it is quite within the reach of the thoughtful reader.

A SKETCH OF ANCIENT PHILOSOPHY FROM THALES TO CICERO, by Joseph B. Mayor, M.A., Fellow and Tutor of St. John's College, Cambridge. Pitt Press Series. Cambridge: Deighton, Bell & Co. Toronto: Willing & Williamson.

THIS delightful little volume has the merit of giving an account, in simple and intelligible language, of the opinions of the leading thinkers of Greece and of the Eclectic school which reproduced their teaching at Rome. Mr. Mayor does not write as the advocate of any special school in modern metaphysics, and he does not perplex us by stating the doctrines of ancient philosophers in the terminology of modern thought, great as the temptation to do this so frequently is. Students of Kant, and more especially of Hegel, whose philosophy seems coming to the front once more in the works of Ferrier, Caird, and in Canada of Professor Watson, will often be startled at what seem strange anticipations of the cardinal ideas of these great masters. Mr. Mayor gives the teaching in all important points in the words of the teacher himself, adding the Greek wherever the phrase is especially pregnant. For those who realize the fact that philosophy, like everything else, is best studied historically, and in its natural course of evolution, this book is invaluable as giving a clear view of what the cultivated Greek intellect had to say on the foundation questions of the mystery of existence. Mr. Mayor, we are glad to see, does full justice to Cicero's contributions to the literature of Philosophy. It is perhaps to be regretted that Mr. Mayor has not included the important philosophical phase of Neo-platonism in his criticism of ancient systems. We cordially recommend the book to all thoughtful readers, whether classical scholars or not.

EDITORIAL NOTES.

HIGH PRESSURE IN SCHOOLS.

THE subject of "cramming" in our educational systems is seemingly, at last, in a fair way to be brought effectively before the public mind, with, we trust, the result of mitigating the ever-growing evil, and of securing the curtailment of some of the studies on the programmes of our Public Schools. The subject has for the past three years received repeated attention in THE MONTHLY; and in the July-August number, in this department, the present writer strongly protested against the whole apparatus of our School system being directed to the purpose of working up a pupil to pass an examination. Now the daily press is taking up the matter, and in the *Globe* we have an instructive controversy on the subject between that journal and the City School Inspector. We are under no call to interfere in the fray, and therefore may leave the disputants themselves to fight it out. The *Globe* manifestly makes out a good case; for the evil is one that taints our whole educational system, and not that alone of the Toronto School Board. Mr. Hughes, on the other hand, writes from a full knowledge of the working of the City Schools, and naturally enough takes the defensive side, in the interest of his own administration. But obviously he writes from the official point of view and from that of the administrator, and closes his eyes and ears to the notorious evils complained of by parents of children attending the schools, viz., to the time taken up, and the consequent injury to health, in the pupils having to labour at home every evening to enable them to stand well in their class next day and thus secure their full markings. Mr. Hughes—who, by the way, writes better in his communications to the daily press than in his contributions to the

School Journal or to his educational manuals—ranges, however, over so wide an area in his letters to the *Globe*, that the subject of "cramming" is apt to be smothered under piles of print. But *this* is the subject that urgently calls for ventilation, not only in its operation in the Toronto Schools, but especially in the High Schools of the Province; for the forcing system obtains everywhere, and will do so so long as it is made the interest of the High School Master, at any rate, to forget that *teaching* is his occupation, and, by the system in vogue, is constantly impressed with the fact that it must ever be subordinate to the financial strategy of "passing" so many pupils through his hands, and at any sacrifice of his own individual convictions, and of regard for the lasting benefit of his charge, bends his whole energies to getting them by hook or crook through the "Intermediate." There can be no doubt that much of the evil against which there is now an outcry has its source in the wholly obnoxious system of "Payment by Results," and in the centralization which, though in some measure a necessity, has grown increasingly under the present *régime*. That some other plan will have to be devised is clearly shewn by the increasing expense and cumbrousness of the present system, and by the frequency of the grave improprieties coming to light in various sections of the Province in connection with the machinery of its working. In many respects it would be conducive to the morals, at least, of teachers, inspectors, examiners, and pupils, were local examinations, by a fairly competent Resident Board, made to take the place of that of the Department; and we are inclined to think that were this plan resorted to, the schools would do better work and the pupils have more justice done them. One thing, at all events, should be insisted upon, viz., a cur-

