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Vol. III. No. 1, JANUARY—FEBRUARY, 1883. { 50c. per annum. 10 cts. per No.

THE

EDUCATIONAL RECORD

OF THE

PROVINCE OF QUEBEC,

PUBLISHED BI-MONTHLY, UNDER THE AUTHORITY OF THE PROTESTANT COMMITTEE OF THE BOARD OF EDUCATION, AND CONTAINING THE OFFICIAL ANNOUNCEMENTS OF THE BOARD.

EDITED BY R. W. BOODLE.

CONTENTS:

MONTREAL:
GAZETTE PRINTING COMPANY.
1883.

"L'idée de l'ordre en toutes choses est la base de toute éducation."—JOUBERT.

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No. 1. FEBRUARY, 1883. Vol. III.

PROCEEDINGS OF THE PROTESTANT COMMITTEE OF THE COUNCIL OF PUBLIC INSTRUCTION.

Education Office,
Quebec, 29th November, 1882.

Which day the quarterly meeting of the Protestant Committee of the Council of Public Instruction was held.

Present: His Lordship the Bishop of Quebec, in the Chair, Dr. Cook, Dr. Mathews, the Hon. L. R. Church, R. W. Heneker, Esq., D.C.L., Dr. Dawson, C.M.G., LL.D., E. J. Hemming, Esq., D.C.L., and the Hon. Gédéon Ouimet, Superintendent of Public Instruction.

The minutes of former meeting were read and confirmed.

The report of the Sub-Committee on School Law having been submitted to the meeting, discussed at considerable length, and amended, it was, on the motion of Dr. Dawson, unanimously resolved:

"That the clauses reported by the Sub-Committee be adopted as now amended and be remitted to the Sub-Committee for revision, and that at as early a date as possible they be transmitted to the Chairman for communication to the members of the Committee, and, should he deem this necessary, for submission to a special meeting of the Committee, and to be then communicated to the Government with the view of their becoming Law."

Rider to report of Sub-Committee on School Law.

On the motion of Dr. Hemming, seconded by Dr. Mathews, it was resolved:

"That the Sub-Committee be requested to consider the question whether

the principle of taxation in educational matters now applicable to Montreal, Quebec, and other cities, could not be advantageously made applicable to the whole Province, and to report thereon to next session of this Committee."

Dr. Heneker read a short paper on the EDUCATIONAL RECORD, pointing out what should be the object and the matter of such a publication. Said paper was referred to the Sub-Committee on the Journal of Education, and said Sub-Committee was instructed, in making further arrangements for the publication of the EDUCATIONAL RECORD, not to exceed the Government grant of five hundred dollars per annum.

It was reported to the meeting that no further action had been taken for the recovery of the arrears of marriage license fees in the hands of the Dominion Government. The Hon. L. R. Church's name was added to the Sub-Committee on this subject.

Messrs. Alnatt and Weir were again appointed Inspectors of Academies and Model Schools on the same terms as previously, the inspection to begin about the middle of May, his Lordship the Chairman and Dr. Cook to prepare a circular to the teachers on the subject.

It was agreed to give a grant of fifty dollars to the Danville Academy.

The Committee, having had under consideration the letters from thesecretaries of the several Boards of Examiners in regard to a reference from the said Committee as to a change in the time of meeting of said Boards of Examiners, agreed to adhere to the present arrangement, but instructed the Secretary to have special papers prepared for the Boards of Examiners for Bonaventure and Gaspé, the examinations in said boards to be held on the first Tuesday of June and December respectively.

A letter was read from Mr. Alfred Neville Thompson, Secretary, Board of Examiners, Stanstead, recommending that William Henry Lee, Esq., Stanstead, be appointed a member of said Board of Examiners in place of Mr. Richardson, deceased. The Honorable the Superintendent of Public Instruction was requested to recommend the Government to appoint the aforesaid William Henry Lee, Esq., Stanstead, a member of said Board of Examiners, Stanstead.

A letter was read from Mr. Driscoll, Chairman, Board of Examiners, Ottawa, recommending that the Rev. Geo. C. Robinson and Malcolm McLeod, Esq., both of Aylmer, be appointed

members of said Board of Examiners, Ottawa. The Hon. the Superintendent of Public Instruction was requested to recommend the Government to appoint the aforesaid Rev. George C. Robinson and Malcolm McLeod, Esq., both of Aylmer, members of Board of Examiners, Ottawa.

In answer to a letter from Principal Holmes, Stanstead Ladies College, recommending that the Board of Examiners, Stanstead, should be empowered to examine candidates for Model School Diplomas, the Secretary was instructed to say that the whole question of the examination of candidates for Teachers' Diplomas was at present under consideration by the Committee.

Papers submitted to the Committee reflecting on the conduct and character of a teacher were referred to a Sub-Committee, consisting of His Lordship the Chairman and Dr. Cook.

Accounts with vouchers laid before the Committee by the Secretary were examined and found correct, the balance to date in the Bank of Montreal being $81.85.

The Secretary's contingent expenses, amounting to $5.85, were ordered to be paid.

There being no further business, the Committee adjourned to meet on Wednesday, the 28th day of February, 1883, or earlier, if necessary, on the call of the Chairman.

GEORGE WEIR, Secretary.

CONFERENCE OF PROTESTANT SCHOOL INSPECTORS.

DEPARTMENT OF PUBLIC INSTRUCTION,
4th January, 1883.

A conference of the Protestant Inspectors of Schools of the province was held this day, at the Department.

The meeting opened at 10 a.m.

PRESENT: The Hon. the Superintendent in the Chair, Inspectors Fothergill, Hubbard, Magrath, McLaughlin, Thompson and McGregor, and the Protestant Secretary of the Department. After some introductory remarks from the Superintendent explaining the object of the conference the following programme of subjects was submitted for discussion:

SUBJECTS.

1. The school year and its division into terms.

2. Length of teachers' engagements.
3. The Superintendent's circular.
4. Course of study for district schools.
5. Bulletins of inspection.
6. Rewards for the encouragement of successful teachers and pupils.
7. School apparatus.
8. Prize-books.
9. The number of School Commissioners.
10. The method of dividing the School Funds among the districts of a municipality.

After a very full discussion of the various questions submitted, it was unanimously resolved:

RESOLUTIONS.

First. That the custom which prevails in certain municipalities of breaking up the school year into two distinct terms, forming a summer and a winter school, is very detrimental to the best interests of Education and should be abolished at once, and that the school year should consist of one session opening in September and closing in May or June, with a short vacation at Christmas;

Second. that the custom of engaging teachers for a single term of the school year, encourages frequent changes of teachers and seriously retards the progress of the pupils and should therefore be abandoned; that teachers should not be engaged for less than eight months, unless the peculiar circumstances of a district render a shorter engagement necessary;

Third. That the practice of allowing the school manager to engage the teacher for a district is illegal and undesirable; teachers should be engaged for the whole municipality by the Board of Commissioners, after due notices of a meeting called for the purpose;

Fourth. That in order to promote the symmetrical and successful training of the children of the district schools, to assist the teachers in the organization and improvement of the schools and to render the work of inspection more uniform and effective, it is very desirable that a course of studies should be provided for the district schools of the Province;

Fifth. That the rough draft of a course of studies for district schools presented by the Secretary be completed and, when authorized, forwarded to the different school boards of the Province, with an urgent request that it be adopted, with necessary modifications, as the course of study for the Protestant district schools in the different municipalities;

Sixth. That the attention of the Department of Public Instruction is hereby directed to the fact that the system of "Boarding-round," still prevails in several of the oldest and wealthiest municipalities of the Eastern Townships,

with the suggestion that the time has arrived when the Department should insist that this objectionable practice should be discontinued ;

Seventh. That the Board of School Commissioners of each municipality should be urged to provide a prize to be awarded to the teacher whom the Inspector may report as the most efficient teacher of the municipality, and that an effort be made to induce friends of Education to provide prizes for the most efficient teacher of each county ;

Eighth. That each district school should be provided with at least a good Black-board and chalk, a map of the Dominion, a map of the Western Hemisphere and a map of the Eastern Hemisphere.

GÉDÉON OUIMET,
Chairman.

ELSON I. REXFORD,
Secretary.

THE STUDY OF ENGLISH.

By M. W. Smith, *Hughes High School, Cincinnati.*

There are two distinct methods of instruction. One makes the acquisition of information the primary object of work, the other gives mere information a secondary place. Of these two, the former is growing more popular every day, and the latter is being largely ignored. Not only parents but teachers say they want something more practical, something that the children will carry with them into the business of the world. Courses of study must, therefore, be so modified as to exclude everything of a purely disciplinary nature. It is said that even mechanical trades, although machinery has robbed nearly all of them of their educating power, should be introduced into the schools in order to put a stop to the useless cramming now so prevalent.

There are good grounds for this discontent, and hence it may be called a healthy one. Many pupils leave the schools at different stages of progress who manifest not only little information, but also little capacity development. They cannot use good English in writing or speaking, have forgotten much of their geography, and can apply but little of their knowledge of arithmetic to any practical purpose. Our schools are evidently not doing as good work as they ought to do, but the remedies so far proposed will not make them any better. Contrive as we may, one fact, a very old one too, cannot be set aside. *Information itself cannot be imparted without the development of a capacity to receive it.* Human

beings, even young human beings, are not parrots, and mere words are nothing without the thoughts which they clothe.

This discontent is not without method. It takes this form:— Information must be imparted through our mother tongue alone. That is, we must concentrate our efforts upon English, and throw out of our schools all other languages, living and dead. A trifling knowledge of geography will do, and the "four ground rules of arithmetic" will be amply sufficient for all business purposes.

So simple a remedy for existing evils is undoubtedly plausible. It teaches, however, only one fact. The real, but unappreciated objection to our school system, is in the subject of reading. Reading is the one study that is either very irrationally taught, or not taught at all. In fact, the English language, from the district school to the university, is so completely neglected that unexceptionable English, even in books, is becoming rare. It is the basis of our system of education; there is not a graded school in the land that is not graded by the reading book; yet in handling the subject, the teacher often fails to impart even information.

If teachers do not learn to teach English better, no revision of courses of study will remove the defects that now exist. Certainly no more information can be taught than is now taught be existing methods, or want of methods. With all our short-comings, good scholars, provided a regular course of instruction is taken, do go out from the schools in moderately large numbers. The trouble is not at its worst, then, in our grammar and high schools: it is very largely confined to schools below those grades. There is no necessity, then, for the sweeping changes that are over-zealously advocated by reformers. There is no special need of throwing out other languages, no occasion for popular practical work or industrial schools. The one great thing to do is to make English a real study, not a pretence as it now too frequently is, and all the practical reforms of our school system will be attained.

How can this be done in a rational way? To develop in our schools a knowledge of English that will prepare the way for its mastery, requires a careful study of reading, grammar, rhetoric and literature. The first three branches belong to the lower schools, the last to the high schools. At present, a course in English often rejects rhetoric. Logic may be omitted, because its study is not essential to the comprehension or mere expression of a thought; but rhetoric cannot be, because all complexity of

expression, or harmony, depends upon the correct use of rhetorical forms. Our system of grading schools upon the reading book is the correct one. We could not better it if we tried. All that is necessary is for us to make the reading lesson an intellectual drill, just as the arithmetic lesson is now made.

In attempting to do this, it must be remembered that non-essentials always assume a greater magnitude than they really possess. Our present forms of spelling are difficult to master, hence the disposition to concentrate effort upon this part of the work, at the expense of everything else. Expression has been next in difficulty, because of the hard, unnatural way that children usually utter any thought which is not their own. The essential work, which is definition and the consequent comprehension of the thought, has, therefore, been almost entirely neglected. The result has been an exclusive development of the memory. Except the definitions of a few words, and those words of special meanings that very much restrict their general usefulness, the young pupil must pick up his knowledge of the language in a very desultory manner. His capacity development is, therefore, uncertain, and much slower than it should be. *Unless he continue long enough in the different grades to get through with some other study in which he is taught more rationally, he will go out into the world almost as helpless as when he entered school.*

The only opportunity the teacher has of making his work count in every step of the pupil's progress, is thus thrown away by the teacher. This is the great secret of the existing discontent. The real elixir could not have been of more value to the old alchemists than the realization of this fact would be to the majority of district teachers.

