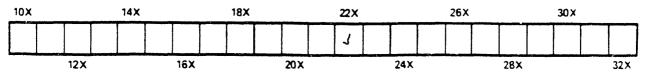
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THE CANADA

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CULTURE AND MODERN UTILITARIANISM.

CHARLES HILL TOUT, M.A., PRINCIPAL JUNIOR COLLEGIATE SCHOOL, TORONTO.

I is a fact, which I suppose few will dispute, that the age in which we are living is a very fast-going one, and one that needs all the smartness we can command to keep apace with it. And on no portion of the globe does the age revolve faster than on our continent of America.

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To-day we stand, as it were, on virgin soil: on one side, as far as the eye can reach, we see nothing but mighty forests whose giant growths have taken centuries to form and assume their present shape; on the other, boundless tracts of wild prairie lands. We turn away our gaze for a while, and, when to-morrow we look again, lo ! a mighty change has been wrought. The wand of that great enchanter, Utility--the touch of the nineteenth century, more powerful than the genii of the Aladdin Lamp that excited our childish wonder and astonishment in the days gone byhas given us in their place, not a solitary mansion or palace, but thriving towns and cities, populous States and Provinces all teeming with ex-

panding life and vigour! Truly our age is a marvellously rapid one, and not without some show of justice do we claim to be the initiators and leaders of the times. Before others have done dreaming of their plans and schemes, ours are carried out and executed. No obstacles, no difficulties, no barriers whatever, are allowed to stand in our way. Witness our railways and bridges. Nothing, not even creeds and faiths, can withstand the magic touch of that potential wand; but, with ever-increasing speed as the age unfolds itself, we rush along barely pausing to take breath or ask ourselves the question : "Whither does it all tend?" or "What is to be the ultimate outcome of this giddy race we are all running so eagerly?" And whenever the question is put the answer rings forth from a thousand lips: National progression, advancement, utility ! and away we go again, satisfied with our answer and our aim. And thus the stream of our life sweeps on, for who would attempt to stem the tide of national progress, advance-

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ment and utility, or what higher, nobler aim could there possibly be than this? But, do we rest on our oars for a moment and take a calmer, broader view of the race, do we but withdraw ourselves from the main stream, the rush and current, of life, and linger awhile in the grateful shade of the quiet banks, other questions, other answers, than these come to our Though we do not now any minds. more than in the heat of the race call in question the end and aim in view, though our faith in the glorious future which awaits us is still unshaken. vet we are compelled to ask ourselves a few vital, all-important questions which thrust themselves upon our reflection as we watch the contest before us. Is national progression and advancement, prosperity and utility, the real goal toward which we are aiming; and, if so, are we setting-out in the right way? Is our equipment such as befits those who have a long and nerve-testing race before them? Are we, in short, prepared for the great end we have in view?

No one, I venture to think, will deny the importance of such questions as these. The unfortunate part of it is, they are too rarely asked or put; the heat and rush of the race drive them from our minds; and it is only when we pause for a moment and watch the movements of those around us that they occur to us at all. Then we begin to see with a start what unpreparedness, what unfitness, what little judgment or reflection, the racers Though the race is a long show. and trying one, and one that calls moreover for the fullest development and culture of every faculty, and the final goal toward which we so fondly imagine ourselves to be aiming is still in the far distance; yet very few indeed seem to have made any adequate preparation for it. A very small proportion of those before us seem fitted in any way for the contest, or possess

the equipment by which alone they can suceeed and achieve the end in view, and without which it were but And then, folly to make the attempt. what is more melancholy still, we note again how indifferent all seem to this fact, how carelessly they are rushing on with never so much as the shadow of a doubt upon their minds as to whether they are in the right way or not : and, saddest of all, we perceive that those who set themselves up for leaders and directors are in most instances little better than blind leaders of the blind; and with their short-sighted directions and policy are but hastening the inevitable consequences such unpreparedness and unfitness must bring about.

We all know how assiduously our racing and boating men prepare themselves beforehand by careful training and practice for any coming contest they have to engage in, and should we not treat with contempt, or pity for his folly, the man who would attempt to compete with such without having first put himself under the requisite training and preparations? I think so, and justly too, for his failure would be a foregone conclusion. Practice and training always tell in the long run. And if a man needs careful and full training for such mimic contests as these, does he not need it a thousand-fold more for the grand race and contest of life, both as well for his own happiness and success as for the happiness and success of others? And it is just this necessary preparation and fitness, I repeat, which are so conspicuously wanting to the contestants before us; and the longer we consider the matter the more painfully does this fact come There is such a thing, home to us. I am fain to believe, as outstripping the times; and I greatly fear that is what we are doing, instead of being satisfied with keeping up with them.