tailment of the school programme and a limitation of the time given to many of the studies. Mathematics, we have again and again said, have altogether an undue place on the curriculum, and, in the case of girls, especially, has time given to it which would be much better devoted to English literature, to modern languages, or to art studies congenial to their tastes and of equal disciplinary value. In the Public Schools, the history course, particularly ancient and modern history, might also, for the younger pupils at any rate, be very wisely omitted. In all schools, Public and High, physical training should receive more attention, and their sanitary condition be made the subject of more close and intelligent study. The school hours, moreover, might also be advantageously shortened, and opportunities for recreation, at oft-recurring intervals, be rigorously insisted upon. We trust, in any case, that good will come of the present discussion of "high pressure" education, and that our school administration will continue to partake more largely of enlightened thought and sound common sense.

THE "INTERMEDIATE."

IN any system of national education, where the funds of the State are drawn upon for the support of the various grades of schools within its jurisdiction, the question how, and on what basis, grants from the Treasury shall be apportioned to supplement local appropriations, must always be a perplexing one. Even in England the matter is still under discussion, and to-day what is called the "special merit clause" of the new Code Proposals is exercising the minds of the profession, and perplexing the Council of Education, in no ordinary degree. From *The Schoolmaster* of October 29th we extract the following editorial utterances as proof of what we have said:—"A graduated scale of payments, in which percentages shall be the guide to a settlement of the grant, will meet with general disapprobation. It is educationally unsound and rotten to the very core. The country has been suffering for nearly

twenty years under the pernicious system, and the time has now arrived to mend it. Satisfactory school work has never yet been measured by percentages, and never can be. A fixed sum for every child in attendance, so long as the general work of the school is carried out in a satisfactory manner, is the short and royal road to an improvement too long delayed." To some extent, we in this Province have solved many of the problems that still confound the wisdom of educational authorities in the mother land. But is it not the case, that in other respects we have too hastily cut the Gordian knot of difficulties which we would have done better by taking time leisurely to have untied? A correspondent of *Punch* recently referred to a Hammer-smith "Beak" (*anglice*, magistrate) who had an innate dislike to "Bysykels" and School Boards, because, says the contributor, "he thinks they both go too fast, and he aint far wrong." Perhaps, in our ready educational methods, we too, in Ontario, have been going too much at bicycle speed. One thing is clear, that in regard to the "Intermediate" Examination and the value set upon it, both by the Department, in determining by its results the grant to the respective High Schools and Collegiate Institutes, and by the public, in what it has been led to conceive, by the same tests, of the measure of the ability of the masters and the success of the schools, we are far, as yet, from reaching satisfactory methods in applying the principle of "Payment by Results." In the High School Department, in the present number, this whole question is admirably and lucidly argued by a Head Master who is among the most competent men in the profession to discuss the matter, and whose utterances on all questions affecting educational administration deservedly carry great weight. The views he has advanced commend themselves to the Minister, his advisory body, and the profession at large; and we trust that they will receive that consideration which now more than ever requires to be given to the subject, if the schools are to be free to do really sound educational work, and if Masters are to be allowed to take some

pleasure in that work, and to prosecute it in an atmosphere healthy, moral, and inspiring. The "Intermediate," as at present worked, it is clear, cannot retain its place in the machinery of the Department without demoralizing every High School and Institute in the Province, wearying and disgusting the whole body of masters, and deflecting education from the aims and ends which ought to be the goal of its ambition. We trust, therefore, that the survey of the question, and the practical remedies suggested in the article in our columns, will receive the favour they deserve, and effect such changes as, in the highest and most lasting interests of education, have become the imperative demand of the profession and the hour.

CUPID IN THE SCHOOL-ROOM.