What is the teacher to do in the school-room to accomplish this? Concentrate his energies upon the definitions of word and thought. There is really not so much difficulty as with the non-essentials. The first step is the etymology of the word; the second, a mastery of its applied meanings; the third, its figurative uses, if it has any; and the fourth, a full meaning of the thought under consideration. Of course, progress by pages will be slow, but actual progress will be remarkable. With such discipline as this, let the pupil go out into the world from the school-room whenever he will, he will know and his teachers will feel that the school has done all for him that it can do. The paragraph

that he has mastered from day to day will have become a motive power that he can apply to everything he does, and that will enable him to make the best use of the opportunities that may afterwards be thrown in his way.

Teachers of little experience may not know just how to prepare themselves to do this kind of work. The presumption is that they are willing to make the effort. An outline of how it may be done will, therefore, be suggestive.

The remarkable deficiency of the majority of young teachers, especially those who have charge of village and country schools, is in literature. A deficiency of knowledge in literature means a deficiency of knowledge in English. It also means a dislike to teaching reading, on the part of the teacher. A fair knowledge of a few of our great writers will always result in making the teaching of English a delightful task instead of mere drudgery. A knowledge of literature, picked up as a knowledge of reading has been, will be of little benefit. The non-essentials will again take all the attention and require nearly all the work that is done. As, in grammar, the question whether a phrase is an adjectival or adverbial element may conceal the fact whether the sentence is in good English or not; so, in literature, a dispute about some biographical statement may shut out everything the author has written.

Two methods of teaching English literature are followed. The older method, which consists in using a manual made up of brief historical outlines, brief biographies, and brief selections, has been in use since 1846. The more recent method, which consists in teaching the individual works of authors without regard to the historical development of the language, has been growing more and more popular since its adoption, in spite of the fact that it fails to give the proper surroundings to a literary period.

The great and insuperable defect of the manual method is that it instructs pupil and teacher *about* literature and not *in* literature. The biographies, of which the manual is mainly composed, represent one of the weakest departments of literature. Biography stands on the same level as Travels. It is true that Biography today occupies a higher position than it ever did before, because the critical faculty has been largely drawn upon to give it character and dignity; but the student needs to become familiar with those departments, especially, which illustrate the creative

faculty of an author. To do this, very little biography is required, very few disjointed selections can be of much benefit. The student must work with one or more entire units of an author's efforts. Then he will be able to form a clear idea of imagination, intellect, and style, and secure that discipline without which the study is of comparatively little value.

The recent method of teaching literature is much more philosophical. Its only weakness is in depriving an author of his historical surroundings. That this method is largely followed is shown by the large number of books published and sold for this purpose.

Within the last ten years some teachers have tried a combination of the best parts of both methods. They have followed the manual so far as the historical development of the language is concerned; and they have woven into this part, in chronological order, one or more units of the best works of our greatest authors. This is, unquestionably, to be the method of the future.

If the student or teacher desires to receive the most benefit from literature within a reasonable time, he must use biographies only so far as they point out the development of the peculiar characteristics of the author to be studied. This work should be purely preliminary, and hence touched lightly.

Since the beginning of English literature there have been hundreds of writers, good, bad, and indifferent. They have left thousands of volumes behind them. All of these authors cannot be studied, even if worth the study. Among these, however, in remarkable groups, are a few who stand out as great masters. All literary men, and a few others have realized these facts, but the majority of persons have not done so. The last have seemed to think that a knowledge of literature is entirely dependent upon the number of books that have been read. The fact is, these few masters contain the very best forms of English, and a knowledge of their principal works is sure to give the best knowledge of the language possible. It should be constantly borne in mind, then, that they are the great teachers of English, and the only ones necessary to study in order to acquire a mastery of the language.

Among quite a number who have not examined the subject closely, the idea seems to prevail that some authors are easier to study than others. If this is true, the difficulty exists in the use

of language outside of that which is familiar to the ordinary mind; but the number of obsolete words among the older writers is not as large as the number of new and unusual words introduced by many recent writers. Ease of comprehension depends upon simplicity of expression. When this simplicity is carried too far, as was the case occasionally with Wordsworth, the result is puerile. An author who feels strongly what he has to say will always use simple words. Where mere beauty is sought, there must be involved forms of expression that cannot be appreciated without careful examination. A student can always comprehend a grand thought expressed in familiar language much more readily than one possessing a beauty which is largely due to elaboration in its structure.

The modern tendency is to elaboration. This is owing to various causes: to periodical writing, which is paid for by the column; to want of leisure, when leisure is absolutely necessary in order to equal previous literary work; to the undue haste which the public demand seems to require; and, perhaps too frequently, to a lack of intense conceptions.

Ideas are comparatively few in number; their forms of expression, almost infinite. What has been admirably said once, especially when the thought was fresh and strong, can never be improved upon. If we master that original expression, we not only add to our stock of knowledge, but also acquire the capacity to judge how well others have uttered the same thought.

What authors are our greatest representatives? Unquestionably Chaucer, Spenser, Shakespeare, Bacon and Milton. Any teacher or student who becomes familiar with the best works of these writers, will acquire a mastery of the language which no other study can give him. With this knowledge, in all subsequent reading and study, the constant allusions to their works, the numerous quotations, and the more frequent references which take for granted a certain definite knowledge of them, will be as familiar as the alphabet. Further; as these authors use English words in their primitive meanings, the study of their works is the shortest and most effective way of securing a large vocabulary of the very best words in the language.

But perhaps the greatest benefit of all is in the opportunity they give for making English literature a genuine study, as certain a means of development as even the mathematics. This

cannot be said of the best recent authors; because their ideas are fewer, not so vivid, and hence not so strongly expressed. Their thoughts, too, are found upon too much of a level. For study we need great variety,—from sublimity to burlesque,—and we have this requirement only in our early English writers.

Let the teacher, then, who finds reading in the school-room now unprofitable, but who realizes that if he only knew how to do it he might make that study the great, vital force of our school system, set to work upon our great English masters, and he will surely be able largely to satisfy himself and the now discontented public.—*Ohio Educational Monthly.*

THE INFLUENCE OF EDUCATION ON OBSERVATION.

It has been remarked that one of the dangers attendant on education is that it may lessen men's powers of observation. There is no doubt, we apprehend, that this possibility does exist. Bookishness and absence of mind are no new fault among students. Among the more cultivated classes they have, indeed, been for a considerable time in process of diminution, and the last half-century more particularly has seen a great change in this respect. Physical science has roused students, who in former ages would have been abstract thinkers and nothing more, to careful and steady observation of external things. Facilities of travelling have acted as another stimulus in the same direction; and the love of nature has been a power over sentimental minds, and has led them insensibly from a quiet enjoyment of their surroundings to more active investigation. So that altogether the classes which at the present day have the advantage of the higher education are far more observant than were their forerunners of three or four centuries ago; and, though even now many of the mathematicians and philosophers who walk the streets of our Universities live largely in a mood of abstract thought, we must be careful of finding undue fault with this, for the inward eye has some claims not lightly to be despised. But, with respect to the mass of the nation, the question we have raised is one that deserves a good deal of attention. Popular education is still in the bookish stage; and, without complaining of what is inevitable, we may and ought to inquire whether literary study does now in the lower ranks promote that vice of inobservance which it certainly promoted in the higher ranks a century or two ago.

Equally we have to inquire whether the virtue which is the converse of this error may be fostered; whether and how the study of books may be made to minister to powers of direct observation, instead of being adverse to them, and to assist in the general business of life.

Literary study may conceivably impede our observant faculties, either by suggesting problems that appear to demand pure thinking alone for their solution, or by imbuing the mind with an ambitious tone, in which the ordinary events of everyday experience are looked upon as unworthy of notice. In the latter case it must be acting mischievously; in the former case it may be mischievous, though it is not always so. If a problem is really of a purely abstract character, it is inevitable that external observation should be lulled during the investigation of it. Newton was in many respects an inobservant, absent-minded man; but without that inobservance he could not have been the master of abstract thought that he was, or have made the discoveries that have been so powerfully beneficial to the human race. But there are many problems which have an appearance of being abstract, and soluble by pure thought alone, in which this is by no means really the case. Questions of ethics, of political economy, of art, are of this nature; they have a delusive appearance of abstraction from the actual world in which we live; and many an inquirer has gone round and round in them in a profitless circle, without being aware that the element needed to render him successful was not brain power at all, but experience of men and things. The danger, however, that the faculties of observation may be blunted by an excess of abstract thought is not very great in the popular education of the present day. But the danger that they may be blunted by mistaken ambition is a real one. The clever and educated poor will at times despise the common incidents of daily life, in comparison with that larger sphere to which books give them an introduction in imagination, though not in reality. Housekeepers find that servants neglect the pots and pans and dishes, cannot find anything when it is wanted, cannot see cobwebs in the corners or dust upon the shelves and tables, while their attention is devoted to the pleasures of literature in some, very often questionable, form. Farmers, we have been told, complain of the degeneracy of ploughboys from the same cause. True, farmers are a complaining race, and their misfortunes of late years

may have made them more querulous than usual; but their testimony should not be quite disregarded. Some considerable application of the maxim that people should do their duty in their own station will be found to give no unneeded help to the observant faculties at a time of large general progress, when hopes and ideas are apt to be extensive and vague.

But it is not enough that education should refrain from hindering the faculties of observation; it ought, if it is sound, actually to promote and enlarge those faculties. How this may be done is a problem not without difficulty. While the fault of inobservance is simple and single in its nature, the virtue of ready observation is complex, relating to many different spheres; he who possesses it in one sphere may lack it in another. When Thales, looking at the stars, tumbled into a well that lay before his feet, he was partly very inobservant, partly very observant; by the one quality he doubtless incommoded himself grievously, by the other he discovered how to predict eclipses, saved mankind from a certain amount of irrational panic, and won for himself a great reputation. To Thales the balance was for good; but it would not be safe to affirm that this would be the case with every one who walked with his head in the air looking at the stars.

Thus the direction in which observation may be most usefully practised varies with the circumstances of the case; with the circumstances of the pupil, when education is in question; and is not the same in the different ranks of society. The problem has, we think, been most successfully solved at present in the Colleges, more or less recently founded, of our great Northern towns. There, physical science is in demand for practical purposes, and educational institutions accommodate themselves to the demand. But in the elder Universities and the elementary schools alike, an equal measure of solution has not yet been attained. Oxford and Cambridge students (to begin with the higher rank) have not, as a rule, any plain and visible necessity for physical science as an aid in their future employments. But there is another side of science besides the immediately practical one—a side which ought to be held of especial value in institutions that have under their survey the largest interests of humanity. The great sciences of observation—astronomy, geology, and the natural history of animals and plants—are more noticeable for their ideal than for their practical side, though they do

touch on practice also. They give sublime views on the universe, such as it is a refreshment and consolation to possess, and such as touch not remotely on the destiny and happiness of man. We in England, at any rate, are not hopeless of the reconciliation of these views with the religious ideal that we have received. But it is the apparent collision, on certain points, between the new and the old that has impeded the reception of these sciences in those respects in which they are so calculated to elicit human feeling, and therefore so appropriate as studies in our elder and chief Universities. In astronomy, indeed, the collision with religion has been long ago practically surmounted. But the observational side of astronomy has been rather sunk at Cambridge and Oxford in comparison with its mathematical side. It may be suspected that many students of astronomy (though not astronomers proper) have less knowledge of the actual face of the heavens than had those Chaldean shepherds who roamed the plains of the East thousands of years ago, in whom the science originated.

