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The Educational Journal.

Consolidating "THE EDUCATIONAL WEEKLY" and "THE CANADA SCHOOL JOURNAL."

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J. E. WELLS, M.A. - - - - - Editor.
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Table of Contents.

	PAGE.
EDITORIAL NOTES.....	149
EDUCATIONAL THOUGHT.....	150
SPECIAL PAPERS—	
The Recent University and Departmental Regulations..	151
Victoria University, Cobourg.....	152
EXAMINATION PAPERS—	
Algebra.....	153
Mental Arithmetic.....	153
MATHEMATICS—	
Solutions of Problems in Third Class Algebra Paper.....	153
SCHOOL-ROOM METHODS—	
Shakespearian Study.....	154
Sentence Building.....	154
Development Lesson on the Numeral Frame.....	154
Exercises for Consonant Drill.....	154
FOR FRIDAY AFTERNOON—	
The Song of the Bee.....	155
The Fisherman.....	155
HINTS AND HELPS—	
How Teachers Waste Time.....	155
Management.....	155
Rules for Teaching.....	155
EDITORIAL—	
Those Examination Papers.....	156
Natural Science in the Public Schools.....	156
NOTES ON ENTRANCE LITERATURE—	
Oft in the Stilly Night.....	157
To a Skylark.....	157
TEACHERS' MEETINGS—	
Manitoba Teachers' Association.....	158
CORRESPONDENCE.....	159
BOOK REVIEWS, NOTICES, ETC.....	159
EDUCATIONAL NEWS AND NOTES.....	159

Editorial Notes.

CORRESPONDENTS will confer a favor by putting business matter, and matter intended for publication, or editorial use, on separate sheets. Copy for the press should be written on one side of the sheet only.

THE second half-yearly meeting of the South York Teachers' Institute is to be held in the Assembly Room of the Parkdale County Model School, on Thursday and Friday, October 13th and 14th. A good programme is prepared including a lecture by the Minister of Education on "Our Educational System."

WE call the attention of our readers to the interesting account of the Manitoba Teachers' Convention, kindly furnished us by a Winnipeg correspondent who was present. From the report of proceedings and *resume* of papers read, it is evident that the teachers in the new prairie province stand in the front rank for education and ability. The essays seem to have been specially thoughtful and able. We hope to be able to place some of them before our readers at a future date.

ONE most encouraging sign of the times is the increasing amount of space given by the newspapers to the discussion of educational questions. We have before us a considerable collection of editorials on such questions, clipped from Ontario journals. Some of the points raised we propose to touch upon from time to time as space permits. No better service can be rendered to the cause of education, which is the cause of national intelligence, well-being, and progress than to have all matters in connection with our educational system, from district school to university, brought into the light of fair and free discussion.

IT sounds rather strange to read in an article by "A Harvard Senior" that English now ranks as one of the most popular studies at the Harvard University. If the statement referred to a university in some other land in which German, or Russian, or Chinese was the vernacular, it might seem noteworthy. Nevertheless it is too true that English has not been in the past a favorite study in American and Canadian colleges. In some of them it could hardly be said to be a study at all, until within a few years. The influence of the colleges, reacting upon the public schools, may in part account for the state of things of which Mr. Haultain complains.

THE periodical cry is being again raised in some quarters against what is called "the craze" for scientific and other "abstruse" studies in the schools. By these terms some of our contemporaries seem to denote everything outside of "the three R's." Many of these subjects, says one, "even if properly mastered (which in nine cases out of ten they are not), are utterly useless to the learners in fighting the battle of practical life." We do not, of course, believe in the utility of any so-called study, if it cannot be properly mastered. But educators cannot too steadily protest against the test of practical utility set up by such writers. We hold it as an educational axiom, that every study which enlarges the horizon of the young mind, opening up for it new fields of knowledge and thought, is of practical utility of the highest kind. The battle of life is much more than a mere battle for bread and butter, or for lucre.

A MEMBER of one of the School Boards recently complained that the system of marking had been discontinued and suggested that it be re-introduced, as he regarded it as a great spur to the pupils. The principal replied that the marking was done as heretofore, but finding parents took very little interest in the reports he had ceased occupying an hour each month in transcribing them, believing the time could be more profitably employed. The question is one of some importance. We sometimes doubt whether a great deal of time is not wasted in the marking itself, and whether the teacher's time could not be more profitably employed. Certainly if the pupil can be got to apply himself from interest in the subject and delight in study, a better and more effective spur will have been found than mere emulation, which is not the loftiest of motives, although a legitimate one when a better is not available.

THE press and public were loud in their praises of the entertainment given during the Toronto Industrial Exhibition, by the two hundred and fifty pupils of the Guelph school, under the direction of Captain Clark, Instructor in Calisthenics of that city. The movements, whether marching or manual, were executed with the precision of clock work, and the exhibition was said to be the finest of the kind ever seen in Toronto. The only criticism we have heard of an unfavorable or modifying character, is to the effect that the movements and exercises, however graceful and effective, were in the main rather adapted for show than for genuine physical culture. We leave this question to the

experts, though it is by no means an unimportant one. What boys and girls, especially city boys and girls need is a training that will develop the growth and symmetry of body, and strength of muscle, as well as grace of movement.

APROPOS to a very important point in Mr. Haultain's letter to the *Week*, we should like to know what was the fate of the candidates who were guilty of such murderous abuse of the Queen's English. Surely they could not be permitted to pass. Yet the discrepancy between the percentage of the "plucked," and that of those who, unless we misapprehend Mr. Haultain's statements, were unable to write or spell with any approach to tolerable correctness, shows that the majority of the offenders must have, by some means, got through. We supposed one of the chief duties of the examiners was to stop all such candidates on the threshold, and send them back for better preparation. Surely all will agree that no one who cannot write respectable English, no matter what his or her qualifications in other respects, should be eligible either for a non-professional teacher's certificate, or for matriculation. Have not examiners the remedy in their own hands?

WE agree with some of our contemporaries that the school hours are too long, and could be shortened with advantage to the intellectual vigor, as well as the bodily health of the children, especially those of tender age. Might not some help be found in this direction for the overcrowding of the class-rooms which is becoming so serious a problem in many sections? Would not both teacher and scholars do more and better work, and do it with greater ease and satisfaction, could the school-day for the children be shortened one-third, or even one-half, and the work be so arranged that the pupils would attend in relays, instead of *en masse*, as at present. The half-time system does not seem to have worked well where it has been introduced in England, but the relentless demands of "the code" may have been chiefly in fault. We are pretty sure that in some such system will yet be found the remedy for many acknowledged evils that are now perplexing school managers.

MR. S. H. PRESTON writes us as follows:—

"In your last issue an article appeared on the formation of the Ontario Teachers' Normal Music Association, which conveys a very misleading impression of the meeting and the teachers who attended. As director of the Summer School I can assure you that nearly all in attendance had taught vocal music in schools previous to the meeting, that the majority were teachers of many years' experience, that a larger number had studied and taught the Tonic-sol-fa system, and that all present at that meeting endorsed the Holt system. Total number 120. Kindly correct, in justice to the teachers and oblige."

We cheerfully give place and prominence to the above, and leave it to speak for itself. The report in our last issue was compiled from

those of the Toronto dailies during the convention. We confess that on examination, the passage referred to seems to have indications of mental bias. The JOURNAL has no prejudice in favor of, or against either system, and, we are sorry to add, no musical knowledge or skill, to render its opinions on the question, if it had them, of any value.

THE following paragraph we clipped, we think, from "Notes on Language," in *The Beacon*:

Under the head of "Facts" the *Journal of Education* of September 1st, page 119, publishes this paragraph: "I had rather probably came from *I would rather* through the abbreviation *I'd rather*. 'I would rather be' is good English, but, of course, 'I had rather be' is not,—just as 'I would be' is good English, while 'I had be' is not." This reasoning is not necessarily valid, because the *would* in "I would be" is clearly an auxiliary verb only, while the *had* in "I had rather be" is yet to be proved such. The guess that "I had rather" may have come from "I would rather" is neither new nor happy; nor is the prejudice of teachers against the classical phrase "I had rather." The phrase *I had rather* was discussed in the *Beacon* of February 19th and June 18th, when it was shown to have been used by the great masters of English ever since the time of Chaucer. It was shown also to have been discussed by Matzner, who wrote the best grammar of English, and by the New English Dictionary (page 833, 2nd col.), according to which the phrase "I had better" used to be "me were better."

Dr U. J. Rolfe suggests that the idiom *I had rather* may have grown out of the use of *have* in the sense of "be obliged."

THE Rev. Dr. Middlemiss, of Elora, in a moderate and courteous article in the *Presbyterian Review*, controverts the positions taken in our issue of Sept. 1st, on the subject of compulsory religious teaching in schools. We should be disposed to question very seriously the assumption that the great majority, perhaps ninety five per cent. of our people are "at one, to an extent that some will regard as surprising, in their views of Scripture, their common Christianity, including little less than the whole teaching of the Presbyterian catechism." We fear this is an extremely rose-colored picture. And yet Dr. Middlemiss frankly admits that his whole contention rests upon this assumption, insomuch that aside from it he has not a word to say in favor of the view he is advocating. Waiving that point, the arguments adduced by Dr. Middlemiss are met, we think, in our article in the JOURNAL of Sept. 15. In fact, it seems to us that a sufficient answer is furnished in the following sentence from Dr. Middlemiss' own article. "The *State* is simply the people—in our case, the Christian people—acting in their civil capacity, and bound to act as Christians in that capacity as in every other." It is precisely because we regard the *State* as the people acting in their *civil* capacity, that we think *religious* teaching is outside of and above its sphere. To act as a Christian is not necessarily to engage in religious instruction, irrespective of time and place.

Educational Thought.

AN algebra cannot teach! Something behind it does that work. What is that something? The teacher, the *living teacher*! Nothing can be substituted for her. And what does this person do? Teach algebra? No. She teaches herself and nothing but herself. The mere memorizing of a fact from the text-book does not educate, but the way that fact is studied and appropriated educates. A Greek grammar, full of all manner of dry details and technicalities, may be so *taught* as to incite in the learners the highest love for truth, manliness, and virtue. A Greek grammar may become the very handmaid of religion. There is no manliness, virtue, or religion in a grammar, but there may be in the teacher who teaches it. That which carries force with it is *behind* the book; it is in the loving, earnest, truth-loving teacher herself.—*School Journal*.

WHAT do you learn from "Paradise Lost?" Nothing at all. What do you learn from a cookery book? Something new, something that you did not know before, in every paragraph. But would you therefore put the wretched cookery book on a higher level of estimation than the divine poem? What you owe to Milton is not any *knowledge*, of which a million separate items are but a million of advancing steps on the same earthly level; what you owe is *power*, that is, exercise and expansion to your own latent capacity of sympathy with the infinite, where every pulse and each separate influx is a step upward—a step ascending as upon a Jacob's ladder from earth to mysterious altitudes above the earth. All the steps of knowledge, from first to last, carry you further on the same plane, but could never raise you one foot above your ancient level of earth; whereas the very *first* step in power is a flight, is an ascending into another element where earth is forgotten.—*De Quincey*.

THE reading-teacher must not neglect grammatical drill, which is one of the most important of all educational instrumentalities, and the basis of the study of language. It has been overdone in the past, and has often fallen into the hands of pedagogical Philistines. No less than twenty-eight parts of speech, twelve tenses, and twelve modes, etc., have been distinguished in school-books. When the deeper meaning of the Bible was thought to lurk mysteriously in the sentence-structure, a good grammarian was proverbially a good theologian, and even now there are pedagogues who assume that there is something wrong in an author if his idioms, which from their very nature are anti-grammatical, cannot be brought under the ready-made formula and "parsed." But nothing yet known makes its place good in teaching to talk and write correctly, and with its neglect in our schools an increasing number of candidates for admission to college are deficient in practical knowledge of their own tongue. What is needed is, of course, not prosody but syntax, and enough parsing and analysis to develop a "sentence sense."—*G. Stanley Hall*, in "How to Teach Reading."

THERE is a great stir in the region of physical science at this moment, and it is, in my judgment, likely to take a chief and foremost place in the field of intellectual activity. After the severity with which science was for so many ages treated by literature, I cannot wonder that science now retaliates, now mightily exalts herself, and thrusts literature down in the lower place. I only have to say on the relative claims of science and literature what the great Dr. Arnold said: "If one might wish for impossibilities, I might then wish that my children might be well versed in physical science, but in due subordination to the fulness and freshness of their knowledge on moral subjects. This however I believe cannot be; wherefore rather than have it the principal thing in my son's mind, I would gladly have him think that the sun went round the earth, and that the stars were so many spangles set in the bright blue firmament." I am glad to think that one may know something of these matters, and yet not believe that the sun goes round the earth. But of the two, I, for one, am not prepared to accept the rather enormous pretensions that are nowadays sometimes made for physical science as the be-all and end-all of education.—*John Morley*.

Special Papers.

THE RECENT UNIVERSITY AND DEPARTMENTAL EXAMINATIONS.

BY T. ARNOLD HAULTAIN, M.A.

It has been my duty during the last few weeks to read and mark more than a thousand examination papers. Such a task—involving as it does the careful gauging of the mental capacity of each pupil, the accuracy of his information, his general intelligence, his command of language, and his power of thought—such a task gives one of the best possible opportunities of testing the general efficiency, first, of the school-masters and mistresses of our High and Public Schools, and, second, of the working of the educational machinery of Ontario. Such an opportunity should not be allowed to slip by without giving the public some information as to the manner in which their sons and daughters are being educated. I have not as yet seen in any periodical any allusion made to these examinations. I venture, therefore, to present a few hints and suggestions with the object chiefly of evoking an expression of opinion from those who by age and experience are far better fitted to express an opinion on these matters than am I myself.