ELSEWHERE in our columns a young lady correspondent of the *New York Nation* narrates her experience as a teacher in endeavouring to win and retain the attention and interest of her pupils during school hours, but which seems to have been defeated by that arch-conspirator, Cupid, in his having kindled the flame of an "absorbing passion" in the breasts of her young charges, and thus distracted their thoughts from the dreary, didactic work of the school-room. Her story, which is capitally told, will no doubt interest our readers, and perhaps serve to elicit similar experience, if it is also the case with us in Canada that our young people when brought together in school life are given to the gallantries described by the correspondent of the *Nation*, and if these seriously interfere with the education which, but for the process of unlovely cramming that is ever going on, they are supposed to be diligently acquiring. We do not wish to commit ourselves altogether to the notion that the emotional nature of our youth is to be utterly dwarfed and repressed, and that flesh and blood are to be dried up into a basket of chips or a quarter of pemmican. We have a pleasing recollection of little innocent amours of our own connected with the early days of our school life, which we cannot but

think promoted diligence, and inspired a healthful rivalry and an ambition to stand well in the eyes of our fair one. A grave historical writer tells us that China is a country where "the roses have no scent and the women no petticoats." It is just possible that a severe prudery may do as much harm as a laxity of morals, and that our school children may be taught to be insufferable prigs, destitute of any grace of life or loveliness of heart. At the same time, it behoves us to be circumspect and watchful, and while taking care that we do not compress the young fresh natures into a too narrow mould, see that nothing is allowed to be developed of a noxious character. There is much truth in what the writer has to say of the harm that one "knowing" child can do in instructing a dozen innocent children in matters concerning which they should remain in perfect ignorance. This requires little comment, save the practical one, of the necessity in our schools of an abundant supply of wise, capable, and reverent teachers, knowing something of the world and of human nature, and possessed of the gift of winning the love and confidence of childhood. Something might also be done in increasing the attractions of our Readers and Text-books, so that children may not be repelled from them and their school studies to get their natural, innocent delights in indulging in mawkish sentimentality or in intercourse with questionable associates.

EDUCATION IN MANITOBA.

WHILE the attention of the Dominion is at present being called to the lusty young Province of Manitoba, and to the great future before it in a material sense, it is gratifying to find that those who have charge of its educational interests are astir in the matter of devising "more liberal things" for the intellectual wants of the new and rapidly growing community. Most favourable as are the conditions of physical life in the North-West, it is the design of the authorities, also, that the mental status of its people shall not fall below the intellectual plane of the older

Provinces. With that view, the Protestant Section of the Board of Education in the Province has recently sent the Rev. W. Cyprian Pinkham, Superintendent of Education for Manitoba, on a mission to the Eastern Provinces, to inspect and report upon the principal Normal, Model, and High Schools of the Dominion, with the object of furnishing information to his Board and the Council of Education of the Province as to the machinery and working-system of the schools for professional training, and for instruction in secondary education. Mr. Pinkham, on this quest, we understand, has visited the two Normal Schools of Ontario, the Public Schools of Toronto, and the Ottawa, Toronto, and St. Catharines Collegiate Institutes, and has gleaned a large amount of information, which we doubt not, in his hands, will be put to good and serviceable purpose. We were glad, in making the acquaintance of this gentleman, to find him a man of energy, of admirable physique, and correspondingly vigorous mental power. His views on educational matters are sound and progressive, and his mind glows with enthusiasm for the great work in which he is actively engaged. We congratulate the Prairie Province in having such a force enlisted in the service of education as the reverend gentleman represents; and with a man of his calibre and magnetism we shall look hopefully on the future of the educational interests of Manitoba, and with confidence on its moral and intellectual growth.

OVERWORK AND ITS CONSEQUENCES.

No one who has observed the large number of members of the profession who have recently become invalided, and been compelled either to abstain temporarily from work or to retire altogether from teaching, but will be able to trace the matter to its producing cause, viz., to overwork and the friction that attaches to the elaborate machinery of school duties, with its increasing round of worrying examinations, high-pressure education, and monotonous routine.

Under all this pressure and the wrestle of professional life, now so keenly contested in the Province, it is little wonder if even the strongest goes down under the severe tension and prolonged strain. There is an innate dislike to become the "under dog" in the fight, but it is fast becoming a serious question whether the game is worth the candle, and how far the profession will consent to remain in bondage to the system of "white slavery" which our Educational Administration at present mercilessly imposes upon it. We noticed the other day the retirement of the head of the Collegiate Institute, at Ottawa, from overwork; and many are throwing up their positions to go into other professions, in which there is unquestionably less wearying, hard labour, and, as a rule, more to compensate one for it. The public, we feel sure, would considerably hear protests from the profession on this matter.