When we come to the poorer extreme of society, though the elementary education of the country does not quite ignore the cultivation of the observant faculties, neither does it, in our opinion, lay sufficient stress upon them. The arts of reading and writing, and the study of arithmetic, taken simply by themselves, have a tendency to withdraw the mind from the outer world, and it needs a corrective to restore the balance. That corrective may, in certain cases, be supplied by the subject-matter of the books read, if it is required that they shall be intelligently understood. At the same time, such a requirement must be very positive and direct in order not to be evaded. Though the Education Department does at the present moment require from children in elementary schools, not merely an intelligent style of reading, but also (in the upper standards) an acquaintance with the subject matter of the books read, it would naturally be felt to be extremely hard that a child should be declared to have failed in reading because he or she showed a want of proper observation. But we should like to see this whole topic of intelligent acquaintance with the subject-matter of the books read removed from the mere art of reading, and constituted into a separate subject by itself—say into a class subject, such as geography and grammar are now. If this were done, it would not be hard upon a child to demand from it some

amount of observation as well as intelligence. If, for instance, the reading book referred to any agricultural operation, such as harvesting, or to some well-known plant or flower or vegetable, or to cattle, or to birds, whether migratory or permanent in the country, then in a country school the children might fairly be questioned so as to bring out what they themselves had observed on these matters. In a town school, questions might be asked on other matters to which reading-books would also now and then make reference; railways, stations, the different public buildings and their uses, the trades or manufactures specially practised in the town. We cannot but think that there is a real gap in the training of children in the poorer classes, and that the step we here recommend might do much to fill it.

A suggestion, however, has been made which, if it could be carried out, would undoubtedly bring popular education into more direct relation with the external world, and therefore encourage the observant faculties more than is the case at present. This is that, just as girls are taught needlework, so boys should in the course of their education be taught some elements of their future practical work in life. This has especially been urged in the interests of agriculture, and it has been thought that boys might be taught, while still at school, so much of the rudiments of farming as would greatly improve their future capacity. Of this proposal we can only say that we should be glad if it could be found practicable, but we are afraid the difficulties of connecting practical farming with school work would be found very great. It might be easier to bring gardening into the school routine. But all that can here be said is that this suggestion, like all others that tend to relieve popular education from mere formalizing, deserves attention; and that if the difficulties which it appears to present could be got over, it would certainly be a great benefit to the country.—*Saturday Review.*

SHAKESPEARE'S LATIN:*

As shown in "Love's Labour's Lost."

By E. W. Arthy.

The extent of Shakespeare's classical attainments has ever been a vexed question, so much so that any attempt to return to it is apt

*Read before the Shakespeare Club, Montreal.

to be regarded, if not with disgust, at any rate with a feeling of only languid interest. This feeling has been increased by tedious and unfruitful modes of treating the subject. The positions of rival schools of criticism have been too extreme on the one side or the other—some accepting too hastily Ben Jonson's terse verdict of little Latin and less Greek; others, on the strength of vague verbal coincidences and far-fetched allusions, insisting that Shakespeare must have been as well read in the chief monuments of classical literature as Ben Jonson himself. The truth, probably, in this case, as in most cases, lies between the rival contentions, and Shakespeare was neither so ignorant as the one nor so learned as the other set of critics would make him out to be. As an acute writer humorously expressed it, "Although the alleged imitation of the Greek tragedians is mere nonsense, yet there is clear evidence that Shakespeare received the ordinary grammar school education of his time, and that he had derived from the pain and suffering of several years, not exactly an acquaintance with Latin and Greek, but, like Eton boys, a firm conviction that there are such languages."

The object of the present paper, however, is not to wade through a "quagmire of critical opinion and confutation," but to throw together a few scraps of information gathered from the reading of "Love's Labour's Lost," which may serve to guide us in forming an opinion as to the probable nature of Shakespeare's school education. Whatever differences of opinion may exist as to the actual extent of Shakespeare's classical knowledge, there can be no doubt that he received a very fair education, and it is almost equally certain he must have obtained it in the grammar school of his native town, of which his father, John Shakespeare, was not only a prosperous burgess, but also chief magistrate, about the time his son would naturally be sent to school. Therefore, before examining the indirect evidences of scholarship afforded by the learned allusions scattered through this comedy, I shall endeavor to answer three questions which naturally arise at the outset of our enquiry.

1st. What did Shakespeare probably learn during the years he was a pupil in the grammar school of his native town? In other words, what was the course of instruction in a Provincial grammar school like that of Stratford-upon-Avon in the second half of the sixteenth century?

2nd. What part, if not the whole, of such a curriculum did Shakespeare probably go through? In other words, how many years was he at school?

3rd. Have we any evidence that would lead us to suppose that the grammar school of Stratford-upon-Avon was in the hands of efficient masters at the time when Shakespeare would be a pupil there?

To return to our first question. We have here two sources of information, one modern, the other contemporary, from which we may form a trustworthy general estimate of Shakespeare's course of instruction during his school days. These sources are Mr. Lupton's reply to Mr. Furnivall, in which he gives a list of text books commonly used in the grammar schools at that time, and the "Ludus Literarius, or Grammar School," a treatise by John Brimsley (himself a head master), published in 1612. From these sources we derive the following information: That at that time boys usually went to the grammar school at the age of seven and commenced Latin at once; that the usual course of study extended over eight years; that a boy in his first year would be occupied with the grammar and accidence. In his second year, along with the grammer, he would read some manual of short phrases and familiar dialogues, the books in use being Lilly's Grammar, "Sententiæ Pueriles," and the Colloquies of Corderius. These books were continued in the third year, when he would also take up Cato's Maxims and Æsop's Fables. In the fourth, while continuing the Fables, he would read the Eclogues of Mantuanus, parts of Ovid, and some of Cicero's Epistles. In his fifth year he would continue the reading of Ovid's Metamorphoses, with parts of Virgil and Terence; in his sixth year, Horace, Plautus, and probably parts of Juvenal and Persius, while the two last years seem to have been almost entirely occupied with Greek. If a boy completed his full course, he remained at school till his fifteenth or sixteenth year, when he would leave prepared for commercial life or for a course of University study.

This brings us to our second question,—How long did Shakespeare probably remain at school? We know that in consequence of the altered state of his father's circumstances, Shakespeare was withdrawn before he has completed the full term, and it is usually assumed, on tolerably good grounds, that he left in 1578, when he had just completed his fourteenth year,

and therefore received about six or seven years' schooling. In going through such a course, unless the teaching at Stratford was exceptionally inefficient, the boy must have made considerable progess in Latin, and acquired sufficient knowledge to read fairly well the most popular poets and prose writers, such as Ovid and Cicero. The masters of the school during the time Shakespeare attended it seem, however, to have been at least of average attainments and ability, as they rapidly gained promotion. No fewer than three held the post during the decade from 1570 to 1580. In the first two years Walter Roche, for the next five (the most important in Shakespeare's school history) Thomas Hunt and, during the last three years, Thomas Jenkins were head masters in the school.

If such then is the probable nature of Shakespeare's school career, as gathered from outside evidence, what more likely than that we should find scattered through his dramas allusions that seem to corroborate our conclusion—and where are such allusions more likely to abound than in his earliest comedy, written while his school lore was still fresh in the memory—a comedy, too, whose main object was to satirize pedantry and the mere parade of scholastic technicalities. To write such a comedy at all, the writer must obviously have had some personal knowledge of the thing parodied, in order that the satire might be relevant and effective. The evidence here is more vital and direct than that afforded by incidental allusions to the mythology and history of Greece and Rome. Shakespeare's genius seems first, as Coleridge suggests, to have dealt with the familiar elements of his own recent experience, before going further a field to find, in the wider world of home and foreign literature, fitting subjects for its more arduous, mature, and complex efforts.

This no doubt has been a long preamble to the little that is to follow, but still it is, I think, not unnecessary to the definite proposition which I now venture to lay down and hope to demonstrate,—namely, that the pedantry of Holofernes, in "Love's Labour's Lost," furnishes us with fairly conclusive evidence that Shakespeare must have been familiar with many of the text books used in grammar schools up to the fifth year, and therefore must have been at school at least five years. Of course by formulating the proposition thus I do not mean to hint that he was not at school for a longer period, a fact which many allusions in other dramas seem to prove.

The boy's first year, as I have said, would be taken up with the Latin Grammar and accidence, and his familiarity with the authorized grammar, namely Lilly's, is shown by the quotation of several of its examples, perhaps the most striking being "*Vir sapit qui pauca loquitur*," which he puts into the mouth of Holofernes. The next stage to the grammar and accidence, and one which covered the greater part of the next two years, is that of vocabularies, phrase books, and familiar dialogues, and this stage is amply illustrated in the scenes between Sir Nathaniel and Holofernes. The Schoolmaster's display of Latin words and phrases in the dialogue that opens the second scene of Act IV, comes from the school vocabularies and phrase-books with which his "ventricle of memory is stuffed." In the synonyms for *cœlum* and *terra* the pedantic master literally parades the school method by which boys were required to note down Latin words and phrases and give as many English equivalents for them as possible.

The next scene between the Curate and the Pedant exemplifies the familiar Latin dialogues which, as we have seen, at this stage formed an important part of the regular school work. It will be remembered that these learned men were walking in the park after having dined with the father of one of the school pupils, where it had been previously arranged that, if the curate gratified the table with a grace, the pedant would undertake to prove Biron's love verses which they had read together to be "very unlearned, neither savoring of poetry, wit, nor invention." The dialogue between these worthies (cf. the beginning of Act V, Scene I) is modelled after the style of the familiar colloquies prescribed in the schools for second and third year boys. The very phrases are often transcribed. We find in the phrase books such expression as "*Videsne quis obviam venit?*" the very words of our play and again "*Diminuis Prisciani caput*," (you talk false Latin) to which Shakespeare evidently owes his "Priscian a little scratched," and the similar phrase "*Olet barbariem*" which recalls Holofernes when in reply to Costard's "ad dunghill, at the fingers' ends, as they say," he exclaims "Oh, I smell false Latin, dunghill for unguem."

In the fourth year, the next stage of Shakespeare's school career, the favorite author was Baptista Mantuanus, so called from his birthplace. So popular was Mantuanus in the 16th century, that

the pedants had no hesitation in preferring the *Fauste precor gelida* to the *Arma virumque cano*, the Eclogues of Mantuanus to the Aeneid of Virgil. And here again Shakespeare most happily displays his familiarity with the favorite author of the schools. While Sir Nathaniel is reading Biron's Epistle which "accidentally or by way of progression had miscarried," Holofernes, full of self-importance and unwilling to lose any opportunity of airing his professional accomplishments, breaks out with the sounding line from the author so dear to the pedantic mind.

But if Mantuanus was the favorite author of the schools, Ovid was the poet most after Shakespeare's own heart. The mention of Ovid brings us to the fifth year of Shakespeare's school life. Shakespeare's indebtedness to this author was remarked more than a century ago and the remark has been often repeated since —and probably most critical readers have arrived for themselves at a similar conclusion. In "Midsummer Night's Dream" we find some very remarkable adaptations of this poet, which, however, would be out of place here, but in "Love's Labour's Lost" we get a striking panegyric upon this most modern of all the ancient singers. Holofernes, in criticising Biron's verses, is made to exclaim:—

"Here are only numbers ratified; but, for the elegancy, facility, and golden cadency of poetry, caret. Ovidius Naso was the man; and why, indeed, Naso, but for smelling out the odoriferous flowers of fancy, the jerks of invention?"

Ovid, with his unfailing ease and grace of language, his exquisitely musical versification, his vigorous and prolific fancy, was eminently qualified to satisfy the ear and excite the imagination of the sensitive boy student; and, if it is difficult to imagine the future poet struggling persistently with the intricacies of verbal scholarship or working with obstinate industry against the grain, it is easy to picture him, amid the subdued hum of the school, turning away from the well thumbed catechism, which by royal authority he was obliged to learn, to dream over the old story of Phaethon, so wildly improbable, yet so terribly realistic, with its vision of the splendid chariot and fiery steeds breaking impetuously away from the unsteady driver, and carrying ruin, conflagration and eclipse down the western steep of heaven.

THE LARGEST LADIES' COLLEGE IN THE WORLD.

By James Cole Thorpe, B.A., *Oxon.*

Wellesley College is the largest building in the world devoted exclusively to the higher education of women. While spending Easter at Boston, I visited this institution; and certainly nothing in the New World has interested me more. It is situated within the limits of the parish rendered immortal by Mrs. Stowe in her "Oldtown Folks." Near by is the village of Wellesley, about fifteen miles from Boston, with which it is connected by the Boston and Albany railroad. This hamlet is remarkable for its quiet and picturesque beauty, for its extreme healthiness, and for the many pretty houses which dot its landscape. But all this sinks into insignificance before its noble College, with over four hundred bright girl students, which is destined in the not far distant future to become a great university, training its women for all those callings and professions in which woman has shown, or is yet to show, that she can take her stand on an equality with man.