In the vegetable world it is a well-

known fact that the fruit of plants and trees which are forced never possesses that richness of flavour, that delicacy of taste, which is the common property of fruit ripened by the ordinary processes of nature; and that the more a plant or tree is forced the more insidi and meagre its fruit becomes. And what is thus true of the vegetable world is no less true of the animaland of man. Such is the speed with which we are swept along in this everyday race against time that, if our efforts and exertions are to produce any fruit at all, it must perforce be fruit of an unnatural and forced growth, with all the imperfections and inferiority common to such-with unprofitableness and premature decay engraved upon it from the very beginning. And this is just the state of things we see all around us. Of change and hurry and dash, of boasting and bragging, there is much; but of maturity and excellence, of improvement and real worth, there is little to be found anywhere or in any-Though we do not acknowlthing. edge it, all we conceive of, all we take in hand, all we execute centres round one narrow point, viz.: the Present! and to it all our achievements are made to tend, all our offerings are brought. It is our high altar, our God.

To bring our fruit to the public mart first-never mind its forced growth, its insipidity, its immaturity, or how much our stocks are injured thereby-that is the all-absorbing passion of our age, the one thing we use life for. And to such a pass has this come, and so firmly has it taken hold of us, that should one whose mind revolts against such a course, and who has an eye for the welfare of posterity, set his face against these selfish, narrow, mistaken views of life, we forthwith regard him as little better than an idiot, and treat him to our pity or contempt. This is no exaggerated statement; it is all too true, as we must confess if we will only give ourselves time to think about it. And it is this which is to lead us on to the grand goal of national prosperity and progression ! This is our muchboasted advancement, our utility ! Ι have sadly misapprehended the meaning and sense of these terms, if this is what they mean. I had always deemed them in my simplicity to be synonymous with wide, universal improvement and amelioration of our race, in which succeeding generations should share as well as our own-with a something that would make our lives and the lives of our children, and those to follow after, better and brighter and happier. I must have been mistaken if the popular view be the right one. But to go to the root of the matter at once without further circumlocution. I think we have, as a people, mistaken the *object* of life, and blinded our eyes to the true facts of the case by Latting imaginary aims and ends before our minds. And if such be really the case, is it not time for us to pause and consider the matter for a moment? We surely, for instance, car.not take such a serious step as the placing of our children-who. let us bear in mind, must influence the destinies of the future, either for good or ill, no less than ourselves-under any, much less the modern, system of training and development, without, at any rate, bestowing some little reflection upon the subject; and it needs but scanty reflection to show us how evident are the evils of the system prevailing amongst us. Our children are *forced* up into men and women almost before they can walk or talk; and, like everything else that is forced and prematurely ripened, they must and do lack, not only all those qualities so pleasing and delightful in the young, but also the qualities that adorn and beautify the youth of all countries and ages, and which to so many minds make up the poetry of existence.

One of the saddest sights to be seen on this continent at the present day is the unnatural precocity of our children, the result of which is but too lamentably apparent to need comment here. And yet this is a feature of our life which is pointed at by so many with marked pride and satis-It is well, indeed, that the faction. destinies of the future be not altogether under our control: or instead of the progress and advance the present century has really seen made, we should now be wallowing in darkness and degradation, compared with which that of the Middle Ages would be as nothing. If we would put an endito such evils as these and bring about a healthier state of things; if we would save our children and those to follow them from future misery and trouble; if we would, indeed, help them to live honourable and profitable lives—lives which shall be a blessing and joy to themselves and others-let us have done with and turn our backs upon the popular training of the day. Let us bring them up naturally, and keep them as free as we can from the *forcing* influences around them, allowing Nature to do her own work in her own time and way. Let their training be as wide and liberal as is possible to give them; and, above all, let us eschew as their deadliest evil the prevalent theory of education so apply termed "the bread-and-butter theory." Nothing more pernicious or far-reaching in its baneful results could have been devised than this, and appealing, as it does, so directly to the lower needs of the great mass of the people, it is exerting so strong an influence against all higher training that even those whom we have been wont to regard as broad-minded and liberal educationists are slowly, but too surely, bending before its sway. Nor is this surprising when men of such

position as the writer of the "Letters to Young Men at College," which appeared in THE CANADA EDUCATIONAL MONTHLY a short time ago, calmly and deliberately advises young men to give their time and attention exclusively to the comparatively narrow course of subjects that bears upon their chosen vocation in life, thereby, as our experience of life proves to us every day, making them selfish and narrowminded, cramped in their views, filled with an overweening, obtrusive idea of their own importance and value in the world, as well as doing all it can to put them out of all sympathy with the hopes, interests and pursuits of 'That the stud int's their fellow-men. first thought and attention should be given to the study which is to be the chief work of his life is right and desirable, and cela va sans dire; but to say that the shall cut down the opportunities of wider reading which a college life gives him, and which are seldom within his reach again, exclusively to this end, to my mind savours of anything but sound or good advice. And, if it be urged that there is not time enough to do both, all I can answer then is that time should be made; there is no real need for so much of the haste and superficiality around us, and should his course in consequence be prolonged for a season, this so-called *loss* of time will be repaid a thousand-fold by the greater fitness and experience with which he will come to his work, as well as by the greater knowledge and grasp of mind generally he has acquired in the meantime. What though others have started in the race before him? He brings the experience and wisdom of his higher culture and training to bear upon the issue, and when they have exhausted their little stock of superficialities and meet the fate their pretensions merit, he will be in the zenith of his success and prosperity. Training and sterling acquirements must

