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DRAWING IN THE HIGH SCHOOLS AND COLLE-GIATE INSTITUTES OF ONTARIO.

BY COLIN A. SCOTT, B.A.

THE foundation of this subject as part of the programme of studies in our Secondary Schools dates back for some time. It was, I believe, an outcome of a movement which passed through Ontario during the Governor-Generalship of the Marquis of Lorne, and to which also may be ascribed the origin of a number of very efficient Art Schools as well as the temporary heightening of the public sympathy in matters of art generally. It was expected that the work prescribed in this department would give a practical training to the pupil, and at the same time open the mind to such artistic conceptions as would be beneficial to himself and to the rest of the community. Sufficient time has now elapsed to enable a competent critic to obtain a fair judgment of the worth of such an expectation and of the means adopted to accomplish its fulfilment, and it must be with considerable misgiving that he regards the success of either of the two aims proposed. Under the present conditions the practical training

is almost useless as far as art is concerned, and frequently resolves itself into an extravagant demand for neatness, the least vital of all the qualities which an artistic drawing should present. The copying of figures (especially badly printed figures) from the flat is the most soulless and least profitable exercise for a youth of either a practical or an imaginative turn of mind. The practical geometry and perspective are more interesting, but a e entirely mechanical and quite remote from the interests of The drawing from objects as presented in the authorized drawing book is a good example of what artistic drawing should never be. the drawing of cold and abstract forms be a preparation for the higher qualities needed to the expression of feeling and concrete conception, then a diet of husks ought to be an excellent substitute for wheaten bread. Industrial design might be treated as a sub ject capable of the greatest artistic importance, but there is too much evidence to show that it is generally

handled in the most mechanical man-The teaching of none of those subjects bears out the expectation of a practical training, at first indulged in by the friends of art and of education. Nor is the subjective side served any the better. Among the pupils of our Secondary Schools, as in the public at large, artistic conceptions involving the sense of eye sight are conspicuous by their absence. The subtle tenderness of exquisite form and colour, the solidity or refinement of modelling, the novelty or simplicity of composition, the personal note and its universal appeal which pervades every work of art, is more meaningless than Hebrew to our pupils or the public, while the symbolism of a white waterfall with its praying-robe of mist, or a mountain clothed in clouds, is more striking and more intelligible on this paper in black type than in nature itself or in the finest works of our artists. A little of the artistic spirit does filter in through music, and of late years by means of improved methods of teaching the arts of English literature, but the arts involving eyesight, the most practical and impressive to the youthful mind, are emasculated or ignored.

What then shall be done? Shall we confess at once that our means have been inadequate, our weapons insufficient and cleanly sweep away this pretence of a rudimentary education in art? Or shall we say that these subjects prescribed by the education department have a certain amount of usefulness in themselves, while any real artistic training is entirely beyond the scope of our Secondary Schools and remote from the necessities of the people of Ontario? This latter alternative, however insulting to our intelligence and our capabilities, is one maintained by many so called practical It is said that the products of art are luxuries to be enjoyed by the That we are at prerich and idle. sent in a stone-breaking age and that

it is unwise to divert any energy from the rougher and more productive occupations. That the older lands are well able to supply us with such refinements, while we return their value in raw materials or the labour of coarse and unskilled hands. a solution needs only to be stated to be rejected by every courageous Canadian, and represents no part of the ideal of the bright pupils of our High Schools and Collegiate Institutes. They are looking for better things and it ought to be possible to bring to these young souls something of the grandeur and delight of an art which has been the sustenance and hope of many of the noblest sons of men.

That some way may be found to accomplish this desirable end must be the wish of every true friend of educa-There is wanted some movetion. ment similar to that which has lately revolutionized the teaching of Eng-As the dry bones of grammar and the rules of rhetoric were forsaken for a direct communion with the living language in its best examples, so must the cold details of the grammar of art be subordinated to the works of art themselves. As it is by reading and studying the poets that we become acquainted with the spirit of poetry, so it will be by the careful survey and study of pictures that we will ever comprehend pictorial art or the nature it represents. The material means for carrying this out the last twenty years with their splendid development in photography and process printing have laid already at our Our pupils may become intimately acquainted with the finest masters. And just as many a pupil who will never make a poet may appreciate and enjoy the highest and the best productions of poetry, so many a pupil who will never learn to draw, and who would never make an artist, may be taught to feel and

understand the greatest and most splendid of the gifts of art. The same work may be carried out in the arts of architecture, sculpture and industrial design, although in these cases it would be more difficult to obtain adequate representations of the works of artists. However, nothing serious would be lost by neglecting them as independent arts, for pictorial art embraces and transcends them all.

How a picture may be treated so as to show the principles of art and the spirit of the artist which underlies it, may be worth our while to indicate at least.

The accompanying pen-and-ink sketch will serve for an example. The qualities of this sketch may be (as

of fir and some other indications of this character are shown. To show this too much would bring the bank of trees too near. The dark tone as compared with the tone of sail and water indicates colour to the spectator, and yet the trees are not black. great deal of colour can be expressed in a black and white drawing; a great difference in modern work especially depends upon this quality. bank of trees is represented by lines not horizontal; this differentiates them from the water and indicates in some places the slope of the branches. do this too much and draw the trees individually would bring them too near and make them too important. These lines running one way assist the perspective towards the left (bet-



with a poem) roughly divided into objective and subjective. To begin with the objective, which, however, will involve a continous reference to the subjective side as well. We may observe a Mackinaw boat indicating the north shore. The boat is not leaning, the sails are hanging straight. The wind is not blowing much, but it is not perfectly calm as there is no reflection on the water. The water is of one tone, a grey as compared with the white sail. The flatness of the water is shown by horizontal lines. That the whole view is seen at a considerable distance is shown by the water not being carried very near the spectator. The bank of trees behind the boat recede in perspective towards the left. They are dark as if ter than if they were sloping to the right) and give unity to that part of the picture. The mountain is grey and faint, indicating a hazy atmosphere. The whole tone of the picture would indicate that the sky is grey and not blue. The lines of the composition are simple. It is better that the crest of the mountain (a Laurentian ridge) comes to the left of the boat than directly over it. That would be to emphasize what is already emphatic.

Here we have a few points at least descriptive of the objective qualities of the sketch. Since the sketch is one of my own, I may be excused from going into the subjective qualities. This was a sketch made from a moving sail-boat in about three minutes, I do not pretend to say that

the points described above were consciously before my mind while making the sketch. That is a result of after reflection. The work of art is unreflective and spontaneous. Rules can not be given by which pictures may be made; but rules may be deduced from pictures by which they may be understood. This, I think, is somewhat analogous to the work of the teachers of English, and some

such work should be undertaken in connection with the teaching of art also in our Secondary Schools.

This sort of education would not have in view the training of artists, but of an intelligent and appreciative public. It would be general and not special, and as such would be fitly included in the programme of studies for our High Schools and Collegiate Institutes.

THE ENGLISH PAPERS OF THE RECENT HIGH SCHOOL EXAMINATIONS.

M. F. LIBBY, ENGLISH MASTER PARKDALE C. I.

NE morning after the autocraft had been guilter of had been guilty of an uncommonly daring paradox "the old gentleman who sits opposite" sniffed audibly and said the autocrat talked like a transcendentalist; for his part common sense was good enough for him. "Precisely so, my dear sir," replied that subtle philosopher, "common sense, as you understand it." There is of course in this retort a gentle Bostonian suggestion that a common sense exists which may be inhaled and exhaled on higher and freer levels than that enjoyed by the old gentleman opposite, and our naradoxical transcendentalist proceeds to moralize as follows: "I show my thought, another his; if they agree, well; if they differ, we find the largest common factor, if we can, but at any rate avoid disputing about remainders and fractions."

We must all judge from the highest horizon-scanning point of view by us attainable and then if we speak emphatically and enthusiastically of what we see, not those who stand higher surely will accuse us of dogmatism or narrowness though other critics may be unable to find our truth other than paradox

or worse. It must often be observed by men of great powers of vision that dogmatism and fanaticism produce a style of expression very like that produced by fervour of conviction. This paper is intended to be a criticism of the recent English papers from the writer's point of view and will probably be acceptable in some degree to those whom it may concern, on account of the fact that it is, to the full limit of consciousness, a candid expression of the opinion of one deeply interested. While I have had the very best opportunities of knowing the opinions of a majority of the leading English Masters of Ontario concerning these papers and while I believe that I am for the most part in accord with that majority, I make no claim to speak for any but myself.

That the nature of the questions asked in a subject at the July examinations is of the very last importance to the well-being of that subject is universally conceded; this truth is ever present in the mind of the actual teacher but is perhaps not so potent in the council of examiners. Whether rightly or wrongly, the vast majority of teachers and pupils regard the "old papers" in a subject as their

true guide and syllabus for a new year's work, and this will be the case as long as competitive written examinations continue. How then is it possible to overestimate the power and responsibility of an examiner in the exercise of his functions? he takes his pen to write a question he may very well exert his imagination picture not only thousands of anxious candidates but also the upturned eyes of tens of thousands who will look to him in succeeding terms for direction and orders; again, not only do the pupils but the masters themselves, more especially that numerous class of them who in remote villages feel themselves unable to be independent and to assert their personal tendencies, the masters themselves regard their "last year's papers" as the authoritative interpretation of a scanty syllabus. One might well exclaim-show me this year's papers and I can show you next year's work. Now while many examiners appear to feel the truth of all this to the fullest extent and to approach their work with scrupulous conscientiousness and a solemn regard for its far-reaching influence, it is certain that many others, especially those not actually engaged in some branch of teaching, toss off their papers in a spirit of mercenary indifference or of mere half-awake indolence with no adequate sense of the endless harm they do, or in sublime ignorance of recent advances in the subjects dealt with.

The papers on which candidates for matriculation and for teachers' non-professional certificates wrote in July last gave pretty general satisfaction, if we disregard, as of course we may very well do, the criticisms of those who are quite below the level on which we find a common-sense atmosphere; there was not quite as much adverse criticism as usual. Of course the candidate who fails, and

the master who fears the loss of his situation if he does not "pass" a certain number-fixed by some worthy trustee such as the village auctioneer or the oracular ex-public-schoolteacher who has risen to wealth and respectability in a new calling and "knows how to run a school"-these unfortunates find the papers awful and outrageous; but such sufferers will moan through the press and sign themselves, "Teacher" "Fiat Justitia" to the last syllable of recorded time. One does not care to join in the pursuit of an examiner when the whole field are hard upon his heels, but this year there is fair game; there are few huntsmen and dogs and one is tempted by the very calm and serenity to say a few temperate words concerning examinations in general and the recent papers in. particular.

It would be a useful problem for young students of psychology to endeavour to arrive at the mental attitude of a departmental examiner as he begins the preparation of his questions; there would be the attitude of the ideal examiner, that of the average real examiner, and that of the worst possible. Taking the second as the most profitable study for the present we may suppose him to have accepted his appointment and to have concluded that the time for action has arrived. He considers what will be expected of him by the Department and the University authorities, judging their expectations by what he knows of the views of certain educationists in positions of trust. more or less vague notions as to what the teachers of the subject in question and their pupils may reasonably expect to see in his paper. Moreover. he must consult his own views with more or less independence, and possibly at times he may find it necessary to endeavour to meet the views of some enthusiastic friend who cannot reason him, but may persuade or overawe him into striving to improve the study of his subject by introducing new features into his questions.

Under the influence of these numerous requirements — requirements which multiply as he thinks of this and that inspector, professor, and high school master—or of the varied objects of study, varied conditions of schools, and endless variety of students; under these influences he finds it almost impossible to please all, or indeed to avoid offending many who have strong claims upon his considerate attention.

Would it not be as wise to deal with the subject quite independently, but upon common-sense or philosophical grounds? Is it not certain that there is a sound method of examining as there is of teaching, and that questions may be asked which cannot give offence to any and yet can be difficult enough to constitute a thorough test of knowledge and training?

In order to produce efficient examiners the training institutes of all grades should give prominence to the subject of setting examination papers, subject of great importance to teachers and pupils in all schools, and especially in advanced schools. Suppose then that we enquire tentatively what the tests of examination questions should be. It will be readily seen that much greater care will be required in setting provincial papers than in setting merely local papers, inasmuch as differences of method, of text-books, of individual inclinations of teachers, and many minor differences must be allowed When a master is examining his own pupils he may simply desire to know whether they have given intelligent attention to his instruction. and hence may ask questions of a minute and even technical nature, but such questions would be serious

grievances in papers intended for the pupils of a whole province.

With regard to the provincial nature of questions then it may appear sound to hold that:

- (a) They should be of such a kind that no fairly efficient master would have failed to inculcate the principles with which they deal.
- (b) They should deal rather with principles than with minute or detailed information.
- (c) They should employ no technicalities not common to the authorized text books (in some cases two or more text-books are authorized).
- (d) In English grammar, where the range of questions is unlimited, the authorized text-books should be the examiner's guide, and only such subjects as are common to the different grammars authorized should be dealt with.

No doubt these tests appear to lay great stress upon the text-books and to that extent curtail freedom of teaching, but if this is an objection it is an objection springing from the very nature and essence of a centralized system of examining and finds an offset in the advantages of that system over others.

