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# Educational Weekly

Vol. III.

THURSDAY, APRIL 29TII, 1886.

Number 69.

### The Educational Weekly

Edited by T. ARNOLD HAULTAIN, M.A.

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JAMES V. WRIGHT, General Manager.
C. FRASER, Business Manager Educational Weekly Dept.

TORONTO, APRIL. 29, 1886.

THE changes that have been made within the last five years in the curriculum of our Provincial University are very numerous. They have been of far greater importance than those of any other period of twice that length. No department has been left unaltered. Without professing to believe that the changes have been, in all cases advisable or judicious, and even admitting that a radical spirit has sometimes overpowered that of calm and wellbalanced observation, it is yet probable that university men will agree that most of what has been done in the way of change, has been dictated by wisdom, and the defects in the way of omission that lurk in the revised curriculum are caused by the

force of circumstance. We should like to see Anglo-Saxon among the studies, a more extensive course in Political Economy, and a wide range in history, both ancient and modern. No one, we imagine, would be more anxious to effect this than those into whose charge the details of the curriculum were placed. But lack of sufficient revenue must for the present stand in the way of such an enlargement. The staff of Professors' change in the curriculum has been most marked in the Metaphysical Department. The abolition of text-books (with a few exceptions) is a step in advance. There is so much difference of opinion on metaphysical problems, so many different schools of thinkers, and so many questions, especially in moral philosophy that encroach upon the region of theology, that suitable or even unbiassed text-books are exceedingly difficult to discover. Under the present system, too, originality will find encouragement, and in metaphysics a student's originality is more demanded than, perhaps, in any cher course. In classics the number of authors has been reduced. Formerly the extent of work required to be read was enormous. A certain breadth was gained at the expense of that thoroughness and exactuess that are necessary to the class-A well-selected course of ical scholar. few books is better far than a wide course of many books. The bill of fare may be more varied, but its contents will not be so well digested. The principles of the present curriculum evidently tend to foster thorough knowledge in some one author, whether in history, philosophy, or the drama. Aristotle and Plato are read almost in their entirety.

To Thucydides, also, much attention is devoted. Poetry, however, is taking a very subsidiary place to prose. The classical student at the university to-day will have less knowledge of the Greek tragedies, of Homer and Lucietius than those of past years. The reason for this is clear. The poets are more difficult to read, and the notes explanatory and otherwise, and the points of grammar connected with

these writers, make it impossible to read them with thoroughness in the limited time afforded by a four years' course. These changes, too, are in the direction taken by Oxford and Cambridge; in following such exemplars we cannot think them wrong. In science the division of labour, so to speak, is very marked. A man may now graduate in chemistry, biology, or mineralogy.

Startling as the change may seem to those who remember the time when a degree in science meant a course in all three of the departments of science, our university has really not gone as far as the great European universities, where a degree may be taken in any of the subsidiary departments of science.

The most pronounced feature of the Modern Language course is the encouragement given the study of Philology. Educationalists occcasionally dispute as to whether the main object of the study of modern languages is to give a practical or a theoretical knowledge of them. For a university man to decide, should not be a difficult task. Knowledge of the modern languages from a practical side only is nothing compared with the learning acquired by a study of the foundation upon which languages are constructed, and an acquaintance with their literature. With the practical purposes of the modern languages a university man has very little to do. With modern languages as literary training, everything. Within the last five years mathematics has been divided into two distinct classes, pure and applied. This is a further step in the direction in which all the courses are very properly tending-specialization, non omnes omnia possumus. The opinion of those who ought to know inclines more and more to this view, that while at school it should be our endeavour to know something about everything, at a university our endeavour should rather be to know everything about something. To know everything about everything would, no doubt, be preferable, but the world is more benefited by specialists than even by well informed men

### Contemporary Thought.

REV. W. R. ALGER, in a lecture on "The Uses of Music," delivered recently in Boston, said the justification of music lay in its power of enriching the finer and better part of human nature. "If soft and melting strains," he added, "inspire to sensual thoughts, the ill effect is not the natural response, but the private contribution of the intividual listener."

Once a week, at least, every pupil in the class should be sent to the board to test his knowledge of the lessons. The blackboard is a very uncomfortable place for the ignorant. It is not the intention of sportive instruction that the child should be spared effort, or delivered from it; but that thereby a passion should be wakened in him, which shall both necessitate and facilitate the strongest exertion.—Jean Paul.

PROFESSOR BELL is confident that telephonic communication may be established between passing vessels at sea. He believes a wire a mile in length trailed behind a ship, will so charge the water with electricity that a vessel coming within half a mile of another thus equipped may communicate with it. "The principle," he says, "is not new; it is old, with a new use waiting for commerce to utilize it. I have experimented in the Potomac, and marvel at the simplicity of the apparatus and the stupendous importance of the results."

"Example is more powerful than precept. Hence the importance of the teacher in all cases setting an example worthy of imitation. The personal character of the teacher will have a most powerful influence on the character of his pupils. In many respects, what the teacher is, is of more consequence than what he knows, to the right bringing up of his pupils. It is absolutely necessary that a man should possess a certain amount of information to fit him for the work of a teacher. But it is at least as important that he should be able to exert a healthy, moral influence."—Collins' School Management.

I HAVE peeped into quiet "parlors" where the carpet is clean-and old, and the furniture polished and bright, into "rooms" where the chairs are neat and the floor carpetless, into "kitchens" where the family live, and the meals are cooked and enten, and the boys and girls are as blishe as the sparrows in the t'atch overhead, and I see that it is not so much wealth and learning, nor clothing, nor servants, nor toil, nor idleness, nor town, nor country, nor station, as tone and temper that render homes happy or wretched. And I see, too, that in town or country, good sense and Gcd's grace make life what no teachers or accomplishments, or means or society can make it -the opening stave of an everlasting psalm; the fair beginning of an endless existence; the goodly, modest, well-proportioned vestibule in a temple of God's building that shall never decay, wax old, or vanish away.-Dr. John Hall.

TRENCH's original poems have perhaps still admiters, though they are scarcely likely to survive. In his youth it was, and perhaps it may still be,

the custom of clever aspirants to try their strength in verse before they settle down to the business of their lives. Their sympathies and sentiments seem to them to require a free expression which might sound egotistical in prose; and many of them are unconscious of the imitative element which is introduced into their compositions through their admiration of greater poets. Trench's poems are not deficient in originality, and some of them are carefully and successfully polished; but they are in the nature of intellectual gymnastics and of prolusions to the main occupations of life. Practice in verse tended in the case of the Archbishop, and of many others, to the improvement of prose style; but he probably in later years attached but moderate value to his poems. In verse or in prose he never wrote anything foolish or insincere. His literary career, like his active life, may be recalled with unqualified satisfaction by those who cherish his memory .- The Critic.

WHEN the foreigners who are disgracing America in their war against the Chinese in California, will produce a record as honourable as the following, we shall be willing to give ear to their protestations: "I have done business with the Chinese perhaps to the amount of several millions of dollars. I have never had a single one of them fail to live up to his contracts. I never lost a dollar by them in all my business engagements with them, though we commonly accepted a Chinaman's word as good for a cargo of merchandise, while a written contract was demanded of white men."-Former manager of San Francisco Merchant's Exchange. "I never found a case of theft among them. They are a very steady people. I have never seen a drunken Chinaman in my life." - An employer of three hundred Chinese operatives. "Their frugal life gives them more immunity from disease. They eat only what is necessary to live upon. They eat to live, and do not live to cat. They are clean in their habits, and they drink no whiskey. I have never seen a drunken Chinaman in my life. They consequently obtain a better resisting power to the attack of disease."- Dr. A. B. Stout, member of State Board of Health .- The Chautauquan.

WE speak of the rapid changes in our American cities, but nothing like the changes of London can exist with us. Growth is not a change of this kind. Paris alone, in certain respects, can show such metamorphoses as London. But on the whole, Paris, as I saw it at this first visit to the Old World, was more like the Paris one sees now than was London of 1850 like the London of to-day. The mere question of growth is a minor matter. London was not the metropolis of the world in 1850, and now it is. Then it was only a huger provincial town. The Londoner in general measured nothing but himself, and nobedy came to London for anything but hardware, good walking-boots, saddles, etc.; now it is the intrepot of the civilized world. The World's Fare of 1851 and succeeding similar displays of what cosmopolite industry can do, the common arrival of ocean steamers, rare at the time I am writing of, have changed the entire character of London life and business and the tone of its society. It is not merely in the fact that 48,000 houses were built in the capital in the last year, or that you find colonies of French, Italians, Russians, Greeks in it, Just that the houses are no longer what they were, inside or out, and thus the foreigner is an assimilated ingredient in its philosophy. All this has come since 1850.—Atlantic.

Ir is often said that Mormonism, as a religious belief, would be harmless except for polygator. Nothing could be more unwise than to admit that. It is Mormonism itself, the union of church and state, the implied treason that will not rush to arms while it is allowed to flourish in a little feudal despotism of its own, the secret power which cares nothing for polygamy except as it believes polygamy may be a weapon in its handsit is Mormonism itself that is to be hated, to be feared, to be crushed. Show the Mormon that the other, deeper, subtler aims he has at heart cannot, must not, shall not be endured, and he will drop his polygamy before you ask him to. Horrible as they are, Mormonism and polygamy have their supremely ridiculous aspects, and it is part of the supremely ridiculous that no man can possibly enjoy polygamy. If he practises it, it is to further other aims. In a community where he is bound to "cherish" all his wives, outwardly at least, and to provide for them all, where he cannot take refuge from the scold in the arms of the favourite, where he must appear on the appointed day at the door of the poor housekeeper as faithfully as on the other day at the table of the excellent cook, it may safely be presumed that polygamy brings its own penalties with it, and would only be endured to secure another object. It has been wittily said that, with a railway through Utah, and Gentile ladies in Salt Lake city, the milliner and dressmaker can be trusted to work the much desired reform; and there is judgment, as well as wit, in the saving. Few men can afford to have a dozen wives and forty children to be supported in equal comfort and luxury .- Alice Wellington Rollins, in Lippincott's Magazine.

WHEN a few days ago we were requested to prepare this report, Superintendent Gorton was consulted, and from him it was learned that this Yonkers experiment was of two years' growth, and that the idea originated in Mount Vernon. The principal, Mr. Nicholas, hearthly approves them as a source of good moral influence. As the result of an investigation of this subject, your committee would sum up as advantages accruing from the exhibition of the home-work of children through the medium of the schools: A bringing together of the home and the school, thus conducing to a better acquaintance between the parents and the teachers; giving to the teacher a better knowledge of the child's home influences and surroundings, thus enabling him to exercise a more intelligent care over the development of the child's moral character; giving to the parents a better insight and new interest in the schools and their management, with an overflowing of the moral influence of school training into homes where intelligent discipline is unknown; a greatly increased respect in all quarter or handicrafts; the diffusion of the principle that in the liberal education of the individual a development of manual skill, as well as a harmonicus unfolding of the mental faculties, should be looked after, and that these react favourably on each other in various ways .-From " The Hand-swirk of School Children," by Rebecca D. Rickoff, in Popular Science Monthly.