natural growth and maturity will fetch the best market prices in the end. But while such men as the writer noted before propound such questions as the following, and then seriously argue and discuss them as if there could possibly be any other than one answer to them, I see little chance of improvement. For example, "How much or how little of education is desirable?" or, "Does the man need a liberal education?" as if every creature under the sun, whatever his position may be, is not the better for being given a broad and liberal view of life and its duties.

It is the pernicious bread-and-butter theory pure and simple with them. It is always, Will it put dollars and cents into your pocket? if not pass it by and stick to that which will, as if that were the one aim and object of your children's training. To regard it in this light is but to take the basest and lowest view of education. If the training of our children means anything at all it means preparing them and equipping them with that by which they will be able to fulfil in life in the very best way they can the part Providence has given them to play-to help them to realize, as nothing else can, that heaven and earth is a great system of which they are integral parts, and in which they have some definite end to fulfil besides the making of money. It teaches them how to help forward the great destinies of their race; to bring about that which we all say we are seeking, viz.: National progression and prosperity; to turn chaos into order, to harmonize the discordant, and in the end to hand on to posterity -beautified and enriched by their

win in the long run—the fruit of | own efforts—that noble inheritance of natural growth and maturity will fetch the best market prices in the end. But while such men as the writer noted successive generations.

Nor will all this, I venture to contend, unfit a youth in any way for the sterner, practical duties of life. He will be no less the thrifty, useful citizen -the competent man of business. Culture and practicality are not irreconcilable terms. But it will rob life of much of its bitterness and hateful meannesses, and transform the selfish, sordid view of it so many of us hold into something higher and nobler. It will set before us, both as individuals and as a nation, an elevating, ennobling ideal end to aim at, which shall enter into and control every action of our lives. But let it not be thought I plead for the culture of idealism simply. It is an education that will train, as nothing else can, every faculty and power of a man's whole nature-hand, head, eye, earso as to enable him to realize and work out the great aims and ends hehas put before him, which I am advocating.

A little more of self-culture, a little less of money-making, a little more of love for the ennobling and the true, a little less of the glitter and the show, and what a change would come over us! What a delightful country this of ours would be, and what a glorious legacy should we hand on to posterity ! If we could but establish the worship of Culture in the Temple of Wealth for a little while; if but one niche were given over to her votaries, how much of that which makes life so hateful at times would vanish; and little by little we should see the dreams of earth's noblest and best fulfilled before our eves.

ECHOES FROM THE CLASS-ROOM.

A. H. MORRISON, ENGLISH MASTER, C, I., BRANTFORD.

V.-READING.

DEADING is, of all educational means, the one best adapted to fill the inquiring mind with varied information, lively images, and the choicest thought of all climes and Books are the monucivilizations. ments of times, wherein are inscribed the epitaphs of the ages, eternalizing men and things. Printing is the child of Legend but the parent of Knowl-Born and developed out of edge. man's intellectual need, it has from the same cause become the progenitor of a greater intellectuality. It has crystallized what was before amorphous or scattered. It has rendered stable and everlasting what was before vague, evanescent and unreliable.

"Reading," says Bacon, "maketh a full man;" true, and it has this advantage over many educational topics in the school curriculum; once mastered, it is mastered for life. No further difficulties can fairly present themselves. The instrument once perfected is eternal in its office. It is independent of amendments, additions, elisions, contradictions, or verifications.

As time advances and men's eyes peer more closely into the future, modifications in various branches of learning are rendered necessary. Much. indeed, that was learned has to be unlearned, preparatory to being re-To-day, a supposed law of learned. physics is discovered to be inapplicable or altogether misleading. Tomorrow, what was thought to be flat and motionless is found to be spheri-The next day, cal and rotating. chemical nomenclature is revolutionized. Yet a space, and a theological

tenet, which for centuries formed one of the paving-stones of orthodoxy, in the light of modern inquiry, falls through, to leave a hideous void, where before men humbly knelt and kissed the fallacy. But with reading nothing has to be unlearned. The power once acquired abides with us, so that if language itself changes, the changes may be traced, classified and interpreted through the agency of a present Thus, though constant medium. speech, both written and spoken, shows some mutation through the course of centuries, to the present generation in time, it never changes, it is always ours. Let us trust that it may ever be so. Let us pause and consider before we attempt any sweeping change in our glorious heritage of letters which contains so much of Let us recollect that ease history. comes not with innovations, that no royal road to learning can ever be made useful or even practicable. Changes that are truly necessary come with time and of themselves.

Time, the corrector where our judgments err; The test of love, truth, sole philosopher.