Having thus guarded against unfairness in the general nature of the paper the examiner would do well to apply methodically certain tests to the individual questions, and if these tests were applied several times after the first draught of the questions and at long intervals they would do much to remove the most exasperating features of weak papers. prolonged argument the following rules for the guidance of examiners are suggested, not as exhaustive or absolute, but rather that they may lead to a better understanding of this vital question:

(a) A question should have some educative value; it should be a test of mental power, knowledge or train-

ing; questions testing memory-training may be judiciously used on the ground that the memory is a most important faculty.

(b) A question should not be ambiguous, obscure, or faulty in English.

(c) Technical terms may be used when they are such as every good student should know; but needless technicalities and such as are not in very common use should not be employed.

(d) Only such questions as admit of a definite answer should be asked in scientific subjects. In æsthetic subjects opinions may differ as to the correct or best view, and yet the question may be valuable.

Doubtless many other guards may be suggested against poor questioning, and some of these may need correction and qualification.

In setting papers in English the writer has found that certain faults are very common, and would give expression to a special abhorrence of

(a) The use of the word "analyse" without a clear explanation of its meaning. It may mean (1) Divide a compound sentence into simple sentences; (2) Divide a complex sentence into principal and subordinate clauses; (3) Divide a clause into subject and predicate; and even (4) divide the subject and predicate in such a manner as to show the relations and functions of the separate words and phrases, though this last exercise is really the important part of parsing: and it often means all four at once; it is a mere careless and indefinite use of words to say "analyze ten lines" of some extract, and leads to endless confusion in competitive examinations; is it not much better to ask a few simple definite questions instead? as, for example, (1) Show the kind and function of the subordinate clauses; (2) Write out the principal statements of this sentence. The best answer to the question,

"What kind of table of analysis should be used?" is, "in examinations, a full analysis never serves the examiner's purpose so well as questions aimed directly at the difficult points of the syntax."

(b) The use of the word "parse." There is hardly a master in Ontario High Schools who is not afraid to tell his pupils to state the parts of speech and the relation, and no more, when asked to parse, and yet that is what is usually required by the examiner. Most pupils writing for matriculation tell in full simplicity all they know about the word; for example, that "houses" is plural and "woman" feminine. Would it not be better to ask for the part of speech and the relation; or, if desirable, for the inflections, than to use the ambiguous "parse" in order to save time? It is through such mechanical use of terms that grammar is so dull a study to so many.

(c) The use of the word "conjugate," If a pupil is asked to conjugate a verb he may give the principal parts, the tenses of all words in the first person singular, or, indeed, all the forms of the verb, and pronouns to match. Everyone knows that this word is of very uncertain definition yet it is seen every time, always leading to the failure probably of some unfortunate, for he who writes most, usually obtains better marks than he who takes the easiest meaning of the question.

(d) The use of the word "classify." What common sense is there in asking a pupil to classify any group of things without stating the ground of classification? "Marbles" may be classified on the ground of material, colour, size; to ask a boy to classify "marbles" and then to "pluck" him for failing to guess which ground you were thinking of would be unjust and discouraging to the boy. How often a pupil could classify if he only knew

what he has a perfect right to know
—what ground he is expected to

classify upon.

(e) Requiring pupils to desynony. mize words of nearly identical force without showing those words in con-Crabbe himself probably would be unable to state the difference between terms that matriculants are required to differentiate with examples. There is no educational pursuit, perhaps, requiring greater astuteness, experience and breadth of reading than desynonymization yet candidates the flurry of examinations are asked abruptly to differentiate terms not in any helpful context-that neither the examiners nor any scholar living should dare to dogmatize upon without the aid of a whole library. No teacher should undervalue the exercise of requiring a pupil to weigh pairs of words in reading English, but it is surely wicked to train up children to dogmatize in the tone proper to such experts as Coleridge or Grahame or Charles John Smith. No differentiation of synonymes out of context should be required at examinations; and even then only plain, clear and unquestionable differences should be required.

(f) No correction of English should be based upon the vagaries of absurd verbalists and similar works. It is well known that every year or two some adventurer writes a book of "Donts" and forbids the use of a number of excellent words or condemns the use of words as abominable and illogical, and throws all the great authors of our own day into error by his ignorant ipse dixit. Dignified educators should take no notice of such merchandise, and should attack only such errors as are condemned by the usage of our best writers.

Sentences that are proof against fair criticism should not be given for correction, as hypercriticism is very much more injurious than none. I do not hope that these views will meet with universal approval, nor are they written in a consciously dogmatic spirit; but so far as they appeal to common sense from the examiner's point of view they should be acted upon. If examiners persist in neglecting the views of teachers, the day will come when the teachers of the various associations will combine to take control of their examinations as lawyers and doctors and other professional men do already.

It will doubtless be observed that most of the foregoing specially annoying faults point rather toward grammar than toward literature or com-

position papers.

The examiners in English for 1891 were of so well-established reputation for knowledge and judgment that much was expected from their joint The result was not disaplabours. pointing: the papers in poetry were such as we would not be ashamed of before the world : considering the material on which the questions were based it is not too much to say that they were broad and just, sufficiently minute, quite untechnical and, in general terms, such as conduce to a thorough and minute but not mechanical or grammatical investigation of English verse. Having said this however it may not be amiss to point out that while there was an evident and intelligent effort at grading the papers there was not that nice discrimination in grading that we should all desire: the primary paper was hardly difficult enough as a test for candidates for teaching certificates, but this error is in the right direction. It must be remembered that the senior leaving examination gives many teachers their final certificates: now while it is certain that the paper on "The Tempest" is just what it should be for prospective undergraduates, it is far too elementary for first-class certificate teachers. While the higher

criticism of Shakespeare would be out of place even in first year work at the University, it can perhaps rot be held so soundly that those when never enter the University and yet who hold responsible places as teachers should learn no more than the elementary studies in poetry give them. ally of course second hand criticism by High School teachers is not likely to do so much good even to this class of pupils as thorough honest work of a simpler nature, still a glimpse of the truth that there is a higher level of criticism, even though acquired by reading "books about books," may give a needed impulse to one who might without it sink into a mere child among children. Truth honestly realized expands the mind as surely as truth honestly acquired: Gervinus or Moulton will stimulate many to do better work for themselves. Surely first-class candidates have the mental habit of induction. if scientific training will ever impart it, and when once that mental habit is fixed the more they read around their subjects the better for them. examiner in poetry has, me judice, given us the best paper on Shakespeare and Chaucer from the University point of view that we have had so far; possibly it is equally wellsuited to the real needs of the teacher's certificate class, but it might be wise to give a few questions for their answering, such as would encourage somewhat more comprehensive grasp of the drama. It is earnestly to be desired that no change shall be made in the provision for these papers, even were the papers not excellent it would be better to retain an examiner of experience; there is no danger of sameness arising from this course, at least not for several years.

In English composition the subjects for essays were chosen with much insight and felicity; there was a very happy suiting of the theme to the powers of the various grades of

candidates. But on the other hand nothing could do more violence to taste and judgment (on the present level) than requiring primary candidates to hack and patch the inimitably smooth and graceful, may I say the too sweetly perfect, English of Irving's Columbus. Many of us regard Irving as our ideal in the elegant style. We ask our ideal Irving whether he would use a word thus, or turn a phrase thus, just as we ask our ideal Shakespeare to criticize a new book of poems. If Irving's English is to be improved by ignorant children then we are training prigs to be openly irreverent and conceited and to quote the dictionary and the wordbook against those whose sense and taste give such books their only authority. Enough has been said about synonyms and grammar-questions in the more general part of this Enough has been said all paper. over the province about the objectionable last-century English extract in the junior grammar paper. In spite of a high literary sense and a great deal of feeling for good English the examiner would seem to have missed totally the present spirit of grammar teaching. Among those who say grammar is useless, those who say it should be untechnical, those who "believe in Latin roots," those who think all grammar questions should be based on extracts from literature, those who think the subject an inductive science and nothing else, among all these the examiner has played the part of the conciliatory old gentleman in the fable who wishing to please all pleased none, and lost his beast into the bargain. natural response to such criticism will be: No two masters agree on the desiderata of grammar, the English masters denounce it heartily and the University authorities almost ignore it; how then am I to please anyone but myself?

Now it is not necessary for examin-

ers to be led about by Reformers, above all by Radicals. Their duty is to make their papers rather Conservative and to allow the text-books, the syllabus, and the masters, to take the lead in revolutionizing a subject.

There is a type of English master who belittles grammar. He is usually an enthusiast for the emotional reading of poetry and an advocate of high literary criticism and philosophic discussion of a poet's system of belief with children who ought to be learning to read and write simple English with decent propriety and appreciation. He holds that the relation of adverbs and subordinate clauses are too difficult, abstruse and imponderable for the brain of a High School pupil but thinks the subtlest psychology of Rossetti and Shelley quite the appropriate nourishment for the same pupil. Now this type of master does much good, be it known, and is really an excellent antidote for the logicians and scientists of algebra and physics, but he does not accomplish what he might with a sympathy for the arid and weary waste of learning dubbed English grammar.

In grammar a boy sees the mechanism of English as in botany of the flowers. At first sight botany destroys the flower, but Gray and Agassiz had more than the vulgar love for plants and animals, and so the great authors who have loved English have always shown a grammarian's knowledge of language. In grammar we find the bony frame of poetry, and the aforesaid art-master stands effeminately aghast at the desecration; but a sturdy boy feels an intense satisfaction in getting at the scientific side of language, if it be taught him with enthusiasm.

In grammar a boy gets a confidence that will enable him to build long and intricate sentences, and it is a safe statement that the long and rolling majesty of the periods of our greatest prose writers and orators has invariably arisen and must of necessity arise from this confident building of sentences which only syntax-knowledge can give.

In English grammar and in a minute knowledge of the technicalities of English grammar lies the key to the study of French, German, Latin and Greek. Apparently this may be refuted, but on a closer examination it is irrefutable. A boy who does not understand the construction of his own sentence cannot translate it into a foreign tongue.

In grammar a boy gets as good a training in the inductive habit of thought as in botany, chemistry or physics, I will not say geometry. In spite of the excellencies of the Greek grammar as training, it may be questioned whether the good points and the subtle points of the Greek constructions may not be very often paralleled in English and whether there are not idiomatic subtleties of the English sentence structure to place against the Greek idioms, if we descend to a comparison not of prejudices but of facts.

Considering the immeasurable importance of language it is a question whether grammar should not be treated as an advanced University study; in the multitude of its phenomena, the difficulty of its nomology, and its importance in life it is hardly surpassed by other science branches.

It is a matter of regret that men of light and leading should desire to emasculate English studies by destroying the study which gives form and solidity to all compositions. Mere technical grammar, except as technicalities facilitate study, may be made the most useless of all time-killing devices, but the understanding of the uses and relations of words, phrases and clauses in expression is beyond all reasonable question the one only path to a scholarly and confident as

distinguished from a shallow and hysterical knowledge of the mothertongue. Cannot the examiner question our pupils so as to learn whether they have mastered grammar for its most useful purposes?

(a) As a scientific training in observing, defining, and generalizing.

(b) As a proof of popular knowledge of language as an institution of life.

(c) As a technical preparation for studying other languages.

(d) As a means of criticizing sentence structure.

Like "the old gentleman who sits opposite" I must now say: This is common-sense, such as all our great writers were educated upon, and of course I await the retort should any courteous autocrat honour me.

PRINCIPAL GRANT'S ADDRESS BEFORE THE N. E. A.

"INFLUENCE OF THE PUBLIC SCHOOL NATIONALLY AND INTERNATIONALLY."

THE public school is not an institution of American origin, as is sometimes claimed, but it is a basal necessity of government by the pub-That form of government is becoming universal in Christendom. There are, indeed, checks on the direct action of the people, and these checks are even more deeply embedded in the constitution of the United States than in that of Great Britain. The difficulty of making a constitutional amendment is far greater in the United States than in a country governed by Parliament and without a written constitution. But, in an old country like Great Britain, where conservative forces are interwoven into the warp and woof of every class, indirect checks supply the place of the impediments that the constitution of the United States interposes in the way of hasty popular action. In Canada, however, democracy is not only omnipotent, but it may act with almost lightning rapidity. ment represents a people instinct with the energy of the new world, without aristocracy, established church, or moneyed or leisure class, and Parliament can set up or pull down by its vote any institution that is not specially exempted from its jurisdiction.

In Britain Parliament is omnipotent and its jurisdiction is unlimited. can do anything that is competent to human authority. In Canada Parliament is supreme, but its province is defined by a written constitution that gives exclusive powers to local legislatures. While, then, in all countries where government is by and for the people, the public school is a necessity on political grounds, it is a more pressing political necessity in Canada than even in the United States or Britain. In considering the influence of the school on the nation. I would define the ideal education which the State should seek to reach as the full development of the faculties and the character essential to modern citizenship. The influence of the school nationally must be estimated by its success in these respects. If the school encourages the best physical development, if it not only teaches to read but inspires the average pupil with a love for reading, if it interests him in the history of his nation, feeds his imagination with suitable food, draws out his powers of observation, stores his memory with a few classic pieces that shall be to him permanent models, and above all roots in him habits of order, accuracy, courtesy,

truthfulness, self-reverence and reverence for the highest, then it has done its work. This ideal is surely not impossible. In the eight formative years between six and fourteen, so much ought to be accomplished if the teacher is at all fit for his place and if the State insists on the pupil's regular attendance and provides proper buildings, grounds and inspection.