### Notes and Comments.

MR. BENGOUGH'S letter on the work "type-writist" in a late issue deserves notice. He makes out a strong case for the new-comer. "New discovéries require new nomenclature" certainly, but it does not follow that those who make the discoveries should also determine the nomenclature. Let us hand over the latter task to our philologists and grammarians. In fact this, we believe, is usually done. When a word "has," as Mr. Bengough says, "come to stay," let us by all means have as correct a word as possible, and only linguists can be trusted to give us this. There are rules for the formation of words; let us adhere to them if we can. If we can, we say, for undoubtedly cases may arise covered by no rule. But "type-writist" will hardly come under this category. "Machinist"-although as bad a word as that for which Mr. Bengough contends, is now accepted. Why not make use of this? But there are scores of incorrect words in the English language which have "come to stay." All we contend for is that their number should not be needlessly increased. Of incorrect words and of "clumsy time-and-labour-consuming, temper-taxing terms," we prefer the latter.

FRIDAY, the 7th of May, has been set apart as "Arbour Day" this year. Schoolmasters throughout the Province have already had some experience in the best modes of beautifying the school grounds, for from such reports as reached us in the spring of 1885 the Arbour Day of that year was a highly successful experiment. A new experiment it now no longer can be termed. Last year witnessed its inauguration; it is now part and parcel of the school system of Ontario. This being recognized, our schoolmusters and mistresses have one more duty to fulfil, a duty as important as any which belongs to other spheres of tuition. The State having decreed that one day in every year shall be devoted to the planting of trees and the general beautification of the school grounds, a new responsibility rests upon the teacher. of the Province. Arbour Day is by no means to be looked upon as a dies non in the educational calendar. From the very fact of its occurring only once in the year it should be regarded as of peculiar importance. If properly carried out, more, perhaps, may be taught on that day than in any other day in the three hundred and sixty-five. It bears a unique character. Its air of novelty lends to it a charm difficult to infuse into the dull routine of the schoolroom; the new and interesting subjects with which it deals are apt to stimulate a wholesome curiosity and ambition; the practical nature of the details, and the possibility of giving each pupil a share in the work, will without doubt have

a more powerful influence in fixing in the memory all information gained and all healthy sentiments evoked. These last two points—the information to be gained, and the sentiments to be evoked, should be borne in mind by every teacher. A wide and liberal view of the object of an Arbour Day should be taken. Its aim is not merely that the ground about the school should be tidied, or that a few shrubs should be transplanted. Rather, we hold, its aim is to excite in the growing generations of Canada a love of nature, and a habit of caring for and tending the products of nature.

One of the most peculiar advantages of an Arbour Day is that it can be made a vehicle of education by every teacher. It needs no profound study or special bent. It is so wide in its scope that each can find in it something to make use of. Those who take an interest in botany will be able to draw upon their stock of knowledge and interest their pupils by practical lessons-not necessarily on the day itself only, but on succeeding days, by utilising the practical materials referred to on Arbour Day. But apart from the information which can be conveyed on this day, there are many other advantages to be derived from it, to which reference. need not here be made. One suggestion only need be here touched on. Let every pupil in the school take a share in the work to be done. This can easily be accomplished, more especially if beforehand a programme has been made out of the manner in which the work of the day is to be performed. We recommend that various different descriptions of work should be undertaken: flowerbeds may be dug; flowers planted; the grounds tidied; trees and shrubs transplanted; grass seed sown; turf laid; graftings made; and so forth. This will give occupation for many hands and minds. Above all things, make the day one of delight. It has all the elements to insure

We gladly insert the following circular:-

Following the example set by all the most prosperous States of the American Union, the Minister of Education, in 1885, appointed an Arb our Day "for the purpose of planting shade trees, making flower beds, and otherwise improving and beautifying the school grounds" of the Province. So heartily was the suggestion acted upon that Arbour Day has now become a recognized institution. By a regulation of the Education Department, the first Friday of May has been set apart for the purposes I have mentioned.

In many localities in North Hastings, our first Arbour Day was utilized to advantage. Owing to the lateness of the season, and to the consequent pressure of farm work upon trustees and parents, little was done in a good many sections. In a number, no real

desire was manifested by teachers or people to do anything.

For the good name of the county, and on account of the important physical, moral and intellectual influences which comfortable and beautiful surroundings have upon children, I hope that, in every school section, well-considered and energetic efforts will be put forth to make the Arbour Day of 1886 memorable in the best sense. I would urge our teachers to make the work their own and to employ, in it, their best energies and intelligence. A few words of advice will not, I am sure, prove unacceptable.

- 1. At once, set about interesting the pupils and trustees of your school, and the people of your section, in Arbour Day. To be able to do this successfully, inform yourselves of the important influence of trees on climate, rain-fall and soil, and of the material henefits that will accrue to the country if the children of our schools be trained to know the value of trees, to love them, and to be able to plant, and care for them properly. Added to this, have a living, intelligent and abiding faith in the important work done, in the formation of character, and in the development of refined tastes and habits, by beautiful surroundings.
- 2. In conjunction with your trustees, elder pupils, and such of the adults as can be interested in the cause, plan out the day's work beforehand. Let it be definitely settled what is to be attempted, and how, and by whom, each part of the work is to be done. Assign some work to every pupil, or ex pupil, whose services can be enlisted.
- 3. The work of the day should comprise the cleaning up of the schoolhouse and grounds, the repairing of gates, doors, fences, etc., and the planting of trees, shrubs and flowers.
- 4. Let the utmost care be taken in procuring, planting and caring for the trees. Let the work be done "to stay."
- 5. Let the afternoon of the succeeding Friday be devoted to talks, by yourselves or by others, on forestry, tree culture and school-house and school-ground adornment, and to the recitation of choice prose and poetical selections which refer to trees.
- 6. By methods which will suggest themselves to the mind of the ingenious teacher, keep the interest in the school grounds of the pupils and people alive.
- 7. On the 15th of May, send me a detailed report of the work done. Preserve in your general register a copy of this report.
- 8. If May 7th cannot be used as Arbour Day, let another day be taken for the purpose.

Sincerely yours,
W. Mackintosh.
Inspector of Schools, N. Hastings.

MADOC, April 23rd, 1886.

### Literature and Science.

#### WHAT THE SONNET NEEDS.

THE average writer of the modern sonnet seems to overlook one distinguishing isature of all the greatest products in this deportment of poetical expression. Thanks to the excellence of the best examples, and to the thorough criticism that has at length appeared on the subject, it is well-nigh impossible now to make a mistake as to what should be the form of a sonnet, or as to how its motive and its method should be adjusted and displayed. It is, no doubt, largely in consequence of the knowledge thus slowly acquired, and the artistic dexterity thence accruing, that any collection of modern sonnets presents a considerable quantity of work whose highest merit is the unquestionable one of the "golden mean." Sweet melodies and carefully balanced thought are good, but they are not everything. The epigrammatic line, the strenuous and boldly insected maxim, the thrilling note of the wind instrument interrupting while supporting and enhancing the mellifluous movement of the strings-it is this feature that one misses in many of the hundreds of sonnets produced in recent years. It is the presence of this element that serves to differentiate the poet and to make his work memorable, as we see in the work of Wordsworth at his best, and notably in the sonnets of Dante Rossetti .-The Athenaum.

### DISRAELI IN LITERATURE.

HE had little or no history out of politics and literature, and the first being here in a manner "taboo," and only to be dealt with indirectly and in the way of general remarks on his character, his literary work may justly receive some particular attention. It is unfortunate that while that work in fiction has been collected in an accessible and satisfactory manner, some of his political and miscellaneous writings have never been reprinted at all, while none are accessible except in fragmentary unco-ordinated form. The reproach ought to be removed, and the addition of some half-dozen volumes to the Hughenden edition would remove it. We should then have a uniform collection of literary work ! quite unique in character. It has been frequently objected to the authors of the present century that they are "not quotable"; that the jewels five words long, which they contain from the point of view of thought, as well as from that of style, are conspicuously few as compared with those of former ages, when the immense mass of the production, both of the whole period and of separate authors, is considered. This reproach may be true: there is, at any rate, some truth in it. But it is not true of Mr. Disraeli. The

excellence of his separate phrases, of his epigrams, of his maxims of life, perhaps contrasts, and certainly has for the most part been thought to contrast, with the inequality and disappointingness of his works as wholes. Again, there is some truth in this. Except "The Infernal Marriage" I do not know an; work of Lord Beaconsfield's which is entirely bar sibi. In that respect even "Ixion" is inferior; and if the author had done more work of this kind he would have equalled (as it is, he has very nearly equalled in "The Infernal Marriage") the author of the incomparable volume which begins with "Babouc" and ends with "Le Taureau Blanc." In a very different way, I think, "Henrietta Temple" may be called a masterpiece, though it is a masterpiece, of course, in a conventional style, and played upon few strings; in fact, upon only one. Of all the others, from "Vivian Grey" to "Endymion," a critic, that is to say a person who does not indulge in indiscriminate superlatives, must speak with certain allowances. "Vivian Grey" itself is a marvel of youthful bri lliancy but the brilliancy is decidedly youthful. "The Young Duke" contains one scene, the gambling party, which is not inferior to anything of the kind in fiction; but the author's apology for it as " a picture rather of fleeting manners than of perennial character," is its best description as a whole. "Contarini Fleming" is, no doubt, a book of great power, and I know critics, whom I respect, who rank it first of all novels. But I suspect that, to rank thus, it ought to be read in youth; and by accident I happen never to have read it myself till middle age, though I had long known all the others. "Alroy," good of its kind, belongs to a kind which must be better than good to be first-rate. " Popanilla" is inferior to "The Infernal Marriage" and "Ixion." For "Venetia," I have myself a peculiar affection, and it seems to me (contrary, I believe, to the general opinion) a very happy instance of the peculiar faculty which Mr. Disraeli had in common with all the great writers who have woven real characters into the characters of novels—the faculty of giving a certain original twist to the borrowed personality. Of the trilogy, I prefer "Sybil" to "Coningsby" and "Tancerd," despite the unmatched political portreits of the second and the picturesque imagination of the third, I should call "Sybil" Mr. Disraeli's best novel, a judgment which is not incompatible with the judgment above given, that "Henrietta Temple" is a masterpiece; and finally, running contrary to the general judgment once more, I should prefer "Endymion" to "Lothair." But in all these books (exceping "Henrietta Temple," and not excepting " Sybil") the parts surpass the whole, and even make the reader lose sight of the whole. The inimitable social and personal judgments. the admirable epigrams, the detached phrases and scenes that bring their individual sub-

jects before the eye as by a flash of lightning, dwarf or obscure the total impression. No doubt the author had definite purposes in writing all, or at least most of them, but the purpose is not the chief thing that impresses itself, nor the characters, still less the plot, or what does duty for a plot, which those characters combine (tant bien que mal, and it must be confessed quite as often mal as bien) to work out.—Geo. Saintsbury, in Magazine of Art for May.

### Special Papers.

### ARBOR DAY.

PROF. BROWN ON TREE-PLANTING.