Concerning the details of the internal mechanism of the conduct and results of examinations, an examiner's tongue is to a very large extent tied. And quite rightly and properly so. Such opinions and generalisations, however, as he may form or draw from the broad area of facts brought before his notice, may be made public without the slightest detriment either to examiners or examined. Indeed some such opinions and generalisations *ought* every year to be brought before the public. To this subject I shall presently revert. For the present let us examine the efficiency of our teachers and of our educational machinery as tested by the recent examinations.

First, then, as to the general efficiency of the masters and mistresses of our High and Public Schools. Two prominent defects were plainly visible throughout the papers: (1) a very noticeable lack of clearness of thought and expression, leading to extreme prolixity, great vagueness, merging sometimes into a total want of meaning, often into absolute nonsense; (2) lamentable ignorance of grammatical construction.

1. To the practical teacher this want of clearness is significant of much. It may indicate careless teaching, or it may be a sign of indolence on the part of an otherwise competent teacher; but probably it oftenest arises purely from *incompetence*: from an inability on the part of the teacher to convey from his own mind to that of his pupil a definite thought—generally because of the indefiniteness of his own. From whatsoever source it springs, however, this want of clearness is a sure sign of ignorance—it is the common cloak of ignorance. But with the details of this significance we need not here concern ourselves. All that need be said is that if a School Inspector found in any of the schools of his Inspectorate an evident and constant general want of definiteness and clearness in the answers given to his questions, he would be perfectly justified in concluding that such pupils were not being properly "*grounded*"—and "*grounding*," there is none but will admit, is the foundation-stone upon which the whole elaborate edifice of education is built.

2. To say that the papers show lamentable ignorance of grammatical construction is to use most euphemistic phrase. The English language is to the vast majority of candidates, an unknown tongue. Of the Queen's English the vast majority of candidates are guilty of murder, most foul, strange, and unnatural. Many exceptions, of course, there are; and if I am accused of destroying the righteous with the wicked, I shall answer that the former are not sufficiently numerous to redeem the character of the whole. It is not only that over and over again one comes across instances of the inability to distinguish between "lay" and "lie," between "fly" and "flee," between "sit" and "set," between "round" and "around;" it is that for hours one reads sentence after sentence in which phrases such as "I seen," "he don't," "they is," "he dost," etc., etc.,

abound; in which plural nouns are linked with singular verbs; in which direct and oblique narration are inextricably entangled; in which there is an utter oblivion of the fact that there exist such things as capitals or commas;—in which, in fact, every known rule that can be broken *is* broken. And this in the examinations for the Junior Matriculation of the University of Toronto, for the Second Class, and for the Third Class, Teachers' Certificates. What can one say or do? One thing one *can* say, and it is this: Such pupils were taught by men and women who could not themselves talk or write correctly. I may be severe, I may be hypercritical, I may be forgetting that we must not upon this continent and amongst the classes from which University and Departmental candidates are chiefly recruited expect that purity of diction which is supposed to be one of the marks of so-called "higher education;" all this I may be forgetting, but what I am not forgetting is that four-fifths of such candidates will one day be, or now actually are, *teachers*.

Second, then, as to the efficiency of the educational machinery of the Province, as tested by the recent examinations. It runs too smoothly. What do I mean by "too smoothly"? I mean that there are too many inducements held out to the youth of both sexes in Ontario to enter upon studies for which the majority of them (I by no means say all) are by nature and circumstances wholly unfitted. I mean that young men who ought to be following the plough and the harrow, and young women who ought to be in the kitchen and the dairy, are tempted into paths of life which they are utterly incompetent to tread. Knowledge—intelligence, even—is not the sole requisite for a teacher. Demeanour, breeding, manner, culture, refinement—one and all of these are as requisite; and can any one, even the most prejudiced, in his heart of hearts believe that the obtaining of thirty-three and a third per cent. will endow any candidate with these? And how are our youths tempted into what they style the "teaching profession"? By small fees, by bonuses, by emulous headmasters, by pushing teachers, by easy examinations, by lenient examiners, and, above and beyond all, *by the competition between schools*. Many are hurried on from one examination to another to feed the vanity and fill the pockets of an ambitious class of teachers. Nothing is thoroughly mastered, and the ground has in most cases to be all gone over again. The result is that the lowest forms of the High School do the work of the Public Schools, and the first years of the University do the work of the High Schools.

On each of these topics much might be said, but this is not the place for it. On one minor one only will I venture to remark—on the small fees, namely. The public perhaps are not aware that by the payment of *two dollars*—that is about two-sevenths of a bricklayer's daily earnings—by the payment of two dollars a candidate may present himself at the nearest town for a Second Class Teacher's Examination. Twenty-eight distinct and separate papers are set.* He is supplied with pens, ink, and paper. A presiding examiner is in attendance for forty-two hours and a half. His answer papers are transmitted, with no cost to himself, to Toronto, there to be examined by men chosen for the purpose. Thus to strew with roses the really thorny path which leads to success in teaching seems to me worse than folly. These things the public ought to know, or, if already they know them, they ought to be reminded of them again and again.

Lastly, to refer to a point already mentioned. It is superfluous to say that examinations are, or should be made, in themselves an *educating* process. They are not merely tests of excellence; they are one of the most powerful instruments the teacher possesses for calling forth or exercising the powers of the mind. Unless examinations are made use of with this end in view, one of their most important functions is wasted. And it has been the habit hitherto so to waste the University and Departmental Examinations. A candidate presents himself for examination; the papers are placed before him; so much time is allowed him in which to answer the questions set; he is passed or "plucked," as the case may be, and—there is

* Each candidate does not, of course, write on the whole twenty-eight papers; but twenty eight distinct and separate papers are prepared.

an end of the matter. Wherein he failed, in what he was deficient, where he excelled, to what subjects he should devote more attention—of these and similar points he learns nothing. The argument that University and Departmental Examinations are tests, and tests only, is hardly admissible. If they *can* be utilized as educating factors, they *ought* to be. There is surely a science of Educational Economy as there is a science of Political Economy, although no Adam Smith has yet arisen to formulate its principles; and surely one of these principles is that no educating instrument should be needlessly wasted. How University and Departmental Examinations may be made of value from this point of view is the question. I would suggest that the examiners for the Junior Matriculation of the University of Toronto, and that each of the various committees of the sub-examiners be required to issue yearly a minute embodying their views and opinions on such subjects as they think should be brought before the notice of those preparing candidates for the following year's examinations: such, for example, as the general tenor of the answers, how they compare with those of preceding years, the more salient sins of omission and commission, the more glaring faults, the general trend of educational methods, etc. Such minute, I conceive, would be welcomed by the High School masters throughout the Province. The cost of printing and distribution would be trifling, and could be easily defrayed by adding a few cents to that now truly infinitesimal fee—the two dollars.

I sincerely trust that I have not in any way betrayed the trust reposed in me as examiner, that I have not divulged or made public anything which should have been kept back. Nothing could have been farther from my intentions. I have purposely avoided references to particular instances, and have dealt as much as possible in generalisations only. An examiner has a fourfold duty to perform: one to those who engage him; one to his candidates; one to the teachers of his candidates; and one (perhaps after all the most important) to the public, who are the fathers and mothers of those candidates. This last I have here, however feebly, attempted to discharge. I believe that there are many old and experienced teachers in this Province who will bear me out when I say I believe the youth of Ontario are yearly sacrificed to that Moloch—education *falsely so called*. They pass through the fire of examinations, and think they are being "educated," and they think being "educated" means being made fit for a sphere for which they are not suited and for which they were never born. They think "education" means a smattering of two or three languages, sciences, and literatures. They think "education" means a contempt for the "humble" occupations of fathers and mothers, a striving after a "higher" walk of life, a more "exalted" "position" in the world. What is the result? I would that the public could read the answers given by the candidates at the recent University and Departmental Examinations. They would then know for themselves what is the result. —*The Week*.

WHEN a man is 82 years old, has been married 58 years, and has taught school 65 years, having spent 11,192 days in the school-room, he cannot be considered headstrong if he concludes that he has done his duty in that line. So thought James G. May, of Salem, Ind., who has just retired from the service.—*School Bulletin*.

THERE should be a law to expel a teacher from a school who examines and corrects the writing of all her pupils. Her time can be better employed. Just take a jumbled sentence and put it on the board and there correct it and make it English. Let the pupils understand that they are helping you to make English of it, and by following this up daily, in a short time you will find things looking better. Do not forget supplementary reading, something outside the regular reading lesson. If your school authorities do not supply you with it, bring in something and read to the children. The geography lesson will entirely change and the pupils will become familiar with stories. There is too much in our schools of what is known as teaching, a continual talking to children. Pupils should learn how to learn something.—*R. C. Metcalf*.

VICTORIA UNIVERSITY, COBOURG.

AMONG the oldest and best known educational institutions of this country stands the one of which we give an illustration and short description today. It owed its origin and short description to-day. It owed its origin to the dissatisfaction felt in many quarters with some of the conditions imposed upon higher education in this country in the olden time. The Methodist Church and a section of the Presbyterian Church took almost simultaneous action in this matter. As early as 1828 the Methodist Conference passed a resolution in favor of an institution for higher education of the youth of both sexes, and soon after proceeded to the erection of the necessary buildings. The original building was commenced in 1832; and in 1836 the institution was established by royal charter as "Upper Canada Academy," and opened for classes under the principalship of the Rev. Dr. Richey.

Good progress was made for the ensuing five years, when the Church, under whose patronage it was carried on, saw the necessity of taking still higher ground on the educational questions of the day. Accordingly, in 1841, the managers secured university powers; and the institution developed into the University of Victoria College,—the late Rev. Dr. Ryerson being the first President. He was succeeded in 1844 by Rev. Dr. MacNab, who remained in charge for six years, when in September, 1850, thirty-seven years ago, the Rev. Dr. Nelles was appointed to the Presidency. This able and well-known educationist, who has become a veteran figure-head in educational affairs, still occupies the presidential chair.

At the time of Dr. Nelles' appointment, the operations of the college consisted solely of the Faculty of Arts and of a preparatory department, designed to prepare students for entrance to the university course. Under his administration, however, the operations have been very greatly extended. The Faculty of Medicine was added in 1854; the Faculty of Law in 1862; and the Faculty of Theology in 1872. In 1875 a special effort was made to promote the efficiency of the Science Department. In that year Faraday Hall was erected; and since that time, under the professorship of Dr. Haanel, who is known as one of the most successful and enthusiastic educators in science on the continent, the science course at Victoria has enjoyed a most favorable reputation throughout this Dominion. The illustration which we give on this page is that of "Faraday Hall," the building in which, under three professors, are conducted the scientific, mathematical, and astronomical departments of the University. A special degree, B. Sc., is conferred on all students who complete the scientific course.

The fact that Victoria was established and conducted under denominational control left the impression on some that it was simply what is known as a "sectarian" institution. Such, however, has never been its character. It has ever striven to give a broad and liberal culture in the arts; it has thrown open its doors to all comers, without restriction or condition other than that pertaining to the necessary educational standard; and in the

development and advancement of its curriculum it has kept abreast of the educational requirements of the country. Indeed, it was not till the withdrawal of the Government grant, in 1872, over thirty years after its acquirement of University powers, that it established its Theological Faculty. The latter faculty, however, of which Rev. Dr. Burwash is Dean, supported by a competent staff of lecturers, is now doing very efficient work in its special direction. The degree of Bachelor in Divinity is conferred on the completion of a three years' heavy course after matriculation; it being a condition that the candidate for B.D. must first be a graduate in arts.

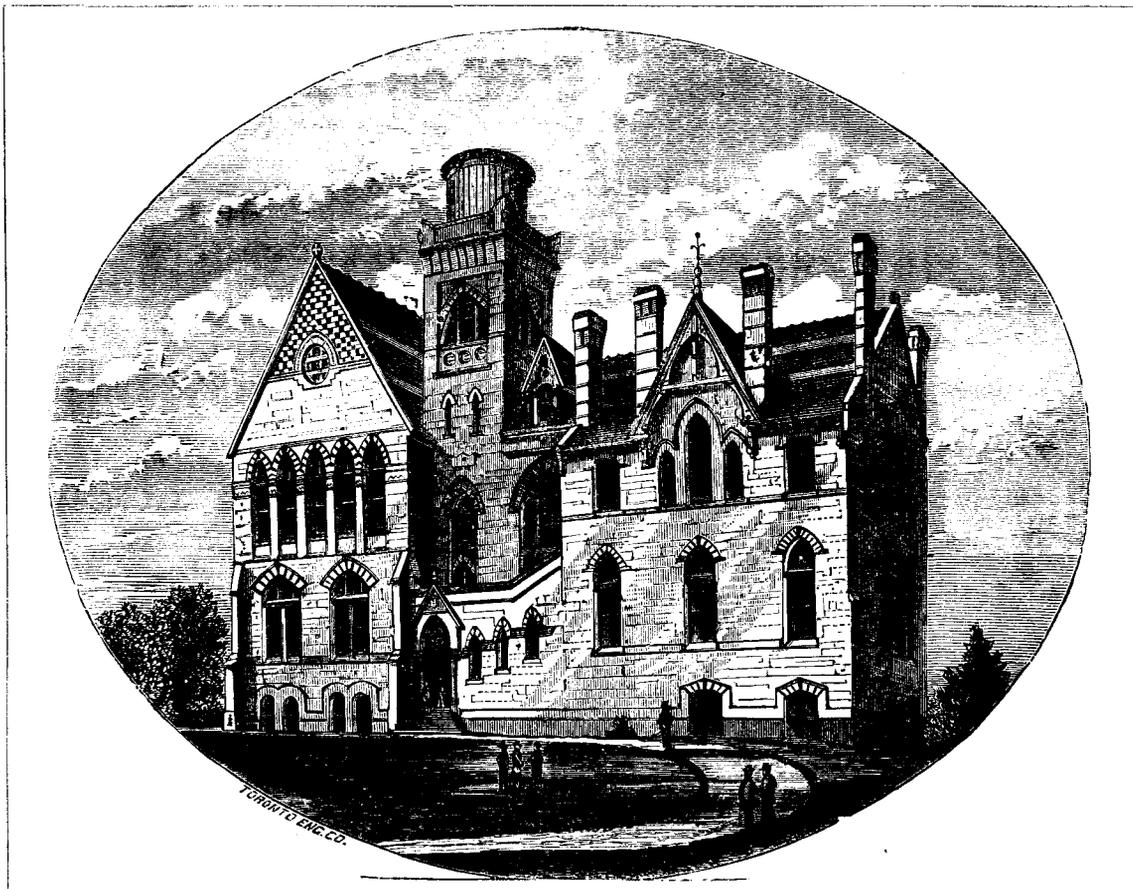
Under an arrangement supervised by the Ontario Education Department, local matriculation examinations, concurrent with those for teachers' certificates, are now held in various parts of the country. This proves of great advantage and convenience to students; and as Victoria, Queen's and Trinity have all come under this provincial arrangement, the papers being prepared by a common Board of Examiners, the standard of matriculation is the same in these and in the Provincial

bright. The graduating class of the past year was the largest in its history; while the number of students in its various faculties, as reported in the latest calendar, is no fewer than 731. A very large matriculating class is entering for the coming session, which opens the 1st of October; and with its two well established feeders,—Albert College, with the University connected with which it was consolidated in 1883, and which college has since been affiliated with it, and Cobourg Collegiate Institute, which is its affiliated preparatory Department,—it should not be short of matriculants in the coming years. In addition, its growing favor as a thorough educating institution is attracting an increasing number of students from the high schools and collegiate institutes in all parts of the country.