Physical development does not demand gymnasium apparatus or a drill sergeant. As a rule, children will see to this matter for themselves in the best ways, if only opportunities are allowed. The games of children are for the great mass the very best means of securing good physical culture. Play, and plenty of it, is indispensable in education. It means harmonious development of the body, without fostering the self-consciousness that is apt to be induced by modern pretentious substitutes. As to the rest of the education that is required, everything depends on getting good teachers and on rational aims and methods.

Good teachers! You may well stop me and ask how are these to be had in sufficient numbers? Here is the supreme difficulty. Not only is the salary of the public school teacher small, his work monotonous and his place in society of little account, but his tenure of office is insecure, and he is often so hampered by multiplied and ever changing regulations that he is not so much a free being as a cog in a vast machine that counts only by statistics. Statistics are needed, but they cannot estimate the highest results. In these circumstances, the influence of teachers on scholars, so far as character building is concerned, is reduced to a minimum; for the influence of one soul on another is a very subtle thing, and the atmosphere of freedom is essential to the impartation of it to a class or school. can never touch the heart of another

with emotion, says Goethe, unless the emotion is genuine from your own heart, or, as Horace puts it, "If you wish me to weep, you must first weep yourself." To attempt too much or expect too much from the school is a mistake. To attempt too many things a greater mistake. But to attempt to teach subjects for which there are not qualified teachers is the greatest mistake of all.

For instance, one would suppose that the State should insist on history being taught in its elementary schools, so that every citizen might know something of the causes that determine the rise and fall of nations, and might be in sympathy with the history and the aims of his own nation. would be a teaching of morality and of the great facts of the spiritual world as well as of history. But how can lads or slips of girls, who have no conception of what is meant by the life of the race, who have never come in contact with cultured minds and who get their certificates by simply passing examinations on text books that they have memorized, rise to this point of view? Or, if they have to cram their pupils in order that they may pass examinations with facts of Canadian or American history that they cannot appreciate or relate to the principles that are at the root of national development, if they have to make them write and learn by rote paragraphs of the British North America Act or even the constitution of the United States, or of the number of men killed in particular battles that might as well be forgotten, what earthly use will such cramming be to unformed teacher and unawakened pupil? The remedy for our crude methods must be along the lines of inducing teachers to take a partial, if not a full, university course, and of imitating in the common schools the German system of teaching history. There, the famous stories of classical

times and the biographies of eminent men in different nations, especially their own nation, are read, and a basis of comparison is laid by instruction in the Old Testament histories. comparative method of study is the modern method in all subjects, and nowhere is there a better basis for historic comparison than in those brief sketches written from a prophetic or ideal standpoint in the books of Judges, Samuel and Kings, sketches and summaries that combine pregnant and glowing reflection with all the charm of concrete details. this method of studying history the child will unconsciously get hold of links of connection between history and geography, and history and literature, and between these and life. His learning will prove of permanent interest and value. He is led to think of other nations and other generations in relation to himself and to the men and women he lives with instead of misconceiving them as abstractions invented to torment schoolboys, or as mere "pagans" with whom he is not expected to have any sympathy. The difficulty of teaching literature to children is very great, perhaps greater than of teaching history itself, and the usual mistake is in being too formal, too didactic, too analytic, and too ambitious. children must be interested, and they can be interested only through their imagination. Mr. Gradgrind would give them "facts." I would give them stories and tales instead. Books like Hans Andersen's, and Grimm's tales, the Arabian Nights, Robinson Crusoe and the Synoptic Gospels to begin with, to be followed by Scott's poems, selections of ballad poetry and "The best selections from Scripture. literature for children from their seventh to their fourteenth year," says Rosenkranz, "consists always of that which is honoured by nations and the world at large," and if the

books I have mentioned are objected to, choose at any rate others that have stood the test of time and a jury that may be said to comprise universal humanity.

The object of the common school. remember, is not industrial. It should not regard children as the raw material of craftsmen, and aim at making They are in the infant mechanics. flower of life, and the best fruit will be had if you give the flower free play and do not expect it to be fruit or even incipient fruit. The aim of the school is to make children happy. healthy and natural; to give them a love for their country and for one another; to open their eyes to the beauty of nature and the meaning of life; to give them a love for reading, and a taste that will enable them in some degree to discern good reading from bad: and to form in them habits that will make the end of their school days to be but the beginning of their education.

2. The influence of the school internationally. The school should teach patriotism. But, there is as great a difference between patriotism and that blatant, arrogant spreadeagleism which in Europe is called Chauvinism, as there is between enthusiasm and fanaticism. is healthy and full of generous inspirations, and the other unhealthy and the destroyer of true patriotism and morality. The one teaches us to love our own land and race first because it is oufs, and we believe that it has done, and that it promises to do, most for man and for that which is best in man, especially for the good old cause of liberty, peace and righteousness. The other teaches us to hate men for the love of God or the love of country. The common school is, we have seen, broad as the nation, and necessary to the existence and well-being of the nation. May we not find for it a broader base? Yes.

Our fundamental proposition implies that its basis must be wide as the English-speaking race, for all the divisions of this imperial race are selfgoverning, and, in the next place, wide enough to underlie all nations that, in accordance with the principles of modern society, are governed by representatives who express the will of the people.

Think of the influence that the school might exert if it realized that its mission was to educate the children in all our English-speaking lands "so that we might again become as one people." This was the expression used by John Jay, one of the American commissioners who negotiated the settlement of peace and reconciliation with the mother country in This was the keynote struck by Jay, Adams and Franklin, and it was adopted on the British side by the Prime Minister, Lord Shelburne, with a frankness and generosity that disconcerted the sinister designs of France and Spain at the time, and led to far-reaching consequences that are only now being understood by the world. If the facts concerning the history of this settlement of 1783, that are revealed in Fitzmaurice's Life of Lord Shelburne and the Critical History of Justin Winslow, the librarian of Harvard, had been known to past generations of school teachers on this continent, the war of 1812-15 would not have taken place, and the game of twisting the lion's tail would not be so popular in the United States as it still is in a good many places from Congress downwards and Read the summary of these facts presented by Mr. O. A. Howland in that noble work of his just published in Toronto with the suggestive title of The New Empire, and then let us explain to the millions of future citizens on both sides of the line and across the Atlantic and the Pacific what were the inspiring ideals

of the men who, after seven years' fighting, thought not only of peace, but of permanent reconciliation, absolute freedom of trade and the promotion of each other's prosperity. Would there be any further waving of a bloody shirt that is more than a century old? The men who try to keep up hatred between north and south because of battles that took place a quarter of a century ago are estimated aright. What should be thought of those who would rake up the ashes of old feuds that were buried in 1783? Is it not time that that very ancient bloody shirt should be reverently laid aside? It should now be well understood that at the close of the war France repudiated the idea of the United States being allowed to practically monopolize the The thirteen colonies continent. were to be restricted to their own boundaries, between Atlantic and the Alleghanies. had joined the alliance on this condition. Great Britain was expected, as a matter of course, to have the same views, for the great west, from the Ohio to the Mississippi, belonged to the province of Quebec or Canada, and was, of course, to be conceded to her, while the remainder of the continent was to be the share of Spain. Against such a combination the feeble states, exhausted by the long war, would have been helpless, even had they been willing to fight for empty spaces of which they knew nothing. . But, as Mr. Jay said, "the one government which had the power to determine the boundaries" was Great Britain, and the young republic found then, as subsequently in a more recent crisis when Napoleon III. was the tempter, that in the opinion of British statesmen "blood was thicker than England in 1783 "endowed" the United States, to use Jay's words, with the great west, to the unbounded amazement of France and Spain, and

did so because Jay and his colleagues pointed out that the vast commerce of America would always be open to Great Britain, and that that would mean perpetual and mutual prosperity. All honour to the memory of Lord Shelburne. He, as Morellet, the French philosopher, wrote to him, "actually put in practice in public life what Adam Smith had only put in words." And he did so because, as he himself wrote, "the people throughout the world have but one interest, properly understood." words these-words to be taught as an axiom in political science in every church, school, caucus and parliament.

If there are two nations in the world that ought to trade freely with each other and to be in perpetual alliance, these two are the British commonwealth and the United States, and the part of the world-wide commonwealth that should be the link between the two is Canada. History, in these days of scientific investigation, has at last been brought into court and given conclusive evidence to the effect that such were the intentions of the great men who drew up the settlement of 1783, and that the British Minister then laid the most magnificent basis for permanent friendship and cooperation that the representatives of Congress could suggest. Surely, if any history should be taught in the common school, this outstanding fact should have the first place, and the lesson would flow naturally from it that the time that is past should suffice for the recriminations, jealousies and suspicions of small men, and that we are now called upon to join hands all round and secure the peace of the world and the coming of the Kingdom for which we profess to pray daily. The Britain of Queen Victoria is not the Britain of George III. Britain is as truly governed by the democracy as the United States is, and Canada

is more frankly democratic than either. This being the case, there is no more possibility of diversity of interest between them than there is between Maine, Michigan and Mississippi. this were understood it would also be seen that secession is as totally out of the question in the British Empire as war proved it to be in the United States, and that the idea that material considerations might tempt a portion of either commonwealth to abandon its flag is insulting, whether made on the north or on the south side of the The common school then might legitimately be made an instrument to promote the permanent reconciliation of the two great countries into which our race divided more than a century ago and which have ever since stood apart.

"Their scars remaining Like cliffs which have been torn asunder."

It may be said that I have presented an ideal out of all proportion to the real, and that it is almost absurd to attribute such vast possibilities of influence to an agency which when considered in detail is so insignificant. Certainly the average common school teacher is a feeble instrument to work such wonders as those that have been described. Admittedly the university don seems a much more imposing personage. No one questions the dignity of his work or his place in society, and generally his salary is pretty good, and his tenure of office all that could be desired, and sometimes a little more than is desirable. It would ill become me to underrate the importance of the university man. If a genius of original force or a man of lofty character, he is the fountain head of innumerable creative influ-To him the young men who are the hope of the future owe their intellectual and spiritual birth. education, too, we must never forget that improvement begins from above. But the common school teacher represents a still mightier force. The great forces operate silently and on so vast a scale that they are often unnoticed or when looked at in detail appear unworthy of notice. It is still true that God chooses the weak things of the world to confound the mighty, not that they are weak, but because to our dull eyes they seem to be weak.

Brother and sister teachers, the mission of the common school is to enlighten the state and to link the nations together in a holy brotherhood. I would have you so filled with this lofty ideal that you may always be inspired, in the doing of your work or urudgery, with a due sense of the issues for time and eternity that are involved.

CONVENTION'S RESOLUTIONS.

[N. E. A., 1891.]

CUIDED by the sentiments which appear to prevail in the Association, as manifested in the papers and addresses, or brought out in discussions or in general conversation, the Committee on Resolutions respectfully submits the following for the consideration of the Association, and as the basis of its public declarations to the country:

- r. The last year seems to have exceeded all preceding ones in healthful educational growth and development. All the instrumentalities which go to promote the intelligence, increase the knowledge and cultivate the morals of the people have been characterized by unexampled energy of action.
- 2. Individual gifts to the higher educational institutions, to libraries and other agencies for extending learning have not only exceeded in number and in amount what has been given in preceding years, but indicate what may confidently be anticipated as to the future. Speaking for the educators of the United States, we express their appreciative thanks to the generous donors who may be living, and exalt and honour the memory of those who are dead.

3. The growth of popular interest in general education has been conspicuously illustrated during the year through the movement toward an organized system of home study and class lectures and examination, commonly denominated the "university and school extension" movement. In the judgment of the Association, it is a movement capable of large beneficial results, but encompassed with It would be idle to some dangers. suppose that any irregular and independent educational work can compare in value with that of the regular institutions, but irregular work may be made of no inconsiderable value to seekers after knowledge who are unable to attend upon the schools. this fact is clearly understood, and if in the organization of the movement the element of home study rather than the public lecture is made prominent, if the public lecture is made of educational value and not a mere entertainment, if the course of studies is arranged and systematized with discriminating care, the movement will bear fruits and scatter blessings along its pathwav.

4. The enlargement of the field of operations of the National Council of

Education, as determined upon at the present session, by means of round table conferences and the original investigation of educational topics of timely interest through the introduction of experts or specialists, seems calculated to promote worthy educational movements more rapidly and to repress and dispose of unsubstantial ones more quickly, and therefore promises to be an instrumentality of much consequence to the educational interests of the country.

5. Regarding, as it does, the free public elementary school system as infinitely more consequential than any other of our educational instrumentalities, the Association observes with great satisfaction the improvements which are continually taking place therein. It is not too much to say that school architecture and sanitation, the preparation of the teacher, the course of seudy, the classification and promotion of pupils, the manner of discipline and the methods of instruction, the general and local supervision of the whole, and all of the numerous details which go to systematize the work adapt it to existing conditions and render it effective have never received so much or so intelligent attention as during year just closing

6. We view with pleasure the spread of kindergarten principles and methods, and trust that they may be generally introduced into the public schools. To this end we recommend that the different States secure the necessary legislation that will enable communities to support and maintain free kindergartens at the public expense. We desire, however, to express our admiration for many of the essentials contained in the organization of the present primary schools, elements which are not contained in the kindergarten, and we therefore desire to be understood as holding fast to the old, while grafting on the present

organization the excellencies of the new.