On leaving the station, after walking some distance in the direction of the College, a fine stone lodge is reached, which admits the stranger to an enclosure of some three or four hundred acres. The first impression received by an Englishman on entering is that he is once again in the Old Country, so truly do the grounds remind him of an English park. From the lodge an avenue of about three-quarters of a mile in length reaches to the College itself. Before, however, we reach the main structure, Stone Hall and the Music Hall are seen. I well remember the feeling of surprise and pleasure which I experienced when the noble edifice came into view. Little did I expect to find, when I left England in November, a structure given up to the education of women, which would throw into utter insignificance anything of the kind in my native land. The discovery scarcely flattered my vanity as an Englishman. The grounds in which the College stands are of extreme natural beauty; the old forest trees and wild flowers still remain, not a fence offends the eye; and Art has done all she can to assist Nature. Four years were occupied in preparing and beautifying the park and grounds before building was commenced. It was only in 1879 that 1,000 azaleas and rhododendrons were imported to make a fair spot fairer still. Of all the

natural features of Wellesley Park, the most noticeable is Wabard Mere, a large sheet of water into which the Charles River at this point expands. On the northern shore of Wabard Mere, on rising ground, the College stands. Built of brick, with freestone trimmings, it is rescued from the dulness and monotony of many brick buildings by its numerous bays, its towers, its spires, and its porches; and presents a very agreeable picture to the eye. It is in the Renaissance style, and the building is in the form of a double Latin cross. Its length extends east and west. Its main entrance is on the north. On the south, as has been said, it overlooks Wabard Mere, while beyond the lake, on the opposite shore, you see the Italian gardens of the famous estate, so well known to all the inhabitants of Boston. East of the building, hidden amongst the trees, is Longfellow's fountain, which during the summer-time plays in the centre of a miniature lake. The history of the rise of this building cannot fail to be interesting to all well-wishers to woman's higher education.

There are men who do, and there are those who do not, believe in this higher education, but I think if all men could be brought to look upon work as a privilege and not as a curse, the ranks of the unbelievers would soon be thinned. The argument which I hear most frequently advanced against woman's work, and, therefore, against her training for that work, is, briefly, that it is a shame to make a bright beautiful girl do hard work, because it will make her less bright and less beautiful. The girls at Wellesley do not think so, and they furnish a strong proof that it is not so. Wellesley College is an instance of how a great domestic sorrow is sometimes turned to the common good. The grounds in which it stands were originally intended by Mr. Durant, its founder, to provide a residence for his only son, to whom he was very deeply attached. This promising youth died before the hope of his father was realized, and from that time the idea of doing something for the common good seized the mind of the bereaved parent. Nobly has his idea been carried out.

The primary aim of the College, and that to which its founder most fondly clings, is that it may be a training school for the 300,000 women in the United States who devote their lives to teaching. It also offers a university education to girls, such as is afforded to young men by Harvard, Yale, and other colleges. The College has a special charter from the Senate of Massachusetts, empower-

ing it to grant degrees, and on all those girls who pass successfully through its four or five years' course it bestows the degree of B.A. or B.S. (Bachelor of Arts or Bachelor of Science); whilst those who wish can, after graduation, resume their studies as post-graduate students, and proceed to the degree of M.A. Would that our old English universities would follow the example of this young girls' college, and refuse to grant the Master of Arts degree, except after a satisfactory examination, and not allow it to any man whose only qualification is that he has rusted for three or four years since he donned his bachelor's gown!

On Wednesday morning in Easter week I presented myself at the great door of the College, and asked if I could see it, taking care to mention that I was an Oxford graduate, and especially interested in education. I was received by one of the ladies in charge, who very kindly offered to show me whatever I cared to see. This offer I gladly accepted. The hall gives you your first impression of the interior of Wellesley College. It is of large size, and a very fit introduction to that which is to follow. In the centre it is open to the roof of the building, and here there is a vast marble basin filled with tropical and other plants; elsewhere the roof of the hall itself is supported by massive pillars. In it are many busts and pictures, which are thus constantly before the eyes of the girls as they pass to and fro. The hall is crossed by a long corridor, which extends from east to west throughout the whole length of the building, reaching 475 feet. The width of the college at the wings is 150 feet. These figures will give some idea of the size of the structure. The building is everywhere four storeys high, and in some parts five. The storeys are connected by broad staircases, while a steam elevator is always in use. I will at this point mention a few facts, in addition to those I have already given, to show the large scale on which the College has been built. In the construction of the main building, seven millions of bricks were used. A branch railway was laid down to bring materials to the spot. The College has its own gasworks, its own farm, and an artesian well supplies it with pure water. It has a hospital, to which a lady physician is attached, and the girls receive medical attendance free of charge. Mr. Durant, the founder of this institution, determined that nothing should be wanting to make it as complete as possible. No expense has been spared; everything has

been done well and throughly, and nowhere is this better exemplified than in the arrangements for ventilation. The building is heated by fourteen miles of piping; the air is kept moist by means of one hundred steam jets, which constantly discharge steam into the basement; and the air is always maintained at that degree of moisture which has been found most conducive to health. The pure fresh air is brought into the basement by thirty fresh-air ducts, and after having been heated, finds its way through the building. Twice daily every bath-room and waste-pipe is carefully disinfected. In no college in the country is equal care taken to provide for the health and welfare of the inmates. The old motto "mens sana in corpore sano" is fully believed in there. I have spoken of the busts and pictures in the hall, and of the value of their influence. I extract from a number of the *Christian Union* a description of the Mrs. Browning room. This room is a perfect model of artistic taste, and it is meant to afford the girls an ideal of beauty. It well succeeds in doing so. My kind escort informed me that the paper was made specially in Europe, and that no facsimile of it exists. The description is as follows: "The room is about 20 feet square, lighted by three stained-glass windows, representing respectively Lady Geraldine, Aurora Leigh, and the Romance of the Swan's Nest; its floor covered with a rich and heavy India rug; its walls covered with a heavy paper, hand-painted, in imitation of Venetian leather, heavily embossed in bold relief—a faithful copy of a remarkable work of mediæval art in Venice; its frieze, twenty four panels, flower pieces painted by Ellen Robbins on canvas in oil, each panel representing a different flower; its furniture old teak, elaborately carved in imitation of Oriental art, set off in striking contrast by two pieces of mediæval German art, a marriage chest and an upright cabinet of the seventeenth century; with a score of raw specimens of Japanese ceramics upon a cabinet in one corner, and Storey's bust of Mrs. Browning in another."

At the west end of the building, on the north side, is the dining-hall. This room seats 375 students and teachers daily. It is filled with numerous tables, each seating from fourteen to eighteen, and at each table a teacher presides. The girls sit in aphabetical order, and consequently those of all ages and of every degree of standing are brought together, while this arrangement effectually assists in preventing the formation of those college cliques which

are often so prejudicial to the welfare of the whole body. The girls meet in the dining-hall twice daily, at 7.15 in the morning for breakfast, and again at 5 p.m. for dinner. There are no servants in the hall during meals; the young ladies lay the table, wait on themselves, and clear the things away. It is a part of the system at Wellesley College that all the lighter work of the place is done by the students, and this includes the sweeping of the hall and of their own rooms. Each girl devotes one hour a day to household work, in other words, to learning to become a good housekeeper, and to manage well and with credit the home which she will one day grace. The heavier work is done by paid servants. The immense advantage of this system of domestic work must be patent to every one. A girl does not go back for the holidays from Wellesley to despise the household work of her own home, but she comes to regard it as her own work, just as much as her favourite studies. An advantage incidental to this system is that it enables the College to dispense with an extensive corps of servants, since two or three men with the aid of machinery do all the cooking. At present there is no school of cookery. This is, I think, perhaps the only thing wanting to make a Wellesley training quite complete. The motto of Wellesley is "Not to be ministered unto, but to minister," and throughly do the girls live up to this.

The library is a perfect gem. It has now 2,200 volumes, and will hold 100,000. On the tables of the adjoining reading-room lie numerous papers, periodicals, and reviews from the United States, England, France and Germany. It was a pretty sight to see from sixty to eighty girls intently studying in the library, all the very picture of health, and all bearing witness with a testimony that none could gainsay, that health and hard work can exist side by side. The books are arranged so as to bring together all those devoted to any one subject, and in the alcoves on either side of the room were groups of girls pursuing their researches in that study for which the division was reserved. The library is not without pictures, so that here, as elsewhere, the mind is ever being educated through the medium of the eye, that great educator. After visiting the library, I saw the chapel, which is directly above it. The building is very simple; it has neither chancel nor altar. It has no pews, and chairs are used to seat the worshippers. There is a very fine organ, and a beau-

tiful memorial window. The chapel accommodates 800 people. The whole household meet here every morning for prayers. On Sunday there is a morning service; for the remainder of the day the girls are free to do just as they like. Sunday is a day of rest at Wellesley, and is not made irksome by too much work. Occasionally concerts are held in the chapel, and the best artists are procured from Boston. Before entering the various class-rooms and laboratories, I shall sketch as briefly as possible the courses of study pursued.

Girls can enter Wellesley at sixteen years of age, but are generally somewhat older. To obtain admission a young lady has to pass a satisfactory examination in Latin, English, and Mathematics, while, unless she intends to take up science, Greek is added. In Latin, she is examined in Cæsar, Cicero, and Virgil's Æneid (Books I—IV); in Greek, in Xenophon and Homer's Iliad (Books I—III); in Mathematics, Algebra as far as Geometrical Progression is required, whilst the ordinary English subjects are taken up. To be able to write a good essay is very necessary. What is far more important than this part of the entrance examination, is that every girl before being received is examined as to her health. None but healthy girls are admitted. Woman's higher education is acknowledged by all to be on its trial. During the first years of the existence of the college, a certain number of delicate girls were allowed to enter; some were immensely benefited, while others broke down under the training. The College has profited by this experience: and, if woman's higher education is yet only an experiment, and not an accomplished fact, it is but fair that such an experiment should be tried on those who start unhampered by any system of previous training which in any way can impair their development. To make the experiment Wellesley is making with anything but the very best material, would be madness and folly. Girls for Wellesley must prepare in health as well as in Latin, Greek, or Mathematics. Latterly, girls have done so, and the results are already beginning to show that the health of women is not impaired by hard study any more than that of men. When we consider how delicate many American girls are, the results of the action of the College in this matter can hardly be over-estimated.

It should be distinctly understood that Wellesley College is not

an ordinary seminary or a finishing school for girls. It is only intended for those who are prepared for arduous study; it offers peculiar advantages to those who are to become teachers. There are seven regular courses of study pursued. There are the General College course, the courses for honours in Classics, Mathematics, or Modern Languages, the Musical course, the Art course and the Scientific course. The Musical and Art courses extend over five years, the other courses over four. The General College course and the Scientific are the most popular. The former is largely classical; in the latter, Mathematics and Modern Languages are studied in conjunction with the Physical and Natural Sciences. It will be seen that Wellesley is in favour of elective studies, and does not confine all to the hard and fast lines of a single curriculum. Amongst American colleges some, such as Harvard, are in favour of a choice of study, whilst others are not. The different courses at Wellesley are, as far as is possible, equal in mental discipline and in systematic culture. The course of study pursued is left to the choice of the student, the Faculty reserving the right of deciding whether a particular course is suitable in any individual case. A lazy course is impossible, and no girl is allowed to select her subject of study from mere caprice.

