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Educational Weekly

VOL. IV.

THURSDAY, JULY 22ND, 1886.

Number 79.

The Educational Weekly

Edited by T. ARNOLD HAULTAIN, M.A.

TERMS: Two Dollars per annum. Clubs of three, \$5.00. Clubs of five at \$1.60 each, or the five for \$8.00. Clubs of twenty at \$1.50 each, or the twenty for \$30.00.

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PUBLISHED BY

THE GRIP PRINTING AND PUBLISHING CO.

TORONTO, CANADA.

JAMES V. WRIGHT, General Manager.

TORONTO, JULY 22, 1886.

ON the 17th ult., Sir Lyon Playfair made his speech in the Imperial Parliament on the Education Estimates of the year. Although the Irish question has all but monopolized the attention of the House of Commons during the greater part of its late short session, yet Sir Lyon Playfair found time to give his listeners much interesting information in regard to the progress made in the British educational system. By way of showing this progress he goes back to the time before the Education Act of 1870 was passed. In 1869, out of every hundred of the population there were only seven children at school. In 1886, the per-

centage has risen to 16.67, so that the improvement has been very marked. In this matter Sir Lyon Playfair compares English with American and with German results. England can, he shows, safely challenge comparison with either country. Germany, he says, has been held up as an example, but England is now not a little in advance of the German standard. Frankfort has at school 69 per 100 of the population. Berlin has 106.4. Cologne has 12.8. Hamburg has 9, and only in one town, in Elberfeld with 16.3, is there any approach to the present English percentage. If Sir Lyon Playfair's comparison had given different results, we might have protested against it as unfair to England. The German returns are taken from select town centres. The English include the agricultural districts as well as the towns. When we turn to America, we find that in Massachusetts, the leading State of the Union in education, the percentage of children on the register who are in actual attendance at school is less than the English percentage. There is room for improvement even so. The British Isles have 23.6 per cent. of absentees, truants for the most part, as against 27.5 per cent. in Massachusetts. In other words, out of 4,412,000 children on English school registers, there are 1,041,000 absent daily from school on the average of the year, and Sir Lyon Playfair is not satisfied with this, and he calls for further efforts to bring the stragglers within the school walls.

In regard to seating capacity also marked improvement is shown. Taking the country through, the provision of school seats needed in 1885 on the most liberal calculation was 4,583,175. The seats actually provided were 400,000 more than these. When we are told how far these seats were filled, the excess of provision becomes much more manifest. For every 100 children in every rank of school age there are 91 seats ready and waiting in public elementary schools, but there are only 80 children on the school registers, and only 62 in average daily attendance.

Sir Lyon Playfair, in the course of his speech, draws attention to matters of grave importance in the structure of the British

educational system. He finds it defective in several points, most of all in technical education and training. Foreign schools, he says, encourage attendance of the children up to 16 or 18 years of age. There are what are termed continuation and improvement schools, and the child passes to these from the elementary school at which he begins. In England there are 20 such schools, and the great mass of the working classes can only obtain such education as the elementary schools affords. If they are to have technical training given them, it must be by a due extension of the elementary school system, and instruction in the natural sciences and in manual training must be brought in to the ordinary school course. The demand for this has been met in some degree, but very imperfectly as yet, and the pressure for further progress is so great that Sir Lyon Playfair thinks it is irresistible, and that the House will soon be forced to comply with the growing demand. Sir Henry Roscoe and Mr. Mather, in the short debate which followed, spoke in the same sense. Sir Henry Holland, on the other hand, expressed his opinion that technical education in all its forms comes properly within the sphere of voluntary effort, and that it would be neither wise nor possible to saddle the taxpayer with the cost. Sir Lyon Playfair takes a middle course. He thinks that more may be done than is now done, but not much more. He finds that when children have passed the higher standards they are usually taken away from school, and that they would be likely to remain if they could get the kind of education which they need. He would, therefore, have technical education given to advanced classes of children and to children who have passed beyond the recognized school age. He has further and larger plans for the future, but he waits for an opportunity of discussing them at a time when there may be a better chance of their receiving the attention they require. When Parliament has declared its mind the Government will be ready to act, but at the present moment education is not the subject to which the mind of Parliament turns with chief interest.

Contemporary Thought.

THE student who relies upon himself will always succeed. It is better to solve one problem than to copy twenty.—*Normal Index.*

SHOULD we not check our little ones when they make use of slang expressions, instead of smiling upon them as if it were clever? We should teach them that such conversation is demoralizing; that it will actually do them harm; then, as they advance in years, they may dislike and despise it. Mothers, are there not some among you who advise your daughters as they depart from your side to attend some social gathering, to "make a mash," or who, upon their return inquire, "Did you make a mash?" What can a mother be thinking of when she makes such an inquiry? I beg of such a one (for there are those who do this) to pause, to consider what she encourages. You cannot reasonably expect your daughter to become a pure minded woman if you fail to be an example of such. The common slang is erroneously thought witty. True wit may be appreciated among sensible people, but slang never! I would challenge any one to discover anything ennobling, anything womanly, anything even witty about the use of what is now-a-days termed *gentle* slang; for there are those who despise the coarse expressions which so often fall from the lips of the street loafer, who appear to glory in such expressions as "going for him," "getting left," etc. Where shall we find as noble types of womanhood in the future as our past records furnish us if our girls do not rid themselves of this pernicious habit? To work a reformation we must begin with the mothers. Through them we may reach the daughters, hoping for the sons to follow. Let us marshal ourselves in one grand army, mothers and daughters leading the van; sons and brothers will not be willing to be found very far in the rear.—*Christian Intelligence.* ●

THE move of the French Chambers against the priests and nuns is interesting, both as persecution and a matter for philosophical debate. The priests and nuns, under the present system, are allowed to teach in public schools, and all people drawing money from the Government must send their children to these schools. The new law is supported entirely by atheists, who believe the human demand for religion to be a superstition, and only the effect of human teaching. The idea of such men as Gambette and Paul Bert was and is to emancipate the French from "the thralldom of religion." It is but fair to suppose these men are honest in their feelings. But at the same time it is also only fair to say that in America Nature has taught to her children a vastly different lesson. If we judge such a city as Paris by its works—"by their works ye shall know them"—we shall be horrified by the epicureanism, selfishness, sordid love of life, and superficiality which are impressed upon us. These are, then, the results of atheism. In America we behold a different state of the human mind. Is there a persistence here of the Asian and Athenian idea of a pantheistic state? Is there a religion in the air we breathe, and is there none in the Parisian air? For here the wisest men we have, hear within their hearts the

still small voice. These men pray for strength and are stronger. They pray for humility and they are more beloved among men, who thereafter heap greater honours upon them. Perhaps each nation has its self-love, but it seems to us, Americans, that the moral air is better here than in Paris. And if that be so, is it not because we have less of M. Paul Bert's exalted knowledge which is called atheism? We shall make war on the Church and make it with wisdom only after we have begun to envy the moral poise of the average French leader of thought, his amiability, his mercy, and his charity. *The Current.*

THE restoration of energy, which sleep alone can afford, is necessary for the maintenance of nervous vigour, and whereas the muscular system, if overtaxed, at least refuses to work, the brain under similar circumstances too frequently refuses to rest. The sufferer, instead of trying to remove or lessen the cause of his sleeplessness, comforts himself with the hope that it will soon disappear, or else has recourse to alcohol, morphia, the bromides, chloral, etc. Valuable and necessary as these remedies often are (I refer especially to the drugs), there can be no question as to the mischief which attends their frequent use, and there is much reason to fear that their employment in the absence of any medical authority is largely on the increase. Many of the "proprietary articles" sold by druggists and in great demand at the present day, owe their efficacy to one or more of these powerful drugs. Not a few deaths have been caused by their use, and in a still large number of cases they have helped to produce the fatal result. Sleeplessness is almost always accompanied by indigestion in some one or other of its protean forms, and the two conditions react upon and aggravate each other. If rest cannot be obtained, and if the vital machine cannot be supplied with a due amount of fuel, and moreover, fails to utilize that which it is supplied with, mental and bodily collapse cannot be far distant. The details of the downward process vary, but the result is much the same in all cases. Sleeplessness and loss of appetite are followed by loss of flesh and strength, nervous irritability alternating with depression, palpitation, and other derangements of the heart, especially at night, and many other symptoms grouped together under the old term "hypocondriasis." When this stage has been reached the "borderlands of insanity" are within measurable distance, even if they have not already been reached.—*Fortnightly Review.*

WHILE the desirability of connecting the training and certification of teachers with the universities is under consideration, it may be well to place before our readers what is being proposed in New Zealand. Writing on the subject of establishing degrees in pedagogy in the university, Sir Robert Stout (a southern statesman and educationist, whose opinions have been quoted on several occasions) observes as follows:—The subject in its fullest bearing is a very wide and important one, for at its root lies this question: Whether our university education should aim at training specialists or simply at general culture? Some contend that universities should have nothing to do with anything but the humanities; in other words, that the arts degrees are the only degrees that the university should confer. I do not say that there

are not many weighty arguments for such a position. It may be that it is outside the functions of a university to specialise knowledge; but in saying something about the nature of having degrees in pedagogy, I start with the assumption that a university should be an institution for the granting of degrees other than those for arts. There are such degrees as those of medicine, of law, and of music, not to mention the scientific degrees that can be conferred by it. What are these but certificates for special knowledge granted to candidates either before or after their arts course? Now, my proposal is to put the teaching profession exactly on the same platform as the medical, legal, and musical. We have recognized that before a man has a right to call himself a surgeon, or a doctor, or a lawyer, or a musical expert, that he should pass a special examination, and the subjects in which he is to be examined are those specially dealing with the profession that he is afterwards to follow. I wish the university to examine teachers, and I desire that some of the subjects in which they are to be examined shall be those which the higher class of teachers at all events should be acquainted with. Can it be said that an arts course is sufficient for a teacher? It may be sufficient, and it may not. But if there are special branches that a teacher should be acquainted with, why should he not have his study directed to them and be examined in them? To my mind the study of mental science is as necessary for the properly-equipped teacher as the study of medicine for the doctor, or of common law for the lawyer. And then again, I think it should be our object in New Zealand to raise our teachers to a higher platform, to make them feel that they belong to a profession. Granting degrees in pedagogy is a means towards this end. I do not believe that our teaching profession has been recognized as it will have to be shortly in the future, if our education system is to be improved. Our young teachers should, if possible, be connected with the university, and then our schools and colleges would be vitalized with the higher educational life. It may be said that the normal schools will give all that is necessary to the teacher. I do not underrate the importance of normal schools; they are a necessity; but I believe that they, without professors dealing specially with logic, psychology, ethics, and the history and development of education, cannot give the tuition required. Even if they could do so, I still think that the university should grant degrees in pedagogy. For if degrees are to be granted in music on what plea can they be refused to teachers? The foregoing are some of my reasons, put in a very brief and condensed form, for moving at the last meeting of the senate for a recognition of the teaching profession by the university. In several American universities (the University of Missouri for example) there is a separate faculty, and degrees are conferred. Were our university to adopt my suggestion, I believe it would be a step in advance, and one that would tend to improve and perfect our education system, which though a noble one, is like all human institutions far from completeness. Indeed I believe considerable evil has been done in the past by it being thought that there is little room for progress in either the system or in methods of education in New Zealand.—*London, England, Schoolmaster.*

Notes and Comments.

"THE requisition for good government and its results," says an exchange, "good order, are : (1) On the part of the teacher, (a) self-government, (b) careful preparation for the work in hand ; (2) Comfort, as a condition of the pupils ; (3) Occupation for all at all times ; (4) Pure air, *pure air*.' PURE AIR ! (5) Cleanliness ; (6) Few rules, besides the comprehensive 'mind your business.' Whatever may be done to make the school-room attractive will help in the matter."

It is almost impossible to understand the character of the Burmese. A man will not injure a worm ; his religion forbids the shedding of blood ; he will starve rather than kill a cow or bullock, though there be no fodder for them. Those who follow the chase are looked upon as accursed, yet there are always one or two in every remote village who kill game, which the people readily buy ; but they care no more for taking the life of a human being, often with the greatest tortures, than we should think of killing a flea.—*Sacramento Bee*.