The question of Federation, in which this institution is interested, it is not our province to discuss. Under the action of the General Conference, the consummation of this scheme is understood to depend only on the success of the effort to raise the money. There is no doubt, however, that the Church, both in numbers, and in ability and influence, is most seriously divided on the question of the consistency and wisdom of the step which has been taken. But whether the consummation of this arrangement be near or remote, Victoria University will proceed with its usual work till the change is made; and we know of no institution better adapted to the purposes of young teachers who may desire to take a few years at college, or more worthy of their support. It has built up hundreds of young men in similar circumstances; and, by way of a word in another direction, it was the first Canadian University to open its doors to ladies, and to encourage them to enter the lists for the higher regions of learning, which it thinks they have a right to occupy in common with the sterner sex.

A word as to its pleasant town of Cobourg, where the student can enjoy a desirable retirement for all purposes of study, and yet have all the attraction and excitement which he requires. He has also the advantages of a healthful location, a comparatively low bill of expenses, and good society,—one of the features of which latter advantage is an acquaintance with the professors from whom he derives his instruction, thus reaping the benefit of their association and experience even outside of the classroom. The various college societies, also, with their valuable libraries, and their literary and oratorical exercises, are of great advantage to the ambitious student; and at Victoria these are carried on with unusual vigor and success.

The graduates of this University are represented in the Senate and on the Board of Regents under arrangements set forth in the Charter. The Senate has been aiming, for years, to make the course of study as thorough and as serviceable to the student as possible; while the Board is equally desirous to maintain the efficiency of the equipments. For late successes in this direction, the institution is indebted to the good management and generosity of its indefatigable Bursar, George A. Cox, Esq.



FARADAY HALL, VICTORIA UNIVERSITY, SCIENCE AND MATHEMATICAL DEPARTMENTS.

University. Starting upon this high basis, Victoria puts her students through an "all round" course of study which, for wise selection of subjects and thoroughness in drill, is certainly not surpassed in the country. There are well sustained chairs in all the branches of a full University course. One of the secrets of the success of this institution is the requirement of attendance at daily "grind" in the classes through the entire four years. A dispensation is granted from such attendance only under urgent conditions. Thoroughness is therefore a feature of the instruction; and the results of this system are apparent in the general success of the graduates of this University in all the departments of professional and business life.

In the number of these graduates Victoria has made a most suggestive mark upon the educational face of the country. They number 2,216; and of these over 500 are in the Faculty of Arts. Thus, almost entirely unaided by public funds, this useful institution has contributed to the educational advancement of this Dominion in a manner which fully justifies the action of its founders, taken at a time when the cause of higher education was not in such a promising condition as it is at present.

The prospects of this institution are deservedly

Examination Papers.

MIDSUMMER EXAMINATIONS, 1887.
THIRD CLASS TEACHERS.
ALGEBRA.

Examiners } W. H. BALLARD, M.A.
 } C. DONOVAN, M.A.

TIME—Two hours.

Note—Seventy-five per cent of the value of this paper counts 100 marks—the maximum.

1. Shew that $(x^2 + 2xy + 3y^2)^3 + (y^2 - 2xy + 3x^2)^3$ is divisible by $4x^2 + 4y^2$.

2. Find the product of

$$\frac{1}{x} + \frac{1}{y+z} \text{ and } 1 + \frac{y^2+z^2-x^2}{2yz}$$

$$\frac{1}{x} - \frac{1}{y+z}$$

3. Find the greatest common measure of $2x^3 - 5x^2y + 6xy^2 - 2y^3$ and $2x^3 + 3x^2y - 6xy^2 + 2y^3$.

4. Find the factors of $abc - ab - bc - ca + a + b + c - 1$; $b(b-2a) - (c^2 - a^2)$; and $512x^{27} + y^{18}$.

5. If x and y are the G.C.M. and L.C.M. of a and b , shew that $xy = ab$.

6. Simplify

$$\frac{x}{(x+y)(x+2y)} + \frac{2y}{(x+y)(x+3y)} + \frac{x}{(x+2y)(x+3y)}$$

$$-\frac{1}{x+3y}$$

7. Solve the equations:

(1) $p(x-q) = q(x-p)$;

(2) $\frac{3}{5}(5x-6) + \frac{7}{8}(3-2x) = \frac{4}{5}\left(\frac{x}{2} - 3\frac{1}{2}\right)$

8. Solve the equations:

(1) $x+y=b, ax+by=b^2$;

(2) $\frac{1}{x} + \frac{1}{y} = a, \frac{1}{x} - \frac{1}{y} = b$.

9. A person goes from Hamilton to Toronto by boat at the rate of 13 miles an hour, remains an hour and a half in Toronto, and returns by rail at the rate of 26 miles an hour. He is gone altogether six hours; find the distance from Hamilton to Toronto.

10. A number consists of two digits; if these digits be reversed the number thus formed is less than the first number by twice the greater digit; also, four times one digit exceeds three times the other by unity. Find the digits.

11. A merchant goes into business with a certain capital which he finds has doubled itself by the end of the year. He then withdraws \$1,000 to pay expenses, and the remaining capital doubles itself during the second year; he then withdraws \$1,000 as before, and so on for four years. He finds that he begins his fifth year with \$5,000; how much had he to commence with?

12. The sum of two numbers is one fourth of their product, and if 6 be divided by the first number and 3 by the second, the sum of the quotient is 1; find the numbers.

MENTAL ARITHMETIC.

Examiners: { Jas. F. White,
 } J. A. McLellan, LL.D.

NOTE—Six questions will constitute a full paper, but candidates will receive credit for all answers.

1. By selling my oranges at 65c. I would gain $\frac{3}{8}$ c. apiece more than by selling them at 50c.; how many have I?

2. In what time at 8% simple interest will the amount be $2\frac{3}{4}$ times the principal?

3. A's money is \$4 more than $\frac{2}{3}$ of B's and \$5 less than $\frac{3}{4}$ of it. How much has each?

4. A boy and a man do a work in 8 hours, but if the boy rests $3\frac{3}{4}$ hours it takes $9\frac{1}{2}$ hours. In what time would each alone do it?

5. By mixing 5 lbs. good sugar with 3 lbs. worth 4c. per lb. less, the mixture is sold at 9 lbs. for 85c. giving a gain of $11\frac{1}{2}\%$. Find price of each kind.

6. A boat goes $16\frac{1}{4}$ miles per hour down stream and 10 miles per hour up; if it is $22\frac{1}{2}$ hours longer in coming up than in going down, find the distance.

7. A and B are partners: A puts in 40% of the stock for 4 months, and B the remainder for 3 months; how should a gain of \$3,400 be divided between them?

Mathematics.

All communications intended for this column should be sent before the 20th of each month to C. Clarkson, B.A., Seaforth, Ont.

SOLUTIONS OF PROBLEMS IN THIRD CLASS ALGEBRA PAPER.

1. THIS is the sum of two cubes, like $a^3 + b^3$, and is therefore divisible by the sum of the quantities, like $a+b$. Hence $(x^2 + 2xy + 3y^2) + (y^2 - 2xy + 3x^2)$ will divide it, i.e., $4(x^2 + y^2)$.

2. Multiply N. and D. of 1st fraction by $x(y+z)$. Reduce the 2nd fraction, and we get

$$\frac{y+z+x}{y+z-x} \times \frac{(y+z)^2 - x^2}{2yz} = \frac{(x+y+z)^2}{2yz}$$

3. Using coefficients only, the operation stands

$$\begin{array}{r} A=2-5+6-2. \\ B=2+3-6+2. \\ \hline 2|4-2 \end{array}$$

$2x-y = H.C.F.$
See elements of Algebra, p. 136.

4. (1st part) Arrange according to a , thus $a(bc-b-c+1) - (bc-b-c+1)$. Hence the expression $= (a-1)(bc-b-c+1)$.

(2nd part) $= b^2 - 2ab - c^2 + a^2 = (a-b)^2 - c^2$
 $= (a-b+c)(a-b-c)$.

(3rd part) $= (8x^9)^3 + (y^6)^3$
 $= (8x^9 + y^6) \{ (8x^9)^2 - (8x^9)(y^6) + (y^6)^2 \}$
 $= \{ (2x^3)^3 + (y^2)^3 \} \{ 64x^{18} - 8x^9y^6 + y^{12} \}$ and the first factor again splits up into $2x^3 + y^2$ and $4x^6 - 2x^3y^2 + y^4$.

5. L.C.M. = product \div G.C.M. See McLellan's Elements, p 145, i.e. in this case $y = ab \div x$; $\therefore xy = ab$.

6. Numerator of sum $= x(x+3y) + 2y(x+2y) + x(x+y) - (x+y)(x+2y)$
 $= (x+y)(x+2y)$: Denominator $= (x+y)(x+2y)(x+3y)$
 \therefore Sum $= \frac{x+y}{x+3y}$.

7. (1) $px - pq = qx - pq$; $\therefore x(p-q) = 0$
 $\therefore x = 0 \div (p-q) = 0$, unless $p=q$, and then $x = 0 \div 0$, i.e., x may have any value whatever.

(2) Multiply through by 40, and we get

$$24(5x-6) + 35(3-2x) = 32\left(\frac{x}{2} - 3\frac{1}{2}\right) = 16x - 112$$

$$\therefore 34x = -73 \quad \therefore x = -\frac{73}{34}$$

8. (1) $ax + ay = ab$
 $ax + by = b^2$
 $y(a-b) = b(a-b) \quad \therefore y = b$; $\therefore x = 0$ from first equation.

It is also clear that a must be $= b$.
(2) Adding $2 \div x = a + b$; subtracting $2 \div y = a - b$
 $\therefore x = \frac{1}{2}(a+b), y = \frac{1}{2}(a-b)$.

9. He is 9 half-hours on the road; the rates are as 1:2 \therefore the times are as 2:1, i.e., 6 half-hours and 3 half-hours, etc.

By algebra: let $x =$ distance
 $\therefore (x \div 13) + (x \div 26) = 4\frac{1}{2} \quad \therefore x = 39$ miles.

10. Let $10x + y = \text{No.}$ $\therefore 10y + x = \text{No.}$ reversed

$$9x - 9y = 2x, \text{ or } 7x = 9y.$$

$$\text{Also } 4y = 3x + 1 \quad \therefore x = 9, y = 7.$$

11. \$6,000 at end of 4th year was \$3,000 at beginning of that year, \therefore \$2,000 at end of 3rd year, \therefore \$1,000 at beginning, etc.

By algebra: $[[2 \{ 2(2x - 1,000) - 1,000 \} - 1,000] - 1,000] = 5,000$
 $x = 1,250$.

$$12. x + y = \frac{1}{4}xy; \text{ also } \frac{6}{x} + \frac{3}{y} = 1$$

$$\therefore 4x + 4y = xy = 3x + 6y; \quad \therefore x = 2y.$$

$$\therefore x = 12, y = 6.$$

CORRESPONDENCE.

Solution of No. 4, paper III., p. 217, H. Smith's Arithmetic, by E. Richmond, Marnoch. Suppose \$100 = cost price, \therefore \$105 = selling price, and \$95 = supposed cost. $\therefore \frac{1}{15}$ of \$95 = supposed selling price = \$104.50; \therefore 50 cents gain corresponds to \$100 cost; \therefore 5 cents gain to \$10 cost. Solutions also sent by T. F. Flaherty, Thorndale, and Jessie C. Gerrie, Ingersoll.

"The product of four consecutive numbers is 73440; find them." Solution by E. Richmond. Find the prime factors of 73440, and arrange them thus: $2^4 \times (2 \times 3^2) \times (3 \times 5) \times 17 = 16 \cdot 18 \cdot 15 \cdot 17$. A different solution was sent by Miss Gerrie.

M.M., of Tamworth, has not given accurate references to the four problems proposed.

No. 319, p. 290, H. Smith's Arithmetic, by E. Richmond.

1st purchase, 21 eggs cost 1 shilling, \therefore 1 egg costs $\frac{1}{21}$ shilling.

2nd purchase, 19 eggs cost 1 shilling, \therefore 1 egg costs $\frac{1}{19}$ shilling.