7. The importance of a more closely related system commencing with the kindergarten and ending with the university to the end that the waste of time, effort and money shall be minimized, and that each grade of the work may aid and support the other is claiming the attention of all thoughtful friends of education. Some progress has been made in this direction. Much more is desirable. It is a problem encompassed with many perplexities and can be completely solved only by mutuality of effort. Yet it must be solved before educators hold out to the people a perfect national educational system, entitled to the first rank among those of the Americans can be satisfied with nothing less, and we confidently look for substantial advances along this line during the coming year.

8. The advance in public sentiment touching the necessity for the special and professional preparation of the teacher has been so marked as to justify us in characterizing it as a revolution. Many of the colleges, even some of the most conservative of them, now recognize the fact that teaching has a scientific basis by providing for instruction in the science of pedagogy. State normal schools are flourishing and multiplying, while they are gradually confining their work more and more closely to pedagogical science. Cities which are to be regarded as in the van of educational progress are drawing their supply of teachers almost exclusively from local normal schools or classes. Professional training classes are being pushed out into the smaller villages for the benefit of the outlying districts. The time is not in the future, it has arrived, when the intelligent sentiment of the country sees the fact that knowledge of the history and philosophy of education, and of the developing processes of the human mind, is essential to the equipment of a good teacher. The time is not far distant when the intelligent sentiment of the country will submit its children to the care and instruction of no persons who are not so equipped.

- o. We have observed during the last year a most striking advance of sentiment in several of the large cities in regard to the selection of none but a professional expert as superintendent of instruction. So strongly has this sentiment been asserted in two or three conspicuous instances as to prove an object lesson for all the cities of the country. Large results must flow from this, and still more gratifying results will follow if a sentiment can be aroused which will insist upon the extension of the same principle to all county or district supervising officers, and to that end we solicit the co-operation of all friends of popular education throughout the country.
- ro. The Association observes with great pleasure the manifest enlargement of educational activity in the Southern States of the union. There is generally apparent in that section of the country an energy of educational effort which must inevitably go far, which has already gone far, to solve some of the social and industrial problems with which those States have been encompassed. With peculiar satisfaction we observe and record the fact, and congratulate our friends of the fair and sunny South upon its development.
- 11. We commend the action of the Government of the United States upon the efforts now in progress for extending improved educational facilities upon the Indian reservations, and to the enlisted men and children of officers of the regular army. We are confident that if this policy shall be pursued the "Indian problem" will be not only less formidable but the

morale of the army will be greatly improved in consequence of it, and we respectfully urge upon Congress the enactment of any legislation which may be deemed necessary to the full attainment of that end.

12. Finally, we urge upon all the friends of education throughout the United States the importance of preparing such an exhibit of the educational work of the country for the Columbian Exposition, to be held at Chicago in the year 1893, as will be a fair and creditable representation of that work, and will reveal to the nations of the world the mighty processes which are in operation for promoting the physical, intellectual and moral well-being of this great people.

Your committee also submits the following memorandum of its sentiments touching those who have conspicuously promoted the success of this meeting:

- 1. The courtesies extended to the Association by the transportation companies and hotels merit and receive our most grateful acknowledgments.
- 2. The zeal and good judgment with which the retiring President of the Association, Hon. W. R. Garrett, has discharged the delicate and responsible duties of his position abundantly justify the wisdom of the choice made at the last annual meeting, and gain for him our lasting regard. The alacrity and efficiency with which the other executive officers have filled their stations, have our highest admiration and entitle them to our most sincere thanks.
- 3. The National Educational Association, assembled for the first time beyond the limits of the United States, and among a people who bear allegiance to another flag, hereby expresses in permanent and enduring form its appreciation of the cordial and sumptuous hospitality with which it has been entertained.

The official action of the Governments of the Province of Ontario, as well as of the other provinces of the Dominion, and particularly of the city of Toronto, must have been conceived in a high-minded spirit of generosity and magnanimity. The complete and felicitous manner in which the high, civil and educational officers of the provinces and the city have given expression to such official action, supplemented by a multitude of courteous attentions which cannot be enumerated, but which will never be forgotten, show that they not only assumed their responsibilities with alacrity, or more likely that they imposed them upon themselves, but also that they have discharged them as a "labour of love."

But even this is not all. At every point of contact with the body of the people of this "Queen City of the Dominion," conspicuous for its beauty, its thrift and its quiet and wellordered life, in our temporary homes, in the public thoroughfares, in the churches, in the magnificent educational institutions, which are her glory and pride, in the public assemblages of the Association, we have been impressed with every conceivable manifestation of popular pleasure at our presence. Such popular demonstrations can spring only from hearts attuned to the music of the humanities, and minds enriched by the culture of the schools and the refined social intercourse of a liberty-loving, God-fearing people.

These things have not only rendered this annual session of the Association a highly enjoyable and profitable one, but one whose conspicuous success will make it memorable in the educational history of our country, of the western continent, and of the world.

We gratefully acknowledge our obligations and express our appreciative thanks to all who, in will or deed, have contributed to our pleasure and the success of this meeting. would say more. We wish for all our Canadian friends Heaven's richest blessings. May virtue and domestic felicity here abide in every home. May social order and tranquillity here abound. May intelligent and healthful industry fill the cup of their prosperity to the brim. Even more. May great results flow from this meeting. May our intermingling be of some permanent avail. Here, under the folds of two flags, one of which we each love and both of which we all honour, for the many thousands assembled and that still greater multitude whom we represent, in fraternal regard and mutual respect, let us pledge the faith of the educators of the Republic and the Dominion that upon this American continent, without reference to political divisions, there shall be the fullest fruitage of that spirit of liberty, the fullest growth of that respect for law, the most widespread diffusion, and the most complete development of that intelligence and culture which has been ensured by the blood of the fathers, and which the flags of the two great Englishspeaking nations illustrate and enforce around the world.

[Presented by the Hon. Judge Draper, State Superintendent New York, Chairman of the Committee on Resolutions.]

[&]quot;WHEN thou wishest to give thyself delight, think of the excellences of those who live with thee; for instance, of the energy of one, the modesty of another, the liberal kindness of a third."

⁻Marcus Aurelius.

[&]quot;A YOUTH is sent to our universities, not (hitherto at least) to be apprenticed to a trade, nor even always to be advanced in a profession; but, always, to be made a gentleman and a scholar."—Ruskin.

THE TEACHING OF SCIENTIFIC METHOD.

(Continued from p. 265.)

ON the present occasion, I may fitly bring my address to a conclusion by calling attention to a few simple experiments in illustration of the method of teaching of which I am an advocate. [The remaining portion of the address was illustrated with experiments.]

In the first place, I hold that, in order that children may acquire scientific habits, they should be led to look around them and take note of all the various objects which present themselves to view; lists of such objects having been prepared, their several uses having been as far as possible realized, and much simple information as to their origin, etc., having been imparted by reading lessons and practical demonstrations, a stage will be reached at which the children can themselves begin to determine the properties of common objects, generally by measurement. The measurement lessons in the first instance may be of the simplest kind. Much may be done with the aid of a boxwood scale divided into tenths of an inch on the one edge, and into millimetres on the other; with the aid of such a scale children may learn to measure accurately and may be taught the use of decimals and the relation between the English and the metric system. Obviously such work might well form part of the arithmetic lesson, and there can be no doubt that "practical arithmetic" lessons would often be far more easily mastered and be more interesting than are the dry problems of the books. It is easy also to take advantage of the opportunity afforded by these lessons to impress useful information of quite another character by such an exercise

as the following, for example, which I suggest, however, merely by way of illustration and not as in any sense novel — "Third class passengers usually pay fare at the rate of one penny per mile. Ascertain from a railway time-table (Bradshaw) the fares to a number of the chief towns in England, Wales and Scotland from London, and then calculate the distances in miles and kilometres (1 kilometre is equal to 1000 metres)."

In the next place, the measurement lessons may take the form of lessons in weighing. I am of opinion that the disciplinary effect of teaching children to weigh exactly cannot be over-estimated; it matters little what is weighed, provided that the weighing be done as accurately as the balance at disposal permits. Worthington, in his invaluable book " Physical Laboratory Practice " (Rivingtons), has advocated the use of a simple balance costing only 4s. However suitable this may be for demonstrating certain principles in physics, its use is to be entirely deprecated, in my opinion, for the purpose I have in view; I would urge most strongly that a far better instrument be procured, such as one of Becker's (of Rotterdam; English agents, Townson and Mercer) balances, costing, with suitable weights, about £3. In using such a balance, care has to be taken in releasing the beam and in bringing it to rest again; the pans must not be allowed to swing from side to side, but must be made to move gently up and down; the weights must be lifted on and off the pans with pincers, not touched by the fingers, so as to preserve them untarnished; and the weighing can,

and, in fact, must be made with considerable exactness. Finding that so many precautions have to be taken, and being severely reprimanded if careless in using such a balance, the child acquires a wholesome respect for the instrument and soon becomes careful and exact. Weighing with the four-shilling pair of scales can afford no such discipline; their use in no way serves to correct the tendency-to quote a schoolboy phrase -to "muck about," unfortunately inherent in youth; a tendency which can, I believe, be more successfully counteracted by proper measurement lessons than in any other way. objection made to the purchase of so costly a balance for school use, I hold to be quite unwarrantable; schools have no hesitation in charging for the use of books, and a charge of half-a-crown a year would more than cover their cost, if it were not possible to provide weighing appliances as part of the school furniture. been told that you cannot trust boys to use so delicate an instrument as that I advocate; and probably you cannot, if you wait until they have grown past control; but I believe that the difficulty will not arise if the instruction be given to children when quite young.

Having learnt to measure and weigh exactly, the children may be set to examine things generally. of the best exercises that can be devised consists in weighing and measuring rectangular blocks of different kinds of wood, and then reducing the results so as to ascertain the weights of equal bulks: in this way the child is led to realize that in the several varieties different amounts of the wood-stuff are packed into the same space; that some woods are denser than others. The relative densities may then be calculated, taking the lightest as standard; and also their densities, i.e., the quantity of wood-

stuff in the unit of volume, choosing several different units both of mass and of volume. The data thus obtained may be made use of in many ways, e.g., in setting arithmetical problems as to the weight of planks, etc., of various sizes; and lessons may at the same time be given as to the uses and characters of the different woods, the trees from which they are obtained, etc. In a similar manner, common liquids may be studied comparatively with the aid of a simple "destiny" bottle, constructed by filing a nick down the glass stopper of an ordinary 2 oz. narrow-mouth bottle, which may also be used in determining the relative density of solids of irregular shapes. Children are thus put in possession through their own efforts of a series of numerical data whereby various materials may be chacterized, and can be led to realize that it is possible to convey exact information by quoting these numerical data.

It is almost superfluous to point out that when the use of the balance has been learnt, a stage is reached at which the study of levers and other simple mechanical powers may very properly begin; and that the determinations of densities of liquids serve as an appropriate introduction to Hydrostatics.

Measurements of another kind, which afford most valuable training, are those effected with the aid of a thermometer. It is most important that the use of this instrument should be generally understood—especially by women. It is astonishing how few people know the temperature at which water boils; and how mysterious an instrument to most is the clinical thermometer. Practice having thus been acquired in making measurements, and considerable knowledge having been gained of properties of common materials, I would advocate the quantitative study-especially by

girls—of the effect of heat on vegetable and animal food materials, and subsequently on earthy substances and metals: such exercises would serve as an appropriate introduction to the study of chemical change, which at this stage should be entered on more particularly with the object of developing the reasoning powers. I propose to give two examples by way of illustration—the one relates to the discovery of the composition of air; the other to the discovery of the composition of chalk.

In considering air, it is the practice with most teachers, I believe, to explain, and in some cases demonstrate, how oxygen may be prepared, and how brilliantly many substances burn i in it; air is then stated to be a mixture of oxygen with nitrogen in certain proportions, and certain proofs of this statement are advanced. Although much interested in the statements, and delighted at witnessing the firework displays which attend combustion in oxygen, the young student is not much the wiser for such lessons: a certain amount of "prepared food" has been put into his or her mouth, but no understanding acquired as to how it has been prepared, or whence it came. I advocate an entirely different course; I would not say one word as to what air is, or as to its having anything to do with combustion, but would lead the scholar to discover that air is concerned in many common changes which apparently occur spontaneously, and to understand how the discovery that this is the case is made. ing directed attention to the manner in which animal and vegetable substances gradually decay, and are destroyed when burnt, and to the rusting of iron, etc., etc., I would propose that such changes should be experimentally investigated, and suggest that as iron rusts so readily when moist, the rusting of iron should be first examined; then would come the

question, "But how is this to be done?" Having become so habituated to the use of the balance, and to express facts by numerical data, the student would appreciate the advice, " Let us see whether the balance will not aid us; let us endeavour to ascertain whether the iron gains or loses in weight during rusting." A clock glass or saucer is therefore weighed; some iron borings or nails are put upon it, and the weight ascertained; and as iron is known to rust more rapidly when wet, the borings nails are wetted and set aside to rust. After several days, the rusted iron is dried in an oven and weighed: it is found that the weight has increased, whence it follows that something from somewhere has been added to the Thus a clue has been gained, and, following the example of the detective in search of a criminal, this clue is at once followed up. did the something come from? might be the water: but is there no other possible 'offender'? Yes—the iron rusted in air." This suggests the experiment of exposing wet iron in air in such a way as to ascertain whether the air is concerned in the rusting. Some borings are tied up in a piece of muslin, and the bag is hung from one end of a piece of stout wire, bent round at the opposite end, so as to form a foot; the wire is set upright in a dish full of water, and a large pickle jar is inverted over it, with its mouth in the water. iron is thus shut up over water along with air. Gradually the iron rusts, and concurrently the water rises in the jar—showing that the air is concerned, as no rise is observed in a comparison experiment without the But after a time the water iron. ceases to rise; measurement shows that only about one-fifth of the air disappears. Clearly, therefore, the air is concerned. The experiment is repeated, and the same result obtained; fresh iron is put into the residual air, and still no change results: hence it follows, that although the air plays a part in the rusting of the iron, the air as a whole is not active, but only one-fifth part of it, which serves to suggest that the air is not uniform, but has parts. Consider the importance of the lesson thus learnt; the number of discoveries made by a few simple quantitative experiments; the insight into exact method which is gained by a thoughtful worker.