IN its effects on school discipline, the study of music will be found to be of great utility. It has been justly remarked that it cultivates the habits of order, obedience, and union. All must follow a precise rule. All must act together, and in obedience to a leader ; and the habit acquired in one part of our pursuits necessarily affects others. Its beneficial influences will be felt not only in the relation of the pupils with the instructor, but in their intercourse with each other. Much of the quarrelsome spirit which we witness among children may be attributed to the want of agreeable resources for amusement, and to the general neglect of the means of cultivating the better feelings.—*Report of Music Committee of Boston, in School-Music Journal*.

RUSKIN well said that it is a no less fatal error to despise labor when regulated by intellect, than to value it for its own sake. We are always, in these days, trying to separate the two ; we want one man to be always thinking, and another to be always working, and we call one a gentleman and the other an operative ; whereas the workman ought to be thinking, and the thinker ought to be working, and both should be gentlemen in the best sense. As it is, we make both ungentle : the one envying, the other despising his brother, and the mass of society is made up of morbid thinkers and miserable workers. Now, it is only by labor that thought can be made happy ; and the professions should be liberal, and there should be less pride felt in peculiarity of employment, and more in excellence of achievement.

It is a very common and very serious mistake to train up girls as if the end and aim of their education should be matrimony. Marriage is not a thing to be sought or shunned. It is an incident, not an end. It should no more be held up as the great object of a girl's life than it should be held up as the great object of a boy's life. High character and noble service to humanity are the objects of life, whether male or female. The single life is often the most useful often the happiest. Wedded life is often unfortunate, especially when the intellect is uncultivated. A highly educated woman—highly educated, I mean, in both mind and heart—if married, will make almost any home happy. Her husband cannot but reverence and love her. Her children will find in her a guide, philosopher, teacher, inspirer.—*Homer B. Sprague, in New England Journal of Education*.

DR. HOLMES has shown the capacity of the English language—that part of it which is manufactured out of obscure Latin words to hide meaning in his poem of "Estivation," in the "Autocrat of the Breakfast Table." It is also illustrated in the following, from *Chambers' Journal*:—"Travellers are, as a rule, of an inquiring mind, and not a few are facetiously disposed. One of this latter class alighted from his gig one evening at a country inn, was met by the hostler, whom he thus addressed:—'Young man, immediately extricate that tired quadruped from the vehicle, stabulate him, devote to him an adequate supply of nutritious aliment ; and when the aurora of moru shall again illumine the oriental horizon, I will reward you with a pecuniary compensation for your amiable and obliging hospitality.' The youth, not understanding a single word of this, ran into the house, crying out:—'Master, come at once. Here's a Dutchman wants to see you.'"—*Ex*.

JUDGE CHARLES DEVENS, in the *New England Journal of Education*, writes that the vast progress of science forces upon the attention and the time for education new and imperious demands. The English tongue is rich in the works of its writers, poets, and orators, beyond comparison with that literature which existed in the seventeenth century. The Latin, once the only language of the learned men of Europe, has lost this position, and it is not to be regained. The mental training afforded by its study and that of the Greek will be the same as of old ; yet perhaps that training may be sought and found elsewhere. But, the Judge adds, I do not fear that the mighty instrument of thought and speech in which Cicero urged and persuaded, or that in which Demosthenes thundered over Greece, are to be thrown aside as broken and useless. The relative importance of studies varies ; proportions change. Even if it shall be found that these studies occupy

a less prominent place among the "humanities"—as they are sometimes termed, which make the basis of a liberal education—the civilized world, whose common property they are, is not ready to do without them yet.

IN a lecture on Dante during a visit to this country, Dr. Farrar forcibly remarked : "I think there is nothing worth study so much as this classic literature. It was the development of this spirit that received those virtues that led a few pilgrims on Plymouth Rock to found this mighty empire. It animated Jefferson when he wrote the Declaration of Independence ; it assisted Ben Franklin to chain the thunderbolt ; it breathed the ardent patriotism in the oratory of Patrick Henry and Charles Otis ; it aided Washington to resound the cannon's roar from Lexington over the colonies, it was the spirit that was in Longfellow and Whittier ; it kept up the drooping spirits of Lincoln in the darkest days of civil strife, it animated the armies that were led to victory by General Grant ; it lifted General Garfield from the dark cabin to the White House ; and its crowning work was casting aside the shackles of slavery which made all men free. If Americans of the future were animated by this spirit society's frivolous religion would fly away like Lucifer before the sun of the morning. I do not know a teacher that could inspire your life like these poems of Dante and Milton.—*Ex*.

CARL SCHURTZ very truly says we are in the habit of pointing to popular education as a panacea for the ills of human society. This is well enough, provided we have the right kind of education to point at. In this respect we should not be blind to the fact that the aversion to manual labour among our young people has grown up under the very system of popular education we now have. The impression is spreading among them that education is to teach them, mainly, how to get along in life, and, if possible, how to get rich without hard work. How many boys without means are there who, having learned to write a good hand, think it beneath them to make a living in any other way than with their pens, or, having learned to add up sums and to calculate interest, would think themselves degraded if they did any rougher work than mark prices on goods or keep books, and, doing this, wear nice clothes and keep their hands white ! And thus it is that the young men, shunning farm and workshop, crowd the cities and haunt stores and unting-houses for employment in constantly increasing numbers ; while it is a notorious fact that the American people, the people born and raised upon American soil, turn out so small a proportion of artisans and manual labourers generally that we have to look in a large measure to foreign immigration to supply that want of society.

Literature and Science.

THE ADVENTURES OF ULYSSES.

BY CHARLES LAMB.

CHAPTER II.—(Continued).

THE enchantress, won by the terror of his threats, or by the violence of that new love which she felt kindling in her veins for him, swore by Styx, the great oath of the gods, that she meditated no injury to him. Then Ulysses made show of gentler treatment, which gave her hopes of inspiring him with a passion equal to that which she felt. She called her handmaids, four that served her in chief, who were daughters to her silver fountains, to her sacred rivers, and to her consecrated woods, to deck her apartments, to spread rich carpets, and set her silver tables with dishes of the purest gold, and meat as precious as that which the gods eat, to entertain her guest. One brought water to wash his feet, and one brought wine to chase away, with a refreshing sweetness, the sorrows that had come of late so thick upon him, and hurt his noble mind. They strewed perfumes on his head, and after he had bathed in a bath of the choicest aromatics, they brought him rich and costly apparel to put on. Then he was conducted to a throne of massy silver, and a regale, fit for Jove when he banquets, was placed before him. But the feast which Ulysses desired was to see his friends (the partners of his voyage) once more in the shape of men; and the food which could give him nourishment must be taken in at his eyes. Because he missed this sight, he sat melancholy and thoughtful, and would taste none of the rich delicacies placed before him. Which when Circe noted, she easily divined the cause of his sadness, and leaving the seat in which she sat throned, went to her sty, and let abroad his men, who came in like swine, and filled the ample hall, where Ulysses sat, with gruntings. Hardly had he time to let his sad eye run over their altered forms and brutal metamorphosis, when, with an ointment which she smeared over them, suddenly their bristles fell off, and they started up in their own shapes, men as before. They knew their leader again, and clung about him, with joy of their late restoration, and some shame for their late change; and wept so loud, blubbing out their joy in broken accents, that the palace was filled with a sound of pleasing mourning, and the witch herself, great Circe, was not unmoved at the sight. To make her atonement complete, she sent for the remnant of Ulysses's men who stayed behind at the ship, giving up their great commander for lost; who when they came, and saw him again alive, circled with their fellows, no expression can tell what joy they felt; they even cried out with rapture, and to have seen their frantic

expressions of mirth a man might have supposed that they were just in sight of their native country, the cliffs of rocky Ithaca. Only Eurylochus would hardly be persuaded to enter that palace of wonders, for he remembered with a kind of horror how his companions had vanished from his sight.

Then great Circe spake, and gave order that there should be no more sadness among them, nor remembering of past sufferings. For as yet they fared like men that are exiles from their country, and if a gleam of mirth shot among them, it was suddenly quenched with the thought of their helpless and homeless condition. Her kind persuasions wrought upon Ulysses and the rest, that they spent twelve months in all manner of delight with her in her palace. For Circe was a powerful magician, and could command the moon from her sphere, or unroot the solid oak from its place to make it dance for their diversion, and by the help of her illusions she could vary the taste of pleasures, and contrive delights, recreations, and jolly pastimes, to "fetch the day about from sun to sun, and rock the tedious year as in a delightful dream."

At length Ulysses awoke from the trance of the faculties into which her charms had thrown him, and the thought of home returned with tenfold vigour to goad and sting him; that home where he had left his virtuous wife Penelope, and his young son Telemachus. One day when Circe had been lavish of her caresses, and was in her kindest humor, he moved to her subtly, and as it were afar off, the question of his home-return; to which she answered firmly, "O Ulysses, it is not in my power to detain one whom the gods have destined to further trials. But leaving me, before you pursue your journey home, you must visit the house of Ades, or Death, to consult the shade of Tiresias the Theban prophet; to whom alone, of all the dead, Proserpine, queen of the underworld, has committed the secret of future events: it is he that must inform you whether you shall ever see again your wife and country." "O Circe," he cried, "that is impossible: who shall steer my course to Pluto's kingdom? Never ship had strength to make that voyage." "Seek no guide," she replied; "but raise you your mast, and hoist your white sails, and sit in your ship in peace: the north wind shall waft you through the seas, till you shall cross the expanse of ocean and come to where grow the poplar groves and willows pale of Proserpine: where Pyriphlegethon and Cocytus and Acheron mingle their waves. Cocytus is an arm of Styx, the forgetful river. Here dig a pit, and make it a cubit broad and a cubit long, and pour in milk, and honey, and wine, and the blood of a ram, and the blood of a black ewe, and turn away thy face while thou pourest in, and the dead shall come flocking to taste the milk and the blood; but

suffer none to approach thy offering till thou hast inquired of Tiresias all which thou wishest to know."

He did as great Circe had appointed. He raised his mast and hoisted his white sails, and sat in his ship in peace. The north wind wafted him through the seas, till he crossed the ocean, and came to the sacred woods of Proserpine. He stood at the confluence of the three floods, and dugged a pit, as she had given directions, and poured in his offering—the blood of a ram, the blood of a black ewe, milk, and honey, and wine; and the dead came to his banquet; aged men, and women, and youths, and children who died in infancy. But none of them would he suffer to approach and dip their thin lips in the offering, till Tiresias was served, not though his own mother was among the number, whom now for the first time he knew to be dead, for he had left her living when he went to Troy, and she had died since his departure, and the tidings never reached him; though it irked his soul to use constraint upon her, yet in compliance with the injunction of great Circe he forced her to retire along with the other ghosts. Then Tiresias, who bore a golden sceptre, came and lapped of the offering, and immediately he knew Ulysses, and began to prophesy: he denounced woe to Ulysses—woe, woe, and many sufferings—through the anger of Neptune for the putting out of the eye of the sea-god's son. Yet there was safety after suffering, if they could abstain from slaughtering the oxen of the Sun after they landed in the Triangular island. For Ulysses, the gods had destined him from a king to become a beggar, and to perish by his own guests unless he slew those who knew him not.

This prophecy, ambiguously delivered, was all that Tiresias was empowered to unfold, or else there was no longer place for him; for now the souls of the other dead came flocking in such numbers, tumultuously demanding the blood, that freezing horror seized the limbs of the living Ulysses, to see so many, and all dead, and he the only one living in that region. Now his mother came and lapped the blood, without restraint from her son, and now she knew him to be her son, and inquired of him why he had come alive to their comfortless habitations. And she said that affliction for Ulysses's long absence had preyed upon her spirits, and brought her to the grave.

Ulysses's soul melted at her moving narration, and forgetting the state of the dead, and that the airy texture of disembodied spirits does not admit of the embraces of flesh and blood, he threw his arms about her to clasp her: the poor ghost melted from his embrace, and, looking mournfully upon him, vanished away.

(To be continued.)

Special Papers.

AN IDEAL EDUCATION OF GIRLS.

No ideal is practical at the first moment of its inception; no ideal springs, armed at all points, from the brain of its creator, as did Minerva from the head of Jove. Each ideal, as a block of marble, must pass under the developing touch of the sculptor Experience, before its value can be proved and the difficulties in its path duly estimated. But still, without ideals, even if not immediately practical, the civilization of the world would soon come to a standstill; and, therefore, there will always be some who, without despising the old, are ready also to reach forward to the new and untried; and it is to such that the present article principally addresses itself.

The subject under consideration naturally divides itself into the three following questions, with their corresponding answers:

1. What is our present ideal of the education of girls?
2. Are the means employed for its carrying out in every detail suitable and sufficient?
3. Presupposing the full attainment of this ideal, is there any possibility of future improvement?