The Musical and Art courses require a short explanation. They were introduced in the autumn of 1878. Those girls who take up these courses do not devote their whole time to Music or to Art. The courses extend over five years instead of four, so as to make it possible for a literary or a scientific education to be obtained in conjunction with a through training in Music or in Art. They have supplied a want which was very largely felt. I refer to the want of a system of education which should satisfy the æsthetic side of woman's nature without developing it at the expense of her powers of observation, her reason, and her judgment. At most institutions Music and Art are extras. This is not so here, for Wellesley has no extras. The total cost of living at the college, and this includes both board and lodging, is 250 dollars per annum, and for this small sum a first-class training can be obtained in Music or in Art, as well as in any other subject. Wellesley is bountifully provided with class-rooms, and the accommodation she possesses for the study of the sciences is of the very best description. The Physical laboratory is superior to

any on the American continent, and is made really subservient to the true wants of the students. There is a lecture-room, which can be darkened at will. There is a Professor's laboratory for the preparation of experiments, and an extensive students' laboratory, with instruments for quantitative work. Dr. Bernard says, in the *American Journal of Education*: "No college that I know of has a collection of physical apparatus which is superior to the collection at Wellesley." Here every girl who takes up physics studies the subject practically, for it is seen that a knowledge of physics to be real, to be of any use, must be practical.

There is a professor of vast knowledge in England who does not recognise this fact, and who, to suit his own idiosyncrasy, refuses to allow any to enter his laboratory except those who have a knowledge of high Mathematics. Is a knowledge of high Mathematics necessary to understand Attwood's machine, or to appreciate the delicate work of a galvanometer? I think not. Would that my professor could see Wellesley, and take a lesson from the successful experience of this girl's college! Possibly, being an unbeliever in the higher education of women, he would scout the very idea. In the Physical laboratory there are facilities and apparatus for the study, among other branches of physics, of spectral analysis, photography, electricity, and astronomy, not to mention optics, acoustics, heat, and mechanics. There is a large collection of microscopes, which are alike used in the physical, chemical, and biological departments. In all, there are sixty-five, the largest number possessed by any one institution in the country. Wellesley has its Microscopical Society; this in itself speaks volumes. Nothing can be more delightful than the soirées of some Microscopical Societies. The society has held one at Wellesley. The Chemical laboratory accommodates ninety-six students; it is too small to satisfy the wants of the College, and Wellesley is waiting for some benefactor of women to come forward and erect a separate building for the study of this charming science. That some one will appear at no distant day there is no doubt, for this college is taking the lead in one of the greatest movements of the nineteenth century, that movement in favour of the higher education of women, which the American republic has done more than any other nation to advance. The queen of sciences, Botany, is not neglected here;

and a feature of the instruction in this department I wish specially to dwell upon. How often have I remarked to my girl friends at home when they have shown me specimens of their flower-painting, "You should study Botany, and then your painting would be more true to nature!" Here every girl who takes up Botany receives free instruction in drawing and in floral painting in water-colours. Everything examined by the naked eye or under the microscope is drawn, and thus the knowledge gained by this course is immediately utilised in the botanical study to which it is subservient. I cannot sufficiently commend this method. In training the young, boys and girls alike, the three faculties of observation, imagination, and reasoning should be brought into play. By all our old methods of education the faculty of observation is uncultivated. The great characteristic of Wellesley is that its educational system is founded on the natural system, in which science not only holds her own, but leaves her sister studies in the rear, while she advances with giant strides. Wellesley possesses a well-stocked museum, and was one of the first colleges in the country to introduce the study of Biology. It is nothing uncommon to see fifty girls in the Biological laboratory engaged on a practical study of the anatomy of the frog. *(To be continued.)*

THE CONFERENCE OF HEAD MASTERS IN ENGLAND.

The annual Conference of Head Masters was held in the Botanical Theatre of University College, London, on December 21st and 22nd. Sixty head masters were present—Mr. H. W. Eve, of University College School, presiding. Though a detailed account of the proceedings would be of little practical value to Canadian teachers, two subjects were brought up which are as full of interest to ourselves as to the profession in England.

The subject of geographical teaching was introduced by Mr. Phillpotts, of Bedford, in a bright and suggestive speech, and an interesting paper on the same subject by Mr. Hale, of Eton, was circulated. The brief discussion brought out some of the many real difficulties attending a satisfactory solution of the problem. On the one hand, the elements of geographical knowledge are traditionally, and with good cause, a subject of instruction in the lowest classes, on the other, any approximation to *Erdkunde* implies some knowledge of several sciences, and has not unreason-

ably been looked upon as the final summing up of such scientific teaching as can be given at school. There is again the necessity of selecting from the enormous mass of geographical information a few facts likely to fix themselves on the memory, while the detailed study of one or more countries is equally important as a foundation for intelligent knowledge. On two points there seemed a general consensus—that the geographical work of the several classes of a school should be co-ordinated under the superintendence of a master who had made a special study of the subject; and that there was much room for improvement in the maps ordinarily used for teaching. Though, with the limited time at the disposal of the Conference, the treatment of so wide a subject was necessarily inadequate, we are disposed to think that the influence of the discussion in suggesting practical improvements to men who can *comprendre à demi-mot* is out of all proportion to the value of the debate if reported in full, and we should regret to see such general questions disappear from the programme.

Next came a proposal to urge examining bodies to substitute "unseens" for "set books" in all such public examinations as are not used as school examinations. The examinations affected would be the Matriculation of the University of London, the various professional examinations, such as that now conducted by the College of Preceptors on behalf of the College of Surgeons, and, to a certain extent, the Oxford and Cambridge Local Examinations. The certificate examinations, intended to work as school examinations, are *ipso facto* excluded. It was urged that the preparation of the various books set by different bodies seriously interfered with the normal course of school work; that boys of very different calibre must be put into the same class merely because they were desirous of passing the same examination, to the detriment both of the best scholars, who were kept down to the pace of the laggards, and of the laggards themselves, who must be crammed rather than taught. It was by no means uncommon to find boys who had passed examinations in set books incapable of construing a simple sentence at sight. "Unseens," it was added, could by a judicious examiner be set to any standard, and supplied a criterion of what a public examination was really intended to test, power rather than acquired knowledge. In reply to these arguments it was pointed out that the set subject was a guarantee of the methodical study of a single book,

which, under a *régime* of "unseens" only, might be superseded by disjointed teaching and an effort to get up "tips"; that the power of getting up a subject was one in itself to be cultivated; and that the apparent difficulties of preparing for an "unseen" would be a serious discouragement to many boys whose early education had been neglected, as well as to their teachers. After an interesting discussion the committee was requested to collect written opinions on the subject.

Among other matters discussed at the conference were the subjects of superannuation and pensions, and of scholarships at public schools in aid of promising boys. A vote of sympathy was passed to the family of the late Archbishop of Canterbury, as well as one of congratulation to his successor, both of them distinguished members of the profession.

INSPECTOR MAGRATH'S REPORT

For the year ending June, 1882.

SIR,

I have now the honor to submit, in compliance with law, the following Report and accompanying statistics relative to the condition of the schools within the extensive district over which the duties of my inspection extend.

I must at the outset express my pleasure that you fully appreciate the progress made in certain schools to which I have referred in more than one Report. A few of the most deserving teachers in those schools have had gratifying proofs of this fact, direct from yourself; and I am quite sure that they will feel encouraged to continue to merit your approbation in the future by exerting themselves even more energetically to promote the cause of education within their respective limits.

In the book of notes which I have been able to commuicate to you, the actual circumstances of every school have been fully set forth. I have endeavored therein to shew plainly the character of the teaching and its probable effect on the taught. I have explained what I have said and done to assist and encourage inexperienced teachers.

I have held up to view the school-room, with its good or bad ventilation and its various features and appliances; I have shown the contrast, in not a few cases, between the spacious church and the hovel close by, which is in grave irony called a school-house, where children of all ages must spend so many hours every week

five days out of seven. One would feel disheartened at such evidences of indifference to educational development, in itself so necessary to true moral and religious training, were it not for the fact that here and there we meet with illustrations of a more liberal, wiser, spirit in certain school-buildings, which present most admirable characteristics both in style of construction and internal arrangements, notably, some of the schools in the township of Clarendon and in the towns of Hull, Thurso, Aylmer, and Bryson.

There are however some structures which are a disgrace to the district, and I must press upon yourself the necessity that exists for adopting a law like that of Ontario, where school-houses are condemned by the proper authorities, and suitable buildings required to be erected. It is not necessary to advocate the construction of expensive buildings; what is required is a commodious and well ventilated edifice in every case. In certain cases the ratepayers have supplied themselves with excellent school-houses by arranging to meet the expenditure in four years, with interest on the upaid debt.

Cheap plans and specifications of school-houses should be gratuitously supplied to every school municipality that requires such facilities. I would also urge the advisability of supplying text books, copy and scribbling books, slate pencils and chalk, and charging the same to the Secretary-Treasurers, especially in the case of schools in the remote sections where there are very limited opportunities of obtaining such things at reasonable rates. I must here express my regret that it was deemed expedient to abolish the Book Depository in connection with the Educational Department.

In previous Reports I took occasion to refer to the evils arising from a too frequent change of teachers. If the term of engagement were extended and made obligatory for three years instead of twelve months, we should have fewer novice (lady) teachers seeking office, and the efficiency of education would be decidedly promoted.

I must once more urge the expediency of having, as in Ontario, three instead of five School Commissioners in each school municipality. I need not repeat the reasons for the change, which must readily occur to any one conversant with the administration of education in certain rural districts.

I am also forced to state that, in my humble opinion, the larger

discretionary powers vested in your office, previous to the formation of committees, enabled you far better to meet the wants of poor old teachers than is possible under the present system. I have already on more than one occasion directed your attention to the distressing case of one old man, for whom no assistance can be obtained on account of his not having subscribed to the pension fund. It is rumored that the present law, regulating pensions, will be repealed. Years ago, I suggested that a small portion of the unsurveyed wild lands should be donated by the Government to the support of a pension fund, and I am still of the same opinion.

In conclusion, I may express my conviction that there is a growing desire to raise the standard of the Common Schools in many parts of the district; and I have every hope that this desire will become more general, according as the people are more easy in their circumstances and more ambitious for their children. Already we have a few schools to which we can point with pride as illustrating the energy and enlightenment of the people, and the time, I trust, is not far off when such institutions will be the rule, and not the exception in this section of the Province.

I have the honor to be &c.,

BOLTON MAGRATH,
Inspector of Schools.

Aylmer, P. Q., 9th August, 1882.

INSPECTOR FOTHERGILL'S REPORT.

For the year ending June, 1882.

SIR,—

In presenting my Annual Statement of the Educational Establishments under my inspection, it affords me very great pleasure to be able to report much progress.

In the City of Quebec marked improvement is apparent in several schools. The High School has steadily increased in numbers, and the general work and good discipline bear evident tokens of care on the part of the Rector and his assistants. The Girl's High School has been well attended, and excellent progress made in the different classes. This school is now well graded, with a good staff of teachers, the building is also well adapted for the purpose of Education and maintained in perfect order.

The Preparatory department, which was opened last September, has met with fair success, and would, I am confident, under an experienced teacher, be an admirable feeder to the Upper School.

The Artillery Street School under Mr. Emslie, with two assistant teachers, has been as usual well attended and the work all that can be desired. The penmanship of the whole school is most excellent. Mr. Emslie imparts a thorough commercial education, and his pupils readily command good situations in merchants' offices. Mr. Fergusson has brought the St. Andrew's School into a high state of efficiency. Miss Lay has been careful in her duties in the Preparatory department; the building is, however, very unfit for so large a school. The D'Aiguillon Street School continues its good work under Miss Wilkins, with Miss Clara Lloyd in charge of the junior pupils. I noticed great improvement in reading and spelling. The School in Champlain Street was in so wretched a condition at the close of the last scholastic year, that I felt it necessary to report its utter uselessness. The teacher, Miss Armstrong, has, however, been able to resuscitate her establishment, and the scholars did fairly well at the examination; the number has also greatly increased.

The most marked improvement in any of the city schools is noticeable in the boys' department of the St. Margaret Street School under Mr. Purdie. The whole tone has been changed from being listless and uninterested to the last degree: the classes are now bright and orderly. Both the junior pupils under Mrs. Purdie and the seniors passed a most creditable examination. I made repeated visits during the year and on every occasion was pleased with the general improvement. Mrs. Purdie has taught gratuitously since September. Miss Ahern, in charge of the girls' department, has her pupils well in hand, but it is not creditable to the Commissioners to allow so large a school with such an admirable teacher to occupy so miserable a room; the roof is so low that the heat at times is unbearable, the means of ventillation are of the poorest kind.