\therefore 2 eggs cost $(\frac{1}{19} + \frac{1}{19})$ shillings = $\frac{2}{19}$ s.

She sells 2 eggs for $\frac{1}{10}$ s. = $\frac{4}{100}$ s.

\therefore loss = $\frac{2}{19} - \frac{4}{100} = 40(\frac{1}{1900} - \frac{1}{1000}) = 40 \times \frac{1}{3800} = \frac{1}{95}$.

Hence $\frac{40}{100}$ invested gives a loss of $\frac{1}{95}$.

40 " " " " $\frac{1}{10}$

100 " " " " $\frac{1}{4}$.

Good solutions were also sent in by the above correspondents; the editor has also replied to several correspondents privately.

The following problems and solutions are added to complete No. 16, which was given with the editor's solution in the last number before the holidays. The whole will give a sort of history of this problem, which attracted some attention last winter.

18. "Write an algebraical expression by means of which it may be shewn how to find a series of square numbers, each of which shall be the sum of two square numbers."—Pott's Algebra, Sec. VI., p. 21. Solution p. 41: "By Euclid I., 47, $3^2 + 4^2 = 5^2$, multiply thro' by x^2 , $\therefore (3x)^2 + (4x)^2 = (5x)^2$ in which x may be any number whatever." NOTE—This is evidently only a partial solution, and gives only one series—3, 4, 5; 6, 8, 10; 9, 12, 15; etc. See No. 16.

19. "If a, b, c , be integers, and $a^2 + b^2 = c^2$, then abc is always divisible by 60."—Pott's Algebra, Sec. VI., p. 22.

20. "Divide a given square into two squares.—Colenso's Algebra.

Pt. II., p. 313. Colenso's solution:

Let $x^2 + y^2 = a^2$, $\therefore y^2 = a^2 - x^2$; put $y = \frac{n}{m}(a+x)$

and $y = \frac{m}{n}(a-x)$, whence x and y :—

$$x = \frac{(m^2 + n^2)a}{2mn}, \quad y = \frac{(m^2 - n^2)a}{2mn}$$

Thus if $a = 21, m = 3$, and $n = 1$, then $x = 35, y = 28$.

NOTE.—A few trials will show that this formula is practically useless, as the three numbers, a, m and n cannot be assumed at random, and the solution gives no clue to the values that must be taken to produce integral solutions.

21. Find two square numbers whose sum is a square."—Wood's Algebra, by Lund, 14th Ed., p. 227. Solution on same page. "Let x^2 and y^2 be the two square nos.

Assume $x^2 + y^2 = (nx - y)^2 = n^2x^2 - 2nxy + y^2$

$\therefore x^2 = n^2x^2 - 2nxy$, $\therefore x = n^2x - 2ny$.

$\therefore (n^2 - 1)x = 2ny$, $\therefore x = 2ny \div (n^2 - 1)$. And if n and y be assumed at pleasure, such a value of x is obtained that $x^2 + y^2$ is a square number. But if integers are required, let $y = n^2 - 1$, $\therefore x = 2n$, and n being taken at pleasure, integral values of x and y will be found."

THE establishment of a Secular College, instead of the present system of sectarian schools, comprising the University of Manitoba, is being agitated in the press of that province and it is said that the scheme is meeting with much favor.

THE Kingston News gives a detailed description of the New Central School Building in that city. We note the following especially good features: Around each room and each hall is dadoing with neat capping, and composed of red and white pine. The blackboards are of slate, and in four rooms they are three feet high and twenty-four feet long, while in the other four rooms they are the same height, but only eighteen feet long. Around the top of each room is moulding on which to hang maps, or anything that must be suspended. The floors are of maple, and each room is heated with fresh air inlets as well as exhausts. The windows admit air at the top, and are supplied with transom lifts, each window being very large. In every room is a closet in which to place any articles the teachers may have in use. In the basement are two playrooms, one for the boys and one for the girls. The flooring is of maple, and the walls are unplastered. The furnace room will have a cement floor, and the boiler is known as a horizontal tubular, low pressure. The heat from it will also be used in ventilating. A receiver has been fitted up in the attic, with a coil, and it acts in ventilating the room by means of a foul air flue.

School-Room Methods.

SHAKESPEARIAN STUDY.

BY PROF. C. C. COX, SOUTHERN FEMALE COLLEGE,
LAGRANGE, GEORGIA.

THE following is a method for general study of the subject and also for the special study of a play. It is the plan I have pursued with my class the past year. Of course it is not fully original, as I have utilized suggestions and information from various sources, but I have attempted to arrange the material systematically, and into two plans supplementary of each other. The method is mainly a summary of some of the modern plans of study. The text-books we use are Dowden's Shakespeare Primer, Rolfe's plays, Abbot's Shakespearean Grammar, the Globe Shakespeare, Dowden's Mind and Art of Shakespeare, besides availing ourselves of numerous works of reference.

I.—METHOD OF GENERAL STUDY.

1. Shakespeare's Environment.

a. The Elizabethan Drama: its development, and parallel readings in the representative play writers.

b. The biography of Shakespeare.

2. The critical study of the text, to ascertain the true reading.

3. A like study of the language, to ascertain the exact meaning of words and phrases.

The study of the grammar to explain certain forms, and to compare the peculiarities of the Elizabethan speech with modern English, and thus to trace the development of our language.

5. The study of the versification, to discover the art of poetics, and to determine the chronological order of the writings, for Shakespeare's verse changes at different periods.

6. The determination of the chronological order, with a view to develop the mind and art of Shakespeare.

7. Aesthetic criticism; the construction of the plots, the delineation of characters, and the determination of the principles of dramatic art.

II.—A PLAN OF STUDY BY WHICH TO GAIN POSSESSION OF A PLAY.

1. The plots and story of the play.

a. The general plot.

b. The special incidents.

c. The sources of the plot.

2. The movement or structure of the play.

a. The introduction, growth, climax, return and close of the action.

b. The relations of Act to Act, Scene to Scene, and of these to the development of the plot as a whole.

c. The unities of Time, Place and Action.

3. The characters; the ability to give a connected account of all that is done and the substance of what is said by each character in the play.

4. The influence and the interplay of the characters upon each other.

a. Relation of A to B, of B to A.

b. Relation of A to C, and D.

5. Mastery of the language.

a. Meanings of words.

b. Use of old words, or of words in an old sense.

c. Grammar.

d. Ability to quote a line in illustration of a grammatical point.

e. Rhetoric; choice and use of words, identification of the figures of speech, the structure of the sentences, etc.

6. Versification.

7. Quoting.

a. What was said by A to B on a particular occasion.

b. What was said by B to A in reply.

c. What argument was used by C at a particular juncture.

d. To quote a line in instance of an idiom, or a peculiar meaning, or figure of speech, or versification.

8. Power to locate.

a. To attribute a line or statement to a certain person upon a certain occasion.

b. To cap a line, *i.e.* to repeat the line with which a given line rhymes, if there are such lines.

c. To fill in the right word or epithet, *i.e.* a

line being incompletely given, a word or epithet left out, to supply what is needed to complete it.

9. Knowledge of the Moral Teachings.

a. The motive of the play.

b. Ethical principles involved.

c. Practical moral lessons to be learned.—
South-Western Journal of Education.

SENTENCE BUILDING.

(AS OBSERVED IN QUINCY, MASS.)

UPON the board are written the following words:

emulate	martyr
sage	placid
precede	bard
patriots	cartoon
lichen	proceed

Each word is looked up in the dictionary carefully and its meaning studied, and all learned which the dictionary tells of its etymology, history, variety of uses, etc. There are four directions given for the use of these.

First: Write ten sentences, using one of these words in each, making a sentence in which the meaning of the word shall be distinguished, or that shall show that the writer must know its meaning.

Second: Write five sentences, using two of these words in each, exercising great care to have the meaning discriminated through the use. This combining two such words in one sentence is much more difficult for a child than would at first be supposed; but practice of this kind develops much skill.

Third: Write five sentences, using as many as possible of these words in each.

Fourth: Write a paragraph upon each word, saying all you can about its history, different uses, different forms, liability to misuse, etc.

It is often said of modern methods in language, that the tendency is to make it all play, using childish words, words about which they "knew it all" in advance. This exercise, and these words which we found upon the board, give a substantial answer, we think, to that criticism.

In another room in the same building, among the words upon the board for such an exercise was the word "minor," and one pupil wrote a sentence in which he used these expressions, but we neglected to take the sentence in its entirety, thinking we should remember it if we had the test portions, but we do not. It was similar to this, however; the italicized words we copied at the time: "It was a *minor event* for the *minor* to sing a *minor piece*." This was wholly developed from his study of the dictionary, and was not taken from or suggested by any textbook.—*Ex.*

DEVELOPMENT LESSON ON THE NUMERAL FRAME.

(MOVE to the right two beads on the first wire, two on the second, and two on the third, asking the children to tell you how many you move each time.)

"How many twos are there?"

"Three twos."

"You may count and tell me how many ones three twos make."

"Three twos make six."

"You may state that with your pencils." $3 \times 2 = 6$.

(Drawing your pencil down through the column of twos, separate them so as to obtain two threes, which will of course be in vertical arrangement.)

"How many threes, children?" "Two threes."

"Two threes make how many ones?"

"Two threes make six."

"Write that opposite your other statement."

(Illustrate on board $3 \times 2 = 6$. $2 \times 3 = 6$.)

(Arrange as before five twos.)

"How many twos are here, children?"

"Five twos."

"Count and see how many ones five twos make."

"Five twos make ten."

"Write that under your first statement."

(Separating the twos as before produce two vertical columns of five each.)

"How many fives?"

"Two fives."

"How many ones do two fives make?"

"Two fives make ten."

"Write that under your second statement."

$3 \times 2 = 6$.

$5 \times 2 = 10$.

$2 \times 3 = 6$.

$2 \times 5 = 10$.

"If I should give five times two apples to Johnny, and two times five apples to Harry, would Johnny have more than Harry, or Harry more than Johnny?"

(Let the children discover and prove for themselves the equality of the two statements.)

If the multiplication table is thus developed, its connections thus currently shown with the other tables, and the same plan continued with threes, fours, etc., the work of memorizing the tables will be lessened almost one-half. But this is mere development, and must be followed by drill. Variety in drill may be secured in many ways.—*A. A. Phillips, in Practical Teacher.*

EXERCISES FOR CONSONANT DRILL.

THE following note explains itself:—

Last week I borrowed a little time from my own school work to study the work of successful teachers, knowing that the gain to myself would be a gain to my school.

I was uniformly surprised at the good work done, but the one thing to which I wish to call the attention of your readers was an exercise in the Shurtleff school, South Boston, in the class doing fifth year's work. This class read so distinctly that I asked the teacher, Miss Folan, by what means she attained such results, for my experience and observation teach me that the greatest difficulty is the inability of children in the public schools to give letters their proper sounds. She said: "I find vocal drill indispensable, and while there are many helpful suggestions in books, I find that much of this work is too advanced for children, and I'm obliged to make exercises to fit my class."

She then showed me various exercises, and the one for drill in consonants seems so well calculated to help children in overcoming one of the greatest defects in their pronunciation that I copied it for my own work, and I feel sure she would be more than willing that other teachers should have the benefit of it through your columns. In taking the drill many more words of each kind were used, and in each case the pupil pronounced the word ending in a consonant with great distinctness; they then gave the consonant slowly and clearly three times, pronouncing afterwards a word beginning with that sound, to make sure that none misunderstood it. The results were in every way satisfactory.

EXERCISE FOR CONSONANT DRILL.

hat—t-t-t-top	lag—g-g-g-gun
mat—t-t-t-tip	sag—g-g-g-game
sat—t-t-t-tap	rag—g-g-g-get
hack—k-k-k-cat	rub—b-b-b-bat
smack—k-k-k-kite	sub—b-b-b-bet
lack—k-k-k-caught	scrub—b-b-b-brush
lap—p-p-p-pan	lull—l-l-l-light
sap—p-p-p-pat	mull—l-l-l-lit
flap—p-p-p-peck	full—l-l-l-lamp
lad—d-d-d-dance	love—v-v-v-vat
had—d-d-d-d-done	shove—v-v-v-van
mad—d-d-d-d-dip	
sun—n-n-n-nap	hush—sh-sh-sh-shop
fun—n-n-n-not	mesh—sh-sh-sh-shut
can—n-n-n-nip	bush—sh-sh-sh-ship
ruff—f-f-f-fight	lurch—ch-ch-ch-church
cuff—f-f-f-fit	much—ch-ch-ch-chat
muff—f-f-f-fun	such—ch-ch-ch-chin
roar—r-r-r-ripe	when
soar—r-r-r-run	what
more—r-r-r-rot	whether
some—m-m-m-mat	laugh-ing
come—m-m-m-met	play-ing
dumb—m-m-m-mum	chat-ting

—*Agnes Iola Rounds, in American Teacher.*

For Friday Afternoon.

THE SONG OF THE BEE.

Buzz, buzz, buzz !
This is the song of the bee.
His legs are of yellow,
A jolly good fellow,
And a good worker is he.

In days that are sunny,
He's getting his honey ;
In days that are cloudy,
He's hoarding his wax ;
On pinks and on lilies,
And gay daffodillies,
And columbine blossoms
He levies a tax.

Buzz, buzz, buzz !
The sweet smelling clover
He humming hangs over ;
The scent of the roses
Makes fragrant his wings ;
He never gets lazy,
From thistle and daisy
And weeds of the meadow
Some treasure he brings.

Buzz, buzz, buzz !
From morning's first gray light
Till fading of daylight
He's singing and toiling
The summer day through.
Oh ! we may get weary,
'And think work is dreary ;
'T is harder by far
To have nothing to do.

—Nancy Nelson, *Pendleton in St. Nicholas for September.*

THE FISHERMAN.