Now, as to the first of these questions—What is our present ideal? That it is intellectually higher for girls and women as a class than that of a century ago, no one will deny. True, there were talented and remarkable women then; but these were the exceptions, not the rule. But, when the housewifely talents of each period are considered, there seems to be some falling off in this respect in the later one. The tendency of the former period was to produce "notable housewives;" that of the latter is to give us women doctors, lawyers, speakers, writers, and generally well-educated women; but women who have little or no knowledge of household affairs. A tendency—be it observed—for, while there are women who neglect everything for intellectual culture, yet there are still many who keep up the traditions of their grandmothers right nobly.

Still the young girl, during school-life, and especially before graduating, is excused from household duties, as of comparatively little importance. "She has so many lessons!" *This must have a tendency to exalt school knowledge unduly, and to lessen her estimation of what she is asked to learn in relation to home and its comforts.* Here, also, the moral element enters; if home—first her parents', and then, in due time, her own—is not the place of all others in which she wishes to shine, her character cannot fail to lose some of the most important elements of true womanliness,

Small things show the direction of the wind; and when we see beautiful young girls and women coming down to breakfast with hair in papers, and in slovenly attire, we may assume that home is at least not their best-loved and honoured place. These habits are, unfortunately, by no means confined to the lowest ranks of society; and, through the carelessness and thoughtlessness of many who do not consider their full meaning, are still becoming more and more prevalent.

The present ideal, then, seems to tend to the exaltation of the intellectual above the domestic in practice; although many might not allow it, if the question were squarely put to them.

We come, now, to our second question: Are the means employed to secure this ideal adequate for the purpose? Never before were such liberal opportunities for the acquirement of knowledge vouchsafed to women. Colleges have opened their doors; and no young girl who feels a desire to continue her studies beyond the usual course need feel disheartened as to ways and means of gaining the coveted end.

Even from a monetary point of view, always the last factor in the progress of improvement, the outlook is brighter. Woman's intellectual work, now, is more adequately paid than ever before; though it has not, as yet, reached the standard of equal payment for an equal amount of work done, without regard to sex. Taking the ideal of the majority, and not that of the exceptional thinkers, therefore, it would seem safe to assume that the means at our disposal are fairly adequate to the end in view.

But our third question begins by presupposing the full attainment of this ideal of the majority; and then asks: Is there room for improvement? In answering this question in the affirmative, it suggests and requires answers to two others:

- (a) What are the proposed improvements?
- (b) How can they be carried out?

First, then, what are the proposed improvements? Some of them are already adopted here and there; but this article must be understood as referring to a scheme applicable to general use. The first point to be made is, that girls, as well as boys, have a physical nature, in addition to their mental and moral natures; *and that exercise, and plenty of it, is as essential to the well-being of the one sex as the other.*

The second point is, that there should be such a co-education of the sexes, both in and out of school—and to this end, the parents must co-operate cordially with the teacher, if there is to be any good result—that the relation between all boys and girls should be healthy and natural. A little, *but not too much*, consideration of the girls as to be taken care of, on the boys' side; and a de-

velopment of fortitude and courage on the side of the girls, should be the result.

Boys and girls should have as many pursuits as possible in common. The beginnings of scientific research—as in after-school hunts after all the different kinds of trees in their vicinity, or in all the habits, etc., of the common animals, which they can observe and report on—are invaluable, as neither being too effeminate for the boy, nor too boisterous for the girl. Such constant association in work and play will go far towards preventing the premature sweet-hearting which so shortens the time set apart by Nature for the full and quiet development needed for the production of relatively perfect men and women.

This aping, by children, of their elders is the result of empty heads, and nothing worth doing with their time; but children who are rightly educated have not enough time for the enjoyment of all the wonderful things daily brought under their notice, and they certainly have not time to anticipate anything, however interesting, in the future, when the present is so full.

In the exciting climate of America, and the still more exciting influences of business and social life, the great difficulty is to prevent our children growing up too fast—a difficulty proportionately greater with girls, inasmuch as their nervous excitability exceeds that of boys.

These points are suited to the first eleven or twelve years of a girl's life, according to her development; in fact, the education should be identical for both sexes up to this age. Both boys and girls should have certain household duties assigned to them, no matter how much additional service is paid for, or how large the establishment may be. We should not train our children to despise honest labor or those who perform it. If we tell the boys stories of the menial services performed by the pages and squires of old, before their knighthood, labour need not, and will not seem degrading. Besides, only a worker can feel for those who work, and so learn, for the after-years, the secret of wisely governing them.

But now we are approaching the time when the girl is

"Standing, with reluctant feet,
Where the brook and river meet."

A great change, physical and mental, is before her. A wise mother, or—failing that greatest gift of God—a motherly friend, must tell her somewhat of the mysteries underlying life and the full, pure meanings of the life in families, hitherto recognized as a fact without realization of what its import might be.

Henceforth, the purpose of her education should be to lead her to *consecrate* herself—no weaker word will do—to the fulfilment of God's purpose in making her a woman. She

must feel that she must take care of her body—not selfishly, but because, if her life be a completed one, she will one day be a wife and mother; and, therefore, dare not squander health which does not belong to herself alone. She must make the most of the special talents she possesses, in obedience to the same guiding principle which makes her prepare herself to be a helpmate to her husband and a wise mother to her children. And, though the vocation of some women leads them out into the world to work, there are few who would not be infinitely richer by the possession of a knowledge of the domestic arts which makes home comfortable and worthy its name.

The transition from girl to woman is, then, no slight change, easily passed by. It is the turning-point of the life—a point that influences the subsequent character more than we give it credit for. All great changes are the outcome of long, quiet development, if they are to be beneficial. Do we recognize this fact? Or, rather, is not this the time when parties, increased studies, and increased emulation, keep the nerves at an abnormal tension? Are the results of this course satisfactory? How many girls break down, not because their intellects are over-taxed, but that their brains being developed and their bodies neglected, the inevitable adjustment of the balance follows.

Now, if a girl at this period were kept at home for from one to two years, and taught how to manage a house in all its details, as the principle acquirement she was expected to make; if, in addition, she were encouraged to continue her investigations in natural history, drawing from nature, wherever possible; if the standard works of literature, beginning with good novels and portions of the poems of Spenser and Sir Walter Scott, were brought under her notice—not as subject-matter for diagrams, but as educative of a sound literary taste; if, occasionally, she was taken to the finest concerts and operas, or on excursions to different factories, where the whole process of manufacture, from beginning to end, might be seen and understood—would she lose much, or, indeed, anything, when compared, after half-a-dozen years had passed away, with the girl who had graduated two years before her?

No; the girl, so trained, so shielded and surrounded by home influences at the most impressible time of her life, would forever bless the true kindness and wisdom that so decided for her. Let us have all the intellectual development of the present time, doubled and trebled, if that be possible; but let us not lose the womanliness which will add another charm to the most varied acquirements. Of course, for the great army of working-girls, this ideal must be modified to suit the circumstances; but its adoption by their more favored sisters would not be without its reaction benefiting all.

The great problem of the present day will be solved when women learn to receive the high privileges now accorded them without losing the virtues they have inherited from the past. No fitter summing up of the whole matter can be found than that contained in the noble words of Tennyson:

“The woman's cause is man's: they rise or sink Together, dwarfed or godlike, bond or free: For she that out of Lethe scales with man The shining steps of Nature, shares with man His nights, his days, moves with him to one goal,
Stays all the fair young planet in her hands,— If she be small, slight-natured, miserable, How shall men grow? but work no more alone— Our place is much: as far as in us lies We two will serve them both in aiding her,— Will clear away the parasitic forms That seem to keep her up, but drag her down— Will leave her space to burgeon out of all Within her—let her make herself her own To give or take, to live and learn and be All that not harms distinctive womanhood.”
—Education.

Mathematics.

ARITHMETIC SUITABLE FOR ENTRANCE TO HIGH SCHOOLS.

1. Find the value in yards of $\frac{1}{2}$ of a league + $\frac{1}{4}$ of a mile + $\frac{1}{8}$ of a furlong + $\frac{1}{16}$ of a rod.
2. What is the cost of carpeting a room 33 feet by 40 feet; the carpeting 2 feet 6 inches wide, and worth \$1.25 a yard?
3. A farmer sells his farm for \$6,000, thereby gaining $7\frac{1}{2}$ per cent of cost. What was the farmer's gain?
4. Express $.83$ of 13s. 4d. + $.138$ of £1 4s. as a decimal of £5.
5. What part of 8 acres, 3 rods is 2 acres, 32 perches?
6. A rectangular garden plot 132 feet wide contains $\frac{1}{4}$ of an acre. What is the cost of fencing it at 50 cents a rod?
7. The product of five consecutive numbers is 2520. What are the numbers?
8. How many seconds will a train 120 yards long require to cross a bridge 50 yards long, the train running at the rate of $11\frac{1}{2}$ miles an hour?
9. What is the price of wheat per bushels that was sold for \$2 a cwt. Thus gaining $\frac{1}{4}$ of cost?
10. Two hats cost \$4.60, and one hat cost 50 cents more than the other. What is the cost of each?
11. If 9 eggs cost 6 cents, how much should a man ask for 24 doz. so that he may gain $\frac{1}{4}$ of cost?
12. In 6 days a mechanic made 78 chairs, making each successive day 2 chairs more than were made during the previous day. How many chairs did he make the first day?
13. A man spent $\frac{1}{3}$ of his money on Monday; $\frac{2}{3}$ of what he had left on Tuesday; on Wednesday $\frac{1}{3}$ of what he had left then. If he had \$4.40 left on Wednesday night, how much money had he on Monday morning?
14. A can build a wall in 16 days; A and B in 10 days. After $\frac{1}{4}$ of it is built in what time can B finish it?
15. How much is tea a lb if $\frac{1}{4}$ of a lb costs $\frac{2}{3}$ of a dollar?
16. A boy has $2\frac{1}{2}$ miles of twine. How many parcels, each requiring $3\frac{3}{4}$ feet, can he tie with it?

17. A certain sum of money is divided among A, B, and C in the proportion of 4, 7, 9. A's share is \$94, what are B's and C's?
18. What part of a lb. Avoirdupois is a lb. Troy?
19. Divide \$800 between C and D so that $\frac{1}{3}$ of C's share will equal $\frac{1}{4}$ of D's.
20. Resolve the numbers of 3384, 8272 and 7507 into their prime factors, and find the H.C.F. and L.C.M. from the factors.
21. Find the interest on \$460.20 at $7\frac{1}{2}$ per cent. for two years, 8 months and 10 days.
22. What is the least number that will divide 17889 and 20926, leaving remainders of 4 and 3 respectively.
23. A farmer has a field 50 rods by 30 rods: how much wheat will be required to sow it, if 2 pecks 2 quarts are sown on every $\frac{1}{4}$ acre?
24. If 8 men or 12 boys can do $\frac{2}{3}$ of a piece of work in 75 hours, in how many days of 9 hours each can 3 men and 4 boys do the whole work?

HINTS AND ANSWERS.