Sweeping changes in language, like all revolutions, do more harm than good; they leave the constitution unsettled, the elements conflicting, the treasury not unfrequently bank-The hermit crab, finding its rupt. habitation too circumscribed for normal growth, shuffles out of the alien shell to seek another asylum; but, during its search, naked, defenceless and bewildered, it too often falls an easy prey to its voracious foes Let us take a lesson from the crab, Festina lente I

I do not hesitate to say that good

reading is the key to a liberal education, nay more, to a universal knowledge: the knowledge of the living world in which we dwell, of the dead world which lies behind us, of the world yet to be, which, like the visible horizon, seems ever before us, never reached, for the morrow is in a sense unattainable, 'tis always *now*.

Few out of the busy multitudes care to dwell among the stars, or swing like Mohammed's coffin, suspended in the cradle of the earth's gravity. Few care to deal with metaphysical abstractions or indeterminate problems, whether mathematical or philosophical; but read man must, to know others, to know himself, to glean from others' experience, so as to anticipate in some measure, the obligations, the wants and the possible conditions of time to come. Our first utterance is a word, not a formula; our closing lips syllable a farewell, they postulate not an equation. "Light, more light" is the watchword of the ages, and that light must come, so far as we are able to judge, if it ever do come, through the medium of written speech; for, granting that the riddle be at length solved by the few, through scientific research, that solution must be imparted to the many through the medium of books, for all men are not discoverers, neither are they contemporaries. A good book is a lamp to the feet of those who walk in the highway of knowledge, while the power to use it aright is a boon second only to the gift of reason itself.

It is an indisputable fact that the most shallow, the most worldly, the most neglected of humanity, if able to spell through a page of print, will be occasionally found poring over their Bible, their newspaper, or their sheet ballads. Even a child finds pleasure in spelling out a name or memorizing a nursery jingle. I think the reason is obvious. Humanity in its simpler

stages naturally takes to what it can understand; therefore it is that the masses are so fond of pictures, these appeal directly to their senses. Well, literature is simply a succession of verbal pictures, transferred through the medium of words to the mindcanvas, there reproducing, by a slightly different process to that of the brush, the fashions, the figures, the characteristics of all ages and all nations To tell me, a simple of society. bread-winner, that the square of the sum of two numbers is equal to the sum of the squares of the two numbers and twice their product, or that the product of the extremes in a proportion is equal to the product of the means, however true these statements may be in the abstract, is to tell me nothing. They are messages in cypher and space, and the eternal verities to finite time and understanding; but to read to me "Robinson Crusoe" is to reproduce for me the freshness of the green woods of earth, the balmy air of the heavens, the tints of the arching sky, the bloom of the green sward, the foam of the restless sea, the scenes I know or can, at least, imagine and love. I exist in Nature surrounded by her offspring and her voices; I do not live in an equilateral triangle bounded by straight lines and my mind refuses With Crusoe to be so circumscribed. I am at home. Here Nature appeals instinctively to her child. My untrained eyes cannot bear the blinding light of the great indeterminate sun; but I can lay my head on the lap of earth and close my eyes in slumber to realize in dreams the sights, the sounds, the odours and the sensations I realized when awake. In this respect, I am like honest Gabriel Betteredge. house-steward to Julia, Lady Verinder, and can swear by "Robinson Crusoe :" "You are welcome to be as merry as you please over everything else I have written; but when I write of 'Robinson Crusoe,

by the Lord, it's serious—and I request you to take it accordingly !"

The realm of literature is to maturity what Hans A: dersen is to childhood. It is fairy-land, and look askance as we may at the dictum, it is nevertheless a fact that man is rather a creature of sentiment and imagination than of prosaic fact, mathematical accuracy, or scientific acumen. Were it not so quacks, impostors and fanatics would have a sorry time of it, and the histories of Manichæus, Mohammed and Loyola would be unwritten. For one who studies the Principia, a thousand read Don Quixote; the journalist is more popular than the geometer, while Bacon is most frequently discussed with eggs. What makes the Bible so popular with the illiterate? It transports the believer from a city built with hands to the very suburbs of the heavenly Jerusalem. Once leaven the masses with philosophy and the family Bible will suffer.

As to the teaching of reading, there is a method of tuition insuring an accuracy of reproduction, while, at the same time, inculcating a taste for the subject, which, I think, is not widely enough followed in our schools; but which I for one deem a valuable aid to class recitation. It consists in the reading of chosen extracts by the teacher to his class-a method whereby the learners become the hearers. and the instructor the active agent. This method of course necessitates thorough ability in the teacher; that assured, I will answer for interest and improvement in the class. It is not enough for the members of a class to repeat, parrot-like, in turn a monotonous round of more or less imperfect iterations. We are, above all things, mimics; what we learn we learn best by imitations. An extract rendered by an efficient reader will go further toward instructing a class than though it had been mumbled through by thirty individual pupils. Be assured, if the trained, fastidious, critical intellect will not only forego an evening's fireside ease or social pleasure, but pay handsomely for the privilege of listening to a Siddons, a Cable, or a Bell, the wondering, open-eyed, sympathetic child-mind will yield golden tribute of interest and appreciation to the well-rendered expositions of literary fact or fancy, which, already blossoming in his mind, may, by their means, be brought sooner and more readily to bear its harvest of perfected fruit.