The following is a topical synopsis of the "Guide to Planting Trees and Shrubs on the School-grounds of Ontario," prepared for the special Arbor Day meeting of the East Middlesex Teachers' Association by Messrs. A. H. S. Broome, C. R. Brown and D. Calvert, a committee of the 2nd year students of the Ontario Agricultural College, under the direction of Professor Brown. We hope to give next week a report of the other addresses at the meeting.

#### GENERAL ADVICE.

- 1. Choose the best kinds of trees and shrubs for the special purposes—having regard to soils, districts and exposures.
- 2. Attend to every detail thoroughly, and adopt the most approved management.
- 3. The best ornament, shade and shelter are from properly developed trees and shrubs so disposed as not to unduly check side branches.
- 4. Never plant upon naturally poor nor wet ground, and remember that drought is more dangerous than frost.
- 5. Make no profuse congratulations when you have many leaves and some growth of wood the first and second years, nor rejoice unnecessarily if fruit is also abundant then, because neither are necessarily indications of well-doing.
- 6. Order your plants one month ahead of time, and place responsibility of delivery upon party supplying them. Instruct nurserymen to puddle the roots before sihping.
- In case of extensive work it will pay to employ competent labour, but the education of others at same time should not be overlooked.

### TREES FOR SHADE.

8. The best trees for shade are the sugar maple, soft maple, horse chestnut, Scotch elm, butternut, European linden, and fern leaved birch.

TREES FOR SCHOOL GROUND SHELTER.

9. A mixture of maple, elm, oak, ash, Leech, birch, black walnut, with evergreens of Norway spruce, Austrian pine, common white cedar, and black American spruce.

#### SHRUBS FOR ORNAMENT.

10. A proper mixture of lilac (10 ft.), guilderose (6), high bushed cranberry (10), hazelfilbert (8), hawthorn, English (15), barberry (6), and mock orange (8). The figures indicate the branching diameter of mature plants. SOILS.

11. All these trees and shrubs do well upon good naturally dry loam, and the lighter character of clay loams.

#### DISTANCE APART.

12. Shade trees from 20 to 30 feet, shrubs rom 6 to 12 feet, according to diameters given in No. 10 note; and for a mixed shelter belt, ten feet apart is best in view to future thinning and selection of standards.

#### WHERE TO GET PLANTS.

13. We have yet to be educated in knowing how to choose, prepare and manage the planting of young trees from our forest. Our College has in view to issue special advice on this subject next year. In any event, all trees and shrubs are most reliable from well managed nurseries, as being always kept in a prepared transplanting condition, they are ready to move at any time, and better able to do well on removal. The first cost is less from the neighbouring bush, but so is the success less on an average even under the very best management.

#### SIZE OR AGE OF PLANTS.

14. The younger the plants the less risk with all kinds; aim at not more than from four to six years in the nursery. Avoid branchless trees that have been standing close together.

#### TIME TO PLANT.

15. From end of April to end of May. Transplanting with the buds and young leaves is not dangerous, but requires more careful attention: fall or autumn planting is not so safe.

#### PREPARATION FOR PLANTING.

16. On obtaining plants cut off any rough branches and roots, so as to balance under and over ground-do not interfere with the evergreens in this respect. On receipt of trees cover the roots with soil in a shaded snot and water them. Take special care of small fibrous roots. Previous fall digging for shrubs and belting is good.

#### WEATHER FOR PLANTING.

17. If possible, choose mild, c'oudy, and most weather, but not so wet as to make the soil sticky.

#### MAKING PITS.

18. Make pits, squre not round, one-half wider and deeper than is actually required; remove any water or scum from old made pits-squaring off the bottom well.

### HOW TO PLANT.

19. Fill up pit to required depth of special tree; plant one inch deeper than the old mark on the stem; incline the tree slightly towards the prevailing wind of the district; spread out very carefully all the roots and fine fibres in the pit; fill in the

best loaming soil first, shaking and gently pulling the plant up and down a little, so as to run the soil amongst the roots. When half the pit is filled tramp moderately firm with the foot, and on finishing give another tramp-heeling close up to the stem. Puddling roots bei 're planting is only required when both soil and atmosphere are dry. A naturally moist soil is the best.

#### PROTECTION.

20. On public roadsides we would not require to protect shade trees were our laws properly administered; if the trees are planted close to a fence the best guard is the triangle, thus :-

This consists of one post at a with fence lumber from bottom to top nailed at b and c. If the line of shade trees is on the out-edge of sidewalk-eight or ten feet from the fence -the best guard is an open one, strong, and with room to allow for growth. Never tie a tree, nor allow it to rub against the guard. AFTER ATTENTION.

21. If wind makes openings around stems, have them made good immediately, as drought would damage seriously; use dry grass or other rough material as a light mulch in midsummer round each tree for the first two years, and place a'deeper mulch during winter for the same period. Keep ground cultivated until the tree shades itself in after years. Do not cultivate later than August, as it tends to prolong growth that may be damaged by winter. If a severe and continuous drought occurs immediately after planting it may be necessary to water-depending upon situation and a retentive soil; avoid watering if possible, as oft cultivation with mulch is hetter for future success. Never allow scum to lie on the soil around trees.

#### PRUNING.

22. No general rule can be given as to pruning; keep the tree well balanced without interfering much with its natural character: encourage the leader, or stem shoot; prune any time from fall of leaf to budding -never draw sap by pruning in early spring; remove all dead or damaged matter anywhere, as well as improper sapling growth from the lower stem.

#### SPECIAL NOTE FOR YOUNG PEOPLE.

Every properly developed tree is a thing of beauty and utility. Trees are the nobility of vegetable life-man's companions and, to some extent, teachers. They supply us with food, clothing, medicine and the many things of every day; they make nations, and actually affect the individual, for men brought up in an oak or a pine forest, respectively, are differently constituted. Trees keep us warm and it is Canadians who must work it out. The

cool, they mellow and purify the air for our health, they break and soften the cold winds. and moisten the hot sunshine; they breathe, perspire, and sleep and sing, they moan, and whistle, and groan; trees have electric affinity one to another, according to kind, area covered, distance apart, and the particular atmospheric conditions; they have also particular friends and enemies in nature, both animal and vegetable, and hence for these and many other reasons we do not deserve well of our country if every person does not plant one tree every year of his or her life.

### A PLEA FOR CANADIAN HIS-

THOUGH many refuse to Herbert Spencer the name, philosopher, few thinking men will dispute the main propositions of his admirably clear and comprehensive tract on education. That one end of the child's training should be: first, sound physical health; second, intellectual development (by whatever means) and third, fitness for the duties of citizenship, is as plain as a first axiom. It cannot then be right to bring up children with no reference at all to duties they must sooner or later be called upon to perform. The Canadian school-boys of to-day must soon take their place as property-holders in the community and exercise the franchise in local, provincial and Dominion affairs. What preparation are they receiving for this important function? What is our primary, secondary, higher education doing to make young Canadian patriots or even citizens of Canada?

Our colleges do lutle or nothing. Our Provincial University carries the anti-progressive spirit so far as to prohibit to its students in their literary society the free discussion of Canadian politics. As a consequence, the majority of its graduates leave college with less interest in Canada, the country they are to spend their lives in, than in modern Germany or classic Greece. Those that have any conceptions of Canada as a country, any knowledge of her wants or possibilities, owe no thanks for this to their alma mater. The sphere of the primary schools is, of necessity, limited. It is true that on the list of subjects to be taught in high schools we find Canadian history, but even here its vital importance is far from being realized. One reason for this is the wide-spread feeling among Canadians of good-humoured distrust of everything Canadian. We belittle our history, our literature, our public men; we look to London or New York for culture; to Leipzic or Johns Hopkins for scholarship.

A great deal has been said about the political destiny of Canada. Whatever that destiny may be, we may be assured of this. great Republic to the south of us cares absolutely nothing for us, her greed for territory is sated, and the many social questions clamouring for instant solution task to the utmost her busiest brains and strongest hands. Nominally, we are a part of the British empire, but England, sunk in commercialism and declining to her fall, knows nothing of her colonies and cares less. The failure of the recent agitation for a union of the empire with its dependencies sufficiently proves this. No help is to be expected from either quarter; our fate is in our own hands | PAGAN VIRTUES AND PAGAN alone.

"History is past politics, and politics present history." The only means of rightly understanding the present is by study of the past. If our history is not studied by us it is not because it does not bear directly upon our social and political welfare. As a nation, we are in a formative period. Our history has been largely one of party, contests. Even as a federation of colonies we have had and have our difficulties. The struggle between local and central authority has begun. This struggle will only widen as new provinces grow up and press upon one another. And though the question of state rights is not complicated here by the presence of a vast social wrong, the national convulsion of '62, '63 must ever be a fruitful warning to us. We have, too, to deal with the strong sectional feeling of a race, alien in blood and language, ever mindful that they have been conquered and embittered by oppression.

Again, it seems certain that our present relations to the mother country cannot long continue as they are. There is no middle course between a closer union and independence. The rising of a nation to the north of the great lakes is not an impossibility. Some may object; the ruling spirit of the age, commercialism, prevents the formation of new nationalities, the establishment of artificial bars to trade. But this commercial century has witnessed the spectacle of the most money-getting people on earth, pouring out blood and treasure like water, to maintain a principle, a mere idea, national unity. Further, it is permitted to doubt the perfectness of our constitution and the unqualified success of confederation. It must be evident then, even from this rough sketch, that our position is critical, and the difficulties we must face neither few nor insignificant. Surely then, if the statement with which this paragraph opened is true, it is not unreasonable to plead that our citizens shall have the most thorough instruction in what most nearly concerns them, the past and present politics of their country. Truism as this seems, it must, like all truisms, be repeated and reiterated.

Whose province is it then to impart this instruction, if not the schoolmaster's?

Where else is that detailed knowledge, withwhat more inspiring ideal can we have than the rising up of a generation of enlightened patriotic men, untrammelled by party, unswayed by prejudice, who shall lay broad and deep, with fearless hands, the foundations of the Canada that is to be.

ARCH. MACMECHAN.

### THEORIES OF LIFE.

(Continued from Jage 210.)

ANOTHER and a similar illustration of the proposition, that Pagan ethics are the ethics of natural human nature, might be found in one of the vices about which their moralists and historians are emphatic, by the insolence and arrogance of youth. We have no special name even for this, the Greeks called it i'ppis and continually dwelt upon it. With the spread of Christianity and the inculcation of the gentler and more passive virtues and of self-control, v" \beta \rho 15 -- though not extinguished, has ceased to endanger civilization. Observe next how other uses of the word "virtue" in the classics, show one or both of these same two features, simple, spontaneous, human nature and selfishness. We need not stop to look at the use of the word prevalent among the Greeks, for when Pindar wrote his odes, among the Romans of all classes and ages, virtue was to the Roman the natural bravery of the masculine sex, and the national virtue of his countrymen was regarded by him as the virtue of all others. A more subtle use of the word is furnished by Greek writers. Aristotle observes that justice is often identified with virtue generally. Whatever satisfies justice is right, nothing more nor less. In the same way an offender of any kind is called in Greek admos that is, an unjust man, consequently, the quality of mercy is-to a Pagan -strained very narrowly: forgiveness, to them remains a duty, so far only as we ourselves should have done, the same as those who have wronged us; so far, in fact, as it is only simple justice. But of its divine character, of any evidence that it is in itself an attribute of God himself, and not a mere concession to human frailty no trace remains. Mercy, the supernatural grace, dwindles into that fraction of it which is strictly logical and just. For the principle of mercy to those of old time was, as you know, an eye for an eye, a tooth for a tooth; love your friends and hate your enemies. A great English divine, Dean Mansel, used to maintain that this was the only true basis of forgiveness; but then Dean Mansel was an Oxford classical man, bred up in all the learning of the Gentiles, therefore, upon the Pagan ethics of Aristotle. This doctrine is

found in Sophocles, where Odyssey is merout which all judgments are faulty, to be ob- i ciful to Ajax, upon this principle it is not tained, if not in the school-room? And I found in the New Testament, and it was never heard yet, that the Dean persuaded any man that it was Christianity.