HURRAH ! the seaward breezes
Sweep down the bay amain ;
Heave up, my lads, the anchor !
Run up the sail again !
Leave to the lubber landsmen
The rail-car and the steed ;
The stars of heaven shall guide us
The breath of heaven shall speed.

Though the mist upon our jackets
In the bitter air congeals,
And our lines wind stiff and slowly,
From off the frozen reels ;
Though the fog be dark around us,
And the storm blow high and loud,
We will whistle down the wild winds,
And laugh beneath the clouds.

In the darkness as in daylight,
On the water as on land,
God's eye is looking on us,
And beneath us in his hand !
Death will find us soon or later,
On the deck or in the cot ;
And we cannot meet him better
Than in working out our lot.

Hurrah !—hurrah !—the west-wind
Comes freshening down the bay,
The rising sails are filling,—
Give way, my lads, give way !
Leave the coward landsman clinging,
To the dull earth, like a weed,—
The stars of heaven shall guide us,
The breath of heaven shall speed !

—J. G. Whittier.

A HUMOROUS incident is told of the work of women on the New York School Board. A janitor of one of the schools went, recently, with a complaint to the principal. He said that he had been janitor of that building for nineteen years, and no one had ever asked to see the basement until one of the women of the School Board came, and said she wanted to make an examination. "And that basement wasn't in a fit condition for any one to see," he added plaintively.

Hints and Helps.

HOW TEACHERS WASTE TIME.

By:—

1. Ignorance in organizing classes.
2. Inability to get the attention of pupils.
3. Giving unnecessary directions.
4. Coming to school without a definite plan of work.
5. Speaking when pupils are not giving attention.
6. Giving orders and immediately changing them.
7. Speaking too loud and too often.
8. Hunting for the lesson in the book.
9. "Getting ready," to do something.
10. Allowing pointless criticisms, questions and discussions.
11. Asking pointless, wandering questions.
12. Going off on "tangents" in recitations.
13. Indolent habits in work.
14. Explaining what pupils already know.
15. Explaining what pupils should study out for themselves.
16. Repeating questions.
17. Failing to reach the understandings of dull pupils.
18. "Picking" at pupils.
19. Allowing slovenly work to be put on paper, slate or blackboard.
20. Repeating answers after pupils.
21. Giving too much attention to society matters.
22. Giving muddy explanations to conceal ignorance.
23. Using the voice where the eyes would be more effective.
24. Asking questions that can be answered by "yes" or "no."
25. Failing to systematize knowledge.—*Selected.*

MANAGEMENT.

BY THE AUTHOR OF "PRESTON PAPERS."

A GOOD text-book education, and the broader one that comes from contact with the world-experience, are among the first requisites towards success in teaching. These are good weapons, but they need skilful wielding. Tact, management, good government, call it what you will, is the best spoke in the wheel, and lacking this the ability to give a correct translation from one of the dead languages, or the power to solve a difficult or intricate problem, will not furnish the motive power to make "the wheels go round."

There are two kinds of management: the natural and the acquired. Some teachers seem to know instinctively just what to do, and how, and when, in order to secure the best results. That is natural tact. But any one, having ordinary ability, can learn some things by using eyes, ears, and intelligence; by studying child nature and observing cause and effect; by applying the "golden rule" with more frequency than the traditional one; by developing an interest in each child, instead of lumping them off into grades, classes, and divisions, like so many bales of cotton or packages of merchandise; by becoming familiar with each one's home life and surroundings, their heredity, physical, mental, and moral qualities, everything, in fact, which helps make or mar character.

"But this is so much trouble."

It is—truly. And so is anything that is worth doing at all; and unless you can put your time, strength, purpose, and life, your very soul, into the work, you had best leave the profession and dig ditches, or wash dishes, as the case may be.

For your own sake you should do this, as well as for the sake of those committed to your care—for your success will be limited in the same degree that you lack management; and your aspiration in your work should be to approximate the perfection taught by the Great Master, your noble exemplar.

HINTS FOR FRIDAY AFTERNOONS.

ONE feature of our general exercises, on Fridays, is a "query box" for all kinds of questions (without too many dates), which will be understood by scholars between ten and fifteen years of age, and will be interesting to them. We have five a week. On one Friday we give the questions, which are copied in the blank books; the scholars find the answers, if they can, before the next Friday, when they copy the answers and five new questions. Each Friday we occupy five or ten minutes studying questions and answers. Scholars enjoy questioning each other, and the teacher rests. Our questions are of every variety—history, geography, any interesting facts, etc. Many of the scholars propound these questions, and the queries and answers of a term make an entertaining and instructive feature for "last day exercises."

* * * * *

A help to make scholars enjoy letter-writing is to have a letter-box. I took a chalk-box, the cover of which was planed, and a hole made large enough for the letters to pass through. Above this opening I painted the word "Letter" in large, red letters; below, the word "Box." We keep the letter-box in full view all the time. Younger scholars look forward to the day when they send letters to classmates; the teacher is the post-mistress, and corrects the letters. At a certain time the scholars get their letters, note the corrections, and pass them back to the original writer, who copies in a blank book. Thus children learn the forms and processes of letter-writing, see the errors of, at least one besides their own; and the playing at "post-office" adds a zest which would else be wanting to the work.—*E. H. Bust in Am. Teacher.*

RULES FOR TEACHING.

1. TEACH naturally.
2. Regulate your teaching by the natural grades in the development of the growing individual.
3. Begin teaching at the standpoint of the pupils; guide them from there onward, steadily and thoroughly without interruption.
4. Do not teach what is in itself nothing to the pupil when he has learned it, nor what will be nothing to him at some future time.
5. Teach intuitively.
6. Proceed from the near to the remote, from the simple to the complex, from the easy to the difficult, from the known to the unknown.
7. Follow in teaching the elementary method (inductive from particular to general), not the scientific method (deductive from general to particular).
8. Follow, above all, the psychological aim, or the psychological and the practical at the same time. Rouse the pupil through the same topic presented from as many points as possible. Combine, especially, knowledge with ability, and exercise the knowledge until it is shaped by the underlying train of thought.
9. Teach nothing but what pupils can comprehend.
10. Take care the pupil retains all that he learns.
11. Do not simply train and polish; education and discipline are not for this, but to lay the general foundation on which to build the character of the individual, the citizen, and the nation.
12. Accustom the pupil to work; make it for him not only a pleasure, but a second nature.
13. Recognize the individuality of your pupil.—*Translated from Diesterweg.*

THE University of Toronto and the Toronto School of Medicine have come to an agreement which will enable the new faculty of medicine in the University to be constituted without delay. For the present the faculty of medicine will be composed of the present teachers in the Toronto School of Medicine, the University adding the following chairs:—Biology, Prof. Ramsay Wright; chemistry, Dr. Ellis and Prof. Pyke; physiology, A. B. McCallum, B.A.; palaeontology, Prof. Chapman. The faculty is to be under the direction of a council composed of non-medical members of the senate.

TORONTO, OCTOBER 1ST, 1887.

Editorial.

THOSE EXAMINATION PAPERS.

MR. HAULTAIN has done well to publish the letter which will be found in the "Special Paper" department of this number. It requires some courage to write such a letter, but none the less under such circumstances it becomes a duty to the public to do so. The "candid friend" is not always the most welcome, but he is often the best friend. The examiners, the teachers, and the Department alike should feel that Mr. Haultain has done them a service in stating so clearly and so frankly his opinions of the work they are respectively doing, so far as that work can be judged by the test of a thousand examination papers, by candidates for teachers' certificates or undergraduate honors in the University. The practical question for each is, How can the information thus given be put to the best possible use?

Mr. Haultain will not, we are sure, misunderstand us when we say the first question is the question of fact. With the highest confidence in his impartiality and his ability to remember and generalize the facts as they came under his own observation, all those interested will still wish to hear from the other examiners. Have they brought from their arduous task the same impressions? Is there any possibility that the samples which passed under Mr. Haultain's hand and eye may have been exceptionally bad? We should like to see every word that he has written established, or controverted, out of the mouths of, not two or three, but a dozen witnesses. Assuming that the papers examined by Mr. Haultain were not below the average, and that his evident disappointment and disgust have not played any tricks with either memory or judgment, the case is a very serious one. For some reason or other the training of the candidates has been grossly and glaringly defective. Worst of all it has conspicuously failed at the two points which afford the crucial tests of the quality of all secondary education, clearness of thought and expression, and ability to use correct English. If such instances as those adduced were but of occasional occurrence we could easily account for them. When, as Mr. Haultain assures us, the murder, foul and unnatural, of the Queen's English is the rule, its proper treatment the exception, we confess ourselves at a loss. We scarcely know what conclusion to draw, or what remedy to propose.

One thing, however, we feel bound to say. Our acquaintance with the masters of the High Schools and Collegiate Institutes, from which the great majority of the candidates must have gone up, is sufficient to make us sure that Mr. Haultain is wrong when he ascribes the defective training mainly to "incompetence," to "inability on the part of the teacher to convey from his own mind to that of the pupil a definite thought—generally because of the indefiniteness

of his own." This is a sweeping charge, and one which must fail, to bring against a body of teachers, many of whom are educators of known skill and experience, and nearly all of whom are graduates, or undergraduates, of Toronto and other Canadian universities. The primary cause of the trouble is not, we are assured, to be found in the incompetence of the masters and heads of departments in our secondary schools. In one important respect, however, this statement must be modified. It is undoubtedly true that much of the training imparted in these schools, especially in the earlier stages of the course, is given by assistants, and these assistants, there is much reason to fear, are too often, poorly paid, and as a consequence, poorly qualified for the very important positions they hold. The false and purblind economy of trustees may be set down as one source of the evil.

Another and still more prolific source of lack of thoroughness is the general insufficiency of the teaching staff in point of numbers, and the consequent unwieldy size of many of the classes. We are persuaded from years of observation and experience that to secure the best results no teacher should have more than fifteen or twenty students, in the earlier stages of their progress, on his hands at one time. From every quarter we see reports of overcrowding in the schools. We have noticed cases in which single teachers are said to have from sixty to ninety pupils in charge. The thing is preposterous. No man or woman, we care not what the talents or qualifications, can teach that number of pupils with efficiency or success. The attempt can but lead to enormous waste of energy on the part of the teacher, and of time of both teacher and pupils. Such economy is the height of extravagance.

It cannot, probably, be denied that the competitive spirit had a good deal to do with the imperfect results. So long as a premium, direct or indirect, is put upon sending the largest possible number of candidates up for examination, so long will the temptation to send up the immature and imperfectly prepared in the hope that they may, by some happy chance, squeeze through, be in some cases irresistible. Again, it must be remembered that the masters have no power to hinder poorly prepared candidates from presenting themselves, and we dare say the soul of the teacher is often vexed by seeing candidates go up from under his hands, who, he knows, are sure to fail, if the test is what it should be.

In one respect we have always thought there was a serious defect in most of both our public and high schools. We refer to the insufficiency of the language training. Training in the correct use of English, both in speech and writing, should, in our opinion, occupy a foremost place in every educational course. Our readers will have observed that we give a good deal of space to such exercises in the practical columns of the JOURNAL.

No study of rules of Grammar, or of works

on Rhetoric, or even of model extracts, will correct habits of speech which are ingrained, and are being wrought deeper and deeper into the vernacular by daily use and wont. Nothing but patient, persistent practice in the use of correct forms, orally and in writing, will cure this evil habit. In the majority of cases, we fear, the sum total of time and attention given to such exercises is very small. This is probably not so much the fault of the masters as of the crowded programme prescribed for them.

It is not our intention, however, to attempt a full discussion of the important questions raised by Mr. Haultain's letter. We shall leave that for the teachers and the Department. We feel that we are doing the former a service in calling their attention to the letter and giving them an opportunity to read it. We should be glad to hear from some of them in regard to it.

We cannot, however, close without uttering our earnest protest against the doctrine which Mr. Haultain seems to both imply and teach, that the benefits of the high schools, and colleges, should be reserved for certain classes, and that certain other classes should not enter upon studies for which they are "by nature and circumstances wholly unfitted." If by saying that "young men who ought to be following the plough and harrow, and young women who ought to be in the kitchen and dairy, are tempted into paths of life which they are utterly incompetent to tread," it is meant to imply that these young men and young women should not be encouraged to aspire to the highest culture within their reach, we must utterly dissent from the proposition. We do not of course wish to see any but those thoroughly prepared and equipped at all points admitted into the ranks of the teaching profession. But we have no caste distinctions in this land, and we want none. Some of the highest ornaments of the bench, the bar, the pulpit, and of the teacher's desk and professor's lecture room, have been drawn from the farm field and the kitchen. What we rather hope to see is the day when the young men and women of Canada will not think the best culture attainable in high school and university too good a preparation for the honorable avocations of the farmer, the mechanic, the housekeeper, or the dairy-maid.

NATURAL SCIENCE IN THE PUBLIC SCHOOLS.

In a thoughtful article read before the New Brunswick Educational Institute at its last session, on the study of "Natural Science in the Public Schools," Mr. John Brittain, speaking of the educative value of the natural as compared with the abstract sciences—those sciences which especially develop the reasoning faculties—observed:—

"The reasoning faculties are the higher, it is true; but they are dependent for their *data* upon the powers of observation, and if these *data* be incorrect or insufficient, of what value are the fine courses of reasoning based upon them? By placing the natural after the abstract sciences in

our course of instruction, we reverse the order of nature."

The point is well taken, and we commend it to the attention of those who have to do with the arrangement of the courses of study in the public and high schools.

Mr. Brittain avoids, in the main, the too common vice of specialists who set themselves to exalt the merits of one particular branch of study, and, in so doing, think it necessary to disparage every other. We are not very sure, however, that he is quite innocent of over-statement in the following strong sentence, which nevertheless contains important truth:—

"A man whose observing faculties have been well developed at the expense of his reasoning powers is a perfectly natural being, and may be a very useful and even amiable creature, but one whose reasoning faculties have been highly trained to the neglect of his powers of observation, is a monstrosity—he has no place in the order of nature, and is likely to be more or less of a nuisance or an injury to society."