1. $(3520 + 1408 + 165 + 2) \div 5005$ yards.
2. $\frac{33 \cdot 40}{9} + \frac{6}{5} + \1.25 \$220.
3. Gain $\frac{1}{4}$ of \$6,000, or \$4187 $\frac{1}{2}$.
4. .14
5. Part = $\frac{1}{4}$.
6. Length = 247 $\frac{1}{2}$ feet. Perimeter of plot = 750 feet or 46 rods. Cost \$23.
7. Numbers are 3, 4, 5, 6, 7.
8. Train has to go its length plus the length of the bridge, viz 170 yards or 6,120 inches. Train goes 204 inches per second. Time 30 seconds.
9. Price = $\frac{2}{3} \times 60 \times 2$ cents, or \$1.06 $\frac{2}{3}$.
10. Sum of prices = \$4.60; difference of do., 50 cents. Answer, \$2.55; \$2.05.
11. A dozen eggs cost 8 cents, hence selling price = $(24 \times 8 \times \frac{1}{3})$ or \$2.08.
12. Number + (No. + 2) + (No. + 4) + (No. + 6) + (No. + 8) + (No. + 10) = 78
∴ number = 8.
13. Sum of money spent = $(\frac{1}{3} + \frac{2}{3} + \frac{1}{3})$ of whole sum, or $\frac{1}{3}$. Hence $\frac{1}{3}$ of sum = \$4.40. Sum = \$49.50.
14. B does $(\frac{1}{4} - \frac{1}{6})$ or $\frac{1}{12}$ of the work in one day, or the whole work in 26 $\frac{1}{3}$ days. To do $\frac{1}{4}$ of the work he would require $\frac{1}{4}$ of 26 $\frac{1}{3}$ days, or 20 days.
15. Price = $\frac{1}{4} \times \frac{2}{3}$ of a dollar, or \$1.17 $\frac{2}{3}$.
16. Number of parcels = $2\frac{1}{2} \times 5280 \div 3\frac{3}{4}$, or 3600.
17. If 4 represents \$94, 7 represents $\frac{7}{4} \times \$94$; and 9 represents $\frac{9}{4} \times \$94$. Answer \$164.50, \$211.50.
18. $\frac{2}{3} \times \frac{3}{4} = \frac{1}{2}$.
19. C's share = $\frac{2}{5}$ of B's share, \$800 divided in ratio 1:2, gives \$500 and \$300.
20. Factors are 2, 2, 2, 3, 3, 47; 2, 2, 2, 2, 11, 47; 2, 2, 2, 2, 7, 23, 47. Hence H. C. F. = 47, and L. C. M. = 11986128.
21. \$93 (nearly).
22. Subtracting 4 from first number, and 3 from second do., the remainders are 17885, and 20,923, of which the H. C. F. is 49.
23. Number of acres = 1,500 + 160; 2 $\frac{1}{4}$ bushels are planted to the acre. Hence number of bushels is $1\frac{1}{4} \times 2\frac{1}{4} \times 21 \frac{1}{2}$.
24. In first case 12 boys do the work in 112 $\frac{1}{2}$ hours. In second case number of boys = $4 + \frac{2}{3} \times 3$ or 8 $\frac{2}{3}$. Hence time in hours in second case = $112\frac{1}{2} \times \frac{12}{8\frac{2}{3}}$, or 171 $\frac{1}{2}$ days of 9 hours each.

Educational Opinion.

A NEW DEGREE.

THE *Journal* has from the outset advocated the cause of normal schools; its readers who are not graduates have thought the utterances in behalf of such institutions were too strong. But time proves all things. The increase of such schools, the enlargement of the summer schools, the lengthening of the term of the institutes, the reading circles, show that miscellaneous preparation for teaching must soon give way. As the physician must be a graduate of a medical school in order to practice his profession, so should the teacher be required to have the diploma of an educational school.

This we are undoubtedly coming to; all signs point to it. To aid this there should be no more "state examinations" where state normal schools should exist. Let these permit all who wish diplomas to attend the examinations given to their graduating classes. Where no state normal schools exist they should be established, until then diplomas may be given by state boards.

There should be a decided effort made to remove the stumbling blocks that lie in the way of the rewards, and dignity, and usefulness of the teacher. There should be a system; there should be efficiency. The county officers have all they can do without burdening them with the business of examining teacher; besides each has his own standard. In some cases this is low, very low, in others it is high. Many men elected by political means do not know what is required of the teachers; any one who can read, write and cipher is good enough in their judgment. Nor is this confined to the country; in a city of several thousand inhabitants a short and stout German hardly able to speak English was made inspector; his gravity as he explored among the text-books for questions was not always copied by the teachers who came before him. But it is unnecessary to extend these grievances; all know them. There should be degrees granted to all who pass the professional examination. Let us hear suggestions. M. T., meaning Master of Teaching, seems a sensible straightforward designation. The power to grant this should rest with the normal schools, we think. If a degree was given to no one who could not pass a thorough secondary (high school) examination as a basis, added to which a theoretical and practical knowledge of the science and art of teaching, it would command respect. Only by measures like these can teaching be made into a profession. All the talking in the world will not do it. All the resolutions passed at conventions of teachers will not do it. The old designation of "Master" is here resurrected and put to good use. Let the teachers

consider this subject. If a degree is selected it should be granted by a competent body of teachers not put into office by politics.—*New England School Journal.*

PARENTAL DUTIES.

PARENTS and teachers are joint-guardians of youth. They deal with the future man and woman in the plastic stage of existence. Their influence upon any generation cannot easily be overrated, but upon reflection it is plain that the work of parents and teachers cannot be confined to a single generation. Such as do the work of the world to-day are essentially what those who had charge of them during the formative period of their lives made them. And they in their turn will conceive what men and women should be by what they are themselves.

Forty years ago school privileges were not equal to those enjoyed by the youth of the present time. Outside of populous towns the school term was brief. But even then parents recognized the need of education. As the time devoted to gaining a knowledge of the "three R's" in any year was scant, parents took great interest in the schools and were anxious that their children should make the most of their privileges. Practically speaking, in many sections, education was then compulsory. A day lost from the term was always regretted. The parents made common cause with the teacher of their children. The joint-guardianship was recognized by each, and the conscientious teacher found his or her best aid in the cooperation of the parents.

In those early days the parents did not abdicate when the teacher made his advent. On the contrary they became still more vigilant in the discharge of their duties as co-workers. They studied the teacher closely, estimating his or her value according to the interest displayed. They might have ceased to interest themselves in the progress of their children, since they had provided them with a teacher whose business it was to expand their plastic minds and mould their characters. But as a fact the parents did not abandon the charge of their children. They watched them with ever-increasing interest, and were quick to note every step of progress. Naturally the teacher felt the responsibility thus imposed. He was always aware that the parents of his pupils were sitting in the seat of judgment. He was aware that judgment in this case extended to his own work. If a child seemed to remain stationary, the fact was noted by the intelligent parents, who at once conferred with the teacher. On the other hand, if a child made remarkable progress, the teacher was congratulated by the parents, and in that way was made to feel that his labours were appreciated in the right quarter.

It was then the fashion to let children

know that the conscientious teacher stood next to the parents, not only in authority but also in dignity. It was not the fashion for the children to feel that in any case of disagreement their parents would, of course, sustain them and condemn the teacher. *Ex parte* trials and judgments were infrequent. Complaints of the teacher were followed by conference with the accused, and children were made to feel that the joint guardianship was very real and practical. And they were taught to treat the teacher with deference. In New England there were three persons to whom obedience was due—the parson, the teacher, and the squire. The parents expected the teacher to give instructions in manners in addition to the common text-book branches. Thus there grew up among parents, teachers and children, a mutual understanding that often became as potential in the business of educating as was the acquired knowledge the teacher was engaged to impart. Children recognized the pact between parents and teacher. But of course their respect for the teacher depended upon the respect they had for their parents. A teacher was quick to recognize pupils who enjoyed good home training. The line was distinctly drawn. They likewise knew—none better—the exact degree of interest taken by parents in the progress of their children. Where the interest taken was very little the labours of the teacher were much increased, and naturally. For a child cannot be deceived as respects the interest felt in its progress by its parents. If the parents seem to care very little, the child inevitably becomes listless and careless, and good work is then a matter of difficulty, if not impossible.

So vital was education regarded in some regions forty years ago, that the matter of selecting trustees, or directors of schools, was laid deeply to heart by parents. It was not often that an ignorant man was selected. It was infrequent that an immoral or irreligious man was selected. In some States political affiliation was never considered farther than to recognize men of all affiliations in the board. The selection of teachers was made with great care, and when one came before the board he was told that in all just actions he would be sustained not only by the board, but by the parents. He was made to feel that the interest of his patrons did not begin and end with the mere act of hiring him to teach. Thus cheered and sustained by generous recognition and good conscience, the old-fashioned teacher did remarkably good work with quite inferior appliances.

Like causes produce like results; and with the vigilant co-operation and judicious sympathy of the present generation of parents, teachers of the present day can move forward

(Continued on page 426.)

TORONTO:

THURSDAY, JULY 22, 1886.

THE CURRICULUM OF THE UNIVERSITY OF NEW BRUNSWICK.

THE calendar for 1886-87 of the University of New Brunswick, which has recently been issued, contains many points of interest. At the present time, when the subject of university teaching is brought so prominently before the notice of the general public, and when, owing to the existence of that still unanswered question—University Confederation—the more critical portion of the general public take a lively interest in the actions and course of the different universities of the Dominion, it will be instructive to glance even briefly at what is being done in a province so far separated from Ontario as to be uninfluenced by the strife of rivalry.

The first point of interest is that Greek, although a compulsory subject at matriculation, is thence forward optional. The *St. John Sun*, commenting editorially on this, remarks:

"It appears that all candidates for admission will still be examined in Homer and Xenophon, although Greek is no longer a compulsory study in the course. Since French and German may be substituted for Greek in the course it is singular that matriculants are not allowed to substitute French and German for Greek on entering. With this knowledge they would be able to study modern language to a little more purpose while at college than if they commenced their undergraduate course with discussions on 'the beautiful stockings of silk of the wife of the merchant.' A boy who does not continue the study of Greek will not derive much benefit from the reading of three hundred lines of Homer and three chapters of the *Anabasis*, required of a matriculant, while the amount of study required to prepare this work would give him some facility in reading French."

With this line of argument we cannot agree. The sole aim of the study of Greek need not necessarily be to acquire the power of reading or writing that language "seated in an arm-chair with one's feet on the fender," as some one has said and many a man who, perhaps, in after life would find great difficulty in correctly construing a sentence from the *Anabasis*, can yet trace to his study of Greek advantages he could not have otherwise gained. Nor do we think that the logical conclusion of making Greek optional is to exclude it altogether from the curriculum as Harvard has done. The acquaintance with Greek grammar and Greek roots which even an

examination on three hundred lines of Homer and three chapters of Xenophon requires will, we venture unhesitatingly to assert, be found by the vast majority of men to be in after life productive of benefit in innumerable instances in addition to the general benefit derived from however slight a knowledge of a language unique in itself. If the *Sun's* reasoning were consistently carried out in every branch of learning, universities would produce nothing but specialists, and we should have matriculants presenting themselves for examination in one sub-department only—morphological biology or abstract-mathematics, perhaps.

We cannot, however, do better than quote here the arguments used by Professor Bridges at the recent encœnial exercises of the university, the curriculum of which we are examining. In his opening oration he said:—

"The main object of our higher institutions of learning is to give that kind of preparation which is necessary in all, and to lay a good foundation for a broad and generous culture. Now no well ordered system of instruction will omit entirely either the study of mathematics or the study of classics. Of the study of mathematics it is not my purpose to speak to-day; their practical utility is patent to the most superficial. To allow a student to omit entirely either classics or mathematics is to leave him only half educated. If a person be incapable of receiving such culture, he cannot be called a liberally educated person; and it is not true education to allow a person to follow any one line of study to the entire neglect of all others. It is, therefore, of prime importance that the college curriculum be so framed that certain subjects be incumbent upon all students, and there can be no reasonable doubt that those qualities of mind and character, which make a man eminent in one line of study, and also enable him to master the elementary difficulties of another subject, if it is brought before him as something which must be done. If, however, he is left to his own choice, some whim of his may make him turn aside from his study, in which he has not learned to feel any interest; and is it not also a very valuable result of mental discipline to be able to direct the mental powers in such a way as to master even those studies which are not particularly attractive to us? One of the most important studies for all persons is that of written language, for language is the medium by which knowledge is communicated and preserved. Language, in the hands of one who uses it with precision and accuracy, is the means of instructing convincingly; and persuading its misapplication, on the other hand, often leads to confusion in our ideas and to many curious errors in the science of morals, legislation and other kindred subjects. Proceeding then upon this view of the great importance of the study of language, I am prepared to contend that no language can compare with the classics as an instrument for the training and discipline of the youthful mind. In the first place, no faculty of the mind admits of being

exercised and trained at an earlier period than that of the nursery. What then, I ask, can be better fitted to train the memory to habits of retentiveness and exactness than the elementary parts of Latin and Greek grammar? Even in the initiatory steps of classical instruction, ample opportunities are afforded the able and judicious teacher for fostering the first efforts of the reasoning faculty, and of the judgment and for developing and exercising the power of attending to what is passing in the mind itself, a result which must be regarded of the highest importance. At this stage the judicious teacher requires of the student a careful analysis of sentences, as well as a thorough examination of the composition of each word. Such a method ought never to be dispensed with in classical instruction: it is quite as necessary and useful to the young scholar towards gaining an insight into the structure and idiom of a language as dissection is to the anatomist. This careful analysis of sentences and words, followed up as it ought to be, by a rendering so literal as to make it certain that the student has a thorough and exact acquaintance with all the minutiae of grammar and syntax, is but a preliminary part of classical instruction after all. All this should be made subordinate to the main objects in view, viz., the translation into vigorous and correct English of the work of ancient genius and the study of ancient literature—that literature that has been the admiration of every past age, and which has influenced the thoughts and moulded the minds of the human race for more than two thousand years."