Before leaving the city schools I must again re-iterate my desire that serving should be made (by the government) compulsory in all the girls' schools.

I regret to state that the school of St. Roch's North is still closed through the lethargy of the Trustees, while the authorities of St. Sauveur de Québec have placed their school in excellent

condition. A change of teachers will take place as Mr. Aubé retires from the management.

At Montmorenci, Miss Parker has through continued ill-health been unable to do full justice to her pupils. She will, I believe, retire for some time. She is a teacher of high order and her indisposition is very much to be regretted.

The Hudlow Cove and St. Romuald Schools are in good order. Mr. Craig continues in charge of the former, while Miss Moffatt, holding is Model School Diploma, has succeeded Mr. Stratton in charge of the latter. Mr. Stratton has taken charge of the National School (Church of England), Quebec.

Stoneham, Tewkesbury and South Dunstan, are all in a most unsatisfactory condition, at present they are closed. The Dissentient Schools of St. Raymond, at Bourg Louis, are, as usual, well managed.

The Rev. H. C. Stuart, M.A., takes a deep interest in the work of education and by careful personal training has given to the schools excellent teachers. Number 1 District is now in charge of a first class model school teacher—Miss Margaret Proctor. I trust that the inhabitants will endeavour to raise that school to the grade of a model school. One at least is needed in the municipality.

The three schools at Portneuf have not been very successful during the year. No. 1 has now undergone a change of teachers, and I look forward to much improvement. No. 2 has been vacant, while No. 3 under Miss Courtney has done fairly well. Several mills are about to go into operation during the summer and autumn, so that we may resonably expect much improvement in the schools of the municipality.

The seven schools at Valcartier (St. Gabriel East and West) have been well taught during the year. A new teacher (Miss Cryan) has had charge of Mill Hill and made excellent progress. The school building has also been much improved. Miss McKillop succeeded Miss McKechnie at No. 3, St. Gabriel West. Miss McKechnie replacing Miss Bamford at No. 1, St. Gabriel East. Miss Clark has been very successful in her management of No. 3, St. Gabriel East, while Miss Neilly has done good work at No. 2. Miss Penny and Miss Cleary still continue to manage with much ability Nos. 1 and 4 respectively of St. Gabriel West. I regret to say that a good deal of unpleasantness still exists

in Valcartier as regards boundary lines of some of the Districts, and the inhabitants do not exhibit a spirit of forbearance, but are ever too ready to have recourse to courts of law and thus involve the municipality in most unnecessary expense.

Of the independent schools I can only state that they are doing good service. The Misses Addie who taught so efficiently the model school at Marbleton have now opened a private school with fair success at Levis. The Misses Addie only require to be known to be appreciated.

The Rev. A. A. Vonoffland, M.A., Bergerville, and Rev. H. C. Stuart, M.A., Bourg Louis, have both very excellent boys' boarding schools, they only take a limited number of young gentlemen and prepare them for the universities or higher forms of our public schools. The ladies school under the Misses Machin has been marked with very great success.

The Misses Chaderton, Misses Lane, Mrs. Wilkins have also good establishments. I regret to say that Mrs. Morgan so long and so favorably known as a most painstaking and successful teacher has retired, her school is now managed by Mrs. Cook, who has taught with success in St. Rochs. Mr. Thom's Commercial Academy for boys continues to stand at the head of schools of that class.

I report with much satisfaction that all the schools are now better supplied with suitable text-books than formerly. The Readers edited by the Messrs. Gage, of Toronto, are being generally introduced together with the Spelling Book by the same publishers: they are excellent books and at once commend themselves to teachers and pupils. The new system adopted in the mode of conducting the examination for diplomas, has also had the effect of securing a far better class of teachers than formerly.

The progress during the past five years in the several schools in my District has been most gratifying; there are only now one or two dark spots, whereas some years ago many schools were in a deplorable condition. We can indeed thank God and take courage.

I have the honor to remain, &c.,

M. M. FOTHERGILL,
School Inspector.

ON PORTIONS OF THE SKELETON OF A WHALE.

Found in gravel on the line of the Canada Pacific Railway, near Smith's Falls, Ontario.

By J. W. Dawson, LL.D., F.R.S.

Bones of large whales are not of infrequent occurrence on the less elevated terraces of the Pleistocene period on the Lower St. Lawrence. I have seen them at several places in the neighborhood of Metis, on the lowest sea terrace, now elevated only a few feet above the level of the sea, and they are reported to have been found on the second terrace at an elevation of 60 to 70 feet. Mr. Richardson, late of the Geological Survey, informs me that he has seen them in several other places on the lower terraces. It has also been reported that bones of a whale were found on Mount Camille in rear of Metis at a considerable elevation; but Mr. Richardson, who visited the locality, failed to verify the statement. The bones found on the lower, and therefore modern terraces are usually in a good state of preservation and have a very recent appearance. The above statements relate to remains of the larger whalebone whales.

Remains of the *Beluga* or small white whale were found by the late Dr. Zadok Thompson, author of the "Natural History of Vermont," in the marine clay in the township of Charlotte, Vermont, at an elevation of 150 feet above the sea. They were associated with shells of *Saxicava* and *Leda*. The species was supposed to be distinct from the *B. Catodon*, Gray, and was named by Thompson *B. Vermontana*. I have found detached bones of *Beluga* in the Post-pliocene clays of Revière du Loup, and considerable portions of a skeleton were found in the excavations for the Intercolonial Railway, on the south side of the Baie des Chaleurs, and were described by Gilpin in the Transactions of the Nova Scotia Institute of Natural Science. Bones have also been found in the brick-clays near Montreal, and a specimen was discovered several years ago in sand holding *Saxicava*, near Cornwall, Ontario. The last named specimen was studied by Mr. Billings, and its bones compared with those of the modern species in the McGill College Museum. On this evidence Mr. Billings concluded that it belonged to the modern species, and I believe extended this conclusion to Dr. Thompson's specimen, the distinctive characters of which, as stated by that naturalist, seem not to exceed the individual differences in modern specimens.

But though the *Beluga*, which now extends it excursions far up the St. Lawrence, and has even been captured in the vicinity of Montreal, occurs as far west as Cornwall, no remains of the larger whales have, so far as I am aware, been found so far inland until the discovery of the specimens referred to in the present note. These were found, as I am informed by Archer Baker, Esq., General Superintendent of the Canada Pacific Railway, "in a ballast pit, at Welshe's, on the line of the C. P. Railway, three miles north of Smith's Falls, and thirty-one miles north of the St. Lawrence River, in the Township of Montague, County of Lanark. They occurred in gravel at a depth of 30 feet from the surface, and about 50 feet back from the original face of the pit."

Mr. Peterson, C.E., has been kind enough to obtain for me the elevation of the place where the remains were found, as indicated by the railway levels. It is 420 feet above the level of the St. Lawrence at Hochelâga, or as nearly as possible 440 feet above sea level. It is interesting to observe that this corresponds exactly with the height of one of the sea terraces on the Montreal mountain, and is only 30 feet lower than the well-marked beach with sea shells above Côte des Néiges, on the West side of the Mountain. The highest level at which Post-pliocene marine shells are known to occur on Montreal Mountain, is near the park-keeper's house, at an elevation of 520 feet. These marine deposits of Montreal are of the same geological period with the Cetacean remains in question, so that the animal to which these belonged may have sailed past the rocky islet which then represented Montreal Mountain at an elevation of 400 feet above the lower levels of the city, and in a wide sea which then covered all the plain of the lower St. Lawrence.

The deposit in which the remains occurred is no doubt the equivalent of the Saxicava sand and gravel, and was probably a beach or bank near the base of the Laurentian hills, forming the west side of a bay which then occupied the Silurian country between the Laurentian hills north of the Ottawa, and those extending southward toward the Thousand Islands, and which opened into a wide extension of the Gulf of St. Lawrence, reaching to the hills of Eastern Canada and New England, and westward, perhaps, to the Niagara escarpment at the head of Lake Ontario. Such a sea might well be frequented by whales in the summer season and individuals might

occasionally be stranded on shallows or driven ashore by gales or the pressure of floating ice.

The bones secured consist of two vertebrae and a fragment of another with a portion of a rib, and others are stated to have been found. They are in good preservation but have become white and brittle through the loss of their animal matter. On comparison with such remains of whales as exist in the Peter Redpath Museum, and with the figures and descriptions of other species, I have little doubt that they belong to the Humpback whale, *Megaptera longimana* of Gray, *Balaena boops* of Fabricius, a species still common in the Gulf of St. Lawrence, and which extends its range some distance up the River, and is more disposed than most others of the large whales to haunt inland waters and to approach the shores. I have seen it as far up the river as the mouth of the Saguenay, and there is reason to believe that occasionally it runs up much further. It is a species well-known to the Gaspé whalers and often captured by them. Of course with so little material it is not possible to be absolutely certain as to the species, but I think it may safely be referred to that above named. The larger of the two vertebrae, a lumbar one, has the centrum eleven inches in transverse diameter and is seven inches in length. The smaller, a dorsal, is ten inches in its greater diameter and four in length. Through the kindness of Mr. Baker, the specimens have been deposited in the Peter Redpath Museum of McGill University.—*The Canadian Naturalist.*

Montaigne as an Educationist.—Montaigne's public school, if he had to construct one in these days, would certainly be somewhat after the fashion of a German Real school; and, so far, he is rightly named a realist. But the leading purpose of all his instruction would essentially be ethical and humanistic. The only respect in which his curriculum would be realistic in the utilitarian meaning would be in the subordinate place assigned to Latin and Greek. So far is he from being a realist in the modern sense that he may rather be set down as an enemy of mere knowledge or information. 'The cares and expense our parents are at in our education, point at nothing save to fill our heads with knowledge,' he says, 'but not a word of judgment or virtue. We toil and labour to stuff the memory, and in the meantime leave the conscience and the understanding unfurnished, void.'—*Prof. Laurie's Educational Papers.*

AN EDITION OF VIRGIL.

VIRGIL'S BUCOLICS AND SIX BOOKS OF THE ÆNEID, with Vocabulary, edited by J. B. Greenough. (Boston: Ginn, Heath and Co.) Mailing Price, $1.55.

The first instalment of Professor Greenough's Virgil, a solid volume containing the Bucolics and the first six books of the Æneid, with full Notes, a list of Plants, and Vocabulary, has much to recommend it for use in schools and and among passmen in universities. It is well bound, clearly printed, and illustrated with various elegantly executed wood-cuts. The text has the advantage of a running summary in English at the head of the page, an innovation but a judicious one. And I may say, having looked through the volume with some care, that its merits in detail bear out the favorable impression derived from a cursory glance.

There are three points to be considered in regard to the present volume,—the Text, the Notes, and the Vocabulary; and these I propose to discuss separately. Though the whole volume testifies to the care and scholarship of its author, or, I should rather say, authors, for in the present edition "all the material that was available has been retained from Allen and Greenough's Virgil," still the *Text* is far from being completely satisfactory. It purports to be based upon Ribbeck's epoch-making work, and at times follows it so literally that in one poem, the first Bucolic, we find the two forms *fines* (l. 3) and *finis* (l. 68) given side by side as the accusative plural of *finis*. This may be puzzling to beginners for whom Professor Greenough intends his volumes ("Virgil is the first Latin poet with whom most students become acquainted." Notes, p. 1), but with this we should have had no fault to find, if Ribbeck had been followed out consistently. An editor of a classic has either to make an eclectic text, or to follow some well recognised authority; or he may follow one in the main, signifying his variations from time to time, as the present editor proposes to do. Unfortunately Prof. Greenough is inconsistent with himself. Some of his variations are recorded, some are not. On comparing with Teubner's edition of Ribbeck, 1859, I find *naves* for R.'s *navis* (Æn. V. 29), and *graves* for R.'s *gravis* (Æn. VI, 56), in both cases without indication of the change. Going through the first Æneid in detail, I find alto-

gether seven such unnotified changes, *omnes* for *omnis* occurring twice (cf. lines 194, 347). Of course the Mss. of Virgil are inconsistent in regard to the termination of the accusative plural of such nouns, but Prof. Greenough is inconsistent with himself. However, these small variations detract very little from the value of the book as a school edition; though, by the way, it has always seemed to the writer that Virgil is utterly unsuitable as a work for beginners.