To pass to my second examplethe discovery of the composition of chalk: how is this to be effected? would call attention to what is known about chalk by people generallywhat it is like, where it occurs, and what it is used for, and ask whether there is no well-known fact connected with chalk which will serve as a clue, and enable us to apply our detectives' method. One of the great uses of chalk is for making lime, which is got by burning chalk. Is there anything known about lime which shows that it differs from chalk? Yes, when wetted, it slakes and much heat is given out, while chalk is not altered by wetting; when the experiment is made quantitatively, lime is found to increase about 33 per cent. in weight on slaking. Let us then study the conversion of chalk into lime by burning, and as our unaided eyes tell us nothing, let us call in the aid of a balance. A weighed quantity of chalk is strongly heated, and is found to grow lighter; after a time no further loss is observed, and when this is the case, the loss amounts to, say, about 43 per cent.; on repeating the experiment, the same result is always obtained, and therefore it cannot be an accident that the loss amounts to only about 43 out of every 100 parts of chalk. What conclusion are we to draw? Evidently that the stuff composing chalk con-

sists of lime stuff plus something else which is driven off when the chalk is What is this something can't we catch it as it is given off? We can, but the experiment is difficult, requiring special appliances, owing to the high temperature required to burn chalk in a close vessel.] If not, is there no other clue which can be followed? Yes, there is. is to be supposed that at an earlier stage in the experiments, attention will have been directed to the way in which discoveries were made in early times; to the fact that various substances were found to act upon each other, giving new substances; and that when a new substance was discovered its action on the previously known substances was studied. in this way various acids were discovered; and that it was found out that these were powerful solvents of metals, earthy substances, etc., - of chalk, among other substances. What happens to chalk when thus dissolved in an acid? The experiment is tried, and it is found that an air-like substance or gas escapes as the chalk dissolves. How does lime behave with acid? It is found on trial to dissolve, but no gas is given off. May it not be then that the gas which is given off when chalk becomes lime, is also given off when chalk is acted on by acid? Let us find out how much gas is given off in this latter case. A weighed quantity of chalk is dissolved in acid and the gas measured, a simple apparatus being used, like that figured in the last British Association Report (cf. Nature, April 23, 1891); it is found when several experiments are made, that, on the average, about 22,000 cubic centimetres of gas are given off per 100 grams of chalk, and chalk is thus shown to be characterized not only by the percentage of lime which it yields, but also by the amount of gas which it affords when dissolved in acid.

What is the weight of the gas that escapes? The experiment is carried out I by means of a very simple apparatus and the all important discovery is made that the weight of the escaping gas is just about what was lost on burning chalk. There can be little doubt, therefore, that the gas thus studied is "the something" which is given off when chalk is burnt. perhays it may be possible to reassociate this gas with lime and produce Lime is therefore exposed in chalk. an atmosphere of the gas, and the increase in weight determined; it is eventually ascertained that the lime increases in weight to the extent required on the assumption that it is reconverted into chalk, and on examining the product it is found to behave as chalk both when heated and when dissolved in acid. the problem is solved, and it is determined that chalk stuff consists of lime-stuff and chalk-gas: I employ these terms advisedly, and advocate their use until a much later stage is reached, when systematic nomenclature can be advantageously made use of.

In talking about chalk, it may be pointed out that chalk is believed to consist of skeletal remains and shells of sea animals, and when the composition of chalk has been ascertained, the suggestion come naturally to examine shells. When their behaviour on burning and towards acid is studied quantitatively, results are obtained which place it beyond doubt that they essentially consist of chalk-stuff. The chalk studies thus become

of very great importance, and may be made to cover a wide field.

It is not to be denied that there are difficulties connected with such teaching as that I am advocating, but it is a libel on the scholastic profession to assert that the difficulties are insuperable. I am sure that in this case the old ever-true saying may be quoted: - "Where there's a will there's a way." Such teaching has not yet been given simply because there has not yet been the will to give it; because its value has not yet been appreciated. No doubt there must be less class teaching, more individual attention, an adequate proportion of the school time must be devoted to the work, and properly trained, sympathetic teachers must be called in to give such instruction.

When scientific method is taught in schools, there will inevitably be a great improvement in school teaching generally; it will be carried on in a more scientific manner, and new methods will be introduced. Indeed, I have already learnt from a headmaster in whose school experimental science teaching is receiving much attention, that the leavening effect on the teachers of some other subjects in the school is quite remarkable, and that they are clearly being led to devise more practical modes of teaching.

Photography and the lantern, also, are modern weapons of great power, which often enable us to clothe the dry bones of otherwise unattractive subjects with pleasing drapery. And here the parent can often intervene with great effect.

[&]quot;We have to rise above ourselves, not above our neighbours; to take all the good of them, not from them, and to give them all our good in return."—George Macdonald.

[&]quot;BRIGHT-EYED Fancy, hovering o'er, Scatters from her pictured urn Thoughts that breathe and words that buin."

—Grav.

THE POWER OF APPRECIATION.

ORE often than not the power of appreciation is spoken of with a half contempt, as if hardly worth having. Appreciation is regarded as the humble antithesis of that creative power which makes things, and does things, and moves the world. It is a passive, unoriginal, shy, quiet quality which neither shines nor shouts before men, and hence is relegated, with a sneer perhaps, to the domain of the drones and the non productive members of the race.

But, in spite of this disestimation, appreciation is a rare and precious possession, of great value to the owner thereof, and of great good to the world at large. And it is misprized in part because of this very unobtrusiveness, this delicacy of na ture germane to it. In the realm of the fine arts or literature, appreciation has the fairly divine function of picking out the true and the beautiful, of giving its gentle but emphatic verdict, to the enheartening of the artist, and the notifying of the Philistines that they must leave the fleshpots of Egypt for the feast of the soul. Where would be the creators of the artistic, the lovely, and the sublime, were it not for the small band of those who really and truly appreciate? It may be almost said that these latter are the complement of genius, so necessary to its discovery and furtherance are they.

In the realm of nature it is the selfsame thing. Appreciation notes the smallest manifestation of earth and sky in the way of grace, harmony and fairness; draws delight therefrom, and transmits that delight to others by pointing out the source of pleasure and inspiration. It is the part of appreciation to take cognizance of the common flower at our doorway; not

the magic blue flower on the other side of the world, nor even the more splendid bloom in our neighbour's field, but just the daisy or the clover blossom close at hand and familiar. This is a truly divine mission, and the recognition of the beautiful in what is staled by being often seen or handled, is a power which alone declares appreciation no mean brother to inspiration and the creative faculty. How seldom do we find those with the gift of getting out of the near-at-hand and the homely what is inherent in We all know that without them! this gift of appreciation travel is useless and a vain show. "They change their skies, not their dispositions, who can cross the seas," quoth Horace. If one utterly fails to see the grandeur or the charm in the mountains that hem his home horizon, or to feel the witchery of the sea that booms or glistens beyond his door, it is pretty sure that Mount Blanc herself will not do much for that person, nor all the seas and waters of earth greatly seize on his emotions. It is the unpretentious extracter of honey from the thistle who revels in and rightly apprises the gardens of the King.

And in the realm of character it is not otherwise. Your friend who carries about with him the touch-stone of appreciation finds daily and even hourly proof of the worth and nobility of his fellow-creatures where a less sensitive soul never suspects the truth. And how we all do long for genuine appreciation! Not for the careless plaudits of people who judge from the outside, but for the deeper, discriminating approval of one who knows us as having searched the heart and the reins. This is one of the reasons why we turn yearningly and instinctively to God Himself.

"God sees us," says George Eliot, "as we are altogether, not in separate feelings and actions, as our fellowmen see us." But some seem to partake of a moiety of that august intuition and to judge accordingly. Those are they who have the power of appreciation, who carry a metewand and a divining-rod, the one to measure stature withal, the other to discover the gold nuggets beneath the rugged soil of character. What a broadening and bettering effect on the person himself has this faculty, and what a beneficent effect on all the hosts he comes in contact with. Such an influence is beyond human soundings.

The more we reflect, the more

evident it becomes that the power of appreciation, so far from being merely a neutral and well-enough thing to possess, is a positive and richly productive possession, a talent which brings to the holder of it as much blessing and happiness as any gift whatsoever (albeit less showy than some), and which is to mankind an incalculable benison, as sure and strong in its working as the influence of moons upon oceans. And it is a grateful thought that, whereas genius is sporadic and non-cultivable, the virtue and power of appreciation can be exercised and fructified in one direction or the other, by every man and woman who breathes and loves and suffers.—Sunday School Times.

PUBLIC OPINION.

MAKE ME THINKS—The spirit of the age (cays Professor S. B. Todd, of Kansas) is opposed to work. Machinery has made men lazy physically, and our system of education is helping to propagate mental indolence. Move me, sadden me, amuse me, make me weep, make me laugh, make me dream, make me feel, cry the masses of humanity; but a very few say "Make me Think."

THE N. E. A.—The absence of the noted Britishers, Mr. Mundella and Prof. Meiklejohn, who there was reason to expect would cross the Atlantic to address the Association, was a disappointment; but the rough and ready, dead earnest spirit of Principal Grant pleased the large audience greatly. In true Saxon loyalty he swore by the British crown; but his genuine appreciation of American institutions warmed everybody to the heart. — Intelligence (Chicago).

A QUIET SUNDAY.—They all notice Toronto's quiet Sunday-no street cars, no open places of business. entire cessation of secular work-and the great majority seem disposed to commend Toronto's wisdom in keeping Sunday quiet as long as possible. And this is just what Toronto will do. if one may judge from appearances. Notwithstanding the agitation of a few months ago on the eve of the leasing of the street railway franchise, when the privilege of running cars on Sunday would have greatly enhanced its value, there is not a word heard on the subject just now. There can be no doubt that a majority of the people of Toronto are opposed to Sunday street cars, and a few years will show that it pays this city to be unique in this respect.—The Montreal Witness.

THE PLAIN CAUSE. — It will be admitted by those who critically study educational matters that it is occasion

for regret and for amendment, if this life as well as "teaching for the love possible, to see that the best intellectual and disciplinary ability is diverted from the teaching profession, at least so far as our public and high schools are concerned. Young men of brilliant attainments and endowed with an individuality that would compel success in teaching studiously avoid it.

The plain cause of this is the small salaries paid our teachers. practical age the teacher is comforted with the bread-and-butter aspect of

of it." If there is no financial inducement the profession is bound to become the field of mediocre ability and our children are made to bear the consequences.

The matter is far reaching. Not only is the individual welfare of every pupil at stake but the future interests of the community and of the country are involved. Let them not be sacrificed to the niggardly, "Penny-wise, pound foolish" policy now in force.--Telegram (Toronto).

GEOGRAPHY.

FORTY-FOUR STATES.—The national flag has emblazoned on its forty-The law provides that an four stars. additional star, after the addition of any new state to the Union, shall not be added to the official flag until the Fourth of July next succeeding. Accordingly, the star of Wyoming, which was admitted to the Union July 11, 1890, appeared for the first time on our flag. The increase to forty-four indicates the marvellous development of the country and the unprecedented growth of the nation. -The School Fournal.

A RAILROAD ACROSS AUSTRALIA. --A new era will open for the continent when the transcontinental railroad is finished. In the south 698 miles of the road are already completed between the port of Adelaide and Angle In the north the railroad has Port. been completed from Port Darwin south as far as Pine Creek. The distance yet to be covered is 1,098 miles, of which it is thought nearly half will be built this year. Most of the country through which the road passes can obtain plenty of water by means of artesian wells.—The School Fournal.

THE ELEVENTH CENSUS. -- A monument of grey limestone has been erected by the Chicago Herald to mark the present centre of population of the United States. A similar thing was done in 1810, when the centre was several miles north-west of Washington, D.C. The centre of population has moved westward at about forty-five miles every decade. Its location each decade since 1790 is as follows: In 1790, 23 miles east of Baltimore; in 1800, 18 miles we t of Baltimore; in 1810, 45 miles northwest by west of Washington; in 1820, 16 miles north of Woodstock, Va.; in 1830, 19 miles west by south-west of Moorefield, W. Va.; in 1840, 16 miles south of Clarksburg, W. Va.; in 1850, 23 miles south-east of Petersburg, W. Va.; in 1860, 20 miles south of Chillicothe, Ohio; in 1870, 48 miles east by north of Cincinnati, Ohio; in 1880, 8 miles west by south of Cincinnati, Ohio; in 1800, 20 miles east of Columbus, Ind.—Educational Gazette.