But the feature in the curriculum of the University of New Brunswick chiefly deserving of comment is the course of study in the department of English. This subject is compulsory during the whole four years, except in the case of those taking honours in other subjects. In the first year there are laid down three plays of Shakespeare, poems from Burns, Cowper, Southey, Scott, Coleridge, Lamb, Moore, Hood (taken from Palgrave), Tennyson's "Aylmer's Field," "Enoch Arden," "Guinevere," "Rizpah," Rossetti, "The King's Tragedy," one of Scott's novels and one of George Eliot's; four of Macaulay's essays; two essays of Matthew Arnold; two from Ruskin; with some of Cobbett's English grammar; part of Brooke's primer and a part of Green's "English People."

This is a variegated list—perhaps too variegated. Lamb, Moore, George Eliot, Hood, Rossetti, even Tennyson might, one would think, be left for individual reading and not occupy the time which might more profitably be spent on a careful and serious critical study of Shakespeare, Milton, Wordsworth, and those who have been placed by posterity in the first and second ranks of English men of letters. Nevertheless this English course is a broad and a liberal one. An error in broadness is perhaps better than one in the opposite

direction. It is a sin of commission rather than of omission, and in time to come perhaps by means of this very broadness the University of New Brunswick may become conspicuous amongst the sister universities as one devoting her energies chiefly to the mother tongue. Despite the true signification of the term, it is difficult for any university to be famous in all departments of learning. It is well that each should strive to shine in some one branch. The goal of New Brunswick seems to be English.

OUR WELCOME.

Kosmos for June, published under the supervision of the V.P. Science Association of Victoria University, is an issue of interest and ability. The opening paper cleverly deals with the Gladstone and Huxley controversy on Genesis, by Professor Burwash. Mr. C. A. Masten's contribution "College Education and Social Science," displays much careful thought. "The Pioneers of Canada;" Dr. Roy's "The Influence of Language on National Character;" "The Rights of Labour," by the Rev. E. A. Stafford, B.A.; and "The Canadian Constitution," by Mr. W. Houston, M.A., are all scholarly articles on subjects at once timely and of present value.

Littell's Living Age. The numbers of *The Living Age* for the weeks ending July 3d and 10th contain *Genius and Precocity*, and *John Weber, Nineteenth Century*; *Contemporary Life and Thought in France*, *The Pre-Raphaelite Brotherhood*, *A Fight for Art*, and *In Osman Digna's Garden*, *Contemporary*; *The Laird of Redgauntlet*, and *Mystery and Romance*, *Macmillan*; *A Court Chaplain*, and *Gustave Dore*, *Temple Bar*; *Boys' Blunders*, *Cornhill*; *An Original of the Last Century*, *Belgravia*; *Mr. Ruskin's "May Day," Leisure Hour*; *Good Friday among the Mexican Penitentes*, and *King Louis of Bavaria*, *Spectator*; *A Russian Experiment in Home Rule*, *St. James's*; *The U. S. Geological Survey*, *Nature*; *A Last Century Letter*, *Academy*; *The Currents of the Atlantic Ocean*, *Le Ginie Civil*; with instalments of "Black Crows," "Doctor Edith," and "A Sicilian Doctor," and Poetry. The number for July 3rd begins a new volume. Boston: *Littell & Co.*

REVIEWS AND NOTICES OF BOOKS.

The Teachers' Institute, and Practical Teacher.

Into this journal has merged the *Iowa Teacher*, lately published at Marshalltown, Iowa, and the *Northwestern Journal of Education*, published hitherto at Des Moines, Iowa. This, it is stated, will add 3,000 subscribers to the Iowa list of *The Teachers' Institute*. The publishers are Messrs. E. L. Kellogg & Co., 25 Clinton Place, New York.

Grammar for Common Schools. By B. F. Tweed, A.M., late supervisor in the Boston schools. Boston: Lee & Shepard.

This elementary grammar is intended for the use of those pupils who have been trained in the primary schools and the lower classes of the

grammar schools, to use language, both oral and written, with some facility and correctness. Although brief and concise, yet it appears to contain the chief part, if not all, that is necessary for an ordinary grammar school course. To teachers we believe it will be found of real practical use, the arrangement being simple and clear; and we accordingly recommend it to their notice.

Appleton's Standard Arithmetic.

I. Numbers Illustrated and applied in Language, Drawing and Reading Lessons. An Arithmetic for Primary Schools. By Andrew J. Rickoff and E. C. Davis. New York, Boston and Chicago: D. Appleton & Co.

We are firmly of opinion that this arithmetic forms a most valuable manual for teachers. The object of the book, as set forth in the preface, is "to familiarize the child with numbers and their combinations, not by means of repeating such formulae as 4 and 3 are 7, but by provoking observation to lead him to the adoption of the formula as a statement of his own experience." The theory is a sound one, and well carried out by the authors. All teachers, and all who desire a knowledge of methods of instruction, should furnish themselves with a copy of this work.

II. Numbers Applied: A Complete Arithmetic for Intermediate and Grammar Schools. By Andrew J. Rickoff. Same publishers.

This is unquestionably a good book, and we venture to believe it will become popular. The author points out that two thoughts were always kept in prominence. (1). "That words are useless in the ratio that they fail to call up in the mind vivid images of the things signified. Hence the aim to vitalize the relation of words and things by the aid of the best practical illustrations at every point; and (2) that, to the learner, the operations of arithmetic are apt to be manipulations of figures after prescribed models, unless he realizes the fact that they are representative of processes that may be applied to material objects." The arrangement is sustained by reason, and the examples numerous—if not too numerous. The suggestions for other problems are certainly new, and we think will be found of great use.

MARK HOPKINS in his "Moral Philosophy" gives a brief and comprehensive statement as to the legitimate field of knowledge, as follows:—"Knowledge is the food of the mind. And as food may over-load and enfeeble the body, and is to be received only as there is capacity of digestion and assimilation, and ultimate reference to action, so knowledge may overload and enfeeble the mind, and should be received only as it can be reflected on and arranged; and so incorporated into our mental being as to give us power for action."

The Popular Science Monthly for August will open with a richly illustrated article of great economic value entitled "Woods and their Destructive Fungi." The author, Mr. P. H. Dudley, a civil engineer of rising reputation, has for several years been studying the structure of those woods most commonly employed in the arts, with reference to the agencies concerned in their deterioration. The results of his investigations put quite a different aspect from the generally accepted one on

the process of decay, and promise to be of vast industrial importance in their practical application.

HON. DAVID A. WELLS closes his series of papers in *The Popular Science Monthly* on "An Economic Study of Mexico," with an article in the August number considering the attitude which the United States should take toward that country. Having given us what is accepted by the best informed as a generally accurate and approximately complete statement of the deplorable condition of affairs which now exist in Mexico, Mr. Wells maintains that, being partly responsible for this ourselves, we should assume the rôle, henceforth, of the generous big brother, and actively assist them in their strivings after better things.

THE supply of novels for summer reading in paper covers is larger and better than ever before. Messrs. Scribner have ready in their Yellow Paper Series a cheap edition of Miss Julia Magruder's delightful story of North and South, "Across the Chasm." Messrs. Houghton, Mifflin & Co. have begun the publication of a second series of the Riverside Paper Novels, which contain in its weekly numbers a very good selection of popular American stories; Messrs. Macmillan & Co. have started the publication of a Summer Reading Series, in which several of Mr. Crawford's stories and other favourites are printed, and under the head of The Lippincott Series of Select Novels, the Philadelphia firm publish a list of light novels for hot-weather reading. As all these series have a weekly volume, readers will not lack variety or numbers.

D. C. HEATH & CO. announce, for October, a book on Manual Training by Professor C. M. Woodward, of Washington University, St. Louis, than whom no man is better qualified to define and expound manual education. He was the founder of the first Manual Training School, strictly so-called, and he shares with Professor J. D. Runkle, of Boston, the honour of first advocating practical methods of tool instruction as an element in American education. Professor Woodward's opportunities for testing methods and for observing results have been unequalled, and his words on this subject are authoritative. His book will be exceedingly practical, his main object being to show just how a manual training school should be organized and conducted. He will give courses of study, programmes of daily exercises, and working drawings and descriptions of class exercises in wood and metal. The course of drawing of the St. Louis school, which has proved so eminently successful, will be quite fully given. The publishers have recognized the universal interest in manual training, and the general demand for exact information on the subject; and they are confident that they will soon be prepared to meet this demand. Professor Woodward's breadth of training (at Harvard, as a teacher of the classics, and later of the higher mathematics and applied mechanics) is shown in a faultless style, characterized by great force and simplicity.

BOOKS RECEIVED.

Three Essays, viz.: *Laws, and the Order of their Discovery*; *Original of Animal Worship*; *Political Fetishism.* By Herbert Spencer.

Forming No. 68 (special number) of the *Harvard Library*. New York: J. Fitzgerald.

(Continued from page 425.)

in the path of professional duty, buoyant with hope, and conscious of the ability to mould character and influence mind, that will be felt as a power in the world's work when their pupils have become mature men and women, and they themselves are approaching the mellow sunset of life, clear in conscience and contented with achievement.

But alas! for the teacher and the school, when directors are careless and parents indifferent! Yet even these heavy drawbacks should only inspire the true teacher to more unflagging zeal, and more self-sacrificing efforts to lift his pupils into the transforming light of mental culture, good morals, and well-bred deportment. Duty thus faithfully performed will, in the final outcome, bring its own exceeding rich reward.—*Pennsylvania School Journal*.

THE TEACHER'S OWN CULTURE.

"SOCIETY expects to find excellence in the schoolmaster, notwithstanding his own peculiar difficulties." This excellence may be shown either in his learning or in his moral character. The special functions of the teacher are to cultivate and discipline others, and if he attempts this, he must necessarily educate and discipline his own mind, and it is to this point that I wish more particularly to draw attention. We are constantly being told that we are behind countries on the Continent in our system of education, and that "technical" and "higher grade schools," with the special education they give will have to become more numerous if the engineers, mechanics, etc., of England are to compete, in the workshop, with our foreign neighbours. The teachers of our country must also see to it that they are fitted to fill the post of honour that will be assigned to them in the future. A man's superiority is soon recognised beyond the walls of his school-room, and he will form the minds of those who, in after-life, will often appeal to his taste and judgment. A good sound judgment, and the habit of mentally taking an all-round view of things may, to a certain extent, be cultivated. We use judgment when we mentally place things side by side for the purpose of finding out their similarity or contrasts with an intent to decide as to which is the right course to pursue regarding them. Thus judgment involves the power to eliminate the opposites or likes of any given line of action. There are continually opportunities occurring, in school life particularly, of verifying and correcting our opinions. This faculty is many times called "common sense," but is not so "common" as is often assumed.

When we endeavour daily to arrive at just conclusions, the power to decide rapidly increases, and the faculty itself grows more

valuable. This will become more extended as experience increases. On the other hand, care should be taken that judgment should not be allowed to deteriorate into mere prejudice.

A quick and accurate observation is an essential qualification for all who wish to become skilled in the profession of teaching. Children's faces, as a rule, are a good index to the mind, and the habit of watching them closely to observe signs of fatigue, restlessness, and intelligence, will develop an insight into human nature not to be despised. A constant watchfulness will soon enable the teacher to discern to a certain extent between truth and falsehood, guilt and innocence, and to recognise other signs of the moral as well as the intellectual nature of children.

Complete self-control is a most important factor in one who attempts to govern others "He that ruleth his own spirit is better than he that taketh a city," and he that commands his own feelings has one instrument by which he can command others. If the habit of mounting guard over one's own feelings and emotions be carefully cultivated, it will stand in good stead in times of excitement, for a calm, quiet demeanour has great influence over turbulent noisy children.

As every school should serve as a training ground for the orderly performance of work through life, it should set up a high standard of method and punctuality. Method reduces the maximum of work to the minimum of labour, and enables all the school machinery to move easily and smoothly. Again, every teacher should have some object or pursuit to which to devote his thoughts out of school hours.

Any suitable hobby will serve to enlarge his ideas, expand his mind, and keep the follower in sympathy with learners, for he will then be a learner himself.

Bacon says, "Reading makes a full man," and, of all people, teachers need to take this means of increasing their store of information, and the study of several good books on one particular subject will be found very useful.