The following graphic picture of the character and results of the training given in the great majority of the public schools, in Ontario as well as in New Brunswick, is worthy of careful pondering:—

"When a child enters the schoolroom, and its walls hide from his view the natural objects and phenomena which have so often excited his curiosity and admiration, he does not feel that he is entering the inner laboratory of nature, where the mysterious processes by which the outside world was evolved will be revealed to him, and its seeming confusion reduced to beautiful and progressive order. Nay, he feels intuitively that he is forsaking communion with nature, and he bids farewell to his beloved fields, and woods, and brooks, with a heavy heart. Perhaps he submits gracefully to the inevitable, applies himself industriously to his books, accomplishes the required course of study, and goes forth again in freedom.

"But nature now has few charms for him. She has lost most of her beauty, and all of her romance. His education has fitted him only for a conventional life, and if an ambitious country boy, he embraces the first opportunity to forsake agriculture and seek in cities, perhaps in a foreign country, an occupation better suited to his tastes and aspirations.

"Most of our children when they leave the schools can repeat the rules of syntax, but they are comparatively ignorant of the laws of health. They can analyze a compound sentence, but they cannot analyze a simple flower. They can give the names of hundreds of capes, cities, mountains, rivers, etc., in all parts of the civilized and uncivilized world, but they cannot name the common plants, insects and birds of our fields and groves. *Sometimes* they can read intelligently the great works of the sages and poets of past ages; but the book of nature, which is always open and full of wisdom and poetry, is to them a hieroglyphic scroll."

At this particular juncture, when the question of moral training in the schools is receiving more of the attention to which its importance entitles it than it has hitherto received, the following remarks are specially noteworthy. That they embody a truth, and one of a most suggestive kind, cannot be doubted. It may be

hoped that the day is not far distant when the principle involved shall be better understood and turned to more productive practical use.

"Let me now press upon you the consideration of the moral value of the study of natural history. Any study which pre-occupies the child's mind to the exclusion of those dangerous activities which are doing so much to corrupt the moral nature of our children, must, for that reason alone, be considered of great importance. And this is what natural history will do more effectually than any other study. The children engage in it with the most spontaneous delight. It is the only subject which the great majority of children will talk about with each other, and will voluntarily investigate when free from the supervision of their teachers."

Notes on Entrance Literature.

OF THE STILLY NIGHT.

BY MONA.

PAGE 71.

THOS. MOORE, the author of this poem, was the great Irish poet. He was born in Dublin, but passed a great part of his life in London. He has left us a great many short, simple poems. He seems to touch the finest chords of the poetic lute, and carries the reader with him in joys or sorrows. In illustration of this I will offer the following short scheme, bringing out the meaning of the stanzas:—

STANZA I.

Line 1. It is a calm quiet night. The writer is sitting thinking. He has not yet gone to rest.
2. Slumber has not yet claimed him as a prisoner. Memory as a servant comes, bringing
3. all the past before him. He thinks of boy-
4. hood, when he played with his friends amid
5. joys and sorrows. Friends that were happy
6. 10. then, are now heart-broken. Thus he sits
7-14. comparing past with present. And though memory is dear, yet when the comparison is made it is very sad.

NOTES.—Line 2—"Slumber's chain." Slumber is likened to a tyrant, who binds his victim with a chain. A metaphor or unexpressed simile. Lines 3 and 13—"Fond memory and sad memory": Memory is likened here to a person of whom one is fond, but who brings sad thoughts. But often we are pleased to dwell on sadness. Slumber and Memory are personified, used as proper nouns, and so written with capitals.

STANZA II.

Lines 1-8. His thoughts still wander to the past. He thinks of friends who have lived, loved and died, and yet he lives. In imagination he stands alone, as far as his early friends are concerned. He feels like one who has been among a gay company, when they have all gone; the lights (8-14) have been put out, the flowers have faded, and none but he is left.

NOTES.—"Friends fall like leaves." A common poetic simile likening a person dying to the falling of a leaf.

"Linked together": Linked by the bonds of love, linked by childhood's happy hours.

"Lights are fled": The lights had been put out, and are here metaphorically spoken of as if having motion and volition. We all know how lonely the apartments seem, after a house-full of guests have gone.

Compare "The eyes that shone" and "The love light in your eyes"—page 52. Also read last verse of next poem. Read also "Death of Flowers"—page 67.

TO A SKYLARK.

WORDSWORTH, the author, is known by every child as the poet who wrote, "We are Seven," and "The Wreck of the Hesperus." His subjects are always from nature, and he handles them in a natural, graceful manner peculiar to himself:

STANZA I.

Line 1. The skylark is known to soar so high that it is well termed the minstrel of heaven, and the pilgrim of the sky. See page 317.

2. The answer is found in the last line.

3. It has a very piercing eye and can see very far.

4. It always builds on the ground.

5. It is generally away all day, returning to spend night at home.

6. The bird in confinement always keeps its wings moving when singing. This accounts for the quivering wings. See page 99—Musical cherub.

STANZA II.

Line 1. Shelley (Page 317), Stanza 4, says "Thou art unseen," etc., "Thy lay is in Heaven," (page 99), Hogg.

2. Hogg says, "Love gave it birth" (page 99). Shelley says, "All that ever was—thy music does surpass" (page 319).

3. The next line seems to indicate that they thrill each other with their mutual songs which also thrill the plain.

4. Or those who live there, if there are any. Hogg uses "wilderness," Shelley "earth."

5. "Yet thou might'st seem" to hold the "proud privilege" to sing, etc.

You go so high that you have lost connection with earth. Shelley says, it sings from "heaven or near it." Hogg says, "Thy lay is in heaven."

6. This is the only bird, which seems to scorn the earth, whether in spring or summer. It goes where light is always shining, early in the morning and late at night.

STANZA III.

Line 1. The nightingale generally lives in a thicket, sleeps in the day-time, sings at night.

2. No other bird is allowed the "glorious light." The nightingale has but the "shady wood."

The bird enjoys the light after it has set for us.

3. It has a very rich, clear, powerful voice. It soars so high that it has a splendid chance to fill the air with its music. Shelley says, "All the earth and air with thy voice is loud."

Hogg says, "Wild is thy lay and loud."

4. Harmony refers to agreeable sounds. The skylark sings the song of Heaven, naturally without preparation. No song by man can equal it. 'Tis divine. (Compare page 319.)

5. Some explain this as referring to Wordsworth himself who lived a very quiet life on the shores of the Cumberland lakes. That is unjust to Wordsworth, who probably never thought of such a thing. The wise strive to go on, you may say up if you wish, to perfection, and if a person wishes to be wise in regard to a certain subject he keeps at it, and does not roam from one theme to another. As here the bird leaves early in the morning, sings all day, and late at night returns to its nest, so do the wise.

6. Kindred means in connection with. "And it is" is understood before true. Heaven and home are always closely connected, so the bird while away in the sky sees its home.

NOTES.—Read and compare (99) and (314) pages. Write a composition on the Skylark, from following headings: 1. Occupation. 2. Time: How spent. 3. Lesson learned.

Also make notes on Wordsworth's character judged from this lesson.

NOTES TO TEACHERS:—A good way to teach literature is this: After the class has gone carefully over the lesson, give them a line or a passage to paraphrase, allow so long to write the paraphrase, and insist on keeping within time. This lesson contains a great many contrasts and comparisons. Following is a list of words which may be compared:—Death and sleep; beautiful and calm; cares, sufferings and fatigues; ancient and old; solemn and deliberate; murmur and complain; alter and change; sincere and truthful; pensive and thoughtful.

Teachers' Meetings.

MANITOBA TEACHERS' ASSOCIATION.

12TH ANNUAL CONVENTION—A LARGE AND SUCCESSFUL MEETING OF THE TEACHERS OF THE PRAIRIE PROVINCE.

THE Twelfth Convention of the Manitoba Teachers' Association, held in Winnipeg on September 1st and 2nd, was undoubtedly the most successful meeting of the kind ever held in the Province. The attendance of teachers and inspectors from the rural districts was much in advance of that of previous years, while the teachers and friends of education in the city turned out in full force. The subjects for discussion were all of a thoroughly practical nature, and very little time was lost in dealing with questions not directly bearing on the work of the profession.

The president's address, by Mr. J. B. Somerset, Superintendent of Education, was replete with information concerning the working of the schools. Referring to the matter of secondary education, he pointed out the necessity of schools for the preparation of teachers, and sketched the plan of the Education Department for establishing these. He gave some facts to show the importance of the work of the Normal School, and expressed himself as more than pleased with the work done in that department up to the present time. The question of inspection of rural schools had been taken up during the year, and a new order of things was to be established in the appointment of four or five experienced men who should endeavor to superintend the teaching in the 500 rural schools of the Province.

The matter of Scripture readings for schools was taken up, and the Association recommended the adoption of the selections of a committee appointed at a previous meeting. These selections are almost similar to those made by the Education Department of Ontario, the difference being, that in all cases where verses have been skipped the whole selection has been discarded. By this arrangement the teachers and pupils can use the Bible itself in the schools.

The election of officers resulted in the appointment of the following:—President, Mr. J. B. Somerset, Superintendent of Education; 1st Vice, Rev. J. M. Wellwood, M.A.; 2nd Vice, Mr. Kerr; Secretary, W. A. McIntyre, B.A.; Treasurer, Mr. F. F. Kerr; Councillors, Miss McLeod and Messrs. D. McIntyre, B.A.; D. A. Stewart, A. A. Ogilvie and S. E. Lang.

The paper of Mr. D. McIntyre, Inspector of Schools, Winnipeg, on "Corporal Punishment," was an able and interesting production. He pointed out that complaints from the public show a growing dislike to the infliction of such punishment, and that restrictions were being imposed by school authorities. He held that the authority for this kind of punishment came from the parents, who may at any time recall it. Parents were among its most determined active opponents, considering it unnecessary and unadvisable. Many opponents had themselves been teachers. Corporal punishment had once been of almost universal application, but it was falling more and more into disuse; its last home, outside the family circle, was the school-room. After noticing the objections to its use, the essayist said he was not able to defend it. He showed that success in the teachers' work required the closest sympathy and heartfelt cooperation between the instructor and the instructed; and that estrangement weakens the influence of the teacher; that the necessity for punishment grows with its practice; that corporal punishment endangers the harmony between the school and the home; that violence is the result of incompetence; that corporal punishment does not remove the cause of the fault; that there is danger in punishment being inflicted by young people of limited experience; that it is resorted to because of inefficient preparation. The essayist also dealt with the abuses of corporal punishment, describing the various instruments used, and giving a list of offences for which they are used.

In the discussion which followed it was plainly evident that corporal punishment is rapidly growing into disfavor among the teachers themselves.

The presence of Dr. J. A. McLellan, so well known in eastern conventions, greatly added to

the interest of the meetings, and his admirable address on "English as a School Study," was most warmly received. To give a synopsis of this address would be to do it an injustice—that it will do much towards making the teachers of Manitoba take a greater interest in the subject is beyond question.

Mr. D. J. Goggin, B.A., Principal of the Normal School, gave an admirable paper on "Definite Aims on Education."

In introducing his subject he put before the teachers the following outline of the work, which it is necessary to know in order to have definite aims in teaching and intelligent reasons for them:—

1st. He must know the philosophy of education which determines the nature of education, defines its province and states the aim we have in view when we educate. 2nd. He must know man's three-fold nature—physical, intellectual and moral. 3rd. He must know the subjects or materials by which we educate, their absolute and relative values for the purposes of knowledge, of power, or of culture. 4th. He must know the best methods by which to bring these subjects and man's nature together so as to accomplish the end decided on by the philosophy of education. 5th. He must know the history of education which reviews the origin and growth into maturity of the educational systems that have prevailed, gives expositions of them by their founders and criticisms of them by educational reformers. Through it he learns of the methods, devices, customs of the past, their advantages, defects, grounds of adoption and disuse; he learns what others are doing and so purifies his own methods, and lays under tribute the wisdom of the entire educational profession. 6th. He must, under hopeful criticism, have such practice in teaching and managing a school that he will be able to execute according to his theories.

Under the first head he discussed heredity, showing the child to be the summing up of the virtues and vices of its ancestors; environment, including the family and the community; the church and the school. Under the second head, he spoke of the physical nature and the necessity of well-arranged physical exercises, knowledge of physical laws, the teaching of calisthenics and manners; also of the emotions, affections and desires, etc., which have their origin in the soul; the motives, the lowest being fear; then in order, prizes, privileges, immunities; above these, desire for standing or rank, desire for approbation, for activity and power, for knowledge, hope of future good, sense of honor and sense of duty; and higher still, religious motives, desire for God's approval, power for an endless life, hope of a blessed immortality, desire to honor the Creator, and a sense of obligation to do God's will. Under the head of subjects, or materials, he spoke of reading, arithmetic, grammar, history, etc., showing how their relative values are to be considered from the practical, the disciplinary and the culture standpoints. The speaker treated of "methods" in an interesting manner, referring to the bringing of the subjects indicated and man's nature together, so as to accomplish the end, and in doing so indicated that certain family methods or devices, or as Dr. McLellan suggested, "vices" are to be avoided.