In turning to the *Notes* a pleasanter task awaits the reviewer. After looking through these with some attention I find very few passages (eg. Buc. I, 68–70), in regard to which I should differ with the editor, and the information conveyed is almost always adequate to the wants of beginners. In fact the notes and the voculary combined raise the present work to a standard far above that of ordinary school editions.

With this acknowledgment, I shall now make a few suggestions that may be useful in future editions. The work is obviously intended for use in the United States; hence references are made constantly to the grammars by the Editor and by Professors Gildersleeve and Harkness. This will, of course, detract from the merits of the edition in the eyes of those who do not happen to use these grammars; and it would have been well if notes upon peculiarities of construction and the use of words had been more common in the work itself, eg. upon Æn. I. 321 and II. 31,2. Occasionally, notes should have been added to point out difficulties or to make the sense clearer, as upon *mea maxima cura* (Æn. I. 678), upon *Sopor* (Æn. VI. 278) justifying the position given by Virgil to Sleep, or suggesting the alternative rendering of "Lethargy," preferred by Mr. Nettleship. The difficulties of translation at Æn. VI. 883-5, and I. 17, 18 might have been more fully explained. Another noticeable point is the scarcity of parallel references. These are often the best comment on Virgil, one passage throwing light on the thought or expression of another. Thus while there is a note at Æn. V. 517, one misses the natural references to Æn. VI. 724 *et seq.* and to Georg. IV. 227. Horace's well known line should surely have been quoted in illustration of *gentem togatam* (Æn. I. 282), and the note upon the proper names in the lines 284, 5 is incomplete without reference to the parallel at VI. 838. The mood of *resolvo*, Æn. IV. 27, should have been contrasted with that of

fundat (I. 193). Again no parallels are given for *talis in hoste fuit.* Some explanation should have been given of the *Trojamentum* (not "Trojæ *lusum,*" as in a note at line 545) in Æneid V, especially after the very convincing paper upon the subject in the English *Journal of Philology* (Vol. IX. No. 17) by Mr. F. P. Simpson. Before passing to the Vocabulary, I must point out an inconsistency between it and the notes. In the latter *veribus* (Æn. I. 212) is correctly explained as ablative of the instrument, but in the vocabulary (*sub voc.* "Figo") the translation "*stick on spits*" is not a translation of this but of *infigunt veribus* (cf. *scopulo infixit* in the same book.) Again at Æn. IV. 159, *fulvum* is explained as "a mere ornamental epithet." Conington very acutely observes that both *spumantem* and *fulvum* have a real force: "it is in fact the same as saying a real, actual lion—a lion in propria persona." He might have cited, in favor of this view of Virgil's use of habitual epithets, his employment of *salsus* (Æn. II. 173.) Lastly, at Æn. V. 466, *vires alias* is mistranslated by "another power," and explained as a God. It is true that Virgil constantly echoes the meaning of the first part of his line in the second part, but there is no more authority for understanding *vires* of a divinity than there is for explaining *numen* of a man.

In passing to the *Vocabulary*, it must first be acknowledged that every beginner will find herein very great assistance, though omissions are noticeable here and there; thus the technical "sporting" meaning of *spatium*, occurring so constantly in Virgil, is not pointed out. But the vocabulary as a whole is very full and complete. The principal of quantification, however, is hard to discover. The termination in *—o* of the active voice of verbs is always marked and always marked doubtful. In Virgil this is always long; besides, terminations and syllables determined by fixed rules are generally and wisely left unmarked. A different principle however is generally adopted here which results in such marking as *medicō* or *-cō*, *nitēscō* or *-cō*, where the only syllables left unmarked are those that really require marking.

In noticing Prof. Greenough's edition of Virgil I have naturally been led to speak of points of difference, or of what have seemed to me omissions and shortcomings. But this review would be incomplete without my adding that every scholar will find great assistance from the Notes and Vocabulary, enabling him to discriminate between various renderings of disputed passages.

Intended as it is for beginners, alternative renderings are rarely given, and Prof. Greenough has generally succeeded in selecting that which carries conviction with it, the rendering upon which most scholars are agreed. Thus his work is admirably fitted for those for whom it was intended, and suitable as a guide to others. All who get it will welcome the second volume containing the Georgics and last six books of the Æneid, which is announced as shortly to be published. Without putting forward any claims to originality its careful selection and honest workmanship are a credit to American scholarship.

R. W. B.

BOOK-NOTICE.

Inscribed on the cover of *Gage's Elements of Physics** is the motto "Read nature in the language of experiments," and to enable young students of Physics to do this has evidently been the aim of the author in preparing the "Elements." It is unquestionably the best work of the kind that has come under the writer's notice. It is virtually a statement of the manner in which a large number of experiments in Physics may be performed, (many of them with articles to be found in every home) and of the inferences that may be drawn from these experiments. After each set of experiments a series of questions and problems is inserted which are not answered in the text, but may readily be reasoned out from the experiments and inferences drawn therefrom. Many elementary science text-books abound in errors, and are marred by presenting numerous theories and statements, once held as true but long-since desproved. Mr. Gage has produced a treatise singularly free from errors and fully abreast of the times. The latest applications of scientific principles, such as the telephone, microphone and phonograph, are passed under review and the principles involved clearly explained. The only fault we have to find with the book is, that in some cases the student is instructed to perform experiments with apparatus so clumsy that, unless great care be exercised, the experiment will fail. A case in point is where the pupil is told to suspend a *lath* by a string and hold near it an electrified glass rod, when the lath will be repelled. If an experiment be given to illustrate some natural law and fails, the pupil does not receive that law with the same faith that he would have, if his first experiments made to illustrate it had succeeded. We hope Mr. Gage's Elements may be introduced into all schools where Physics is taught, and that the appearance of this book may induce many schools to add this subject to their curriculum or exchange it for a certain amount of Latin or Greek.

J. T. D.

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* Elements of Physics. A Text Book for High Schools and Academies. By Alfred P. Gage, A.M., Instructor in Physics in the English High School, Boston. (Ginn, Heath & Co.) Mailing Price, $1.55.

LIBERAL CHRISTIAN UNION.

LECTURES, 1882-83.

Held in the Lecture Room of the Church of the Messiah.

December 15. The "Last Judgment" in Art.—Rev. L. G. Ware, Burlington, Vt.

December 29. Public Speaking.—Geo. Murray, Esq., Montreal.

January 12. Origin of the English Alphabet.—E. W. Arthy, Esq., Montreal.

January 26. Life without Air.—Dr. Wm. R. Sutherland, Montreal.

February 9. Phenomena of Dreams.—Rev. Dr. J. Clark Murray, Montreal.

February 23. Jean Jacques Rousseau.—R. W. Boodle, Esq., Montreal.

March 9. Early Christian Architecture.—A. C. Hutchison, Esq., Montreal.

March 23. Conservation of Force.—Dr. T. Sterry Hunt, Montreal.

Tickets for the Course $1.00. Single admission 25 cts.

YOUNG MEN'S CHRISTIAN ASSOCIATION.

EDUCATIONAL CLASSES AND LECTURES.—1882-83.

The Association has been very busy this season with Lectures and Classes. The following took place before the beginning of the new year:—

Lectures on American History, by Dr. Kelley.

Popular Medical Lectures, by Drs. Osler, F. W. Campbell, Roddick, T. W. Mills, Cameron, and Buller.

CLASSES.

1. Commercial Arithmetic, by C. A. Humphrey, Esq.
2. French, by J. L. Morin, B. A.
3. Practical Geometry and Mechanism, by Prof. McLeod, M.E.
4. Book-keeping, by P. S. Ross, Esq.
4. Phonography, by D. A. Budge, Esq.

The following is a list of the lectures falling within the present year:—

TEN POPULAR LECTURES ON ASTRONOMY.

By G. H. CHANDLER, M.A., McGill University.

Monday Evenings at 8. Commencing January 8th, 1883.

TEN POPULAR LECTURES ON LITERATURE AND BIOGRAPHY.

Thursday Evenings at 8. *Commencing February* 1*st*, 1883.

Rev. Dr. Buckham, University of Vt. February 1—Introductory Lecture.

Prof. Moyse, February 8—"Tennyson."

Rev. J. F. Stevenson, D.D., February 15—"John Milton."

Rev. Canon Norman, D.C.L., February 22—"Shakespeare, his influence on English Language and Literature."

J. T. Donald, Esq., M.A., March 1—"James Watt, Engineer and Scientist."

Rev. Elias Nason, of Mass., March 8—"Daniel Webster, the secret of his Power."

Rev. Dr. Thomas, March 15—"The Men for the Age."

Rev. E. A. Stafford, B.A., March 22—"Samuel Johnson."

Rev. G. H. Wells, March 29—"Washington Irving."

Rev. Dr. Clarke, April 5—"American Anti-Slavery Literature."

Rev. J. S. Black, April 12—"Scottish Literature."

Full Course Tickets are available. Admission to each Single Lecture 25 cents.

DR. ARNOLD,

THE PRINCE OF SCHOOLMASTERS.

By H. Tattersall, *Hermitage School, Birkenhead.*

[The interesting sketch that follows appeared in the London *Schoolmaster*. Our space does not permit us to print it entire, but we have endeavored to preserve the most important and suggestive parts, omitting details of mere biographical interest.]

The study of Biography, if followed out in its true spirit, is one of the most interesting and profitable mental pursuits. Its aim is twofold—to arrive at a true estimate, first, of the *Character*, and secondly, of the *Acts* of the particular individual in question. To us, as a body of teachers, the record of the personal history and work of no man can be more interesting than that of him who won the title of the "Prince of Schoolmasters." In the body of eminent educationists who by their merits have won the right to be acknowledged as leaders of the great "Army of Light" his figure stands out, bold and conspicuous; and we know not, nor ever shall know what the England of to-day owes to the life and work of Thomas Arnold.

In 1820, after his marriage and ordination, Arnold settled at Laleham, near Staines, as a private tutor. The motives which led him to adopt this comparatively modest sequel to a brilliant

university career were several. Amongst others were his family relationships, a natural taste for the work, and a desire for a retired life in order that he might prosecute his beloved mental pursuits. Not that he was unambitious. On the contrary, he was accustomed occasionally to entertain dreams of very large and extensive spheres of influence; so much so that he found it necessary in some degree to guard against them. In speaking to a friend he said, "I believe that, naturally, I am one of the most ambitious men alive," adding that "the three great objects of human ambition," which he alone considered as deserving the name, were "to be the prime minister of a great kingdom, the governor of a great empire, or the writer of works which should live in every age and in every country." Again, in 1823, he writes, "I have always thought, with regard to ambition, that I should like to be *aut Cæsar aut Nullus*, and, as it is pretty well settled for me that I shall not be *Cæsar*, I am quite contented to live in peace as *Nullus*." The occupation he had chosen had proved very congenial to him, and long after he had removed to a wider sphere of usefulness he looked back on the ten years of his private tutorship with affectionate contemplation and pleasure. In 1831 he writes to a friend who was about to engage in a similar occupation, "I know it has a bad name, but my wife and I always happened to be fond of it, and if I were to leave Rugby for no demerit of my own I would again take to it with all the pleasure in life. I enjoyed, and do enjoy, the society of youths of seventeen or eighteen, for they are all alive in limbs and spirits at least, while in older persons the body and spirits often become lazy and languid, without the mind gaining any vigour to compensate for it. Do not take your work as a dose, and I do not think you will find it nauseous. I am sure you will not if your wife does not, and if she is a sensible woman she will not either, if you do not. The misery of private tuition seems to me to consist in this, that men enter upon it as a means to some further end; are always impatient for the time when they may lay it aside; whereas if you enter upon it heartily as your life's business, as a man enters upon any other profession, you are not then in danger of grudging every hour you give to it, and thinking of how much privacy and how much society it is robbing you; but you take to it as a matter of course, making it your natural occupation, and devote your time to it; and then you find that it is in itself

full of interest, and keeps life's current fresh and wholesome by bringing you in such perpetual contact with all the springs of youthful liveliness."