In conclusion, let me use the words of Professor Pillans, who remarks: "The moral training received in a well-conducted school from observing the example of strict and impartial justice in the conduct of the master, his kindness to all, his paternal regard for their improvement, his patience with the slow, his encouragement of the quick, his unruffled serenity of temper, and his reluctance to punish, is far more important to the pupil's well-being in the world and his character as a member of society, than any given amount of literary acquirement. The good or evil lessons which a boy draws for himself, almost unconsciously, from the master's demeanour in school, are more influential and impressive than any direct instruction."—*The Teachers' Aid*.

Methods and Illustrations

EXERCISES IN ENGLISH FOR FOURTH FORM CLASSES.

II.

1. RESOLVE into a series of short sentences:—

(a) "At noon I proceeded to a point at which it had been arranged that I should hold a council with the chiefs of all the tribes, who, according to appointment, had congregated to meet me; and on my arrival there I found them all assembled, standing in groups, dressed in their finest costumes, with feathers waving on their heads, with their faces painted, half-painted, quarter-painted, or one eye painted, according to the customs of their respective tribes; while on the breast and arms of most of the oldest of them, there shone resplendent the silver gorgets and armlets which in former years had been given to them by their ally—the British Sovereign."

(b) "In the year 1670, the French authorities in Canada built a fort upon the Detroit river, for the double purpose of trading with the Indians, and of opposing a barrier to their progress eastward."

(c) "The whole of the Canadian force now amounted to 1,300 men, comprising 600 Indians, under the celebrated Tecumseh, 300 regulars, and 400 volunteers disguised in red coats."

2. Punctuate the following sentences and insert in their proper places the capital letters:—In the midst of these thoughts while he was stopping to peep over the stone wall he started back and caught hold of his companion's hand quick quick cried he let us run away or he will catch us who will catch us asked the stranger mr toil the old schoolmaster answered daffy dor you see him amongst the haymakers.

3. (1) Make a list of the dissyllables and one of the trisyllables in the follow. lines:

(2) Indicate phonetically the pronunciation of the italicized words:—

They drive home the cows from the *pasture*,
Up through the long shady lane,
Where the *quail* whistles loud in the *wheatfield*,
That is *yellow* with ripening grain.
They wander in the thick waving grasses
Where the scarlet-lipped strawberry grows,
They gather the earliest snow-drops,
And the first crimson buds of the rose.

4. Give other words pronounced the same as "isle," "none," "find," "forth," "mean," "gate," "jail," "hocs," "oh," "plate," "groin," "rap," "meat," "root," "roars," "pain."

5. Shew by constructing sentences that the following words can be used with different values:—Sound, ring, for, on, that, benefit, and thunder.

6. Vary the structure of the following sentences:—

(1) Gratiano and Nerissa, Portia's waiting-maid, were in attendance upon their lord and lady.

(2) The death of Richard Grant White removes one of the best-known of our literary and dramatic critics.

(3) I there saw Pere Rouquette, the poet-priest of Louisiana.

(4) I next paid a visit to Judge Gayarre, the distinguished historian and author.

(5) One most unique and striking feature is the greenhouse and the conservatory, erected on the roof of the hotel.

7. Indicate the pronunciation of these words:—Cucumber, musk-rat, canine, finance, due, dew, Cagliari, fallacy, father, carat, caret, bleat, soot, April, February, Wednesday.

8. Mark the accent of the italicized words:

(1) We *present* in our *present* number some portraits of Chicago's finest buildings.

(2) The *gallant* came late, but he made a *gallant* attempt to reach us in time.

(3) Nearly every *minute* he found a *minute* gem.

(4) It was said that the placing of *incense* here would probably *incense* him.

(5) They were ordered to *escort* the *escort* as far as Linden.

(6) The reports of the *conflict* *conflict* to an extent.

(7) It is impossible to *attribute* such an *attribute* to a man of his social standing.

(8) The *record* which he will read is the one I was ordered to *record*.

9. Supply the ellipses in the following sentences:—

(1) The erection of a building so noble in design, so solid in construction is a sure indication.

(2) The poet went to Abbotsford as well as Newstead Abbey.

(3) "Thy waters wasted them while they were free,
And many a tyrant since."

(4) "A merry Christmas, Bob!" said Scrooge.

(5) Not a word was spoken save by the young General.

(6) I should rather have this than that.

(7) The pages of romance can furnish no more striking episode than the battle of Quebec.

10. Change to indirect narration:—

(1) "Gentlemen, I would rather be the author of that poem than take Quebec to-morrow."

(2) "I have nothing further to say, your honour; I have said all that I deem necessary to establish my innocence."

(3) "I impeach him in the name of the House of Commons."

11. Re-write the following in prose, using your own words as much as possible:—

THE VOYAGEUR'S GRAVE ON THE NILE.

Here on the Nile's bank,
Arm 'neath his head,
Came up just where he sank,
Motionless—dead.
Comrades! your eyes grow dim;
Throw a flag over him.

No time for long good-byes;
Lay him at rest;
Bury him as he lies,
Warrior-like dressed.
Hush, now! the mass is said
For quick and for the dead.

"Forward!"—He'll never harm
In his lone bed.
He'll hear no war's alarm,
No martial tread
Leave his rude cross to tell
Near he lies.—Farewell!

Fearless, he cared not how
Slender his boat.
Down the St. Lawrence now
No more he'll float.
Strange here in stranger land,
Dead on the burning sand.

ALFA.

LANGUAGE LESSON.

RULE.—Use words which express the sense. Avoid expressions which do not exist.

"The robber was hung" should be "the robber was hanged," because "hanged" means to execute by hanging, while "hung" is to suspend. You can say "the hat hung on the nail." There is no such expression as "was hung," hence it is contrary to common sense to use it.

"He plead his own cause," is wrong, because there is no past tense "plead;" it should be, "he pleaded," etc.

"He proposes to buy a horse." "Propose" means "to suggest." You cannot say, "he suggests to buy a horse." It should be "he proposes," etc.; that is, "he has formed the purpose," or "he intends."

"The pen whom I have made." "Whom" is only applied to persons, "which" to things.

"He has got a knife." "Got" is the past of "get." The sentence does not mean that he "did get a knife," but that "he has a knife," hence this is all that is necessary to say.

"He sot there," wrong, because "sot" is a drunkard, and the sentence means that "he was sitting" or "sat."

In the same way correct the following:—

The boiler bursted. He has been misfortunate. I wish to get shet of him. Give me theirs. He lives further from her than I. I throwed a stone. He flew from his pursuers. He is a good musicianer. He catched a bird. This is a preventative against fever.
—National Educator.

A PRACTICAL LESSON

IN PICKING OUT NOUNS AND VERBS FROM A READING BOOK.

The best teachers find out that set lessons in grammar to Standard II. children, are of little avail in enabling them to take a paragraph from an ordinary reading book and tabulate the nouns and verbs in it as is required on the examination day. I have found from experience on following out the plan I am about to explain, that 90 per cent. of the children of an ordinary Standard II. will tabulate 90 per cent. of the nouns and verbs in an ordinary paragraph correctly in three or four months.

For the first two months of the year the ordinary grammar lesson should be employed in giving the children correct notions of nouns—i. e., names of things, and ordinary active verbs as fly, run, jump, etc. These are easily grasped by the children when presented to them in easy sentences. At the end of two months discard the ordinary weekly grammar lesson, and devote ten minutes at the end of one reading lesson a day, as follows:—The children are supplied with slates and pencils. They head two columns on the slate with

NOUNS. VERBS.

With books open at the lesson the class has just read, the teacher selects a paragraph and draws the children's attention to it. Take the following:—

"When he came he did exactly what they hoped he would do. He walked straight up to the basket, and nearly overset it to begin with. Then he began to paw the handle, and to play with a bit of hay which hung over the side. Then he stood on his hind legs, put his fore paws on the edge and looked in. Then he drew back, gave a little spring, and in he went."

The teacher has the blackboard headed like the children's slates. He then proceeds as follows:—Children begin to read at the paragraph. Put up your hands when you come to a noun or a verb. Boy answers "'Came' a verb." Why? Because it tells what "he" did. The word goes on the blackboard and on the children's slates in the proper column. Read on again after "came" until you come to another noun or verb. Hands up. "'Did' a verb." Right. At an early stage of working out this plan, verbs such as "did," "would," "do," "had," "be," "am," "was," "been," etc., will almost invariably be overlooked. No amount of explaining will make it intelligible to Standard II. ability that such words are verbs. One of the most gratifying results of the plan suggested is, that after a little practice, the children gather such verbs into the net quite comfortably. If they pass the word "is," "am," "do," or any other small and oft recurring particle, the teacher pulls them up by saying, "Now, children, you

have passed over one of those little verbs that I have told you to be especially careful about. Look back, who can find it?" They begin to search zealously, and after having had their attention drawn to them two or three times, they take quite a delight in such old friends as "is," "has," "am," etc., and never afterwards let them slip.

The nouns should be tested by placing the word "the" before each. Take the word "basket" in the paragraph. Why do we call the word "basket" a noun? Because is the name of something. What is the word "basket" the name of? An article to carry things in. At the end of six or seven minutes, the blackboard and the children's slates will have these two columns:—

NOUNS.	VERBS.
Basket.	Came.
Handle.	Did.
Bit.	Hoped.
Hay.	Would.
Sidd.	Do.
	Walked.
	Overset.
	Begin.
	Began.
	Paw.
	Play.
	Hung, etc.

Now, slates down. Look at the board. Stand those who can make a sentence with the verb "came" in. Take a few sentences rapidly, not taking the same noun twice over. Insist upon every word except "came" being changed in each sentence given before calling the sentence a good one. If play-time comes after the reading lesson, send the children out one by one as they make good sentences. It will sharpen their wits wonderfully, and the teacher will get at the laggards unfailingly. The above plan is not so mechanical as it may appear. It can be made full of life, interest, and sound teaching in the hands of an active teacher. Words that may be both nouns and verbs are noted, and sentences made illustrating their uses. Try the plan for a month, and then test the class with a paragraph not touched before. The children will take an intelligent delight in the grammar lesson for the remainder of the year.—*The Teachers' Aid.*

LESSONS IN BOTANY FOR BEGINNERS.

STEMS.

"You see, children, these bean plants which have grown from the beans that we planted a little while ago, in earth which has been kept warm and moist? Some time since we learned something about the roots of plants and their use. Now let us talk about another part of a plant. What do you call this part of the little bean plant which grows upward and bears the leaves?"

"The stem,"

"Does the stem ever bear anything else besides beans?"

"Flowers."

"Yes; and after the flowers?"

"Pods, with beans in them."

"That is right. So we may remember that the business of stems is to bear leaves, flowers, and seeds, or fruits. We said that the part of the young plant which grows upward into the light is called the stem. This is true, but it is also true that many stems grow beneath the earth. What is this which I have?"

"Potato plant."

"Yes; we have here a whole plant, carefully dug up so as to preserve the roots. Let us, beginning with the leaves, name the parts of this very useful vegetable. These are?" (pointing to the leaves);—

"Leaves."

"Yes; and this, along which the leaves grow?"

"The stem."

"Right; and this?" (pointing to the subterranean stems bearing small potatoes);—

"Roots."

"No; there you are wrong. Do you see these small scales? Are they not like little leaves? That is what they really are; but they are not green, as leaves usually are, because they have grown in the dark, and it is the sunlight that gives to leaves their beautiful green colour.

Well, if you think of these pale, thin scales along this stalk, as underground leaves, what do you think we may rightly call the stalk which bears them?"

"Stems."

"Yes; this is one kind of underground stem, and here and there this stem is greatly enlarged—swollen. you may say—and so the potato, which is such a useful article of food, grows. Such enlarged parts of underground stems are called tubers. The little dents, commonly called eyes, here and there on the potato, are really buds, each covered by a scale-like leaf. Now let us see the real roots of the potato (touching the fibrous roots). If we examine these we shall find no leaves, either perfect or partly formed. Instead we find the tiny root hairs whose business it is to take up nourishment for the growing plant from the earth. There are many kinds of underground stems, some of them very different from that of the potato. You have all seen onions and hyacinth bulbs, I suppose? Bulbs of all kinds are really underground stems, but are very short, having the leaves or scales so crowded as to overlap one another. We have not time to talk of other varieties of underground stems to-day; but we will say a little more about the stems that grow in the light—the above-ground stems, you may, if you choose, call them. Notice this geranium. You see how the single stem grows upright for a little way? Then

what happens?" (pointing to the first branches).