Mr. D. A. Stewart, of Pilot Mound, Inspector of Schools, read a paper on "A Country Boy's Education," which was thoroughly practical. He discussed the importance of country schools, alluding to the success of the Scotch as the result of their parish schools and the efficiency of their teachers. He went on to point out that rural school-houses should be comfortably built, the site selected with care, with two acres for a playground. Trees should be planted and the grounds made beautiful. The furniture should be of the best; and as much black-board supplied as the walls would admit of. As good teachers should be secured as the finances would allow. The rooms should be made attractive with pictures and flowers. A country boy had better not be sent to school until seven years old; those sent at that age make better progress at the end of five years, than those sent at five. It was too great a task for boys of five years to travel two to seven miles a day. A boy should have his powers of observation developed; botany and zoology being taught in simple forms. The reflective powers should be

developed, and the boy should be taught habits of order, and a good knowledge of business forms and business transactions. Attention should be given to book-keeping and commercial arithmetic, and a boy should be taught to avoid making errors in the simple rules, and to write a good letter, and to read good literature. Lastly, the country boy should be taught obedience, and his moral and spiritual education should not be neglected.

Mr. E. E. Best, of Gladstone, gave a paper on a kindred subject, "Rural School Life," which was highly appreciated. He pointed out a number of the defects and faults of trustees, and showed the importance of having the best equipped teachers and well-trained inspectors. He complained of the false ideas of economy, and the outcry against taxes; and held that greater financial inducements should be held out to superior teachers. He suggested that the inspector be made an ex-officio member of the school board. He charged a lack of interest in education against the public generally.

The paper of Mr. W. A. McIntyre, B.A., of the Collegiate Department, Winnipeg, led to more practical discussion than perhaps any other. His subject was "Secondary Education."

After entering into a defence of the present method of mixed teaching, he proceeded to lay down a programme of study for primary schools. He maintained that all men in order to be successful in life—no matter what their calling—require, to a certain extent, the same qualities of mind and heart, the same physical and mental strength, the same delicacy and depth of feeling. Referring to the subjects of instruction, he noted that music and drawing, two subjects that perhaps more than any other except literature, tended to develop taste and feeling, were entirely overlooked in our Province. When a child is well grounded in the elements of knowledge, has his chief qualities of mind developed to some extent, he should be encouraged to pursue a special line of study. There must be courses of instruction to meet the demands of the students. In Manitoba the classes of students are those wishing to enter the professions, for whom the course of study is laid down by the legal and medical faculties; those entering business life, who must have commercial training; the young ladies, who must have more heart and less head, more poetry and less reason than the gentlemen; those who don't know what they are going to do in life and who might follow out a university course, and the teachers of our Province who have no other place of training. Secondary schools in order to do this must be sufficient in number to meet the demands of the Province. The scheme of appointing lower grade intermediate schools in all the chief villages, and higher grade schools in the cities and chief towns, ought to meet the requirements of the case. There should be close connection between these schools and the primary schools on the one hand, and with the university on the other. There is now close connection in the first case; there is no union in the second. The matriculation examination for entrance into the university, and that demanded by the Faculties of Law and Medicine, do not by any means correspond with the work being done in the secondary schools. This is to be deplored as the essential law in a system of instruction of this kind is unity. The board of education and university council must consider this lack of harmony, or hold themselves responsible for the consequences, which are sure to be disastrous. These schools must receive a liberal support from the State—for without it they cannot have good teachers, good inspectors, proper equipment. Without secondary schools there will be no teachers for our primary departments, and if these are forced to close, it will be a worse disaster than an early frost.

The discussions of all the papers was of a thorough practical nature, and much good cannot fail to be done through the meeting.

On the evening of Friday, Sept. 2, Dr. McLellan delivered a lecture on "The Influence of National Education on National Life," in Victoria Hall. The citizens came out in hundreds and the hall was filled. The lecture was a complete success in every way. The great originality of thought and force of expression of the talented educationist were thoroughly appreciated, and he will always

be sure of a crowded house in Winnipeg. Every one present was delighted, and the Doctor was delighted with his reception.

One of the most pleasing features of the convention was an excursion down the Red River on the complete little steamer *Alice Sprague*. The visitors were the guests of the city teachers, and they were right royally entertained. It was an afternoon long to be remembered by those present, and such a happy meeting will certainly do much towards making every member of the profession feel that he is associated with men and women of high social as well as intellectual qualities.

Correspondence.

To the Editor EDUCATIONAL JOURNAL.

DEAR SIR:—I notice that in the last issue of your valued paper you have copied *verbatim et literatim* from the "Mail" the report of my remarks made at a meeting of the ladies and gentlemen attending the Summer Music School in August last, held for the purpose of organizing a Normal Music Teachers' Association for Ontario.

The attention of the "Mail" was called to the incorrectness of the report at the time, but no notice was taken of the matter.

I regret very much that a very obtuse minded, or prejudiced reporter, should have so misrepresented what I said on that occasion, as to make it appear that I was casting a slur upon a people whom I hold in such high esteem for their very many sterling qualities, and at whose hands I have received many favors.

My remarks upon bag-pipe music were made in a jocular manner, and were so considered by all present (except the reporter), many, if not the majority of whom were of Scotch origin, myself included.

The fact that the resolution which I moved, was carried unanimously in such a gathering, is the strongest proof of the utter falsity of the construction put upon my remarks by the reporter.

The gentlemen composing the reportorial staff of the Toronto Press, as a rule, are noted for their accuracy and fairness in reporting the proceedings of all public meetings, and I am sorry to find any one among them who has unnecessarily made himself an exception.

By inserting this in your next issue so as to bring it under the notice of my fellow teachers, you will greatly oblige,
Yours faithfully,

ARNOLDUS MILLER,
Headmaster H. S., Vienna.

VIENNA, Sept. 22nd, 1887.

THE OBDURATE PUPIL.

ONE often hears orators tell how, in every audience they stand before, there is a certain obdurate unresponsive face that defies all efforts of their eloquence. With a genuine orator the reduction of this incorrigible is the task of the occasion. However much the rest of the audience may laugh or weep under the spell of the speaker, if this one does not yield, success is not complete. Accordingly every effort is aimed at this particular mark, and no relaxation is indulged in until at last the immovable one is moved.

So in a recitation, however responsive and enthusiastic the majority of the class may be, if there is one who does not enjoy the work, the whole skill and energy of the true teacher will be concentrated on this one, not openly, not professedly, not by boasting, but patiently, persistently, quietly. The victory will come at last and the joy will be greater than his who has conquered a city.

The first condition for success in such a case is not to worry. Does a hunter fume and fret because the game requires hot pursuit? That there is game is a delight. To capture it, even at the risk of life, is a necessity of his existence.

Such a pupil is game. Let the teacher rejoice at getting on its track, delight in its pursuit, and never "call off" until—the game is bagged.—*Ex.*

A POOR man seventy years of age was sent to the almshouse. Had he saved the money spent for tobacco since he was twenty years of age, providing he spent an average of thirty dollars per year, how much would he have had?

Book Reviews, Notices, Etc.

BOOK NOTICES.

Mathematical Teaching and its Modern Methods. 47 pp. Boston: D. C. Heath & Co.

Every mathematical teacher will find this a valuable little monograph full of mature thought. It is from the pen of T. H. Safford, Ph.D., professor of astronomy in Williams College.

Exercises in Arithmetic. 140 pp. London: Rivingtons.

This contains about 1,400 well graded examples in sets of six or seven, by J. Hamblin Smith. In arithmetic Mr. Smith is at his best. A good book for testing the classes of our public schools.

Moffat's Selected Inspectors' Arithmetic Questions. Seven volumes. One penny each; answers twopence.

Elementary Treatise on Determinants. By Prof. Peck, of Columbia College. 48 pp. 75 cents. New York: Barnes & Co.

This is an excellent introductory work with numerous easy examples and applications.

Chauvenet's Elementary Geometry. Revised and abridged. By W. E. Byerly, Professor of Mathematics in Harvard University. Philadelphia: Lippincott & Co. \$1.20. 322 pp.

This is an admirable treatise in which modern methods are pretty radically followed. It includes solid geometry and will be found helpful and suggestive to every teacher of Euclid.

The Difficulties of Algebra Made Easy. London: Moffat & Paige.

The 80 pages of this book may be of some little service to those who are preparing for third class certificates without the aid of a teacher. There is, however, much matter that is decidedly behind the times in which we live in Ontario.

Sheldon's Elements of Algebra. Sheldon & Co. 264 pp.

The binding and general get up of this book are far superior, but the methods and matter are much inferior to those of our high school text-books. It is an easy introductory book well suited to the wants of junior pupils—a much better book than Hamblin Smith's.

How to Teach Arithmetic. 95 pp.; 2s. 6d. London: Moffat & Paige.

This is a series of notes of progressive lessons by T. J. Liversey, Master of Method and Lecturer on School Management. It is worthy of a perusal by the teachers of our normal and county model schools, though it is at many points far behind Kirkland and Scott's Elementary Arithmetic as regards methods.

The Earth in Space. A Manual of Astronomical Geography. 73 pp. Boston: D. C. Heath & Co.

This little volume by E. P. Jackson, A.M., is much on the same plan as Lockyer's Primer of Astronomy. The exercises and questions are particularly good. It is a pity that this book, or its equivalent, should not form part of our third class teachers' course of study.

Wentworth & Hill's Exercise Manuals. No. 1, Arithmetic; No. 2, Algebra; No. 3, Geometry.

These are excellent books for examination purposes and might conveniently lie on every teacher's desk. No. 3 is really a first-class book and contains more fertile hints and suggestions than any other volume of three times the size that we have ever seen. It contains a revelation to those who have studied only Euclidean geometry.

Dynamics for Beginners. By the Rev. J. B. Lock, M.A., Lecturer in Physics in the University of Cambridge, etc., etc. London: Macmillan & Co.; Toronto: Williamson & Co. \$1.00. 178 pp.

This is a fresh, original treatment of the subject, in which only the simplest parts of algebra and trigonometry are assumed. It is a bright, clear, well-graded book—evidently the work of a thorough teacher.

Educational Notes and News.

A CONVENTION of high and public school trustees is to meet in Toronto on November 8th.

THE Ontario College of Pharmacy is applying for affiliation with the University of Toronto.

At the recent Second Class Examinations Stratford Collegiate Institute passed 23 candidates out of 29.

H. HORSEY, M.A., of Queen's College, Kingston, has been appointed science master in the Ingersoll Collegiate Institute.

MR. A. CARRUTHERS, B.A., has been appointed classical master of the Seaforth High School at a salary of \$1,000.

THE London Collegiate Institute is now amongst the overcrowded schools and Principal Woods is urging the Board to supply more room.

MR. WM. SANDERSON, B.A., formerly of Smith, and brother of Captain Sanderson, has been appointed mathematical master of the Ottawa Collegiate Institute, at a salary of \$1,000 a year.

At a recent meeting of the London School Board a resolution was passed accepting in advance the resignation of a young lady teacher "when it comes," and appointing another to her place in the event of her resignation. The London Board seems to take time by the forelock.

At one of the English Board schools the master, in a general exercise, wrote the word "dozen" on the blackboard, and asked the pupils to write each a sentence containing the word. He was somewhat taken aback to find on one of the papers the following unique sentence—"I dozen know my lesson."

THE highest salary paid in Manitoba last year to a male teacher, was \$1,500 per annum; lowest to a male teacher, \$222; average yearly salary to a male teacher, \$477.17. The highest salary paid to a female teacher was \$441.31. The total payments to teachers in Protestant schools in the Province during 1886 was \$168,042.35.

THE following graduates of Queen's College have come west to take positions: Mr. W. Nicol, B.A., science master, Guelph Collegiate Institute; Mr. W. Clyde, M.A., English master, Petrolia High School; Mr. John Marshall, classical master, Essex Centre High School; and Mr. Herbert E. Horsey, M.A., science master, Ingersoll High School.

THE interesting report on spelling reform presented by Mr. Wm. Houston, M.A., chairman of the special committee on spelling reform, will be printed in full in the minutes of the convention. There is evidence that the movement in favor of reform is slowly making advance in Canada, as in England and the United States.—*London Advertiser.*

MR. FRANK J. SHUTT, M.D., F.C.S., Fellow of Chemistry in University College, has been appointed chemist to the Central Experimental Farm, Ottawa. He has lately returned from a tour in the Eastern States, where he visited the laboratories in all the principal universities and institutions with a view of ascertaining the more modern appliances and apparatus.

A GOOD many of the school boards in the cities of the neighboring republic are considering and adopting a rule or by-law to make the appointment of all teachers permanent unless the removal is for assigned cause. This is practically the rule in the cities and towns of Ontario, but in our rural schools over seventy-five per cent. of the teachers are engaged for a term not exceeding a year.

OUR people now appreciate the merit of higher education, and not a few provinces have subscribed and are subscribing funds to build higher middle schools, while some have made generous donations to the Imperial University. We are glad to let our people know that a lady in New York, without making public her name, has made a donation of \$100,000 for establishing a school for the higher education of young women—*The Student, Tokyo, Japan.*

THE Calendar of the new Medical Faculty of the University of Toronto has just been issued. It is a very complete little volume of upwards of 100 pages, containing all the information required by intending students.

THE great library of Von Ranke, the famous German scholar and historian, has been bequeathed to the University of Syracuse, N.Y. John Crouse, of Syracuse, has also given to this favored institution \$200,000 for the construction and support of a female department, and it is announced that Franklin Holden, also of Syracuse, has agreed to pay for constructing and equipping an astronomical and meteorological observatory.

THE analysis of the standing of the leading colleges and institutes at the recent matriculation examination at Toronto is as follows:—Toronto Collegiate Institute sent up 18, Hamilton 5, London 10, Upper Canada College 11, Woodstock 4, Brantford 6, St. Catharines 8, St. Thomas 2, Stratford 2, Galt 3, Chatham 5, Strathroy 3, Owen Sound 2. The scholarships were captured by the Toronto, Strathroy, Hamilton, Caledonia, and Owen Sound Institutes, U.C. College and Trinity College School, Port Hope.