Yet, practice must ever walk hand in hand with precept, for they are twin sisters, inseparable in tuition. Not only must the instructor prompt, but from the instructed a response must be elicited. The echo must follow the trumpet-call. The ripples must eddy away in ever-widening rings from the centre of impact. This is natural. It is nature's law. Let it be mere rote reproduction, if you will, so that it be true. What care I if my friend cannot analyze his feelings of friendship for me, so long as those feelings be genuine. If he love and trust me, the time for analysis will come. We cannot make a child think as a man, any more than we can transmute an imperfect world into the refined idealism of the Christian heaven. I do not say that a child should not be made to understand all that it learns. I do mean to say that a child cannot understand, and from the very nature of things ought not to understand, all that it reads. This may seem downright heresy to some advanced unconservative minds. Well, tet us not slight old landmarks. Ι too have been a child, and I too have been, and am, a reader. I know not how I learned to read. It seems to me that the faculty came like the bird's song-by that terrible alphabet method too-instinctively. I know that much that I read was misunderstood, ill-understood, or not understood at all; but I read on till the

day came when I did understand, and now I thank the carly practice of the misty past, which enables me to grope my way through the mists of the present, and in some sort to pierce the arcana of the dim, unfathomable future.

Yet, reading need not, and indeed must not, be all rote. A combination of three things is necessary to make the perfect reader :--First, a good model; secondly, imitation; thirdly, critical analysis. Of these the first two are the most important. There can be imitation without criticism. Can the young nightingale construe the import of the mellow notes she catches from the parent bird? Can the leaf rustling in the breeze translate the sentiment whispered by its fellow-friend? Has the Alpine cascade to be initiated in the analysis of sound before its silver tinkle makes faint echo of the mighty thunder of These, too, read sweet Niagara? extracts from the volume of Nature, because they cannot help it; and the child in turn will read because he cannot help it, provided he have a model and practice. I think sometimes we anticipate too much, expect too much. We raise a child on stilts, and are disappointed because it cannot touch the stars. And, again, I think we confide too little. We do not give the child credit for comprehending much that it does comprehend. Incapacity of the child-mind to reduce a thought to words is not always a sign of ignorance. It is more frequently a proof that the vocabulary is weak or unready. Knowledge and power of expression are two totally different things; but one of the best ways to attain to facility of expression is to read much. I object to a reading lesson, as a reading lesson, being made an epitome of history, geography, biography, grammar, and all the arts and sciences under heaven. 'Tis a lamentable waste of time. I

read first to improve my powers of expression, and then to instruct or amuse myself. I must first master the mysteries of verbal legerdemain before I reproduce for the benefit of an admiring circle the substance of my reading in a dozen different oral guises. So with the young. I warrant, moreover, their reading amuses them and instructs them, mentally, though orally they are able to give no If they cannot so profit, then sign. the book is at fault---it is too advanced, or dull, and should be replaced.

We are so fearful, in these days of Mutual Aid Societies, that a child's vocabulary shall run ahead of its senses. We dare not teach a child the cabalistic legend " fat pig," till it has been to a prize cattle show to poke its diminutive finger into the obese flank of the savoury quadruped. No, we can trust nothing to the youthful imagination. On the same principle it would be absurd to teach a more advanced scholar the word "heaven," because we cannot place before him the reality, or at least a reputable locum tenens. For my own part, I hold the imagination of the young to be a glorious heritage that we are only too liable to overlook, so prosaic, dull, and commonplace have we become in the conflict of life. We are doing too much for our youth. We are inviting them to become academic milk-sops-class-room dilettanti-instead of robust, self-assertive, intellec-Far better to have a tual athletes. child revel in the glories of Jack-the-Giant-Killer, and climb a metaphorical bean-stalk to the child's heaven, than chain his immortal instincts to an historical date, or weigh his opinions to earth with the pons asinorum. These things, like sorrow and trial, must come; the trouble is, we introduce them in the majority of cases too early into the child-life. Sufficient unto the day is the evil thereof.

THE TEACHER AND THE SCHOOL.*

BY MISS H. J. TRCMANHAUSER.