Yet a further use of the word "virtue" among the Greeks is for intellect, ability; the orator, Antiphon, an unscrupulous and daring political schemer, is represented by Thucydides as second to no man in virtue; that is in intellectual farce, though he used this farce only for selfish ends. The same tendency to identify virtue with intellect is common enough nowadays, whether in the form of that "smartness" (Anglice dishonesty) which is the national virtue of this progressive continent, or in the subtler form of absorption in science or literature, or philosophy. In either case, sympathy is weakened, affection blinded, selfishness is developed in some form or other, whether in the vulgar form of the race for wealth, or in the form of isolation and self-culture, as in the life of Goethe. Socrates himself, in his zeal for knowledge, showed a certain lack of sympathy where sympathy was due. Plato tells a story how, during the last twenty-four years of Socrates' life, the poor woman who had the misfortune to be his wife, and who, if she was, so rumour said, a shrew, had some reason for so being, presented herself at the prison door to take farewell of her husband; before she was admitted she found Socrates surrounded by the usual circle of admirers, sitting on a bed nursing the benumbed leg, from which the chain had just been struck off. Then began she-as Plato bitterly observed-to say the sort of things women will say: "O, Socrates," she said, "this is the last time you will see these friends and they you." "Will some one." observed Socrates blandly, "remove her," and they took her out; and Socrates, stroking his leg, began, "What strange things, my friends, are pain and pleasure, how closely are they bound together, and so on." The consecration of a lifetime to self-culture, as Goethe consecrated his life, is in accordance with Pagan morality, and would have seemed irreproachable to Socrates and Aris-

In much the same way prudence ψρόνηδις. in Greek is often spoken of as the supreme virtue. Given a finite creature in a world out of joint, with no end to be pursued but happiness, no strong personal love to a divine Master to transform the old world and make all things new again; no bond to bind him to other men, except natural and very fitful sympathies, what more reasonable than that prudence should be canonized in the first of virtues. There is a passage in a writer thoroughly imbued with Greek ideas -George Eliot-which is the echo of numberless reflections in the Greek dramatist. " Certainly those decisive acts of Dorothea's

life were not ideally beautiful, they were the mixed result of young and noble impulse struggling amidst the conditions of an imperfect social state, in which great feelings will often take the aspect of error and great faith, the aspect of illusion." That is a somewhat melancholy moral, which the tragedians of Athens, Sophocles and Euripides are continually enforcing. Beware enthusiasm, beware lofty ideals, beware ambition, that is the less in they teach. Life is a very complex thing, and the spirit in which it should be met is a spirit of cautious distrust of everything, especially of everything extreme; of enthusiasm, for it means a narrow mind; of affection, for it is blind and partial; of heroic and unnatural virtue, for outraged natural will tempt it to unnatural crime; of your own cause and creed, for your love of it is mixed with love of self. The battles of life are not always battles between good and evil, as the Sunday school teaches, but between one partial good and another; one honest, but narrow mind, and another; each man fighting for what he calls, and sincerely thinks, his rights, each right and each wrong, and both ruined, and all for want of a wider mind, of a greater power of self-analysis, of a larger measure of self-knowledge. And so the supreme virtue that prudence, which is ever on the look out for pit-falls, and most of all suspects them in its own fairseeming and imperious instincts. That prudence which prefers even the humdrum and the ardinary to the difficult heroic. The broken-hearted king in Sophocles' Antigone enforces this moral:

"For now the fear comes over me that 'tis best To round one's life in the accustomed way."

And again-

"Prudence is the largest part of happiness— A lesson men shall learn when they be old."

The chorus in Euripides' Bacchantes enforce the same.

"A wisdom wider than the laws,
A life of loftier deeds,
This is no plan for mortal man,
This doth surpass his needs.
But the divine, whate'er that may be,
Nature and ancient use,
It costs not much to honor such,
And why should'st thou refuse."

There is one more last feature in Pagan virtues, in which the same childishness and selfishness are in both perceptible; I mean the extraordinary self-complacency of their great men. The only humility to be traced in Pagan ethics is, that humility, which a sense of the importance of man against nature must impress upon any one with cool judgment and a clear head; other humility, intellectual, not moral, the Greeks learned. But of that other and truer humility, which springs a sense of the weakness of man against -not external forces-but himself, that humility which teaches him how little he achieves of himself, even though he be among the world's heroes; which whispers

to him in the hour even of spiritual success like, yet unlike, the slave at a Roman triumph that after all he is but an unprofiable servant.

"God's puppets are we best and worst,
There is no last or first."

Of this humility the Greek knew little or nothing. Their great men are always striking attitudes, and discoursing eloquently of virtue, and consciously striving to be heroic. and complacently announcing their own superiority to their fellows and the vulgar herd. Sometimes the feeling shows itself in a grotesquely childish shape, sometimes wears a subtler and a modern aspect. As an instance of the first, remember what occurred after the battle of Salamis. The commanders of the assembled Greek forces met to vote prizes or rewards to the heroes of the hour: the votes are counted, and lo! each general has voted for himself. Take a subtler form of the same egotism. Plato has drawn a picture of the ideal man and of his life in this fallen world, amid his painfully common-place acquaintances and surroundings. For such a man, what Tacitus calls the last infirmity of noble minds, the love of fame has no charms, he has vanquished, as he thinks, all human weakness, but the infirmity which Tacitus counted no infirmity, which even Milton, when he borrowed from Tacitus, overlooked; the infirmity, one thousand times subtler than the love of fame, spiritual pride, this he has not vanquished, and wrapt in this pride he will not condescend to minister to weaker men and women. Not merely has he washed his hands of all vulgar politics, and the coarse machinery of government; not merely has he removed the patty resentments of the ignoble pettifogging of law-courts, and permitted the dishonest to plunder him unpunished, but with the same serene indifference, he averts his glauce from nearer weaknesses and dearer offenders. He has a wife, and a wife who is only human and ambitious for him and for herself, and as she pays her round of visits, each gossip aims a woman's shafts at her peace of mind, discoursing long and loudly of her husband's fame, and the reflected glory shed upon his wife. Yet can this poor woman find scant comfort from her Olympian lord, he is not rude to her-his pride and state forbids, nor is he considerate; he bestows upon her foolishness a well-bred inattention.

Aristotle's picture of the ideal man shows the same quality more nakedly. The high-minded man, says Aristotle, is one who thinks himself worth a great deal, and is worth a great deal. He is one who will never run away from danger, still less if he has to do so in undignified haste with his big arms swinging; nor will he do wrong (to merit injustice), why should he? for nothing is worth winning in his eyes, yet when great honors are showered on him, and at the

hands of good men, he will feel a moderate pleasure, as hereby receiving what is his due, or perhaps a little less, for there can be no honors quite worthy of him. To honor from ordinary persons and for trivial causes, he will be quite indifferent; so too with wealth and power and good fortune, he will take them moderately as they come; neither very sorry to fail nor very glad to succeed in such things, honors being of little moment to him, of still less moment are these things. He is thought by the world superior, yet it is not without good reason that he despises the world, he does not run into danger for trifles, nor does he love danger, for he does not care about trifles, but great dangers he will dare and lavish his life upon them, for life is not worth living at all costs, and he will confer favors, but he is ashamed to receive them, for to confer shows superiority, to receive inferiority, and if he does receive a favor he will return it with interest, for so the recipient will be in his debt and under obligation to him, and he remembers the man he has benefited, but not the man who has benefited him, for the recipient of benefis is at a disadvantage, and he wishes always to be at an advantage, so he is glad to be reminded of the one, but will try to forget the other; and he wants nothing, or next to nothing, but is eager to supply other's wants (in order to feel his power); and to the great and fortunate he is lofty in his bearing, but to the middle classes moderate; for to lord it over the first is a difficult and glorious achievement, but over the second it is too easy a task; and in the case of the first to give oneselfairs is not ungentlemanly, but in case of the second it is vulgar. Again, he will not play second fiddle, and he is indolent and procrastinating, except when the honors of the task in hand is great, for there are few things he cares to do, and these few are brilliant, whereon necessarily he shows his likes and dislikes, for to conceal the latter would imply fear. Besides, he care for truth more than for popularity. and whatever he does or says is open. And he speaks home-truths, except in so far as he is ironical, and he will be ironical to ordinary persons. He will not change his habits of life, unless it be to suit a friend. He will not express surprise at anything, for nothing is important in his eyes; he will not bear grudge, for it is little-minded to remember wrongs; nor will he talk personalities, either of himself or another, for he does not care to hear himself praised nor others blamed; nor does he flatter, nor yet disparage even his enemies, unless it be in a scornful sort of way. He does not lament over necessary trouble or trifles, nor will he condescend to entreaty. To do any of these things would imply excitement of mind (and he is not excited). And it would seem pro-

(Continued on page 266.)

### TORONTO:

THURSDAY, APRIL 29, 1886.

### PLANTING IN SCHOOL GROUNDS.

OUR academies, certainly, should have their academic groves. It is doubtful whether all our schools are not academies, according to the definition which bestows that term on every institution where more than the simple elements of instruction are imparted. Academy or school, however, they should have the trees; and as a rule, school or academy, they have not got them. The city instructional edifice is a brick building surrounded by a Sahara of planked yard-its country relative often a wooden structure in a bleak quarter acre lot. Nevertheless, our grumblings over the matter need not be too intense. It is progress, and great progress, that we have them at all. It is but a few years since nine out of ten of them were not. A vast advance has been made. We have the schools. Now let us have the trees.

A school should not be overhung by embowering arbors of waving foliage, nor picturesquely situated among, and half hidden by, sturdy oaks and graceful elms. Walls and roofs should be given their full chance of sun-light; the shade is better to fight in than to live in; an inflammatory rheumatism is too high a price for a cooling breeze. In short, it is not well to have too many trees near the house. At some distance it is well to have plenty of them.

A great point is that of shelter; and this is generally necessary on the north and west. Nothing but evergreens will give us this, therefore along the north and along the west of our school inclosure we should have them in such numbers as the ground at our disposal will permit. For my part, I should like to see a good acre of our white Canadian pines (there is nothing better) on each such flank. There is no grove so healthy as a pine grove; from no other such mass of leaves will come on a summer's day such balmy zephyrs to your open school house windows. Such groves would well supplement the playground, and they would also supplement the school house, for they would teach a lesson—a lesson not in the books, a lesson to be learned from example, effect against a back-ground of evergreen. alone. The ground and the trees would be valuable; they would represent money;

they might be converted into it. That they were not so converted would teach the pupils that trees had a use more valuable than to build houses withal, to be sold for a thousand pence, or to be cut down that fat bullocks might feed where once they stood.