DURING the recent session of the Educational Association an organization called the "Ontario Teachers' Normal Music Association" was formed. The following officers were elected:—President, James Duncan, Windsor; Vice-President, S. H. Preston, Toronto; Secretary-Treasurer, J. A. Wismer, Parkdale; Corresponding Secretary, Mrs. G. S. Riches, Toronto; Executive Committee, Messrs. N. G. Workman, Ottawa; R. W. Hicks, Parkdale; N. W. Wismer, Norwich; and the officers *ex-officio*.

THE Bowmanville Union Public and High School buildings were totally destroyed by fire a week or two since. Active preparations are being made for rebuilding in different localities. The *Sun* says that the educational interests of the town may suffer in consequence of unseemly divisions in the Board, and that "it is no secret that the destruction of the High School seems to be the aim of a certain section." It is to be hoped that no so short-sighted and suicidal policy can succeed, but that wiser counsels will prevail.

ACCORDING to a Hawkesbury correspondent of the Toronto *Mail* a struggle is now going on in that district on the question of English teaching in the schools. The correspondent says that the French children have, at the direction of the Priest, refused to bring English books, and have been sent away until they do so. It appears that in the past the English language has been illegally ignored in the school, and that the present conflict has arisen from an attempt to restore it to its proper and lawful place in the curriculum.

THE Lindsay *Post* says that the adoption of the collegiate institute by-law for \$20,000 by the handsome majority of one hundred, marks the beginning of a new era in the town's educational history and in the progress of public improvements, and thinks it beyond doubt that the construction of a new high school building will be followed in a year or two by the reconstruction of the ward schools and by the replacement of the union school "monstrosity" with a plain, modern, common-sense, well-lighted, and well-ventilated structure.

THE Bavarian Government have a touching faith in the efficacy of the birch rod, and have issued orders that no child shall be punished at school except by its means. For this purpose two sizes of rod have been prescribed. In British and American schools, however, the birch rod has ceased to be a symbol of pedagogic authority, although it is only of late years that the charge of half a guinea in each pupil's bill at Eaton for a birch rod has ceased to be made. The Eaton rod was three twigs within branches, bound for a part of their length with strings.

A MOST successful meeting in the interest of Queen's University was held in Shaftesbury Hall, Toronto, on the 27th ult. The attendance was large and the sentiment of the meeting was strongly in favor of placing Queen's upon a solid financial basis. Resolutions favoring that view and pledging the friends of Queen's in Toronto, as represented at that meeting, to co-operate in raising the amount required for the adequate equipment of the institution were passed and a committee appointed

to canvass the city for subscriptions to the endowment fund.

THE Stratford *Beacon* is the authority for the statement that Inspector Alexander waited upon the Minister of Education and laid before him the proposition to engage Mr. Freeland to give the teachers-in-training at the Stratford Model School a course of instruction in tonic sol-fa music, and that the Minister advised the carrying out of the proposition. This is sufficient refutation of the contention that the Holt, or the tonic sol-fa, or any particular method of teaching music, to the exclusion of all others, has been prescribed for model schools.—*London Advertiser*.

THE Napanee *Banner* says that imposing a fee upon pupils at the high school does not seem to have curtailed the attendance, and the old difficulty in regard to accommodation presses upon the board even more urgently than during the last term. The board have been compelled to deny admission to pupils from outside the county. The *Banner* maintains that, now that a fee is exacted, it is the duty of the Board of Education to provide accommodation for all qualified pupils who present themselves from this county. To exclude pupils for any length of time from a high school on the ground of want of accommodation would certainly augur something very wrong somewhere.

A RECENT notice from the Education Department contains the following:—At the Departmental Examinations for July, 1888, for second and third class non-professional certificates, candidates will not be allowed to write for both grades, and only the following classes will be eligible to write for second class: Those who hold third class certificates and want to obtain second class; those who wrote in July, 1887, for second class (whether they then held third class or not) and failed; those who at any previous third class examination obtained the aggregate required, but who failed in one or more subjects. Instructions will be given to High School headmasters and presiding examiners in 1888 to see that none but the classes above defined are allowed to write in 1888 for second class certificates.

THE Baptist denomination in Ontario has lost one of its wealthiest members, and the cause of higher education one of its most liberal supporters in the recent death of Senator McMaster, of Toronto. Mr. McMaster was in life the largest contributor to Woodstock college, and the sole founder of the Baptist Theological college in Toronto. In his will he leaves over \$860,000 as an endowment for an Arts college, to be established in Woodstock or Toronto, as the denomination may decide. This will bring up the sum total of Mr. McMaster's bequests for educational purposes to nearly one million dollars. The Arts college to be founded and the Theological college already in operation, will form departments of McMaster University chartered at the last session of the Ontario Legislature.

THE following, which was sent to the Minister of Education, explains itself: "We, the undersigned members of the botany classes of 1886-87, desire to express most heartily our appreciation of the advantages afforded by the classes. It affords us pleasure to state that we have derived great benefit from them. We trust they may be continued for the benefit of others. In view of the facts that the regulations require botany to be taught practically, and that those teachers who attend are put to some inconvenience and expense, we take the liberty to suggest that the work done in this way be recognized by an examination of a practical character. We cannot allow this opportunity to pass without testifying to the scholarly, genial, and untiring manner in which Mr. Spotton has conducted the work of the class."

THE Italian Government has not perplexed itself with all our fine questions as to how religion in schools affects civil rights or how this or that amount of Bible pleases this or that Church. Signor Cataceno, the Inspector of Schools in Italy, has issued to the teachers a circular with which he says: "You will have to develop and strengthen in the soul of the children, faith in God, the supreme and infinitely merciful Being. You will prove to the child by your own life, that man's object and aim is to become like God. Thus only may the solution of many educational and social

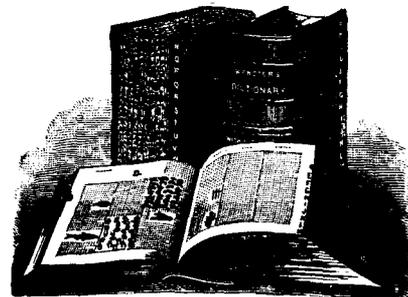
problems be found out. A system of education which excludes religion cannot be perfect. Without doubt children should be taught the love of country; but it is still more noble to instil into their minds love to the God of mercy, and charity towards all men; this is the source of all virtues. I invite you, with a view to this end, to make your children read the Gospels."—*Montreal Witness*.

THE following resolution was passed by the Stormont Teachers' Association at its recent meeting in Cornwall:—"Believing that the use of intoxicating liquors is injurious to the nation, family and individual, and desiring to educate the rising generation upon the important question, be it resolved that we as individual teachers, in our respective schools, do at once begin a course of scientific temperance instruction, and prosecute it vigorously and enthusiastically, making use of such helps as are available to assist us in our work, using our best efforts to arouse, control, direct and educate public sentiment in favor of total abstinence and prohibitory legislation in our respective fields of labor, both in and out of the school-room, but more especially among our pupils by direct and forceful teaching, and that as soon as a text-book is provided we will endeavor to introduce it into our schools and use it in such a way as to secure the greatest possible amount of good to ourselves, our pupils, and the public generally wherever our influence can make itself felt."

HALIFAX papers furnish views of the new Dalhousie building and a description of its interior. The main building is 198 feet long, 55 feet wide, and the roof is 71 feet from the ground, the eaves of the tower 99 feet, and its greatest height 140 feet. It faces east, and its three storeys (besides basement and attic) have a ceiling each of 14 feet. The walls are hollow bricked, faced externally throughout with pressed bricks in white putty joints, cleaned down and oiled; with trimmings of free stone; all sill and lintel courses running entirely around the building; also band courses. The building is brilliantly lighted with 382 windows. Fifty-six of these are fitted with semicircular heads of freestone resting on the lintel course, with carved keys and sunk panels richly carved in various designs. The superstructure rests upon a massive foundation of quarry-faced granite, standing six feet above the ground, topped with a moulded granite plinth course. A mansard roof covers the immense structure, which, together with the roof of the tower, the top dormers and pediments, are covered with slate; while the decks of the mansard are covered with "sparham roofing." The cost of the building and furnishing will be about \$70,000.

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The author of the work is the celebrated Dr. Richardson, of England; and this book, though somewhat less bulky, being printed in smaller type, contains the whole of the matter of the English edition, slightly re-arranged, as to some of the chapters, to suit the requirements of our public school work. It is, however, but half the price of the English edition.

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- The text books named in the annexed schedule, "A," shall be the authorized text books for the Public Schools of the Province of Ontario.
- The text books mentioned in said schedules, the names of which are printed in italics, shall continue to be used in such schools only as have adopted the same on or before the date hereof.
- On and after the 1st day of July, 1889, all text books, the names of which are printed in italics, shall cease to be authorized, unless their use is extended for a further period by resolution of the Trustees.
- The text books to be used in the subjects prescribed for the Fifth Form of Public Schools shall be the authorized text books in the corresponding subjects in the First Form of High Schools and Collegiate Institutes.
- All text books prescribed or required for senior matriculation (or for first year examinations) of any of the Universities of Ontario may be used in such Forms as take up senior matriculation work.
- In the case of text books authorized before December, 1883, the copyright of which has not been surrendered to the Education Department, any addition to or alteration of the contents thereof, made without the consent of the Education Department, shall be considered a violation of the conditions of authorization, and such book may forthwith be struck off the list of authorized text books.

SCHEDULE A.

LIST OF TEXT BOOKS AUTHORIZED FOR THE USE OF PUBLIC SCHOOLS—FORMS I-IV.

<i>Reading</i> —	
The Ontario Readers.	
First Reader, Part I.....	\$0 10
" " Part II.....	0 15
Second Reader.....	0 25
Third Reader.....	0 35
Fourth Reader.....	0 50
<i>Arithmetic</i> —	
Public School Arithmetic.....	0 25
Elementary Arithmetic—Smith & MacMurchy.....	0 25
" " —Kirkland & Scott.....	0 25
<i>Geography</i> —	
Public School Geography.....	0 75
Campbell's Modern School Geography.....	0 75
Lovell's Intermediate Geography.....	0 65
Calkin's World—An Introductory Geography.....	0 50
Geikie's Physical Geography—Primer.....	0 25
<i>Grammar</i> —	
Public School Grammar.....	0 25
Mason's Outlines of English Grammar.....	0 45
Campbell's Swinton's Language Lessons.....	0 25
Miller's.....	0 25
Connor's Elements of Etymology.....	0 25
Morris & Bowen's Grammar and Exercises.....	0 25
Morris's English Grammar—Primer.....	0 20
<i>History</i> —	
Public School History of England and Canada.....	0 35
Jeffers' History of Canada—Primer.....	0 30
<i>Drawing</i> —	
Public School Drawing Course—including Kindergarten series, each number.....	0 10
<i>Temperance</i> —	
Public School Temperance.....	0 25
<i>Agriculture</i> —	
Public School Agriculture (to be authorized if found suitable).....	0 35
<i>Music</i> —Public School Music Reader (use of text book at the option of trustees).....	
	0 40

LITERATURE SELECTIONS—1888.

For Teachers' Third and Second Class Non-Professional Examinations.

CLASS III.

English.—The following selections from the High School Reader will be the subjects for examination in Literature for candidates for non-professional third-class certificates.

<i>PROSE.</i>	
*No. VIII. Walton—Angling.....pp.	62-66
" XIV. Steele—On "The Love of Country as a Principle of Action.".....	83-87
" XV. Addison—The Golden Scales.....	88-92
" XXII. Goldsmith—From "The Vicar of Wakefield.".....	127-133
* " XXV. Burke—On the attacks on his Pension.....	147-154
* " LIX. Lever—Waterloo.....	284-293
" LXIII. Thackeray—The Reconciliation.....	308-315
" LXXIV. George Eliot—From "The Mill on the Floss.".....	356-359
* " LXXXVIII. Lowell—The Robin.....	397-400
<i>POETRY.</i>	
*No. III. Shakespeare—The Trial Scene in "The Merchant of Venice.".....	40-52
" XX. Gray—The Bard.....	111-115
" LVI. Bryant—To the Evening Wind.....	272-273
* " LXVII. Longfellow—The Hanging of the Crane.....	336-342
" LXXIX. Tennyson—The Lord of Burleigh.....	370-372
" LXXX. " "Break, break, break.".....	373
* " LXXXI. " "The Revenge.....	373-377
" XC. Matthew Arnold—Rugby Chapel.....	401-407
" CV. Gosse—The Return of the Swallows.....	437-438

* Those selections marked with an asterisk will be repeated for 1888-9.

Latin—Caesar—Bellum Gallicum, I., 1-33.
French—De Fivas' Introductory French Reader.
German—High School German Reader (Grimm, Kinder-und Haus Marchen).

CLASS II.

<i>English—Cooper</i> —The Task, Books III. and IV.	
<i>Coleridge</i> —Life of Sir Alexander Ball (last four in The Friend).	
Latin—Cicero—	In Catilinam I.
Virgil—	Aeneid I.
Caesar—	Bellum Gallicum I., 1-33.
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Notes on The Task, Book IV., and on the Life of Sir Alexander Ball, by J. E. WELLS, M.A., late Principal of Woodstock College.

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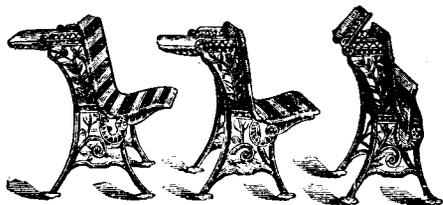
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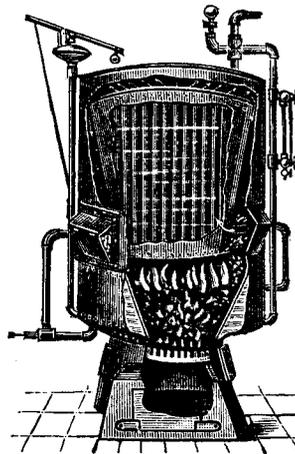
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