ONE THING IS SURE .- One thing is sure, we "Americans" learned something during our visit to Canada. We learned in the first place that Toronto is a pretty large city-200, 000-and is quite as enterprising and more beautiful than most American cities of that size. Canadian geography and history will be taught with better understanding in many schools of the United States henceforward. In our conceit we expected to show the Canadians a thing or two about schools. Perhaps we did; but we were obliged to confess that they had a good deal to teach us. - The Tri-State School News (Ind.).

A GREAT WATERWAY.—The great canal between the North and Baltic Seas, which is now being constructed by the German Government, is des-1 tined to be one of the greatest artificial waterways of the world. three centuries the project of cutting through the Danish peninsula has been discussed, but it has only been seriously considered during the last thirty years. It took positive legal form in 1886, and in 1887 the work was begun. Since then thousands of men have been employed on it, and at the present rate of progress it will require the labour of 7,000 men seven years to construct the gigantic work, which will be completed in 1895, and cost over \$37,000,000. The canal is nearly sixty miles long, running across the province of Schleswig-Holstein north-east by south-west from Holtenau, on the Bay of Kiel, to Brunsbuttel, on the River Elbe. At lowest tide it is to be 20 feet deep and 115 feet wide at the bottom, and will thus permit the largest Baltic steamers to pass each other. about fifteen miles it runs through a line of I ills where the cut to the

bottom of the canal is from 45 to 100 feet, and on the watershed between the Elbe and the Eider an excavation of about 95 feet is required for nine miles. The work calls for the removal of an immense amount of earth and rock, and indicates in a measure the gigantic character of the undertak-All told, it is estimated 78,000,ooo cubic meters of earth will have to be moved, or enough to cover nearly 30 square miles to the depth of a yard. The cost is borne by the Russian and German Governments in the proportion of one or two and one-tenth, but Germany constructs the work and will control the canal when finished, so much so that in times of war only German war ships pass through it. The saving in time will be an immense item even for one year. It now requires about three days for a steamer to go around the Skaugh: it will take but half a day to get through the canal. This, when 29,ooo steam and sailing vessels are concerned, means a saving of time equivalent to at least 1,500 men's labour for a whole year. But there is besides a vast saving in the lessening of risk and the prevention of wrecks. The Sound is now proverbially dangerous, and thousand of dollars' worth of property and many lives are lost in passing through it every year. tween 1877 and 1881, for example, 708 lives were lost. From a national point of view it will be a great advantage to Germany, as it will unite the German seaport Wilhelmshafen on the North Sea with Kiel on the Baltic. and its opening will prove to be strategically and commercially one of the events of the century.—The Free Press (London).

ones, make new opinions, fight old ones, and compare those of youth with those of an altered state of thought and society.' -De Tosqueville.

[&]quot;In these days one must not only live ! upon what has been learnt, but learn more; and instead of sleeping away our acquired ideas, we should seek for fresh

NOTES FOR TEACHERS.

ORIGIN OF HOSPITALS.—We are accustomed to think that hospitals are of modern origin. They existed in India as early as the fifth century, B.C. In Ceylon, King Pandukabhayo established a hospital in his Palace, and one of his successors, King Dutthagamini, in the second century before Christ, established eighteen such institutions. The Buddhist king, Asoka, had, about the year 250 B.C., hospitals for both men and animals.—Our Times.

THE WORDSWORTH MEMORIAL.-We learn that a gathering of Wordsworthians was held a few days ago in Mr. Craik's room at Messrs. Macmillan & Co.'s, to hear the report of the Wordsworth Memorial and Purchase of Dove Cottage Committee. The Rev. Stopford Brooke was in the chair. It was stated that £1,020 had been subscribed, and that after payment of all charges there was a balance in hand of £200. trustees were appointed, including Sir H. Davey, M.P., Professor Bryce, M.P., Professor Knight, Mr. Craik, and Mr. Stopford Brooke. Professor Knight, of St. Andrew's, promised some very valuable contributions in the form of portraits, autographs, relics, and a complete set of Wordsworth's books, in first editions. excepting the hopelessly rare one "The Evening Walk." - The Publishers' Circular.

THE LONDON "SCHOOL GUAR-DIAN," ON SECULAR EDUCATION, AND MR. ROBERTSON'S PAPER.— Our readers will find below an editorial from the School Guardian of London England, referring to Mr. Robertson's paper in a recent issue of THE CANADA EDUCATIONAL MONTHLY:

"THE Bishop of Manchester has lost no time in addressing the beneficed clergy and leading laymen of his diocese on the subject of Free Edu-He advises school managers to accept the fee-grant and to adapt themselves to the condition of things created by the new Education Act, and he does so because he thinks that in this way only can Voluntary Schools be preserved. In urging that the most strenuous efforts should be made for the maintenance of Voluntary Schools he is largely influenced by the fear that the abandonment of any large proportion of them would inevitably lead to a purely secular system of Board School education. Such a result would, he considers, be nothing less than a national cal-In estimating the weight to be attached to the bishop's warning we must remember that he is not conjuring up imaginary terrors, but is speaking from his own long experience of the results of a secular system in The bishop concludes his letter by an earnest appeal to Churchmen, and more particularly to the wealthier Churchmen, in his diocese to contribute according to their ability to 'The Special Diocesan Fund for the Aid of Voluntary Schools,' and he sets the example himself by promising to contribute to the fund 100l. a year for five years. We feel the utmost confidence that the wealthy Churchmen of one of our richest counties will respond to this appeal in no niggardly spirit.

"If it were necessary to enforce the arguments of the Bishop of Manchester, we could not do so better than by referring to an address delivered by Mr. W. J. Robertson to the members of a teachers' association at St. Catharines, Canada. Our space does not permit us to quote the whole of

the address, but in another column we give some extracts from it which will be found full of interest and instruction. Mr. Robertson, it must be remembered, is speaking of a system of education that is free and compulsory, and which is controlled by what many regard as a panacea for all educational evils-a Minister of Education. It would be amusing, if it had not also a serious side, to note the writer's opinion that, far as the Canadians have gone, the end is not yet. He says 'free books will come next in order, then free dinners, and then free clothing, and finally free pocket-money and free tickets for public lectures and entertainments.' But the main question that the writer, asks is whether the free and compulsory educational system in Canada has resulted in improved morality? His answer is given unhesitatingly, and a terrible answer it is: 'The moral condition of our political atmosphere to day is more corrupt than at any time in our political history.' 'The old-fashioned honesty of our fathers and grandfathers has almost wholly disappeared in some parts of our land.' . . . ery-a low shrewdness which aims perpetually at overreaching one's neighbours, is so common as scarcely to call for observation.' These are the words not of a heated partisan, nor of one who speaks from mere hearsay but they represent the deliberately expressed opinion of a teacher speaking to teachers. These evils he does not attribute to the spread of education, but he boldly asserts that the educational system and the educational methods in Canada, while not the cause of crime, have not been preventatives. The real reason why education has been at best only a neutral force in moral improvement he considers to be the idea that the functions of the teacher begin and end with intellectual work, using the word

'intellectual' in its narrowest sense. We are unable to follow Mr. Robertson in the consideration of the various remedies he suggests for this state of things, but we cannot refrain from saying that his proposed remedies seem to us wholly inadequate."

IF NOT A PROFESSION—WHY?—The phrase "teachers' profession" is persistently used by many and as persistently objected to by others. is the ground for objection? County Superintendent Bruce, of Topeka, puts it into plain words. After the statement that no lawyer or doctor would be allowed to practice on the short preparation of the teacher, he asks: "Where is the lawyer or dentist who used his profession as a stepping stone to any other occupation? But the teacher does this. The compensation of the common school teacher is inadequate to the needs of any profession. His rank and influence in society are too insignificant. amount of pride he manifests in the elevation of the calling, is expressive of nothingness. His hours devoted to reading and study along the lines of his work are too few and too far between. The consultations with his brethren are too infrequent." These are plain words, but, to be honestly critical, are they not too true? It is not the amount of "reading," "study," and "consultation with the brethren," that is done by the commissioned officers of a regiment, that correctly gauges the opinions and efforts of the whole body of men composing the regiment. If there is not enough enthusiasm and inspiration in the educational leaders to spread over the whole body of teachers, and arouse the ambition to elevate the teachers' calling into a profession, then it is the inertness of the main body that will decide, in public opinion, against the fitness of the term "profession." The

appellation must be earned by working in a professional spirit or it will not be accepted by other professions, or by the world, merely because it is assumed.—The School Fournal.

"TRICKY BOYS."—What is the reason we hear so many boys saying "honor bright" to each other when they are making trades or promises? Is it because boys cannot trust one another, and are obliged to put in an extra proof that they mean to fulfil their obligations?

A few days since I heard one boy say to another, "You'd better look out for Fred Wilson; he is a tricky boy." Inquiring into the matter, I found that "tricky" in Fred Wilson's case meant getting the best of the bargain in trades by representing things to be better than they really are; making certain promises that he never fulfilled and did not expect to fulfil when he made them. He was a boy who was not reliable, and nobody could depend upon him. Fred was a fine talker; the boys said he could get around anybody if he tried to. Some boys who thought themselves quite clever had been "taken in " by him.

Now, boys, do you know what kind of man Fred Wilson will make? Unless he changes very much, he will be a dishonest, unjust, unreliable business man. There are too many such men in the world already. What we need are true, square, honest dealers in business everywhere. The boys who are growing up to take positions of trust and responsibility in life

should begin now to be straight in all their transactions with each other. Don't represent what you have to offer in trade as being better than it really is. A number of years ago there was a boy whom I knew who used to "swap" chickens and rabbits with other boys. He made it a point to get the best of the bargain always, if not by fair means, by unfair ones. He generally made these bargains with boys younger than himself. When he got older, he managed somehow to keep himself in pocket money, which his family, having a hard time to make ends meet, could not furnish him with. He had a "knack," they said, of keeping himself in money. Small pieces of money were often missed in the household, and sometimes at the neighbours', and oftentimes he managed to get the pennies away from the small boys at school. Nobody seemed to suspect him of getting it dishonestly, although he was always known as a "tricky boy" among his schoolmates. When he became a man, he was given a position of trust and responsibility. handled a great deal of money, and no one suspected him of being dishonest in any way. But the time came when it was found that he had been stealing thousands of dollars from his employers. He is in State Prison now, and just before he went he confessed his crime, and said, "I was always dishonest; when I was a boy I did not seem to have any true sense of honour. If I had only begun then to be straight and square in my dealings, I should not be a convict in State Prison to-day."-Susanna Paine.

business of life, so as to extract the greatest possible portion of comfort out of small means; the refining and tranquilizing enjoyment of the beautiful in nature and art, and the kindred perception of the beauty and nobility of virtue; the strengthening conciousness of duty fulfilled; and, to crown all, 'the peace which passeth all understanding.'"

[&]quot;The appropriate and attainable ends of a good education are the possession of gentle and kindly sympathies; the sense of self-respect and the respect of fellow-men; the free exercise of the intellectual faculties; the gratification of a curiosity that 'grows by what it feeds on,' and yet finds food forever; the power of regulating the habits and the

EDITORIAL NOTES.

THIS month we give all that our space will allow us to print of the proceedings of the National Educational Association of the United States. We specially commend to our readers Principal Grant's Address. In it are found sentiments and teachings of the highest value to all Canadians.

MR. COLIN SCOTT, Ottawa, has a paper in this issue on a subject regarding which there is and has been dissatisfaction for years. Can any improvement be made in our High Schools in the subject of Drawing? This Magazine is ready for suggestions; let Drawing Masters speak out on the matter.

WE direct the attention of our readers to the advertisement of the North-west Teachers' Bureau, Regina, N.W.T., the announcement of which recently appeared in THE CANADA EDUCATIONAL MONTHLY. Its object is to aid Boards of Trustees and teachers in making or receiving appointments. Mr. Jno. J. Young is the manager.

OUR BROTHERS.

- O Englishmen! in hope and creed, In blood and tongue our brothers! We, too, are heirs of Runnymede; And Shakespeare's fame and Cromwell's dee Are not alone our mother's.
- "Thicker than water," in one rill,
 Through centuries of story,
 Our Saxon blood has flowed, and still
 We share with you its good and ill—
 The shadow and the glory.

Joint heirs and kinfolk, leagues of wave
Nor length of years can part us;
Your right is ours to shrine and grave,
The common freehold of the brave,
The gift of saints and martyrs.

Our very sins and follies teach
Our kindred frail and human;
We carp at faults with bitter speech
The while for one unshared by each
We have a score in common.

We bowed the heart, if not the knee, To England's Queen—God bless her!

-J. G. Whittier.

SCHOOL WORK.

CLASS-ROOM.

HIGH SCHOOL ENTRANCE EXAMINATION.

(Continued from last month.)
TEMPERANCE AND HYGIENE.

Examiners.—I. S. Deacon; Isanc Day.
NOTE.—Any five questions may be taken.
A maximum of five marks may be added for neatness.