Yet, if we have but a small lot to protect and beautify with trees, we should run a single line of evergreens along the north and west and let them branch to the ground. The evergreen needs every lower branch for many years; for one reason that its trunk and the ground beneath it both need shade; for another, that your wind-break is no wind-break if the air has full sweep beneath it. For choice of trees, the pinc will give a tall, dark, solid row; the cedar one of lower height and closer texture; the Norway spruce a lighter green and more picturesque line of conical summits. Of these, the cedar of course will thrive on the moister soil. And, by the way, when we come to planting them, there are four things to be looked for, namely, a small tree, a good root, kept from sun and air till the moment of planting, and a depth no greater than its forest bed. It is true that by planting deeply, we hold the tree root in the ground firmly, a very necessary thing to do; but by this over-deep planting we often find ourselves, in the course of a year or two, holding a dead stick in the ground very firmly; not at all a necessary thing to do. The trees should be planted firmly," but where the wind can affect them that firmness should be secured by staking, not by planting the roots so deeply that heat and moisture cannot do their work. Give these a fair chance, in fair soil, and the tree will soon make itself steady enough. Till then, if necessary, tie it, and by the way, do not let your ligature ingrow.

If there be room enough, supposing we have planted our rows of evergreens on the sides to be sheltered, we shall have an improved climate in our school grounds; but we can greatly add to the beauty of our row if we have room to plant another row inside, twelve feet from the first, and let this second be of the soft maple. When both are grown up, the light green in summer and the bright scarlet in the fall, of the maple, will produce a beautiful And now two sides are done. For the rest, the south and east, we need no !

screens. Here we require, at fair distances, separate and beautiful trees. Say thirty feet is resolved upon, plant them fifteen, and in ten years cut out half. In the meantime, with the same expenditure of ground, you have twice as many growing trees for ornament; and there is nothing more beautiful if once we educate our eyes to perceive their beauty. The man who passes a succession of beautiful trees, unobservant as of so many pebbles in a walk, lives his life out without obtaining one-tenth of the pleasure his eye-sight might have afforded him-

Of trees to choose from, we have in this climate a vast choice--the firm unbending oak; the slender, lofty, swaying ash; the urn-curved elm, the beech with its successional shelves of foliage; the basswood, broad of leaf, deep of shade, white of blossom; the white-stemmed birches, upright and conical in the cut-leaf, divergent and leaning in the common; the maples in their infinite variety (choose the soft for the wet land) the mountain ash with its clustering berries, the larch pendulous with a myriad festoons of light and glancing green. All these, any of these, will do well for the south and cast sides of your enclosure, not too near the house; and when they grow large, not too near each other. On the north and west we want the shelter of evergreen belts; on the south and east merely the beautiful effect of occasional and isolated trees.

The Arbour Day instituted by Government last year bids fair to be a great success. And when the school grounds have been stocked, why not encourage the pupils to direct their attention to the roadsides? Why not to hill-sides otherwise useless-to barren land almost useless ?to planting a mile-long wind-break of evergreens for some struggling farmer unable to try the experiment himself. But let me take the opportunity of warning against the too common course of enthusiastic beginners, the tendency to plant largely and care for slightly. Of what use is it to plant one year numerous fine trees and in the fast following years to leave them unwatched till they dry to death slowly, or to leave them unprotected from cattle to be bitten to death quickly? "Ninety per cent.," writes one correspondent to me, "of our carefully chosen and nicely planted trees are now dead for want of a little care till they should grow beyond the need of care." Let me therefore sketch the needs of tree planting:-

All trees do well on loam, fairly drained. Pine will grow on poor sand.

The soft maple and the cedar will flourish on a soil more moist than most others will bear; the last on a soil rather low, however, than wet.

Mulch all trees -that is, the year they are planted spread around them straw or other such material three feet in radius, and six inches in thickness. I have seen stones used with good effect to keep this in place. This prevents the sun from drying the ground. Another way is to stir the ground shallowly twice in a summer.

Keep cattle away from all young trees. They will destroy in a minute what yourself and nature have been three years in doing.

Always remember that, if we choose to take care of a row of trees, plant them well, stir the surface frequently, or mulch it sufficiently, and generally watch their welfare, we can make that row of trees grow three times as well as will a similar line uncared for, if it live at all. There is a deep pleasure to be obtained from watching the success of a thriving plantation. The bark stands firm, clear and healthy on the stems; you can almost ree the vigorous branches extend themselves as if grateful for your care; great masses of leaver broad, bright, and many-veined, will spread and burgeon forth rejoicingly in the sun; and as you seek their cool and fragrant shade, will wave and flutter above your head, an ever-changing kaleidoscope of picturesque verdancy.

When you plant your trees, grudge not a little care. What is it to bring a wheelbarrow of sand to a clayey site; one of clay to a place too sandy? You are planting a tree by which your grandchildren may remember you-which perhaps shall for many a year do its ut'ermostdumb, yet living; silent, yet sensitive—to Hease yourself. Its grateful shade shall please you in the summer day; its shelter cherish you in winter time; or if it then be bare of every leaf each denuded branch shall speak to you of a time when you also shall appear as lifeless, and of a resurrection as certain as the coming spring.

Pupils of the Canadian schools, the remembrance of many a century past, the knowledge of many a nation existing, lies open to your view; the printer's art—to your ancestors for many an age unknown

-sets before you the past and present as in a vast and magic glass. Look in that mirror, and you will see the citizens of certain nations, swayed by a pitiable and a mistaken view, adopt wealth as the standard of happiness, and realize by lifetimes of successive disappointments the greatness of the error they have made. Of I such error is his a branch who expects to | they may obtain for the book. win pleasure by stripping his ground of 1 every tree, wreaching from every rood all, food that it will grow, careless that such denudation destroys the upper and the nether springs, and hinders the refreshing coming of the summer rain. Shall not yours be a different course? The land was not given us to destroy its fertility; to leave a desert to those who may succeed. Wiil you not aid what you may in benefiting your country by preserving, where you can, some slight portion of her ancient forests; aid what you may in planting and caring for some trees?

R. W. PHIPPS.

### OUR EXCHANGES.

Littell's Living Age. The numbers of the Living Age for April 10th and 17th contain "The Relations of History and Geography," by James Bryce, and Newman & Arnold, Contemporary; 'About Kensington Gore, 'and "The Rosettis,' Fortni, http; "In French Prisons," by Prince Kropotkin, Ainsteenth Century; "Ireland under her own Parliament," National Review; " Musings without Method," Blackwood; "A Pilgrimage to Sinai," Leisure Hour; " Reminiscences of my Later Life," by Mary Howitt, Good Words; "lewish Folk-Medicine," Spectator; "Lying as a Fine Art," Saturday Review: ' Dutch Skating Grounds," St. James' Gazette; "Queen Victoria's Key," Chambers; "Of the Writing of Letters," All the Year Round; "Indian Death Customs," Knewledge: with instalments of "Ambrose Malet, ""The Haunted Jungle," and "The Light at the Farmhouse," and poetry.

#### BOOKS RECEIVED.

A Parallel Syntax Chart of Latin, Greek, French, English, and German, Based on the Logical Analysis. By W. W. Smith, Prof. Latin, and R. E. Bla kwell, Prof. English and French, Randolph-Macon College, Virginia. Boston: Ginn & Co. \$1.00.

### REVIEWS AND NOTICES OF BOOKS.

THE practice of cheap publishing is about to reached its lower -or highest-level in the issue of a series of new original novels by well-known writers, printed in demy Svo on fair paper with striking covers, at a panny apiece. The enterprising publishers are the Society for the Propagation of Christian Knowledge, and the first two authors secured are Mr. Fatjeon and the Rev. Boring Gould, the author of the strange tale of "Mehalah."

HOUGHTON, MIFFLIN & Co. are publishing "Hamlet's Note-Book," a defence of Bacon's

alleged authorship of Shakespeare's work and a criticism of Richard Grant White's essay on "Bacon's Promus," by Wm. D. O'Connor; and a new edition of Judge Nathaniel Holmes's "The Authorship of Shakespeare." They also expect to have ready early next week the handsome memorial volume on George Fuller already described at length in these columns. Though the work i to be sold by subscription, the publishers with How the trade a commission on orders which

THE Chantengran has the name of Farnest Ingersoll among its contributors to the May impression. Mr. Ingersoll is always popul'r and instructive in his magazine articles, and he fully sustains his reputation in the present article-a gleaning from the National Museum at Washington on "Our Utilization of Animal Products." Bishop Hurst contributes another of his eastern studies to the May issue Like those which have preceded, it is bright, thoughtful, and suggestive. The topic of the present article is the "Coptic Church of To-Day." Charlotte Brontë is the subject of a racy character study from the pen of Kate Sanborn. It bears the marks which distinguish all Miss Sanborn's work, decisive opinions, quick sympathy, and a terse style. A timely paper appears in this number of the Chantanguan on "News-gathering in Washington." "The Special Correspondent" is the theme, and from the amount of information it contains we imagine the writer who signs himself Seyet, must know from experience something about the guild of which he tells. We understand that this article is to be followed by one on the Associated Press.

MRS. HARRIET M. MILLER, whose charming chapters called "Bird-Ways," published by Houghton, Misslin & Co., under the signature of "Olive Thorne Miller," have won her an audience with readers of Thoreau, Burroughs, and Torrey, four readers may remember that a few weeks ago we reviewed most favourably this little book], resides at 271 Quincy Street, Brooklyn, N. Y., which city has been her home for the last nine years. She is a native of Auburn, N. Y., and a distant relative of Horace Mann, the late distinguished educator. She has been writing regularly for publication only about fourteen years, being about forty years of age when she began. Her first articles were for children, though rarely in story form; later, still over the name of "Olive Thorne," she wrote natural history papers and serials for the young, contributing to the foremost religious and literary weeklies and juvenile monthlies. It is about four years since she began the study of birds from life, some of the results of which appeared in papers in the Atlantic, Harrer's, and other magazines, and now re-appear in ' Bird-Ways." She now writes very little in any other line. Her studies are pursued both at home, where she has a large sunny room bird-tenanted, and in Prospect Park, Brooklyn. She has published, besides the volume already named, "Little Folks in Feathers and Furs," "Nimpo's Troubles" (most of which appeared serially in St. Nicholas) "Queer Pets at Marcy's" (true stories of pet animals and birds), and "Little People of Asia" (an account of the method of life of Chinese, Japanese, Siamese, and other children); and is gathering material for a second bird book .- Literary World.

(Concluded from page 263)

bable that he will always walk slowly and talk in a deep voice, and with a measured utterance. For not caring about trifles he is never in a hurry, nor can he become so when he thinks nothing of importance. But people who talk with shrill voices and walk fast, only do so because they think things important.