SHALL not, in these pages, endeavour to fix a standard or lay down a code of rules; but shall try simply and unobtrusively to state my ideas concerning the teacher and his mission. Teachers should be uniform. Not necessarily in methods, manners, or modes of thought, but in unbending defence of virtue and unflinching loyalty to right. The struggle between right and wrong which began at the dawn of earth's history, will go on, surely and steadily, as long as suns shall rise and set, moons wax and wane; and parents and teachers should stand side by side in the conflict. I maintain that the true teacher exerts an influence in the cause of good as powerful as that of the minister of the Gospel or the wise parent The responsibility of those who undertake the training of the rising generation is tremendous, and eternity alone can measure its magnitude. We are all aware that children are the most skilful imitators the world can produce. From the early dawn of infancy until life's sun sinks behind the western hills, we are the subjects of the mighty sway of influence, whether good or evil, and frail, fallen humanity seeks to copy evil rather than good example. "As the twig is bent, the tree's inclined." How vitally important, therefore, is it that a teacher should be a model of all manly virtues, disdaining to stoop to actions mean or unworthy! His life and conduct should be characterized by purity, uprightness and truth, and his daily intercourse with those entrusted to his care should be designed to uplift and ennoble them mentally and morally. The late Dean Stanley wrote : " How surely a young man who knows and does what is right will compel others, almost against their will, and almost without his consciousness, to know and to do it also ! The persons disappear, but the good tradition remains; their good works do follow them, either their own good works and words which outlive themselves, or those which they have inspired in their successors and survivors. The vision of a noble character, the glimpse of a new kind of virtue, does not It is said that among the perish. Alps at certain seasons the traveller is told to proceed very quietly, for on the steep slopes overhead the snow hangs so evenly balanced that the sound of a voice or the report of a gun may destroy the equilibrium and bring down an immense avalanche that will overwhelm everything in ruin in its downward course. And so about our way, there may be a soul in the very crisis of its mortal history, trembling between life and death, and a mere touch or shadow may determine its destiny." How unconscious, therefore, and how momentous is the teacher's influence!

The atmosphere of the school-room should be, as nearly as possible, like that of a happy home where kind looks and words dispel all unhappiness and gloora, and kind actions weave an indissoluble bond among its members. Doubtlessly all of us have heard exclamations to this effect: "Oh, I never could be _ teacher; I'd never have the patience, and I should become unbearably cross !" It is a

^{*} Paper read before Teachers' Institute, Stratford.

fallacy that a teacher's temper cannot be otherwise than soured by long experience in his profession. On the contrary, I firmly believe that if we fully appreciate our high calling, and teach in that noble, gentle, regal spirit of the one Great Teacher who lived and died long years ago, that instead of becoming seared our natures are softened, our sympathies deepened and enlarged by seeking the benefit of those whom the Divine Teacher delighted to own and bless. There are those who may be sceptically inclined on this point; but if we take kindness as our watchword doubt soon disappears. Yes! it is kindness which causes the machinery of the school-room to work without friction or confusion. It brings only sunshine and flowers, smooths the rough places, makes discipline easy, instruction delightful. Fear is the tyrant's weapon .o exercise authority, to enforce obedience; but the kind teacher needs no such relic of barbarism. Boys like a friend, not an overseer. Order, attention, obedience and earnest endeavours are all the outgrowth and immediate results of a desire to please such an instructor. If you have not yet experienced its efficacy take it unreservedly as the panacea for the petty annoyances which clog the current of every-day school-life. Then note the pleasure with which your pupils will anticipate your wishes, obey your gentle commands, and the smiling faces and expectant looks which greet your approach.

Like dew-drops falling on a flower A teacher's words should be, But never like the hailstone shower That blights the blooming tree. If Nature has not made the thread Of intellect refined, In vain we hammer at the head To cultivate the mind.

But while we are kind, let us maintain a calm firmness in all circumstances, and never for one moment allow the idea that we will tolerate anything unmanly, immoral, impure. Let us strive to reach the hearts and feelings of our scholars, and lead their thoughts, by daily intuitions, to the contemplation of the pure, the virtuous, the Godlike. Teach them to reverence the very name of the Deity, to hold in deep respect all holy things, and see in nature its allwise Author. Teach them that

God hath a presence, and that you may see In the fold of a flower, the leaf of the tree; In the sun of the noonday, the star of the night;

- In the storm-cloud of darkness, the rainbow of light;
- In the waves of the ocean, the furrows of land;
- In the mountains of granite, the atom of sand:

Turn where ye may, from the sky to the sod, Where can ye gaze that ye see not a God?

If parents and teachers fully realized the importance of keeping these truths before the youthful mind, Infidelity, accursed child of Ignorance, would receive a lasting blow.

- "No God! No God!" The simplest flower That on the wild is found
- Shrinks as it drinks its cup of dew, And trembles at the sound.
- "No God!" Astonished Echo cries From out her cavern hoar;
- And every wandering bird that flies Reproves the atheist lore.