1. State fully the service rendered by water in the process of digestion. [15]

- 2. Give some of the quotations of your text-book from Solomon and Saint Augustine on the evil effects of wine-drinking. [15]
- 3. Show that, unlike our food or the natural drinks, alcohol, when used as a daily beverage, creates a thirst for larger quantities. [15]
- 4. "Compared with milk, alcohol shows no trace of being a food in any particular."—(Text-Book.) Make a full comparison to prove this statement. [15]
 - 5. Shew that the work of the heart is

greatly increased by even a "moderate" use of alcoholic drinks. [15]

- 6. Shew that alcohol is rightly named a stimulant, and contrast the weariness that follow its use with that arising from physical exercise. [15]
- 7. Give several illustrations to show that the use of artificial drinks is unuecessary. [15]

AGRICULTURE.

NOTE.—Only five questions are to be attempted. A maximum of five marks may be added for neatness.

- r. (a) What evils result to the soil and to the crop from the growth of weeds? [7]
- (b) What means should be taken to destroy the Canada thistle? [8]
- 2. Explain the terms: temporary pasture, soiling, surface drainage, trenching, rotation of crops. [15]
- 3. How could one tell whether a field covered with a crop of wheat half-grown, needed draining or not. [15]
- 4. "The principal operations in preparing the soil for the seed are plowing, cultivating, harrowing, and rolling."—Text-Book. [15]

How does each one of the processes just named affect the soil and the plant growth?

- 5. (a) Why is subsoiling beneficial to the c op? [8]
- (b) What precautions should be taken, in subsoiling, as to the condition of the land and to the time of the year? [7]
- 6. "When fertilizers are applied to soil, it will generally happen that any one kind of crop will not be able to make use of all the elements of plant food which they contain."—Text-Book. [15]

What can the farmer do, that all the elements may be used?

- 7. Write, what you can, on the cultivation of wheat, under the following heads:—
 - (a) Preparation of the soil,
 - (b) Quantity of seed per acre,
 - (c) Time for sowing,
 - (d) Time for harvesting.

JUNIOR LEAVING AND PASS MATRICULATION: 1891.

ENGLISH GRAMMAR AND RHETORIC.

Examiners: W. J. Alexander, Ph.D.; T. C. L. Armstrong, M.A., LL.B.; J. E. Bryant, M.A.

NOTE.—All candidates will take section A. Candidates for the Junior Leaving Examination will take any one question of section B, and candidates for Junior Matriculation any one question of section C.

Α.

This delusive itch for slander, too common in all ranks of people, whether to gratify a little ungenerous resentment; whether oftener out of a principle of levelling, from a narrowness and poverty of soul, ever impatient of merit and superiority in others; whether from a mean ambition, or the insatiate lust of being witty (a talent in which ill-nature and malice are no ingredients); or lastly, whether from a natural cruelty of disposition, abstracted from all views and considerations of self; to which one, or whether to all jointly, we are indebted for this contagious malady, this much is certain, from whatever seeds it springs, the growth and progress of it are as destructive to, as they are unbecoming, a civilized people. To pass a hard and ill-natured reflection upon an undesigning action; to invent, or which is equally bad, to propagate, a vexatious report without colour and grounds; to plunder an innocent man of his character and good name, a jewel which perhaps he has starved himself to purchase and probably would hazard his life to secure; to rob him at the same time of his happiness and peace of mind, perhaps his bread; the bread, may be, of a virtuous family; and all this, as Solomon says of the madman who casteth firebrands, arrows, and death, and saith, "Am I not in sport?" all this out of wantonness, and oftener from worse motives, the whole appears such a complication of badness as requires no words or warmth of fancy to aggravate. Pride, treachery, envy, hypocrisy, malice, cruelty and self-love may have been said, in one shape or other, to have occasioned all the

frauds and mischiefs that ever happened in the world; but the chances against a coincidence of them all in one person are so many, that one would have supposed the character of a common slanderer as rare and difficult a production in nature as that of a great genius, which seldom happens above once in an age.

- 1. (a) Write a grammatical analysis of the first sentence: This delusive . . . civilized people.
- (b) Parse the words in italics throughout the extract.
- (c) Ill-nature, self-love. Why not illnature and selflove? Classify self-love and selfishness as to word formation. Compare the methods of word formation to which they respectively belong as to origin and priority, stages of development and extent of usage in the language.
- 2. Criticise briefly each sentence in the paragraph as to the order of words and terms, clearness and strength, showing the effect of the rhetorical expedients employed.
- 3. Discuss the propriety of each of the following phrases as used in the extract:

Delusive itch for slander, too common, are no ingredients, we are indebted, contagious malady, undesigning action, reports without colour and grounds, plunder of his character, to purchase, out of wantonness or worse motives, to aggravate, in one shape or other, that ever happened, the coincidence.

4. Correct or justify the following expressions as used in the extract, with reasons:

From a natural cruelty, thus much, which perhaps he has starved himself . . . and probably would hazard his life, at the same time, may have been said, production in nature, perhaps his bread, which seldom happens above once in an age.

- 5. Of the following words taken from the extract:
 - (a) Trace any ten to their sources.
- (b) Select any five that survive from old beliefs and customs, explaining each.
- (c) Give other existing forms of any five, accounting in general terms for the different forms and meanings of such words:

Delusive, slander, rank, ungenerous, re-

sentment, ill-nature. ambition, witty, talent, consideration, reflection, undesigning, propagate, innocent, jewel, starve, secure, whole, virtuous, sport, person, chance, genius.

6. Discriminate the following pairs of words, and use each word in a phrase in which the other could not be used:

Ranks, classes; resentment, animosity; merit, worth; insatiate, insatiable; talent, genius; ingredient, component; malady, disease; invent, discover; vexatious, annoying; plunder, rob; hazard, risk; complication, combination.

- 7. (a) Discuss the use of each of the three degrees of adjectives in forming comparisons.
 - (b) Correct or justify each of the following:
- (1) Of all the figures of speech none come so near painting as metaphor.
- (2) He is not such an old man as you. He is just such an old man as you.
- (3) Of all others the vice of lying is the meanest.
 - (4) The lesser of two evils.
- (5) The head boy is a better reader than any boy in the class.
- (6) He is the best reader of any boy in the class.

C.

8. Discuss the propriety and the order of each member of the following pairs of terms as used in extract A.

Meanness and poverty, merit and superiority, ill-nature and malice, views and considerations, growth and progress, hard and ill-natured, colour and grounds, character and good name, happiness and peace of mind, words or warmth of fancy, frauds and mischiefs, rare and difficult.

- 9. State the principle of Syntax that is violated in each of the following, and make the necessary corrections:
- (a) Having failed in this attempt no further trial was made.
- (b) Nothing but grave and serious studies delight him.
- (c) Everything favoured by good usage is not therefore to be retained.
- (d) No man hath a propensity to vice as such; on the contrary a wicked deed disgusts him and makes him abhor the author.

(e) Neither will they be persuaded though one rose from the dead.

HISTORY AND GEOGRAPHY.

Note.—Only nine questions in all are to be answered by any candidate, namely, section A, five questions from section B, two from section C, and one from section D. The two questions marked with an asterisk are for candidates for the Junior Leaving Examination only, and both these questions must be taken by these candidates.

Α.

I. Describe the grievances and complaints of the people of Canada which led to The Constitutional Act of 1791. Describe the provisions of this Act and the hopes of those who promoted it; and show wherein the Act was successful in allaying the discontents of the people and wherein it was not successful.

В

- 2. Describe graphically the conflict at Ligny, Quatre Bras, and Waterloo.
- 3. Describe the policy of William Pitt towards Ireland. How far was he successful in carrying out his policy, and in what respects did he fail? What were the causes of his failure and the results of it?
- 4. Sketch and contrast the respective attitudes of Burke and Pitt towards France during the progress of the French Revolution (1789-1793). State and account for Pitt's final attitude towards the French Government of that time.
- 5. Give an account of the events in the earlier part of the reign of George III. (1763-1792) which were concerned with the development of the freedom of the press and the increase of its influence.
- * 6. Sketch the personal character and political career of the elder Pitt (Lord Chatham) stating particularly his efforts
- (a) In upholding the honour of the empire abroad;
- (b) In promoting the independence of parliament and parliamentary reform;
- (c) In preventing the secession of the American colonies.

Mention any other notable efforts which Chatham made to promote the welfare of the kingdom and advance its honour.

- 7. Enumerate and describe the improvements and advancements made in the technical arts, manufactures, agriculture and commerce of Britain from 1750 to 1790.
- 8. Describe and account for the religious revival which characterized the middle of the 18th century. Mention some results of that revival which extended beyond the immediate sphere of its action.
- * 9. Give an account of Walpole as a Minister of Finance. What were the principles of his financial policy? How far was he able to carry his principles into effect and wherein did he fail? Describe the influence of his policy as Finance Minister and Premier upon the mercantile prosperity of the nation.
- 10. Describe the difficulties and obstacles that stood in the way of the union of England and Scotland in the reign of Queen Anne. How were these overcome or removed? What were the provisions of the Act of Union? What have been the practical advantages of the Union?

c.

- 11. Sketch briefly the political and military career of Julius Cæsar, accounting as far a you can for its success. Give your estimate of Cæsar's character and abilities; also of the influence of his career upon the history of the world.
- 12. Sketch the career of Philip of Macedon, and give some account of the resistance offered to his ambition by Demosthenes. Give your estimate of the influence of Philip's successes upon the development of political freedom in the ancient world.
- 13. Sketch the history of the Persian invasion under Xerxes (B.C., 480), describing more particularly the achievements of the Greeks at Thermopylæ and Salamis. Sketch briefly the military operations of the Persians and the Greeks during the next year (B.C., 479), and state your opinion as to the general influence of the invasion upon the subsequent history of the Grecian States.

D.

14. Describe generally the extent and boundaries of the British Possessions in North America:

- (a) At the beginning of the Seven Years' War (1756);
- (b) At the close of the War of American Independence (1783).
- 15. Describe briefly the position (using modern names) of the following: (a) Gallia Transalpina, (b) Gallia Cisalpina, (c) Liguria, (d) Etruria, (e) Latium, (f) Samnium, (g) Apulia, (h) Asia (propria), (f) Cilicia, (f) Bithynia and Pontus, (k) Thracia, (l) Dacia, (m) Africa (propria),

LATIN GRAMMAR AND COMPOSITION. (Primary.)

Examiners: A. J. Bell, M.A., Ph.D.; William Dale, M.A.; John Fletcher, M.A.

NOTE.—Candidates will take five questions in section A, and five in section P.

A.

- 1. Compose short sentences in Latin to iflustrate the following constructions:
 - (a) The ablative absolute,

(n) Numidia, (o) Mauritania.

- (b) The genitive of price,
- (c) The historical infinite,
- (d) The subjunctive of purpose,
- (e) The gerundive.
- 2. Write the second singular of the future and future perfect tenses of vivo, gaudeo, fio, eo and loquor.
- 3. Explain the use of the cases of the words italicized in the following sentences:
 - (a) Ego, sententiam rogatus, haec respondi.
 - (b) Nunquam illius diei oblitus sum.
 - (c) Vestra maxime interest recte facere.
 - (d) Paucis post diebus in Italiam venit.
- (e) Regi Germanorum nomen fuit Ariovisto.
- 4. Compare novus, proximus, aeger, magnus, paucus, citerior, certus, amicus, diu and maris.
- 5. Decline throughout castra, itinera duo, eodem die, cuius legationis, compluribus his proeliis.
- 6. Give the gender of finis, vulgus, virtutibus, mons, legiones, flumine, pars, domo, fidem, verbis, with rules.
- 7. Show how frequentative, inceptive, diminutive and desiderative verbs are formed, illustrating by examples.

В.

Translate into Latin:

- 8. Ariovistus answered the ambassadors that, if he needed anything from Cæsar, he would come to him, but if Cæsar wished anything, he must come to him.
- 9. On the same day the general was informed that the enemy were marching to meet (obviam) him, and were less than two miles away.
- 10. Cæsar, the greatest of Roman generals, was born in Rome in the six hundred and fifty-fourth year from the founding of the city, and the hundredth year before the birth of Christ.
- 11. Ambassadors were sent to Cæsar by the Aedui to ask him to come, as soon as he could, to their assistance against the Germans.
- 12. He put in command of the legion a young man, whose father he had known very well (familiariter uti), and whom he perceived to be of very great ability.
- 13. When the commander learnt this, he at once dismissed the council, saying that there was need of action rather than of deliberation.

LATIN AUTHORS.

Primary.

Examiners: A. J. Bell, M.A., Ph.D.; William Dale, M.A.; John Fletcher, M.A.

NOTE.—Candidates must take section A, and either section B or section C.

Α.

(Cæsar De Bello Gallico, IV., 16.)

Translate into idiomatic English:

Germanico bello confecto . . . Rhenum postularel?

- 1. Parse: quarum, prædandi, prælio, dederent, æquum, imperii.
- 2. Mark the quantity of the penult of the following words: videret, facile, timere, receperat, dederent, invito, populi, transire, responderunt, existimaret, imperii, potestatis.
- 3. Frumentandi causd. Express the same meaning in three other different ways.
- 4. Derive and explain the meaning of: commentarii, septentriones, clientes, alarii, repræsentare, portorium.

B.

(Cæsar De Bello Gallico I., 36.)

Translate into idiomatic English:

Ad hac Ariovistus . . . sine sua pernicie contendisse.