Spiritual pride, self-righteousness, therefore, was not an infirmity, according to the Pagan code, which turning on the pivot of self and aiming at self-culture and self-development, naturally did not decry or even closely scau the features of its idol. Man's duty in this world-says the Westminster Confession-is to glorify God, and enjoy Him forever. Man's duty in the worldsaid the Greek moralist—is to make himself like God and glorify himself. The chief enemy to be conquered in life's battle, according to the Pagan, is the eternal enemy, the shock of circumstances, the changes and chances of this life and the one supreme recipe, is an unbending pride, which will face unflinching a world in arms, and this is very natural, just as natural as that to a Christian-if any man be really a Christian -the chief enemy is the inner enemy self, and the supreme weapon an ever present humility. Many of the maxims, most of the maxims of Christianity, can be found in Pagan writings, and Christianity alone has popularized them; but here in this virtue of humility there is a real gulf. The attempts made by one writer to find a parallel to the gentleness of Christ in Pagan ethics, has served only to throw a light upon the real difference. This writer thinks that he has found a parallel even with the dying words of Christ, "Father forgive them, for they know not what they do." His parallel is in Seneca, and it is, "Forgive the world, they are all fools." The tone of scornful pride rings in the Pagan version and destroys the parallel.

It is reported of a famous Pagan, one of the Chinese Emperors, that as he lay upon his death-bed he could find nothing better to say than that he was one of the greatest and most fortunate of men; he had nothing to wish for, nothing to repent of, no flaw in his happiness and prosperity, having had enough though not too much, he was willing to depart. How astonished, how disgustedsays a Saturday Reviewer-would he have been had he been told to pray that neither through splendor of anything that was great, nor the concert of anything that was good in him, might withdraw his eyes from regarding himself as a sinner. The same Saturday Reviewer has shown how the Pagan self-complacency has affected modern history, injuriously at times, when the classics have formed the chief morals of conduct. Notably in the French revolution, the Gi-

ronde swore by Plutarch, the lives were to the circle who met at the house of Madame Roland, a veritable revelation. In those lives they saw, or thought they saw, that their own ideals were not mere ideals, that they had been realized once, and could be realized again, for does not Plutarch describe a time when all men had been Republicans, when ail men had been as dignified as even General Lafayette himself, when all men had devoted themselves to striking attitudes, and to deliver orations, such as even the deputy Verguiared would not have disdained. If any evidence were wanted-says the Reviewer-to show the superiority of the Scriptural over the classical theory of life, it can be derived from a comparison of the self-consciousness and self-complacency of the Gironde with the morose earnestness of the Puritans of the Long Parliament.

MAURICE HUTTON.

### Mathematics.

ANOTHER SOLUTION OF PROBLEM NO. 6, IN FIRST CLASS "A" AND "B" ALGEBRA PAPER FOR 1885.

GIVEN 
$$(y+z)^2 = \text{to } a^2yz$$
, (1)  
 $(z+x)^2 = \text{to } b^2zx$ , (2)  
 $(x+y)^2 = \text{to } c^2xy$ , (3)

to eliminate xyz.

Multiply (1) by x, (2) by y, (3) by (2), and add.

Thus we have  $x(y+z)^2 + y(z+x) + z^2(x+y)^2 + to (a^2 + b^2 + c^2)xyz$ . (I.)

But by a well-known identity, viz.:  $x(y + z)^2 + r(z+x)^2 + (x+y)^2 - bxyz$  -(x + y)(y + z)(z + x),the left side -(x + y)(y + z)(z + r) + bxyz. (II.) Multiply (t) (2) (3) together and we get  $(y + z)^2(z + x)^2(x + y)^2 + bba^2b^2c^2x^2y^2z^2$ or  $(y+z)(z+x)(x+y) - \pm 8abcxyz.$ 

.. (II.) becomes  $\pm Sab c x yz + b x yz$ . .. (I.) becomes  $\pm Sab c x yz + b x yz$  $= b(a^2 + b^2 + c^2)x yz$ 

..  $2 a b c + 1 = a^2 + b^2 + c^2$ , or  $a^2 + b^2 + c^2 \pm 2 a b c = 1$ .—Ans. Sincerely yours,

D. F. H. WILKINS, B.A., Mount Forest. Bachelor Applied Science. April 16th, 1886.

### $WIIY+\times-=-AND-\times-=+?$

In the Journal of Education for December 17th, a correspondent asks why plus multiplied by minus equals minus, etc. While my pupils are at work upon the multiplication of integers in arithmetic, they are led to see that the product bears the same relation to the multiplicand that the multiplier does to ONR. While at work upon multiplication of fractions the pupils are led to note the truth of the same principle.

The pupil being thoroughly imbaed with this principle when studying arithmetic, naturally ex-

pects to find it to hold good in the algebraic process of multiplication; and, as multiplication is, at bottom, a unity, his expectation is well grounded.

Example 1 .- Multiply 3 by -4.

Principle.—The product bears the same relation to the multiplicand that the multiplier does to one.

In this example the multiplier is the negative of 4 times 1; hence the product is the negative of 4 times 3; 4 times 3 = 12, the negative of which is -12. Therefore,  $3 \times -4 = -12$ .

Again: If the factors are literal, the explanation takes the same form, thus: multiply a by -b. The multiplier being the negative of b times 1, the product is the negative of b times a = ab, the negative of which is -ab. Therefore, a multiplied by -b = -ab.

Example 2.—Multiply -3 by -4.

[State the principle as above.] In this example the multiplier is the negative of 4 times 1; hence the product is the negative of four times -3; 4 times -3 = -12, the negative of which is +12.  $\therefore$  etc.

Again: If the factors be literal, the explanation takes the same form, thus: Multiply -a by -b. [Principle as above.] The multiplier being the negative of b times 1, the product is the negative of b times -a; b times -a = -ab, the negative of which is +ab. Therefore,  $-a \times -b = ab$ .—

N. Newby in Journal of Education.

### Educational Opinion.

#### IMPORTANCE OF MANNERS.

THE precociousness, amounting almost to impudence, of American children is by no means a new subject to call to the attention of parents, yet this very precociousness is the bane of many a career. Children with a certain amount of attractive brightness win so much applause in the family circle and among its intimates that early in life a feeling of pride and self-sufficiency is developed that is apt to crowd out better tendencies.

A child whose sayings are quoted in his presence, who is made to feel that his doings are of paramount importance in the household, soon learns to look upon teachers, schools, and parental restraints and authority as superfluous where he is concerned; he is a law unto himself, infinitely more capable of making laws than of being controlled by them.

And is there a greater annoyance to be met in society than one of those untrainmelled people? Having from childhood been accorded the first place, they have no perspective of human rights, and see themselves always in the foreground.

How hard it is to realize that from the first conscious act of a child the undefinable force in individual life that we call manner is being developed.

What is it that attracts or repels us when we meet a stranger? Manner. He may be a rascal through and through, but if he has

been trained in the little at's that make life agreeable we can tolerate and "ndure for the time that society forces us into the same gathering. If he is a moral king and has the manner of a boor, we refuse to tolerate him, and are glad that the merest conventionalities suffice for the necessary intercourse, and worship the moral hero at a distance. What is the reason of this? Manner is the invisible card presented by each person on introduction, unless reputation has preceded the personal encounter.

After the true character is understood, intolerable manners re passively endured, but how much is pleasure curtailed by the absence of the little refinements that make up so much of the pleasure in friendly intercourse, and how much of a man's power is diminished by his ignorance of these little details!

When it is realized that the time to impart those habits that constitute manner is early childhood, it seems strange that an intelligent parent should allow this moulding period to pass without training. It is easy to help a child to form polite habits at so early an age that long before a respectable age is reached the habits are simply an expression of nature. A boy who is kindly and polite always to his mother does not make an effort to do a polite or kindly act for another woman, and if an effort is required he is so habituated to the thought that kindly and polite attentions are due to a woman, that it would require more effort to refrain from the action than to do it.

others before herself, she will never be accused of self assertion. If she has been taught to observe the laws of good breeding in her own house in childhood, girlhood will find her able to meet any of society's demands in conventionalities. Nothing betrays the character so quickly as the unconscious acts. When the mind is off guard, then habit comes to the front, and society mentally puts on the tickethat stamps one ill-bred or well-bred.

The habit of interpretation is one that is acquired in childhood. Says a recent writer in Blackwood:

"The necessity for self-repression maker room for thought which those children miss who have no formalities to observe, no customs to respect, who blurt out every irrelevance, who interpose at will with question or opinion as it enters the brain. Children don't learn to talk by chattering to one another, and saying what comes uppermost. Mere listening with intelligence involves an exercise of mental speech, and observant silence opens the pores of the mind as impatient demands for explanation never do."

This habit of expressing every passing thought make the mind like a sieve, and it

soon becomes impossible for it to retain a thought, or make each thought a link in the answering argument.

For mental discipline a child should not be allowed to ask useless questions, nor should answers be given when a little study on the child's part will solve the problem. Self-repression is second only to self-control in children's training. Impatience, yawaing, indifference when another is trying to amuse or entertain, is a habit that should not be tolerated for a moment, and it is as pernicious a factor in injuring a child by creating mental inertia as senseless chatter and question is in creating useless activity. Teach a child to respond sympathetically to a kindly action, not because it is interesting, but because of its intent.

If a child is trained in its home to obey the Golden Rule, to preserve at the table the habits that govern all well-regulated and refined households, there is no danger but that he will carry a passport that will give him entrance to any society that his brain or pocketbook may demand. Brain and pocketbook may float him for a time, but he will be so freighted with a conscious ignorance of details that he will neither give nor take the possible enjoyments of his position.—Christian Union.

### WOULD FREE EDUCATION ELEVATE THE NATION?

THE following are the concluding paragraphs of a Paper read before the Lambeth District Teachers' Association by Mr. H. Maidment:—

The English nation is great to-da; because of the sturdy independence of its sons in the past. Unhappily, a dependence on the State seems taking the place of selfreliance amongst many: the State should find work for the unemployed, say some; the State should give the agricultural laborer a share in the soil, say others; and some amongst us say, the State should provide education free, although the parent is able to pay part of the expense. All these proposals, and none more than the last, have the same tendency—the enervating of the working classes; and I trust the elementary teachers of England will try rather to deepen the feeling of individual responsibility among the people, than to further the idea of State dependence by advancing the cause of free education.

Before concluding, I will add one word on Mr. Chase's proposal (and I think he has the doubtful honor of being the original proposer), that the whole cost of education should be borne by the State, and that schools should have one source of incomegrant. I have shown how much this means, viz., a Government expenditure of twelve millions annually. Even now there is very

little hope of getting Parliament to agree to the abolition of the principle of "payment by results": if the Parliamentary grant were trebled the difficulty would be all the greater, and probably entirely unsurmountable. Would teachers as a body welcome the time when, not part only, but all, school income was dependent on the report of an Inspector? I think not. Nor do I think the destruction of local responsibility by any means desirable, for local interest would lessen; and, as a third objection, I would point out the centralising character of the proposal, and excessive centralisation is never good. But I need not dwell on these points, for the suggestion is not now, nor is it ever likely to be put before the country, by a responsible

Briefly to summarise what I have said. I have shown that the parent cannot claim free education as a right, and that free education is not the only, or even the best, way of meeting the present distress; that no practicable means of raising the money, and at the same time of retaining the voluntary system, has been advanced; that there is no evidence to show that free education would improve the attendance; that it would probably lower the standard of education, and make it less popular; that whilst it might lighten the work of the teacher, the teacher's work might be eased without its adoption; and that the tendency is rather to the moral degradation of the nation, and not its elevation.