We regret to learn that Mr. J. R. Miller, of Goderich, has been recently compelled to rest from the labours of his Inspectorship in consequence also of overwork. From this cause his constitution has of late run down, and has induced grave weakness of the eyes, which compels him to seek skilled medical advice. While regretting the misfortune that has come to so able and energetic a worker in the educational field, and wishing him a speedy recovery, we feel it our duty to utter a note of warning to those whom we know are overtaxing their strength, and would ask the profession collectively to seek at the hands of the Minister some degree of relief from the circumlocution and the exacting duties which are telling so disastrously upon the physical strength of every teacher.

PRINCIPAL GRANT ON JOSEPH HOWE.

In his late lecture before the Young Men's Christian Association of Toronto, on the above subject, Principal Grant, of Queen's University, Kingston, laid emphasis on the duty of every Canadian to cement, by every means in his power the ties that bind one Province of our Dominion to all the others.

We should know more of the climate, the racial, and other conditions of the component Provinces of our own country than of any other. We should look with affectionate interest on the great men—orators, writers, educators—of every Province in Canada, and by so doing we shall cultivate a spirit of nationality and patriotism. Now, it has been remarked by Mrs. K. Seymour MacLean, in a thoughtful article in a late issue of the *Canadian Monthly*, that in the American Republic it is a first object with every teacher to educate children into an intelligent appreciation of their future position as citizens; and a most interesting essay in the current number of *Education* (Boston, Vol. II., No. 11) shews how Common School education may be made to impress on children the following cardinal principles of Republican freedom all over the world:—

1. The Common School not a haphazard blessing, but the institution of a Free State, and related to expenditure, and imposed taxes, and sacrifice of high or low degree.

2. Equality.—The Common School as a leveller—refusing to regard social distinctions, securing equal rights.

3. The Common School as a preacher of the doctrine of Fraternity—that we are members one of another, children and adults alike.

The principles laid down in *Education* would apply to Canada, where the upholding against public opinion, by an autocratic Minister, of such an anomaly as Upper Canada College, is a scandal inconsistent with the free principles which are “in the air” of this country. But ought not all Canadian educators not only to endeavour to teach those doctrines of equality and brotherhood which will yet root out from among us the snobbishness, the wealth-worship, the craving after social position, which are among the bad traditions derived from another and baser system of society? and further, ought not our educators to aid in forming a *national* Canadian type of character, to train the growing mind away from *colonialism* and into *citizenship*? By this it is not meant to inculcate any special doctrine as to severing the connection with England, but to call forth a spirit of self-reliance,

and to cultivate a national tone rather than a provincial one. From this point of view we give a brief summary, as far as possible from memory, in Principal Grant's own words, of the career of this great citizen of Canada.

Joseph Howe was born on the shores of an arm of the sea which forms one of the most attractive portions of Halifax scenery. His boyhood passed before those days when we have competitive examinations for babies. “Intermediate” Examinations were unknown, nor were boys crammed with undigestible learning till they became idiotic or their heads burst. But Joseph Howe had four educators of no mean value. The first was nature. Much of his time was spent where it is to be wished much of every boy's time could be spent—in the woods, or climbing the hills, or swimming the waters. The second was good books, notably the Bible and Shakespeare. The third was a good father; and the fourth was hard work, beginning at the lowest step in a printing office. Howe early cultivated the art of verse writing, in which he was successful to a degree that must have done much to educate his powers of expression. By degrees he drifted into politics, and fought single-handed the battle of Responsible Government against the “Family Compact” in Nova Scotia. The printer's boy became the great popular teacher, all but worshipped by public opinion in Nova Scotia. He was warmly attached to British connection, a subject on which Principal Grant recited some spirited verses of Joseph Howe's composition. On one occasion he allowed personal feeling to make him untrue to his own principles of Canadian nationality, when he led the opposition to Confederation; yet he was a great man, and when he died, as Lieutenant-Governor of Nova Scotia, all mourned.

The Hon. S. H. Blake, Q.C., as chairman, presented to the lecturer the thanks of the meeting, and expressed the feelings of all present when he said, that while they appreciated the great Nova Scotian who was dead, they did not less appreciate the living Nova Scotian who addressed them, “For,” said he, “you were born in Nova Scotia, were you not?” Principal Grant replied, “Yes, sir, I am thankful to say I am a Canadian.” Loud applause greeted this sentiment. —*Communicated.*