"The stem divides."

"Yes; and these divisions of the stem are called what?"

"Branches."

"Right. Now I want you to notice every plant you see, and find out all you can about stems and branches. Some stems live a long time, growing stronger and firmer year after year, and adding branches to branches. Can you tell me what such plants are called?"

"Trees."

"Yes. Can any one tell me the name of some plant whose stem only lives a few months?"

"Bean!"

"Yes, the bean, pea, and many other common vegetables as well as most of the flowers which we raise from seeds in our gardens. It would take a long time to learn all that is known about stems and branches; but in other lessons we will talk about some of the most interesting kinds, and you must, as I said before, try to find out for yourselves as many different kinds as possible. Bring specimens to school, and we will examine them in class. Dig up small plants and see if you can tell the true roots from the underground stems; only you must not think that every plant has stems beneath the earth, for this is not true."

Additional lessons may teach something more of the *form*, *direction*, or *mode of growth*, and *duration* of stems, though with primary pupils of course no exhaustive study of the subject can be attempted. A few object lessons might well be given on particularly striking forms, such as the leafless branches of the cactus and stunted or undeveloped branches in the shape of thorns, spines, or tendrils. The main thing, as in all natural science teaching, is so to interest the children that they will see and examine every plant with which they meet, and recognize in it the organs discussed in class.—*The American Teacher.*

PRIMARY READING.

SUGGESTIONS AS TO METHODS AND MEANS.

THE synthesis of words should be taken up as soon as pupils know enough sounds for building new words. There must be an understanding between teacher and pupil as to the marking of sounds and the manner of indicating silent letters. Letters may be marked only for the most uncommon sounds, and crossed out or printed lightly to indicate that they are not sounded. A constant drill in sounding should be kept up during the year as a means of discovering new words, and should not be slighted when the work of spelling by letters is begun. It is generally better to leave the spelling by letters till the pupils have made considerable progress in

reading, and when begun it should be made very simple by using only words containing no silent letters. Throughout all the year, pupils will gain a good deal in the way of spelling by the copying of words and sentences from their reading lessons at quiet work after lessons. The names of the written letters are being learned in writing-lessons all this time, and should be reviewed in their work in language and reading. Most pupils can copy simple words, their names, etc., fairly well, even though they may not know the names of all the letters or be able to spell them correctly by naming the letters in the right order.

While most of the work in reading is from the blackboard, and the pupils are not yet ready for *real* book reading, it serves as a good discipline and a help in future work, if the teacher sometimes select stories containing some new words, gives the pupils books, and reads sentence by sentence for the children to repeat while looking at the words. The pupils enjoy this work. It is a help to them in learning to keep their places, and they gain a good deal in the way of expression and rapid reading by sentences.

Children learn to read with correct expression by imitating others, as they learn many other things. No harm to the pupil can come from this unless it be carried to excess, and the pupil thus come to depend upon the teacher or other pupils for correct expression rather than upon himself. Pupils must be taught to read as they talk, if they talk correctly. We often have to teach them to talk and to read correctly at the same time, and repetition and concert reading often encourage pupils who are a little backward who are likely to hesitate when attempting the reading of a hard sentence.

When books are first used by the class it is better to teach the new words of the lesson from the blackboard, and it is well to print or write difficult sentences occasionally. If pupils are carefully taught during the year, at its close they should be able to read readily any of the first readers in common use. If possible the pupils should become familiar with several first readers; their knowledge of words is thereby increased, and they gain greater power to read well because their reading lessons are not likely to become tiresome or monotonous on account of repetition. It is much better to require pupils to read the same words combined in different ways or sentences than to dwell on the one sentence or story until the pupils know it by heart, for the purpose of testing the pupil's knowledge of words. There should be more reading matter put into the school room. Children have reason to complain when the teacher *puts them back* to the first part of the book. It is possible to cultivate in the child of six or seven years a taste for reading as a means of acquiring information and a taste for good literature.—*American Teacher.*

Educational Intelligence.

EDUCATION IN THE MARITIME PROVINCES.

IN selecting a home for himself and his posterity, a man should ask himself what educational advantages each of the various fields for immigration possesses. Not only is this important in its direct bearing upon the well-being of his children, but it furnishes a means of testing the purity and wholesomeness of the social, moral, and intellectual atmosphere in which he will be called upon to live. Given a country in which all stages of education are attainable by the unaided efforts of the poorest individual, a public school system thoroughly unified and harmonious in the working of its various parts, a body of well-trained and earnest teachers, a healthy public sentiment manifesting itself in the attendance of twenty per cent. of the population at school, one may with confidence rely upon the presence of an intelligent, law-abiding community.

The legislatures of the different provinces of Canada have all succeeded in building up school systems that may fearlessly invite comparison with those of any other country. As our remarks must be of limited length, and chiefly confined to the maritime provinces of Nova Scotia, New Brunswick, and Prince Edward Island, we shall proceed to make a rapid sketch of the condition of primary, secondary, and higher education in these provinces.

So liberally do the legislatures and county councils contribute to the expenses of education that by levying a very moderate local school tax, even a sparsely settled district can afford educational facilities. The extent to which the people appreciate their privileges in this respect may be judged from the last reports of the Superintendents of Education for the three provinces, which show that in New Brunswick one in 5.63 of the population attended school during 1885, in Prince Edward Island one in 5, and Nova Scotia one in 4.2. Nothing stronger could be said as to the quantity of public instruction—its general dissemination; we have now to consider its quality. Among the agencies which tend to increase the efficiency of a teacher and the effectiveness of his work might be reckoned teachers' associations, a carefully graded course of study extending from the infant classes to the university, well selected text-books, and the thorough inspection of schools. But the most important of all is the normal school, in which teachers study the science, and practice, under efficient supervision, the art of teaching. Each of the Maritime Provinces has its normal school, which gives candidates for the difficult position of teacher a thorough training in the principles of education, and stimulates them to further study in the literature of their calling.

Next above the common schools, in which the ordinary English branches are taught, stand the county academies, grammar, high or superior schools as they are variously called. In these, while most of the subjects of the common school course are continued, several of the higher branches are added, such as classics, modern languages, and the natural sciences. There are in Nova Scotia eighteen Academies, and in New Brunswick seven grammar schools, besides a large

number of superior schools, in which the higher branches are studied. In these, as well as in the common schools, strenuous efforts are being made to satisfy the requirements of those who intend to pursue a college course, and also to meet the increasing demand for industrial education. The secondary schools form a connecting link between the primary schools and the universities, the work of the course leading up to the various examinations for matriculation in arts, law and medicine, or to those for teachers' licenses.

The top story of the educational structure is occupied by the university. Of these there are two in New Brunswick and four in Nova Scotia, the attendance at which is steadily increasing, the number attending two of the leading Nova Scotian colleges last year being two hundred and thirty-seven. We have already exceeded the prescribed length of this article, and we have only room to say that the universities of these provinces furnish a worthy key-stone to the arch of public instruction. The whole system of education is thoroughly uniform, and although at the time of the Free School Act, it did not meet with the general public approval, the experience of the past twenty years has shown the people its many benefits.

The labours of Dr. Forrester in the cause of free education, and the statesmanship of Sir Charles Tupper in securing legislative sanction to such a grand reform, will ever be remembered with gratitude by Nova Scotians.—*The Halifax Critic.*

THE MANITOBA TEACHERS' CONVENTION.

THE eleventh convention of the Manitoba Teachers' Association (of which we only had space for a very brief notice in our last issue) began in the Central School, Winnipeg, on the 2nd July. The proceedings were opened by Mr. A. Bowerman, M.A., Principal of the Winnipeg Collegiate Department, 1st vice-president, who read a portion of Scripture and offered prayer.

Mr. J. B. Somerset, Superintendent of Education, President of the Association, took the chair and delivered his opening address, which was exhaustive and able.

Mr. N. McCallum, B.A., Principal of the Portage la Prairie schools, read a paper on "Written Examinations," showing in an able manner their utility as a means of education, cultivating independence of thought, self-reliance, systematic arrangement and classification, and as a most effectual means of review.

A brief discussion followed, Mr. A. Bowerman and Inspector D. McIntyre taking part.

The election of officers followed with the following results:—

President, Mr. J. B. Somerset, Superintendent of Education; 1st vice-president, Mr. D. J. Goggin, Principal of the Normal School; 2nd vice-president, Mr. N. McCallum, Portage la Prairie; secretary, Mr. W. A. McIntyre; treasurer, Mr. F. F. Kerr. The foregoing were all elected by acclamation. The following were elected by ballot as members of the executive council: Messrs. D. McIntyre, E. S. Popham, Miss Sharpe, E. A. Blakely and D. H. McCallum (Emerson). At the afternoon session Mr. Goggin, the newly elected first vice-president, took the chair. Mr. E. S. Popham, M.A., English master, Winnipeg

Collegiate, gave a very interesting exercise with a class of seven pupils, putting them through a review exercise on Shakespeare's "Merchant of Venice." Very deep interest was taken by all present in the method pursued by the teacher illustrating his object to get the class to think for themselves and enter fully into the spirit of the play. Mr. Popham followed the class exercise with the reading of a brief paper discussing the principles upon which he based his method of teaching. Various questions were asked and answered, and points raised were discussed by Miss Johnson, and Messrs. Reid, W. A. McIntyre, Bowerman, Greig, Inspector McIntyre, Bamford, Somerset, Goggin and others. Several of the speakers contrasted the method exemplified by Mr. Popham with the teaching which they themselves had received in English literature, strongly approving of the former. Mrs. J. F. McIntyre, late assistant teacher in the Normal School, read a brief but admirable paper on "System and Cleanliness in the School Room." Inspector McIntyre introduced a discussion of the paper, stating that the ideal presented by the essayist was one which she herself had worked out in practice in her own school. The paper was also criticised most favourably by Superintendent Somerset, Mr. N. McCallum and Mr. Goggin from the chair. The President then took the chair at the request of Mr. Goggin, when it was resolved on motion of Mr. W. A. McIntyre, seconded by Mr. Goggin, that the next convention be held at Portage la Prairie. The meeting then adjourned.

On the following day the meeting was continued and Dr. Kerr, Dean of the Faculty of Manitoba College, read an interesting paper on "School Hygiene," showing how important it was that the health as well as the education of the pupils should be attended to. Mental exercise is conducive to health if the necessary physical conditions are observed. The paper treated of nearly every phase of school life, ventilation, heating and lighting of school houses, suitable sites, interior arrangements, construction of desks, seats and stairways, and the duty of the teachers to be ever vigilant in the matter of contagion or causes that lead to it.

Mr. E. A. Blakely, Principal of the Boys' Central School, Winnipeg, read a paper on Promotion Examinations. An interesting discussion followed, Messrs. D. McIntyre, Greig, Bowerman, Reid, Goggin, Hewitt, W. A. McIntyre, Garratt and Somerset taking part.

A paper on "The Relation of the Teacher to the Parent" was then read by Mr. F. H. Schofield, B.A., Principal of the Dufferin School, Winnipeg. The aim of the paper was to point out the duty of the teacher to supply, as far as possible, the place of the parents, and the duty of parents to co-operate with the teacher in securing the education of their children.

During the afternoon session Mr. W. A. McIntyre read a paper on "Barriers to Progress," the tenor of which was intended to show up the influences which were dragging the morals of the pupils in the dust in spite of the efforts of the teachers to elevate them. Dime novel literature was exercising a baneful influence on the boys, while the sentimentalisms of such writers as May Agnes Fleming were doing the same for the girls. It was hard for the teachers to contend against these influences

while the parents countenanced them. Then there was the city bill-poster, who was allowed to placard the fences and houses with pictures that no child could gaze upon without becoming in some sense demoralized; bar-rooms were kept open during prohibited hours, and prize-fights, sparring exhibitions, pool tables, Sunday baseball, all contributed their share to the general demoralization. The press, too, was not doing its full duty in the matter. Our newspapers were amongst the best in the Dominion; but while they cry out against slugging matches, they give their readers a column and a half describing some pugilistic encounter in which the American bull-dogs figured. No paper with a claim to respectability should allow subjects of this kind in its columns. The paper was followed by an animated discussion, after which Rev. A. A. Cameron read a paper on "The Religious and Moral Influence of the Teacher." Votes of thanks were accorded to those who had contributed the various papers; and the meeting closed with the singing of "God Save the Queen," and the benediction.

PRINCIPAL is wanted for Ridgetown public school.

It is stated that a high school will be soon established in Georgetown.