There is much that at first sight is attractive in the proposal for free education, but the more closely the subject is examined, the clearer does become that its adoption would remedy no evils, but would act prejudicially to the cause of education—a cause dear to the hearts of all of us—and in the interest of which I ask you to reject the specious proposal which has been submitted to you, and to declare by your vote "That this association of elementary teachers believes that the introduction of a national system of free schools would retard the progress of education."

AMONGST the announcements of Charles Scribner's Sons are the two latest volumes of "Mommsen's History of Rome," translated by Dr. W. P. Dickson; "Persia, the Land of the Imams," by the Rev. James Bassett; "The Epic Songs of Russia," translated by Miss Isabel F. Hapgood, with an introduction by Prof. F. J. Child: Fischer's "History of Modern Philosophy;" and Ribot's " Contemporary German Psychology." Scribner & Welford announce "Letters of George Sand," translated and edited by R. L. de Beaufort, with six portraits; Johnson's "Rasselas"; Goldsmith's "Vicar of Wakefield," in fac-simile of the first edition of 1766, with preface by Austin Dobson, and a complete bibliography; Hatton's "North Borneo," and Johnston's "Kilima-Niajara Expedition."

### Methods and Illustrations

### READING TAUGHT BY PHONETIC BOOKS.

[To those interested in phonetic spelling the following article from the Phonetic Journal (London, Eng.), will be interesting:-]

Now that my examination is over, it gives me much pleasure to record the results I have obtained by the use of Phonetic Reading Books.

I will endeavour to describe the system, as I have found it to act, in as brief a manner consistent with its real value in teaching the young. Having a knowledge of Phonography, and knowing the benefit it has been to myself, I have been trying for years to impress upon my scholars the fact that our language is so composed as only to have in it about fifty words spelled as pronounced, and first began to teach Semiphonotypy by making my classes spell the words by the short vowels when they are sounded as such, for example, vegetable, becomes "ve ge inble," and cat "c a t." I found according to this system that the labour of teaching to read was greatly lessened, and so I became resolved, in spite of all the difficulty I had to contend with, to introduce the Phonetic Readers into my school. I purchased some 250 books in September, including some reading sheets for the baby infants, and began work in earnest. It may be interesting to others engaged in education to know the results of such work and the length of time employed in the reading. I started with every child in the school, from those of three years to the Seventh Standard. We had been through the whole of the First Phonetic Reading Book, with the Standards, in two days. Here I may state that each reading lesson occupied thirty minutes. We at once commenced the Second Book, and I should state that we did not take the capital letters as they are arranged in the phonetic books, as by reading the books I soon found out that the children picked up the capitals themselves; and as I had to get through the whole of the books in the space of four months I thought it would be advisable to omit them till the children had acquired a fair knowledge of the system. Number 2 was finished in eight days, and ( then we recapitulated the last three lessons and went over the capitals. With extreme pleasure both to teacher and taught we took up the Third Book, and after an enjoyable fortnight found ourseives at the end of this book. When I came to No. 4 I had little or no trouble, as my pupils knew the sounds of ! the letters, and that each word was pronounced as spelled, as well as myself. The climax of my anticipation was reached when, after | second year's work; and I answered, "None!

another fortnight, we bade farewell to phonetics proper, and were ready to embark on the Transition Book. The reading of this book proved the most interesting three weeks in teaching I ever experienced. Each child was in ecstacy to see the number of absurdities with which our language abounded, and interest in reading could be seen to grow more and more daily. The pupils became delighted in finding out words in their leisure time that were spelled to their minds ridiculously wrong, and then trying to find out the right pronunciation. I used the Transition Books till all the words were thoroughly well known by all the Standard children, and my infants read this book fluently. At Christmas I packed all the phonetic books away (my examination being in March), and began to take the different Standards in three reading books, and I was, to say the least, surprised both at the expression and fluency with which every child read. The result of my examination for the year is, one failure in reading, and two in writing from dictation. Last year (1885) I had been teaching my children according to the short system of the vowels explained above, and I had not a single failure in reading, and only one in dictation. The whole of my school (both mixed and infant departments) received the excellent merit grant. I should also mention that the infants were taken by an ex-pupil teacher. Formerly the reading of this school has always been the weakest subject.

I write this for the information of any who would like to try the method. I am convinced that if private schools, where examinations are not compulsory, would take the matter up, it would lead ultimately to the introduction of phonetic reading in our elementary schools, and then our children's time would be greatly saved, as they would learn to read better in two years by this principle than in six by the corrupt system now generally employed. I am daily bringing the subject forward to educated persons, and inviting them to hear my school read in both ways, namely, by the phonetic and the present alphabet, and in many cases I get these persons to say they will adopt the principle. To-day two clergymen called to see me, to gather some information respecting phonetic reading, and they have just left me with a firm resolution to try it.

A GOVERNMENT SCHOOLMASTER.

### TEACHING YOUNG CHILDREN LANGUAGE.

A VISITOR asked the question, the other day, "How much do these children study?" At first the question seemed absurd, considering that the children are only upon the at all, if you mean by studying, taking a book and comm tting to memory the text of any lesson; a great deal if you mean by studying, the concentrating of the thought upon any subject. For instance I would not think of giving these children a spelling lesson to study, in the ordinary sense; yet 1 do believe that they must gain the power of giving undivided attention and undisturbed thought to any subject."

I have been thinking over the matter since, in order to discover what exercises are of use in giving the children this power, and I find that there are many that can but discipline their young minds. The habit of looking through the sentence in reading before reading aloud, which is one taught the child in the earliest stages of his school-life, is perhaps the first step in the direction of quiet study. The building of words, where the child is told to thing the sounds and thus discover the words they form, must strengthen this same habit of quiet study. While certainly the varied lessons in number, where the attention of the whole class is directed to the different groupings employed to make any number, as o, must all lead to the same result. The children will be unconscious of any study of the subject, as their little minds are carefully guided by the teacher; yet the habit is forming.

As a step beyond this, when we would bring memory to our aid, any simple exercise may serve the purpose. For instance, the little slips with a single word written on each may be given to the children, who are told to put the words into sentences (that they may be used correctly); to notice the letters used to form the words, and then, with the slips turned face downwards, to spell the words. For this year's class, as a step in advance, I have written two or more words on a slip. These words consist in some instances of opposite terms, as,-

> fresh thick deen rough stale thin shallow smooth

Of the present and past tenses of verbs,

came	blow	read
come	blew	read
think	catch	throw
thought	canahi	threw

Of words pronounced alike, but of different meaning, as,-

their	bluc	knev
there	blew	new
pail	pane	hear
pale	pain	here

These words give an excellent languagelesson, fixing the correct use of such words as catch and caught, throw and threw, naturally and permanently, while the correct spelling of the words is aided first by the eye, second by memory. - American Teacher.

### Educational Intelligence.

#### THE PLANTING OF EVERGREENS ADVOCATED.

THE near approach of Arbor Day will make the following interesting:-

To the Editor of the Perth Courier.

Sir,-It is strange that, with the facts perfectly plain before us that the clearing away of our forests is reducing our crops, we do not more generally adopt a very ample and cheap remedy.

One would think that the opposite to the above proposition might be correct, namely, that clearing the forest would rather increase than reduce harvests. But after a certain proportion this is not the case. After two-thirds or three-fourths of forests in a locality is gone, crops will decrease as the remainder of the wood is cut. This has been proved all over North America. The lack of shelter, and the injurious climatic effect of disforesting on the rainfall, then begin to produce their well-known evil effect on agriculture.

There is one method, a very simple, easy and cheap one, whereby many of these evil effects may be greatly ... sened. That is, the planting of rows of evergreen trees as windbreaks along the exposed sides of farms.

Many young evergreens-pine, cedar and spruce -can be got free of charge in our woods and fields, or they can be bought, when young, cheaply from our nurserymen. In the States they are planted out by millions yearly.

The best time is the first week in June or the last in May, and if care then be taken to keep the roots from the air till planted, and to take small trees, there is no need for failure in taking root. Of course, like all other planted trees, they should be mulched.

A week's work in the spring would, if given to this object, result in procuring for the farmer who so devotes the time, a fine row of dense, protecting foliage along the north side of his farm, and if the plan were generally carried out it would greatly improve the climate of the country, and increase the crops, to judge by the experience of other localities, at least one-fourth. Yours, etc.,

R. W. Pmers.

TORONTO, March 31st, 1886.

In the Toronto schools the number of maps are 352; blackboards, 36S; globes, 43.

Sters are being taken to transform the Seaforth High School into a Collegiate Institute.

A NEW metalloid called "Germanium" has been added to the list of elements, making the sixty-seventh.

THERE is a lively discussion in the columns of one of the leading English magazines as to the proper spelling of the word "jubilee," some maintaining that it should be spelled "jubile-"

School Inspector Thomas J. Craft, of Detroit, died a few days since, after several weeks' illness, at the age of sixty years and six months. He was one of the best school inspectors Detroit ever had.

MESSES. MACHILLAN & Co. will publish immediately the "Baird Lectures for 1885 on the D.D. The lectures deal systematically with the influences which moulded the conception of the Apocalypse, with its structure and plan, its inter- , the Language Faculty; Dr. McLellan. pretation, and its design and scope.

RECENTLY Mr. Eugene Kelly contributed \$50,-000 for the proposed Catholic university at Washington, and the Rev. Jas. McMahon, rector of St. Andrew's church, Duane-st., New York, \$5,000.

LORD WANTAGE has given twenty acres of land at Blewbury, near Wallingford, for the site of the Gordon Memorial Industrial Schools. It is an excellent site for the purpose, being situate on rising ground, backed by the Berkshire downs, and only an hour's journey from London by rail.

MISS KIN KATS, a graduate of the Normal School of Tokio, has been chosen by the Japanese Government to receive three years' training, at the Government's expense, at the Salem, Mass., Normal School. She will then take charge of the Normal Schools of Japan. She will be the first Japanese woman to be educated at the Government's expense in America.

THE Fall Meeting of the Teachers of West Huron Institute will be held at Goderich, on the 14th and 15th of October, 1886, at which time Dr. McLellan, the Director, will be present. A circular from the Department states that "The Directors of Institutes will take Hopkins and Fitch as the ground work of some of their lectures in 1886. Teachers should read these works before their Institutes are held, and be prepared to discuss them." For the examination in July, 1886, No. 3, No. 4, or No. 5 of the Drawing Course for public schools will be accepted; after that date it is intended to take the numbers prescribed by the regulations for the 4th class. The drawing books, duly signed by teacher, must be presented to the presiding examiner during the first day of examination.