- 5. Parse: Jus, consuesse, oportere, adventu, illaturum, iis.
- 6. Conjugate: vicissent, uteretur, congressi, manerent, penderent, contendisse.
- 7. Explain carefully the reason for the mood and tense of fecissent and the difference between vectigalia and stipendium.
- 8. Translate the following phrases, explaining the grammatical peculiarities:
 - (a) Ante diem quintum Kalendas Apriles.
- (b) Vulgo totis castris testamenta obsignabatur.
- (c) Tertiam aciem laborantibus nostris subsidio misit.

c.

(Cæsar De Bello Gallico I., 40.)

Translate into idiomatic English:

Hæc quum animadvertisset. . . nobis accepissent sublevarent,

- 9. Parse: quærendum, se, persuaderi, impulsus, quos, aliquid.
- 10. Conjugate: appetisse, discessurum, intulisset, vererentur, meritus, accepissent.
- 11. Explain carefully the reason for the mood and tense of *intulisset*, and the difference between *aliquis* and *quisquam*.
 - 12. Translate and explain the meaning of:

- (a) Sibique decimam legionem prætoriam cohortem futuram.
- (b) Complures annos omnia Æduorum Vectigalia parvo pretio redempta habere.
- (c) Ipse in citeriorem Galliam ad conventus agendos profectus est.

LITERATURE SELECTIONS.

FOR THE PRIMARY EXAMINATION.

English Poetical Literature.

[Published by request of a subscriber.]

The following selections from the High

School Reader:-

1892. III. - The Trial Scene in the "Merchant of Venice." V .- To Daffodils. IX.-On the Morning of Christ's Nativity. XVIII .- Rule Britannia. XX .- The Bard. XXXI.-To a Highland Girl. XXXII.-France: an Ode. XXXIII. - Complaint and Reproof. XXXV.-The Isles of Greece. XL .- The Glove and the Lions. XLI .-The Cloud. XLII. -- On First Looking into Chapman's Homer. XLIII.—On the Grasshopper and the Cricket. XLIX.-Indian Summer. L. - To Helen. LII. - The Raven. LIV .-- My Kate. LV .-- A Dead Rose. LVIII.-Each and All. LX.-The Diver. LXII.-The Cane-Bottomed Chair. LXVII. - The Hanging of the Crane. LXXV .- The Cloud Confines. CV .- The Return of the Swallows. CVI.-Dawn Angels. CVII.-Le Roi est Mort. CVIII. -To Winter.

CONTEMPORARY LITERATURE.

OPENING the first page of the Atlantic one need go no farther to be interested. Rudyard Kipling's "Disturber of Traffic" is unlike his other stories save in its excellence. Anything about Laurence Oliphant in some unaccountable way holds peculiar interest—a "Modern Mystic" is no exception to this rule. "An Innocent Life," "Town Life in Arkansas," and "Speech as a Barrier between Man and Beast" are among the best in a good number.

WORK for September in pickling and storing is assigned in the September Table Talk. "Breakfast Fruit" and "Extra Days" are articles all house-keepers will delight in, and those who are not included in that description will surrender to "A Beautiful Guest Chamber."

THE "Song of the Goldenrod" opens the September St. Nicholas. The song will surely consider many of the flower's claim to be the emblem of the States. The Pueblo Folk stories begun in this issue will receive attention both from children and "grown-ups." The serials are as interesting as ever, and the illustrations as telling and dainty.

Scribner's Magazine. Everyone can sympathize with Andrew Lang's "Adventures Among Books," but no one else could have told the tale so well. "A China Hunter in New England" leads us on a pleasant journey. Charles G. D. Roberts contributes a short and well-told story.

THE tenth volume of Mr. Ford's edition of Washington's writings is the opening review in the Critic of September 5th. There is much interesting information given concerning Tom Quiney, Shakespear's son-in-law, in the Shakespeariana. The first sight of poetry in the Critic gives pleasure—it is so sure to be good.

THE Dominion Illustrated's last issue contains many Canadian views. An especially interesting series is on "Canadian Churches." Items of news are given from Toronto, Nova Scotia and Montreal. A novel by Hawley Smart is appearing at present. The literary competition closed on August 1st has not yet been announced.

A DELIGHTFUL collection of political caricatures from *Punch* is given in the August *English Illustrated*. Sir Robert Peel, Lord John Russell, etc., are shown masquerading as characters out of Dickens. The Russian Jewish exile, on his arrival in England, is pourtrayed by Ellen Gertrude Cohen. Marion Crawford's serial is continued.

MRS. BURTON HARRISON'S new story will appear during the year in the Century; and the 400th anniversary of the discovery of America is to be celebrated by publishing a Life of Columbus. The present number contains a portrait of Thomas Bailey Aldrich, and a critical review of his poems by Frank Dempster Sherman. "The Squirrel Inn" is concluded, and a novel by Rudyard Kipling is promised for the November issue. A fine engraving is given of David and Goliath, a painting by William S. Dodge.

John Ruskin. By J. Marshall Mather. (London a.d New York: F. Warne & Co.) Mr. Mati n's work, which aims at giving an outline of the life and teaching of John Rusl in from an impartial standpoint, has now reached a third edition. It is well worth careful reading; two of the best chapters being "Social Science," and "Moral Influences of Ruskin's Writings."

Two convenient and tasteful editions of the Waverley Novels are now being issued by Messrs. A. & C. Black, Edinburgh. We have before us "Waverley" (prescribed for study this year in the High Schools and Collegiate Institutes of Ontario) in each of these editions. The sixpenny edition is clearly printed on good paper, and the "New Monthly Issue" (price 2s. per volume) is probably the best cheap edition of Scott's Novels to be had. Both editions have the author's Notes and Glossary, and the latter has an index as well.

The High School Trigonometry. Py I. J. Birchard, M.A., Ph.D. (Toronto: William Briggs.) \$1.25. A third volume has now been added to the High School Mathematical Series, which will no doubt, like the preceding volumes, be received with favour in our schools. Mr. Birchard's ability as a mathematician, and his success both in teaching and in preparing text-books are known to our readers. The present work is complete and practical, and contains a large number of examples. We congratulate the author and publishers on its appearance.

The Illustrated News of the World. We have enjoyed reading "Our Note Book" in the past, and doubtless often will in the future, but someone has been deluding Mr. James Payn. Who has been so unkind? People can drive, walk, and even run in Ontario on Sunday. Canada, Mr. Payn says, is the least literary of the British Colonies. He will learn better some day. The French Squadron at Portsmouth is fully illustrated and described. Andrew Lang's new "Shakespear" and "Robust Writing" by Frederick Greenwood are among the best writing in the number.

Macaulay's Essays. Edited by Samuel Thurber. (Boston: Allyn and Bacon.) Five selected essays of Macaulay, well printed and annotated.

Burke's American Orations. (Boston: D. C. Heath & Co.) 50c. Four Speeches on the American War, and the Letter to the Sheriffs of Bristol form the text of this volume, which is edited by Prof. A. J. George, A.M. The editor contributes an Introduction and a few good Notes.

Duty. By ex-President Seelye. (Boston: Ginn & Co.) It is something to learn from the publishers that such a book as this—an elementary text-book on morals—has been greatly called for, and to find that it has actually appeared. It is simple, clear, and comprehensive, and we hope it may be widely used and do much good.

Principles of Agriculture. By J. O. Winslow, A.M. (New York: American Book Co.) A large part of this book is taken up with the treatment of these sciences which bear on agriculture and the occupations of rural life. Without careful explanation and a good deal of assistance from the teacher we fear that the book, though good in other respects, would prove difficult for public school pupils.

Leigh Hunt. (London and New York: F. Warne & Co.) Choice passages from the poems and essays of that delightful writer-Leigh Hunt-selected and edited, with a Biographical Introduction of no little interest, by Charles Kent, form one of the recent volumes of the Chandos Classics. tasteful appearance is an index to the charm of the contents, which have been gathered from some eighty volumes or more where they had formerly appeared. A bright and pleasant atmosphere is breathed by those who read Leigh Hunt's writings, and this volume is a good companion. The editor has added many short extracts, such as that on "Bagpipes (Table-Talk, 1851)"-

"An air played on bagpipes is like a tune tied to a post;" or this, on "The Countenance after Death"—"A corpse seems as if it suddenly knew everything and was profoundly at peace in consequence." The New Empire. By O. A. Howland of Osgoode Hall, Barrister at-Law. (Toronto: Hart & Co.) To write a book about his country, its position and its history is an ambition worthy of a Canadian, and to write a book that should be of interest to all his fellow-countrymen, while it expresses thoughts and feelings in the minds of many, and reminds not a few of never-to-be-forgotten facts in our history has been the reward of this Canadian. This work will henceforward be an authority and a useful book of reference. It reflects credit on author and publishers, and ought to be widely read in the English-speaking world.

Balladen und Romanzen. Edited by Prof. Buchheim, Ph.D., of King's College, Lou-(London: Macmillan & Co., and New York.) \$1.00. A selection of the best German Ballads and Romances, edited, with Introduction and Notes, by the eminent German literary critic, Prof. Buchheim, is a book that is sure of a welcome from students and others. This pretty volume is one of the well-known Golden Treasury Series, and is uniform with Dr. Buchheim's "Deutsche Lyrik." The Introduction on "The German Ballad" and the Notes appended to many of the poems will be found worthy of the author's reputation.

Selections from Tennyson. With Notes by A. W. Burt, B.A. (Toronto: The Copp, Clark Co.) 75c. It is always a pleasure to receive for review a book by a Canadian author, from the hands of a Canadian publisher, and to be able to speak well of the work. Mr. Burt's Introduction on the Study of Poetry is sensible and practical, showing an interest in and knowledge of the teacher's field of labour that is prepossessing. The suggestions made in the Introduction, the Notes, critical and biographical, selected criticisms, and the appended chapter on Poetics will all be found satisfactory and well-adapted for use in our schools. Perhaps more attention might with advantage have been directed to the general characteristics of Tennyson's style, but we have very few criticisms to make on the work as a whole.

From D. C. Heath & Co., Boston:

- (1) A Primary Word-Book. By Saiah E. Buckbee.
- (2) Trois Contes Choisis par Daudet. 15c. Edited by Prof. Sanderson of Harvard.
- (3) Molière's Le Bourgeois Gentilhomme. Edited by F. E. A. Gasc.
- (4) Comparative View of the Governments of the United States, France, England and Germany. By John Wenzel.

Dictionary of Political Economy. First Part—(Abatement-Bede). 3s. 6d. Edited by R. H. Inglis Palgrave, F.R.S. There is at present, we believe, no Dictionary of Economics, and this work promises to be of considerable use. It is to appear in some twelve or fourteen parts, published quarterly, and is intended to contain articles on the chief subjects dealt with by economic writers, and short accounts of their lives and writings. Among the contributors to Part I. are Prof. W. J. Ashley and the late Prof. J. E. Thorold Rogers.

From Ginn & Co., Boston:

- (1) The Education of Girls. By Fenelon, Translated by Kate Leipton, M.A., of Vanderbilt University.
 - (2) Classics for Children-Marmon.
- (3) The Children's Primer. By Miss Ellen M. Ayr.

Cardinal Neuman Essay on Poetry. With Reference to Aristotle's Poetics. Edited by Prof. Cook of Yale.

The study of Poetical Literature is occupying much attention at this time, and to read an essay by a great master of style which attempts to determine the fundamental principles of poetry, and passes in review both ancient and modern writers, is an interesting and profitable thing at any time.

Principles of Political Economy. By Prof. Charles Gide of the University of Mont pellier, France. Translated by E. P. Jacobsen of University College, London. With an Introduction and Notes by Dr. James Bonar, M.A. (Boston: D. C. Heath & Co.) \$2.00. English-speaking students of Political Economy will be glad to hear of the appearance of this translation of Prof. Gide's

important and, in some sense, remarkable work. It is intended for the use of impartial students who are neither very far advanced nor mere tyros. The style is clear and pleasant.

English Men of Letters:

- (2) Scott. By R. H. Hutton.
- (6) Shelley. By J. A. Symonds.
- (10) Thackeray. By Anthony Trollope.
- (11) Milton. By Mark Pattison.
- (19) Byron. By Prof. Nichol.
- (22) Wordsworth. By F. W. H. Myers.
- (28) Gray. By Edmund Gosse.
- (36) Coleridge. By H. D. Traill.
- (38) Keats. By Sidney Colvin.

In paper covers, 15. (London: Macmillan and Co., and New York.)

This series is universally known and appreciated, and therefore an extended review of these volumes is unnecessary. Our readers will be glad to be reminded, however, that the issue above described is easily accessible, and probably more valuable than many books at once dearer and rarer. Such an admirable biography, for example, as that of Gray, by Edmund Gosse, is one of the best books for teachers of English Literature. We enumerate above the biographies appearing in this series of the English authors prescribed for special study in 1891-2 by the Department of Education.

Language Exercises, Peter Smith, Principal Madoc Model School, 25c. (Toronto: Copp, Clark Co.) This work will be found a very useful auxiliary by teachers of first, second and third book classes, for whom it has been specially prepared.

THE Rose Publishing Co., Toronto, are publishing another series of copy books for the public schools which have been authorized by the Education Department. Nos. 1 to 5, 7 cents each; No. 6, 10 cents. They are much in the style of those already in use.

We desire to congratulate the Canadian Office and School Furniture Co., of Preston, Ont., on having obtained a gold medal for their exhibit of school desks at the Jamaica Exhibition and bespeak for them the patronage of the various school boards throughout the country.