In his tutorship Arnold pursued his mental avocations with the same zeal and assiduity which characterised him throughout life. His chief objects of study were philology and history; and for the sake of reading "Niebuhr's History of Rome" he mastered the German language. His mental pursuits, however, did not prevent his attendance to social and religious duties. He gave much and regular assistance to the curate of the village, both in the parish and workhouse, visiting the sick and poor. Over the minds of his pupils he exercised a wonderful influence. The great power of the future head-master of Rugby was foreshadowed in this more limited sphere. The great secret of the man's success seems to have been his all-absorbing zeal and earnestness Professor Bonamy Price, who was one of his pupils, writes as follows:—"The most remarkable thing which struck me at once on joining the Laleham circle was the wonderful healthiness of tone and feeling prevailing in it. Everything about me I immediately found to be most real; it was a place where a new comer at once felt that a great and earnest work was going forward. Dr. Arnold's great power as a private tutor resided in this, that he gave such an intense earnestness to life. Every pupil was made to feel that there was a work for him to do—that his happiness, as well as his duty, lay in doing that work well."

At this time he was engaged in the preparation of a Lexicon of Thucydides, an edition of that author with notes, and important articles on Roman history. Nor did he, in addition to all this, neglect to take a deep interest in the social and political life of the country. Those were stirring times for English politics, and nothing of importance passed without comment, private or otherwise, from Arnold. If time allowed I could quote numbers of his letters showing his deep interest in the social, political, and theological events of his time, which display a wide grasp of thought and a statesmanlike understanding, together with much liberality and magnanimity of feeling and sentiment. And this interest in the world around him never flagged, but strengthened and increased throughout his life. I may here remark of his letters that they are worthy of the careful perusal, not only of every teacher, but of every thoughtful man. Their tone is so earnest

and sincere, their expression so lucid, their knowledge of men and things so great, and often their literary style so finished, that they form one of the most valuable and interesting series of correspondence ever given to the world. It was not the fate of Arnold, however, to spend his life in the quiet and retired, however useful career, of a private tutor. And well for the world that it was not. In December 1827, he was appointed to the head mastership of Rugby school.

We now come to a period in Arnold's life which, to us as teachers, is naturally the most interesting. When Arnold entered upon his work he had many and great difficulties to confront—difficulties as regarded the school, both of an internal and external character. The state of public school education in England was at that time in many respects unsatisfactory. So much time and so much prominence were given to the study of the classics, and, consequently, other subjects of daily increasing importance and utility were so conspicuously neglected, that on many hands was heard the voice of murmuring and discontent. Further than this, there was a growing conviction on the part of many thoughtful minds that the education of the sons of the English gentry ought to be connected with a more systematic training in the principles of Christianity. Rugby, whilst retaining most of the characteristics of the public schools of the period, yet was so constituted as to impose fewer restrictive conditions on its master. Arnold had very decided views on the burning educational questions of the time, and upon what he considered the duties and responsibilities of a head master. And in the adoption of these views and the fulfilment of these responsibilities he claimed complete freedom of action. His relations with the trustees, who formed the governing body of the school, were generally of an entirely cordial and satisfactory character. But at the same time, he distinctly "maintained that in the actual working of the school he must be completely independent; and that their remedy, if they were dissatisfied, was not interference but dismissal. On this condition he took the post, and any attempt to control either his administration of the school, or his own private occupations, he felt bound to resist 'as a duty,' he said on one occasion, 'not only to himself, but to the master of every foundation school in England.'"

The considerations as to the manner and spirit in which he

entered upon his duties open out a very wide field of suggestiveness and instruction, and one to which it is impossible to do the barest justice in the brief space of this paper. Let us first glance at his *General Principles.* His conception of his duties was a high and noble one. He held that the supreme aim and end of education was the moral and religious elevation of character. To this all else must be subordinate, and for this every power must be employed. According to some, the public schools of the time were nurseries of vice and wickedness. Whilst recognising in them much that was evil, Arnold held, however, that, properly conducted and administered, they formed one of the best possible trainings a youth could have. The elevation of character, and the best means of effecting it in the public school, it was his ambition to realise. He saw in school life much that tended to foster a false manliness amongst boys; and false manliness Arnold abhorred—he exerted his whole powers to cultivate a true manliness. Hence, he treated the boys as "gentlemen and reasonable beings." Whilst, for instance, he taught them to look upon lying as a high moral crime, he never showed the least inclination to disbelieve a boy's assertion. Only, when a lie was discovered, a severe punishment, in the higher forms even expulsion, followed. Often he would check an attempt to substantiate an assertion: "If you say so, that is quite enough—*of course*, I believe your word." Consequently a feeling was created amongst the boys that "it was a shame to tell Arnold a lie—he always believes one." His insistance on his great principles is well illustrated by an incident of his school career. On one occasion he had, in consequence of a disturbance, expelled several boys. This excited general discontent. Arnold, standing in his place before the whole school, addressed them thus:—"It is *not* necessary that this should be a school of three hundred, or one hundred, or of fifty boys: but it *is* necessary that it should be a school of Christian gentlemen." His relationships with his assistant masters deserve a word. He treated them with the greatest consideration and respect. "It was one of his main objects to increase in all possible ways their importance and their interest in the place." In speaking of the high reputation one of them had acquired, he said, "Nothing delights me more than to think that boys are sent here for his sake rather than for mine." Every three weeks he held a conference with his colleagues, in which matters of school work were discussed. All were invited freely

to express their opinions on any point; and not infrequently suggestions were made by the subordinates which were in opposition to his methods, but which were adopted, and their success cordially acknowledged. He thus gained the entire sympathy and confidence of his co-workers. I cannot better summarise Arnold's general principles than in his own words:—"What I have often said before I repeat now; what we must look for here is, first, religious and moral principles; secondly, getlemanly conduct; thirdly, intellectual ability."

The means by which he effected a practical adoption of these principles were, of course, many and diversified. To treat of them all in this paper is impossible, but a few of the most prominent may be briefly enumerated and touched upon. *General Discipline.*—In this he instituted a complete reform at Rugby. Whereas corporal punishment had hitherto formed the chief, in fact, almost the only punishment, Arnold relegated it to the background. His great aim was to the effect in the boys' minds a sense of moral honour, and a due regard to the resposibility that devolved upon them in the work of preparation for the great battle of life; in a word, as I have before suggested, the cultivation of true manliness. In order to do this he tried to make himself acquainted with the personal character and mental temperament of the boys individually; and further, he maintained a keen watchfulness over the general pursuits and activities of the school as a whole, and of the different sections that composed it. And perhaps in no particular of Arnold's character and system as a teacher do we recognise the true educationist more than in this. To this end no labour was spared, no pains neglected, no expenditure of time and labour thought too great. It is interesting to note, however, that in forming the conception, and in great part effecting the realisation, of such a lofty and exalted standard as this, the more common and much abused means of corporal punishment was by no means excluded from the school *regime.*

(To be continued.)

LOCAL ITEMS.

Protestant Board of School Commissioners, Montreal.—The December meeting of the Protestant Board of School Commissioners was held on Thursday afternoon, the 14th. The Chairman, the Rev. Dr. Norman, reported that the Rev. Dr. Jenkins and himself had sought opportunity of laying the circumstances and needs of the Board before the Hon. Mr. Mousseau, who had received the

deputation courteously and had promised to consider carefully the document presented and to consult his colleagues of the Ministry as to the course to be pursued in the interests of Education in the City of Montreal. Dr. Norman also reported that he had had an interview with the Finance Committee of the City, and that in consequence of representations then made, that body had kindly consented to pay the Board its quota of the City Tax quarterly instead of half yearly. The Committee on awarding the Costigan prize, reported that after a keen competition it had fallen to the Sherbrooke Street School, and that the amount of Fifty Dollars had in consequence been distributed to the teachers of that school, ten dollars being reserved for distribution to the three pupils of the school who had won the highest places at the late promotion examinations. Reports of attendance in all the schools were submitted, showing an enrolment of pupils 23 greater than that of last month, and an average attendance in the Common, High and Senior Schools of 883 per cent. The Chairman, Mr. Lunn, the Hon. Treasurer, and the Secretary, were instructed to appear on behalf of the Board before the Royal Commission now sitting, as soon as the affairs of the Protestant Board are in question.

The January meeting was held on the afternoon of the 11th. The Chairman reported that he had transferred Miss Hill from British and Canadian School to the High School, and Miss Watson from the Point St. Charles to the British and Canadian, and had engaged Miss Warcup to succeed Miss Watson. He further reported the pressing need of new sanitary conveniences at the Sherbrooke Street School, whereupon it was resolved to erect them as soon as the finances of the Board would permit. The Hon. Treasurer reported that he had received from the city treasurer the balance of school tax due for 1882 so far as it was possible to estimate it, and submitted the statement of account for December, which was referred back for audit. The lamented death of Mr. Haney, late head master of the Dorchester Street School, was reported, and instructions were issued to pay two months' salary to his widow. The question of choosing a successor was committed to the Rev. Drs. Norman and Jenkins. The same committee was entrusted with the preparation of the winter examinations. The Chairman was requested to call an early special meeting to determine conditions of sale for the property now occupied by the Senior School and the Preparatory High School.

The late Mr. Haney.—We have to lament the loss at the early age of thirty-two years of Mr. Francis C. Haney, late head master of the Dorchester Street School, Montreal, whose death of typhoid fever occurred on the 24th of December last. Having entered the McGill Normal School in 1874, he took the Elementary School Diploma in 1875, with honorable mention in History, Education, Arithmetic and Geometry. In the following year he

received, with the Model School Diploma, honorable mention in English Grammar, English Literature, Algebra, Geometry and Mensuration. Having spent the interval in teaching, he returned to the Normal School for the session of 1877–78, and at its close received the Academy Diploma, and honorable mention in Mental Philosophy, Greek, Latin, Geometry and Mechanics. For a short time he taught in the McGill Model School, but soon entered the employ of the Protestant Board of School Commissioners of Montreal, being appointed Head Master of the Dorchester Street School in September, 1879. He will long be remembered as a man of sound sense and ready wit, whose sarcastic manner of speech was unable to conceal the genuine kindliness of his heart.

The Bystander.—All readers in Canada and all who take an interest in the fair discussion of current events will have welcomed the first number of the *Bystander*, now a Quarterly Review, price 25 cents. The pleasure afforded by its able comments upon contemporary politics, thought, and opinion is so great that we would willingly forget such sentences as the following upon Home Rule in Ireland:—"It would be strange if the work of the Protectorate," legislative union with Great Britain, "undone by the Profligacy of the Restoration, and restored by Pitt, should be once more undone by the feebleness of Radicalism in the present day." But, why should an historian thus indulge in wild paradox?

The Morrin College Review.—Close upon the heels of *McGill University Gazette* come the first two numbers of a Review issued by Morrin College, Quebec. We can only say that we wish it all success, and we hope that its spirited protest against the iniquitous Duty on imported Books will find an echo in other periodicals. "Give us Free Books" should be the cry of every paper that has the cause of education at heart.

CORRESPONDENCE.

INSPECTOR HUBBARD'S REPORT.

To the Editor of the EDUCATIONAL RECORD.

DEAR SIR.—Will you allow me to correct one or two typographical errors in my Report, as it appear in the RECORD for this month. In two instances *Durham* is given as "Dunham," the latter place is not within my District.

As my Statistics were given in full in the Statistical Table, I did not repeat them in the body of my Report. It may, therefore, be proper for me to add a few brief notes.

My district of inspection embraces 37 school municipalities. I reported for the past year, 295 school districts, 301 school houses belonging to Commissioners or Trustees. Number of schools of all kinds in operation, 312; total attendance, 8140; average, 5972. These figures, taken in connection with the facts stated in the report as published, will give an idea of the number of visits made.

I remain, yours respectfully,

H. HUBBARD, School Inspector.

SHERBROOKE, December 9th, 1882.