THE following is the programme for the Semi-Annual Institute Meeting of the Teachers of W. Huron, to be held in the Public School, Exeter, on May 21st and 22nd: - Good English, W. Houston, M.A.; Spelling Reform, W. Houston, M.A.; Mensuration of Surfaces and Solids, for 4th and 5th classes, G. Baird, Sr.; Drawing, Inspector Tom; School Hygiene, J. A. Rollins, M.D.; Utilization of Time in Teaching Arithmetic, A. Embury; Composition, P. McEachren; The Simple Rules of Arithmetic, Geo. Moir; Errors in the Use of Language, A. S. Case; Theory of Music with Class, Miss Halse; Drill, Sergeant Robinson; Miscellaneous Business.

THE following is the programme for the Ontario County Teachers' Institute Meeting, to be held on May 6 and 7, in the High School Building, Port Perry :- Thursday, 9 to 10.30 n.m., General Business; 10.30 to 11.30, Physics; T. G. Campbell, B.A., Whitby.-1 to 2.30 p.m., Art of Questioning; Dr. McLellan, D. of I. - 2.3010 3.30, Literature; F. H. Sykes, B.A., Port Perry. -3.30 to 4, Election of Officers .-- 7.30, Lecture: " Educational Critics Criticised; or, Teacher and Parent in the Work of Education; Dr. McLellan. Friday, 9 to 10 a.m., Address; President Embree.-10 to 11.15, Entrance Examinations; A. T. De-Lury, Manilla.-11.15 to 12.15, p.m., A B C of Arithmetic; Dr. McLellan, D. of I .- 1.45 to Revelation of St. John," by Professor W. Milligan, 1 2.30, School Etiquette; E. Sanderson, Canning-

ton .- 2.30 to 3.30, Should Teachers form a Union? David Boyle, Toronto. - 3.30 to 4.30, Training of

THE following is the programme of the Lanark County Teachers' Association, to be held in the High School, Almonte, on May 13th and 14th : -Thursday, 13, 9 a.m., President's Address; General Business of Association; Geography, F. L. Michell, M.A., L.P.S.: A B C of Arithmetic, J. A. McLellan, LL D., Director Teachers' Institutes. - 2 p.m., Mental Arithmetic, D. A. Nesbitt, H. M. Pakenham, P.S.; Experiences of a New Teacher, Miss Twigg, No. 8 Pakenham P.S.; English Literature, W. Houston, M.A., Parliamentary Librarian, Toronte. - 7.30 p.m., Public Lecture in Town Hall, "Critics Criticized," J. McLellan, L.L.D., D.T.I.; Vocal and Instrumental Music. Friday, 14th, 9 a.m., Spelling Reform, W. Houston, M.A.; The Art of Questioning, J. A. McLellan, LL.D., Director Teachers' Institutes, -3.30 p.m., Election of Officers; Address on "Hopkins' Outline Study of Man."

THE fourth report of the Royal University of Ireland has just been published. The report gives full details of the number of persons who presented themselves for the various examinations of the university in the year 1885, with the results of the examinations. The general progress is stated to be satisfactory, and it is worthy of notice that the high position in the university obtained by women in former years was fully maintained in 1885. There has also been published as a Blue Book the report of the Intermediate Education Board for Ireland for 1885. The number of students who presented themselves for examination in that year was 5, 181, which is a smaller number than in any year since 1879, and the same may be said of the number of those who passed, 3,171, or 61.2 per cent, of those who presented themselves. The reports of the examiners, extracts from which appear in an appendix, speak favourably for the answering in almost all the subjects for examination.

Schoolhovs, in the United States, at least, are beginning, according to the Boston Transcrift, to believe in peaceful agitation and constitutional methods of reform. A schoolmaster in New Jersey, who had offended the susceptibilities of his pupils, has just been deprived of his position as master simply because a precocious small boy solemnly arose in the midst of the morning's work. and proposed a resolution that the schoolmaster had "lost the confidence of the school." The resolution met with instant favour, and was duly accepted, and now there is a vacancy for a man of a different stamp. We were under the impression that schoolboys in England had arrived telerably near the end of the tether so far as immunity from restraint is concerned. Evidently, however, they have not yet emerged from the "Dark Ages" of academical oppression; but all the same we are inclined to tremble at the bare possibility of what would undoubtedly happen, if any boy, small or great, was to "take occasion by the hand" in a similar way in one of our public schools. We imagine that the experiment would not only terminate ingloriously, but would leave behind it painful memories in more senses than one. - The Schoolmaster (London, Eng.).

### Promotion Examinations.

## EAST MIDDLESEX. APRIL, 1886. ARITHMETIC.

SECOND TO THIRD CLASS,

(Limit of Work. — Numeration and notation (Arabic) to 1,000,000. Roman notation to the number of the year. Accurate and rapid mechanical operations in the four simple rules. Practical applications of the four simple rules. Easy factoring. Multiplication and division by factors. Mental arithmetic.)

- 1. Write in figures: twelve thousand and eighteen, MDCCGLXXXVI.
  - 2. Add 7896 cents
    5 hundred and forty cents
    386459 cents
    2 thousand and 7S cents
    6849 cents.
- 3. Add all the numbers that end in 39 between 100 and 1,000.
- 4. Put these six boys' attendance in a neat table, find the total monthly attendance, and each boy's attendance for the '....i' year. (Six marks extra will be given any pupil who correctly finds the average attendance for the half-year.) Four marks for a neat and correct table, and one for each correct total.

Name.	Jan.	Feb.	Mar.	Apr.	May.	June.	Total.
Jno. Kay, Wm. Pitt, Robt. Ely, Ch. Fox, T. Gray, Fr. Tod,	18 13 20 17 19 16	19 13 17 19 17	21 19 20 18 10	18 16 18 18 17	20 19 18 19 17	18 16 16 17 18	
Total,	-						

- 5. Subtract 3896785 from 100,000,000 and again from the remainder and so on until you have \$8309645 left.
- 6. Multiply the sum of 749 and 1616 by their difference.
- 7. Divide 48,697,873 by 72. (7 marks for long division, or 10 marks for division by factors).
- S. Mrs. M. sold 19 lbs. of butter at 17 cents per lb., 18 dozen eggs at 16 cents per dozen, and 28 lbs. of lard at 9 cents per lb.; in payment she received 15 lbs. brown sugar at Sc. per lb., 7 lbs. granulated sugar at 11c. per lb., and the balance in cash. How much money did she get?
- 9. A farm helper received \$23 a month and his board. In three years he finds he has saved \$504. How much per month did he spend?
- 10. How many strokes does the clock strike in

Allow to marks for the style of doing the paper, if the figures are very neatly made, the work well arranged, the denominations correctly and fully written in Nos. S, 9 and 10, and the writing good.

11. Twenty-eight bushels at 19 cents per quart would be equal in value (a) to how many pounds of coffee at 2 cents per oz.; (b) to how many rods of rope at 2 cents per foot; and (c) to how many cords of wood at 3 cents per cubic foot?

(This question is only for Third Class pupils who take this paper for review. They must omit Nos. 1 and 2.)

#### COMPOSITION.

SECOND TO THIRD CLASS.

Limit of Work.—The simple sentence, oral and written, continued. Changing affirmations to negations or interrogations, and vice versa. Supplying ellipses. Writing in sentences meanings of words or phrases. Capitals and punctuation marks—period, interrogation, and quotation. Sentences containing given words. Themes of a limited number of sentences when the topic for each sentence is prescribed. Short descriptions of pictures, objects or acts: reproduction of very short anecdotes, and of the subject matter of the reading lesson, according to topics prescribed by the teacher.

Insist on neat, legible writing, and complete sentences. One mark off for every mistake in spelling.

1. Put the proper term of family relationship in the following blanks:

- 2. Write complete sentences in answer to the following questions:
  - (a) What day of the week was yesterday?
  - (b) What lesson in your reading book do you like the best to read?
- (c) For what cause or causes would you stay at home from school.

We can never be too careful
What the seed our hands shall sow;
Love from love is sure to ripen,
Hate from hate is sure to grow.

Tell how you can in any way sow seeds of love.

- 4. The teacher will stick a chalk pencil (crayon) in the neck of a bottle and place it on the desk. The pupils will write full sentences stating:
  - (a) Where the chalk pencil is.
  - (b) What is its colour.
  - (c) What is its use.

[Here appears an illustration.]

- 5. Write a composition on this picture.
- 1st. Tell who went walking, and what went with them.

2nd. Tell how Harry shews his sister what Jip can do.

3rd. Tell what the other dog is doing.

#### THIRD TO FOURTH.

Limit of Work.—Capitals, continued; punctuation marks: .; ::?! "." Compositions based on object lessons, pictures, local events, relation of stories, subject matter of reading lessons. Familiar letter-writing. Simple business forms, such as accounts and receipts. Exercises to train in the correct use of apostrophes, and of common words and phrases that are liable to be misused, such as: older and-elder, healthy and wholesome, there is and there are.

Insist on neat, legible writing, and complete sentences. One mark off for every mistake in spelling.

1. Put the following into a properly constructed letter written by Mary Kelby to her cousin Gerty Fendon: arrange it in three paragraphs, puncturete and put in the capital letters. Date the letter to-day from your own post office.

Of the thirty marks 10 are for correct arrangement of date, introduction, margin, paragraphing, subscription. Count one off for every error in capitals; 2 for every error in division into sentences and paragraphs; 1 for every error in punctuation, and three for every misspelled word.

- 2. At Thorndale last Saturday Roger Gray paid Walter Adare \$20. Write the receipt.
- 3. Supply letters or words instead of the apostrophes in:
  - (a) 'Tis some poor fellow's skull.
  - (b) Don't say "won't" to me.
  - (c) Didn't you find that plant by the water's edge?
  - 4. Ask this question in your own words: Seek'st thou the plashy brink

Of weedy lake, or margin of river wide, Or where the rocking billows rise and sink On the chafed ocean's side?

To the Water Fowl .- BRYANT.

[Here appears an illustration.]

5. A subscription was taken up in behalf of the boy in this picture. It was large enough to pay the expenses of giving him a college education. From this hint and what you can infer from the picture try to construct a story.

#### HYGIENE AND TEMPERANCE.

Limit of Work.—Respiration, Circulation and Digestion.

- What is meant by good ventilation:
   Why is it necessary to health?
   How is it provided in this school-room?
   Give rules for ventilating a sleeping room.
- 2. All the blood, pure and impure, must pass through the heart.

What is the impure or venous blood?
Whence does the heart receive the impure blood, and what does the heart do with it?
Why do we breathe?

3. Why is it important that food should be thoroughly chexed?

Why do we need variety of food, or why is it better to live on bread and meat and potatoes than to diet on bread alone?

Why does exercise give us appetite for food?

4. Why is it so hurtful to take alcohol just before setting out on a very cold journey?

How does alcohol affect the brain?

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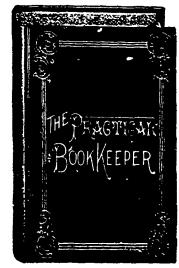


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DR. S. P. MAY, COMMISSIONER of the EDUCATION DEPARTMENT for Ontario, at the Colonial and Indian Exhibition, London, England, will make arrangements on due notice, for Teachers to visit Educational Institutions and other places of interest in London.