Opportunities are not rare and it costs little to daily drop a jewel into the immortal casket. Purity and temperance of speech should be practised and encouraged, and the very first approach 'to profanity nipped in Jeremy Taylor says :--the bud. "Nothing is greater sacrilege than to prostitute the great name of God to the petulancy of an idle tongue." Washington, the illustrious child-hero, considered the foolish and wicked practice of profane cursing a vice so mean and low that every person of sense and character detests and de-Satan tempts men through spises it. their ambition, their cupidity or their appetite until he comes to the profane swearer whom he catches without anv reward. There are two very necessary and pleasing social qualities which, it is to be feared, are sadly neglected in some of our schools. These are, politeness and common good manners. Teachers should set the example by treating their pupils with a degree of consideration becoming the relations existing between superior and subordinate, and pupils in their turn should be taught to observe due respect for the rights and wishes of their schoolmates and teachers. If instructors and parents would pay proper attention to this duty they would confer a lasting benefit, for

Hearts, like doors, can ope with ease, To very, very little keys; And don't forget that they are these, "I thank you, sir," and "If you please."

Let us beautify our school-rooms and encourage pupils to take pride and delight in making and keeping them neat, comfortable, attractive and clean. It is gratifying to see public sentiment changing on this point, and to notice that people are awakening to the fact that schools should not be the dark. dingy dilapidations they were in the time of our grandfathers. We should encourage wholesome habits of reading. A plan which works very well is for the teacher to keep a supply of books and papers suitable to the advancement and intelligence of his pupils, and distribute among them weekly those desired by each. Let each child keep a small note-book in which to record the number of lines and the titles of each evening's work. and let the teacher on Monday morning examine and comment upon the work of the preceding week. There is a duty underlying our path which perhaps some of us rarely contem-This is our duty to parent and plate. posterity. As soon as a child takes his position under a teacher the moulding of his character is, to a

great extent, taken from the parent's hand and committed to the teacher's care. Iudicious, indeed, should be that process of moulding, since habits contracted at school cling tenaciously And who, but a parent, through life. can tell the joy which there is in the consciousness that a son walks in the way of wisdom, and who but he can measure the anxiety and pain attendant upon the footsteps of the wayward? The children of to-day are the men and women of the near future, and a teacher should be awake to a sense of his accountability, inasmuch as these children must very soon become either good or bad members of society. Who of us that has studied the life and methods of that prince of teachers, the immortal Arnold, of Rugby fame, can doubt for an instant that his good works and words will flow on silently and powerfully until the stream of time joins the ocean of eternity?

> So when a great man dies, For years beyond our ken, The light he leaves behind him Lies upon the paths of men.

The time will come when all will realize the necessity for, and expect in a teacher, just such a Christian character, and not until then will the teaching profession attain its true standing or heaven-appointed altitude. We should not overlook or neglect the inculcation of the principles of tem-If parents and teachers perance. would picture to the tender young the horrible results of intemperance upon society, the degrading and brutalizing effects upon the nation at large, the ruinous effects upon homes and families, and the ruthless destruction of soul and character, there is not the slightest doubt that less of the evil would exist. In my humble opinion the proper place for the temperance pledge, and the place where it will work most effectively, is the public Fix a day permanently, have school.

the pledge signed annually by all who are willing to take it, and spend the day, or half of it at least, in suitable addresses by clergymen, teachers and others anxious to help on in the great and noble cause. But until aversion to intemperance, fierce as the hatred which burned in the sixteenth century, is born in the blood and bred in the bone of the youth of our land, and until nations and governments decree the manufacture of intoxicants a crime, fair Canada may legislate in vain. But a canker-worm, ruinous as intemperance, gnaws at the very vitals of youthful character. Truth, fairest name in any tongue; Truth, the bulwark of Christianity, the pillar of true morality; Truth, the foundation of noble character, the glory of age and the ornament of youth, lies trampled and bleeding; and Falsehood, destroyer of peace, parent of deception; Falsehood, corrupter of society and snare of youth, stalks unblushingly forth in the broad noonday of our nineteenth century vaunted morality.

Lying's a certain mark of cowardice; And when the tongue forgets its honesty, The heart and hand may drop their functions, too,

And nothing worthy be resolved or done."

Arise, then, in your might, Oh ye parents, ye instructors of youth, marshal your forces and rescue from this degrading, soul-destroying thraldom the young and perishing of our land! In conclusion, if we wish to become perfect teachers, to hold ourselves, like Hawthorne's town-pump, the grand reformers of the age, let us make our pupils feel that, after home, the best, the pleasantest, the happiest, the purest place on earth is school.

SCIENCE VERSUS IMMORALITY.

CELDOM has the moral sentiment of the civilized world received so severe a shock as it has done in connection with the revelations which a prominent London newspaper has made, within the last couple of months, of the gross and inhuman vices practised in the metropolis of the British Empire. One of the worst features in the case is the fact that the enormities referred to have been committed, not by the "dregs of the population," as that expression is commonly understood, but by men of wealth and social station. "Gentlemen "(!) of education (save the mark!) and leisure have employed, annually, in the corruption of female youth and childhood, sums that would have afforded decent maintenance to numbers of poor families. Men whose own condition of life had been made

in every way desirable, so far as money could accomplish that object, have found nothing better to do than to employ their means in spreading moral contagion and destruction among the families of the poor. Men who boast the name of Englishmen have thought it not beneath them to trade in the souls and bodies of unfortunate child-England, as a nation, struck the ren. manacles from the hands of her negro slaves over fifty years ago; but some Englishmen to-day, belonging to the most favoured social class, do not hesitate to practise, upon weaker members of their own race, crimes worse than those which made slavery a hissing and an abomination among the civilized races of mankind.