MR. J. H. MARBLE has lately been appointed science master of the high school at Paris.

MISS CHAPMAN has been appointed teacher of the 2nd division of the public school in Bowmanville at a salary of \$275 per annum.

At a meeting of the Hamilton School Board on the 5th July, Mr. S. B. Sinclair was appointed assistant teacher in the model school.

An application has been made to the Mitchell town council by the high school board for \$2,000 for the purpose of enlarging the high school.

REV. WILLIAM CLARK, M.A., professor of Mental and moral philosophy at Trinity College, has sent in his resignation, to take effect at Christmas.

MISS AGGIE BLAIR, of Strathroy, has resigned her charge of school section 7, Euphemia, and Miss Annie Morrison, of Oil Springs, has been engaged in her stead.

THE pupils of Coleridge Public School presented a handsome album to Mr. D. L. Campbell, on the occasion of his departure to pursue his studies at Whitby High School.

THE building committee of Alma College, at St. Thomas, have settled the general plans for the construction of the new addition to the building belonging to this flourishing institution.

MR. A. H. McDUGALL, B.A., late of the high school, Kincardine, has been appointed to the position of mathematical master in the Stratford Collegiate Institute with a salary of \$1,000 per annum.

MISS ROBBINS has handed in her resignation as teacher of the north ward school, Guelph; and Mr. Nichol has been appointed science master in the collegiate institute in the same town as successor to Mr. Orr.

MISS McDUGALL, who has resigned her position as teacher in the Cannington public school, was agreeably surprised by her pupils presenting

her with an address, accompanied by a silver cruet and two napkin rings.

INSPECTOR HODGSON's report of his visit to the Hamilton Collegiate Institute condemns the heating and ventilation as unsatisfactory, but the improvements for which the contracts have been let will no doubt remedy the defects.

THE Rev. P. Weir has received from Sir George Stephen, President of the Canadian Pacific Railway, a generous donation of \$2,500 towards the erection of a new building for a school for boys, in connection with the Morrin College, the total cost of which is estimated at \$7,500.

THE Guelph Board of Education have added \$100 a year to Capt. Clarke's salary in consideration of his handsome donation of \$609 towards the erection of a gymnasium, which, it is stated, he proposes to supplement next season by an amount sufficient to cover all expenses of the building.

PRIOR to the closing of the St. Mary's Collegiate Institute a few weeks since, Mr. G. J. Riddle, who has been appointed successor to Mr. Ross as mathematical master of the Galt Collegiate Institute, was presented with a handsome cane and a valuable edition of the works of Thackeray.

EIGHTY-FIVE per cent. of the students at Harvard now use the college library as against fifty-seven per cent. ten years ago. Their teachers do not regard this increase with any suspicion that the librarian has been indiscreet in his selection of books, but look upon it as indicative of the growth of a genuine desire for knowledge.

THE Southampton public school board passed the following resolution at the regular meeting on the 3rd inst.:—Moved by Mr. Johns, seconded by Mr. McAulay, "That this board does hereby instruct the teachers of this school to read such selection from the Bible as they may deem appropriate at the opening and closing of the school throughout the year, and that this board furnish each department of the school with a copy of the Bible."

ON a recent visit made by Dr. J. J. Wadsworth to the senior and junior division of the common schools at Simcoe, he expressed himself more than satisfied with the progressing of the pupils and organization. He paid Miss Annie Ryan, the very highest teacher in the junior division, the very highest compliments for the efficiency she has exhibited in teaching the children under her charge. Dr. Wadsworth also expressed himself delighted with the improvement shown in the senior division, and also complimented Mr. John Alexander.

SOME time ago Mr. Seath, High School Inspector, performed the duty of inspecting the building occupied by the collegiate institute at Peterboro' and made a most unvarnished report, condemning the inefficiency of apparatus, inadequacy of the building and play ground and total absence of a gymnasium. Last week the board of education decided to meet the council and take steps to lay the whole matter before the people. While the town has made rapid progress, the accommodation for advanced education has remained *in statu quo*.

THE Society of Science, Literature and Arts, of London, England, has conferred the honour of Fellowship upon Mr. McKay, Principal of the Pictou Academy, who is the author of a very able

paper on "The Sponge," which was read before the British Association for the Advancement of Science on the occasion of its meeting in Montreal. This gentleman is said to be a most indefatigable worker in the cause of education, although his advocacy of so-called *spelling reform* is totally at variance with the views of the EDUCATIONAL WEEKLY.

ON the 2nd inst. a Teachers' Institute was formed at Burk's Falls by Mr. Tilley, Inspector of Model Schools, assisted by Rev. Mr. Grant, Inspector for Parry Sound, who was subsequently elected president. Miss Landreau, of Berniedale, was chosen vice-president, and Mr. Thos. White, secretary. The following named were appointed a standing committee: Misses Monaghan, McLaughlan and Cleland; and Messrs. Nicholson and White. Mr. J. J. Tilley then gave model lessons in grammar, arithmetic and geography; also an object lesson in fractions. This was a complete success.

MR. RANNIE, secretary of the North York Teachers' Association, desires to correct a statement inserted in our issue of the 24th ultimo, on the authority of Mr. D. H. Lent. In referring to the meeting of the Association held on the 11th June, Mr. Lent wrote that the motion, "That in the opinion of the teachers of North York, the time has arrived for a closer union of the teachers of Ontario for the sake of mutual aid and protection," was carried unanimously; whereas, Mr. Rannie alleges, four members voted in its favour only; although, he added, those who did not vote for the motion had probably not given sufficient consideration to the subject to enable them to form an opinion in regard to it.

AT a meeting of the town council of Clinton Mr. Hine, on behalf of the Clinton High School, made application for a grant of \$4,500 in order to raise the school to the standing of a collegiate institute, giving a detailed statement of the anticipated advantages that would accrue therefrom, and showing that the annual expenditure would be no greater, possibly less, than at present. Mr. Manning, as a member of the high school board, spoke at length on the supposed advantages and benefit that would result to the town by having the school raised to a collegiate institute. Mr. Menzies also made a few remarks of a similar nature. On motion, the matter was referred to a special committee.—*Clinton New Era.*

A MEETING of the Protestant section of the board of education at Winnipeg was held in the education offices on the 5th July. Ven. Archdeacon Pinkham occupied the chair, and the other members present were Rev. Prof. Hart, Rev. A. Langford, W. F. Luxton, W. B. Hall and Superintendent J. B. Somerset. A number of minor matters relative to school districts were disposed of. The request of the Emerson school board for permission to reduce the period of their summer vacation was granted. It was further resolved that for the last half of the current year one hundred school days be accepted as equivalent to the full school term, and that no deduction shall be made from the Government grant to any school board that may report an attendance of pupils to their school during the above number of days.

AT a special meeting of the school board at Lindsay on the 2nd inst., communications were

read from High School Inspector Seath, in the shape of a report of the accommodation of the Lindsay High School, objections alone being given. The outbuildings were reported to be in a very bad state; there were no flowers, no water supply; the class-rooms were inadequate, and not conveniently arranged; heating was insufficient, and no ventilation in the first storey; no waiting or cap rooms, and only one teachers' private room, and that one was very scantily furnished; from H. Hughes, sanitary inspector, referring to the dirty state of the school outbuildings; and from S. A. McMurtry and others asking an appropriation for the support of a hand-ball court for the use of the pupils of the high school. The secretary was instructed to advertise for teachers to fill the vacancies caused by the promotion of Miss Rose to the senior division of the east ward school, in the place of Miss King who has resigned, and the vacancy caused by the resignation of Miss Brown in the north ward school.

THE British educational statistics possess some general interest as indicating what progress is being made in Great Britain in the direction of educating the future enfranchised masses. The fact is that Britain has been taking gigantic strides towards improving her national education. In 1870 the Education Act was passed, and it has done its work so thoroughly that though in 1869 the school attendance was only seven per cent. of the total population, yet in 1886 the percentage had increased to 16.67, and these returns indicate the agricultural districts as well as the town centres. Britain is actually taking the lead in the percentage of general school attendance over Germany and the intellectual state of Massachusetts. The absentees (mainly truants) in Great Britain are only 23.6 per cent. of the school population, while in Massachusetts they form 27.5 per cent. Special legislation is proposed in Britain in the hope of reducing even this percentage of absentees. The Radicals propose as the cure the abolition of all school fees in the public school—a system which prevails in this country to a preponderating extent.

THE catalogue of 1886 of the university of Mount Allison College and of Mount Allison Wesleyan Academy, New Brunswick, has been issued. The faculty of arts as now constructed comprises Dr. J. R. Inch, president and professor of mental philosophy and logic; Dr. Charles Stewart, moral philosophy and evidences of christianity; A. D. Smith Wood, professor of classics; S. W. Hunton, mathematics; Rev. John Burwash, chemistry and physics; B. C. Borden, English language and literature. The examiners for degrees are Rev. Dr. Pickard, moral philosophy and logic; Dr. Allison, superintendent of education for Nova Scotia, classics; Thomas Pickard, mathematics, Dr. W. L. Goodwin, of Queen's College, Kingston, chemistry and physics, and A. A. Stockton, political economy and constitutional history. Special arrangements are made for the convenience of school teachers to pursue a college course while continuing to teach during summer terms. Honour courses have been established in classics, mathematics, philosophy and modern languages. The study of Greek is elective, the equivalent for the freshmen and sophomore years being one year of French and two of German, or one year of German and two of French.



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The Calendar for the Session 1886-87 is now published and contains detailed information respecting conditions of Entrance, Course of Study, Degrees, etc., in the several Faculties and Departments of the University, as follows:

FACULTY OF ARTS.—Opening September 16th, 1886.

DONALDA SPECIAL COURSE FOR WOMEN.—September 16th.

FACULTY OF APPLIED SCIENCE.—Civil Engineering, Mechanical Engineering, Mining Engineering and Practical Chemistry, September 16th.

FACULTY OF MEDICINE.—October 1st.

FACULTY OF LAW.—October 1st.

McGILL NORMAL SCHOOL.—September 1st.

Copies of the Calendar may be obtained on application to the undersigned.

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Summer Shorthand Class.

With the consent of the Hon. the Minister of Education, the undersigned will conduct a Shorthand Class in the Education Department concurrently with the sessions of the Botany Class in July. For particulars address,

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EDUCATION DEPARTMENT, ONTARIO,
 TORONTO, May 21st, 1886.

DEAR SIR,—

From the replies already received respecting the proposed Summer Class in Botany, the Minister of Education has decided to complete arrangements for its final organization. The Opening Lecture will be delivered in the Public Hall of the Education Department, on Tuesday, July 20th, at 2 p.m.

Mr. Spotton suggests that those purposing to join the class should read the following portions of Thome's Text Book: Chapters 1, 2, 3 and 4, and so much of Chapter 6 as relates to Phanerogams and Vascular Cryptogams; or, the corresponding portions of Prantl's Text Book (Vines' Translation). Members should also come provided with Pocket Lens, Knife, Dissecting Needles, Collecting Box, Part II. of Spotton's Botany and Gray's Manual.

The Department will grant a Certificate, signed by the Minister, of Attendance on this Course, but will not undertake to conduct any examination with a view to test the proficiency of the class.

Yours truly,

ALEX MARLING,
Secretary.

CIRCULAR TO PUBLIC SCHOOL INSPECTORS.

EDUCATION DEPARTMENT, ONTARIO,
 TORONTO, May 1st, 1886.

SIR,—The Drawing Classes conducted at the Education Department, Toronto, during the last two summers will not be continued during the current year. It is nevertheless desirable in order still further to qualify teachers in this subject, that facilities of some kind should be offered for their self-improvement. Instead of the classes formerly taught at the Department it is now proposed to give a grant to each Inspectoral Division in which a class is formed for instruction in elementary drawing.

The conditions on which such classes may be formed are:—

1. The class must consist of at least ten persons holding a Public School Teacher's Certificate.
2. The teacher in charge must possess a legal certificate to teach drawing; or be approved of by the Education Department.
3. At least 30 lessons of two hours each must be given.
4. Teachers who attend this course will be allowed to write at the Departmental Examination in Drawing in April, 1887.
5. The Primary Drawing Course only shall be taught.
6. A grant of \$20 will be made for each class of ten pupils, but only one class will be paid for in any Inspectoral Division.

Will you be good enough to inform the teachers of your Inspectorate of these proposals in order that they may make the necessary arrangements for organizing classes.

Yours truly,

GEO. W. ROSS.
Minister of Education.