It is needless, however, to dwell further on the facts. Words can but feebly express the shame and horror that they involve. What we may do with advantage is to consider whence such evils spring, and what is their most effectual remedy.

As regards the unhappy victims of the rich man's lust, there is an economic side to the problem which is doubtless difficult to deal with. That the pressure of life should be so hard upon some as to render the path of virtue one almost impossible to tread is, in itself, an evil of the first magnitude, and one which a more fully developed economic science must some day grapple with. The efforts at present being made, under the guidance of a purely sentimental impulse. to provide improved dwellings for the poor, and in other ways to force on them higher modes of living, we do not, we must confess, regard as very hopeful. It is seldom that the state succeds in paying Peter without robbing Paul, or in closing the door to one social abuse without opening it to another and perchance a greater. The economic problem, however, is not the only one to consider, nor is it perhaps the most important. The educational problem demands equal and more immediate attention, seeing that the knowledge necessary for its solution is immediately available. As every one is aware, a vast amount has been done for popular education in England within the last fifteen years; yet it is precisely the children who have been growing up during the last lifteen years who are furnishing prey for the "Minotaurs" and other scoundrels of the metropolis.

The theory of state education is that the state is bound to see that its juvenile members do not grow up ignorant, and as a result of ignorance, prone to vice. It is also held that the state owes it to every youthful citizen to furnish him or her with such elements of education as may be needed to fit them for employments requiring a knowledge of reading and

writing. From the latter point of view reading and writing are looked upon in the light of tools; but why the state should be required to furnish mental tools rather than material ones-to furnish the child's head with the multiplication-table, but not to provide his hands with saw, axe, or hammer—has never, to our mind, been entirely evident. It seems to us that if the state is to educate, the whole strain and stress of its effort should be to produce good citizens; not to fit this boy for a counting-house or that girl for a position as "saleslady," but to impart to both that knowledge and imbue both with those principles that make for the right ordering of life and for the good of society. The multiplication-table and the rules of grammar may be found valuable aids to these all-important objects-we do not say they are notbut we insist that they should be looked upon and treated as means always, as ends never; and as means to no other objects than the ones mentioned. It should be distinctly understood and continually repeated that the state has nothing to do with this or that individual's success in life, so far as that may be a matter of competition; that the only "success" the state can undertake to prepare any one for is the success of good conduct and of social adaptation.

Now it is evident that if state education were dominated by this idea, it would have to assume an essentially scientific character. For the conduct of life, what is wanted is not accomplishment of any kind whatever, but knowledge of what life is and a sense A true education of its realities. will, therefore, find its basis in the laws of life-physical, intellectual and moral-and will aim at bringing each individual face to face with the great realities upon which happiness depends. From such an education all false prudery would be banished.

No child would be allowed to grow up in an ignorance which might expose it to the gravest physical perils; on the contrary, the way of physical salvation would be clearly and plainly indicated, and the perils of every kind which wait upon violations of law The would be faithfully exhibited. chief impression, however, would be produced by the constant reference of all instruction to the grand aim of promoting integrity, purity and harmony of life. Every branch of knowledge would be considered and treated in its bearing upon this aim, and not, as is now generally the case, in its bearing upon individual success in the competition of life. "Do so and so," children are now told, "and you will rise to positions of distinction in society." Yes, provided others fail to act with equal wisdom; but, supposing all to conduct themselves wisely and well, where is the distinction to come from? No doubt it may safely be predicted that all will not; but is it well to assume this in the appeals we make to the young, and so to accustom them to thought of profiting by the errors or weakness of others? The educator, we hold, should use only such modes of appeal as are applicable to all; and a promise of eminence, of distinction, of wealth, of power, is not applicable to all, but only to a few. To all it may be said: "Do so and so, and your life will rest upon solid foundations; you will be a healthful and helpful member of society, and, whatever your lot in life may be, you will have an inward fund of happiness and self-respect that will be secure against all vicissitude. Moreover, the world is so constituted that you cannot give without receiving, and whatever you sow for others you will reap the same yourself."

We believe that were education dominated by these ideas, and by the one main purpose we have indicated, the result would soon be seen in quickened intelligences and improved dispositions; and at least the gross ignorance would be removed which at present is answerable for so large an amount of juvenile depravity.

There is, however, another aspect to the question with which we are now specially concerned. What shall be said of the "education" of the men of wealth and leisure, who find their highest pleasure in the most criminal and ruthless forms of vice? These men have passed through public schools, perchance through universities; some are said to be doctors of medicine; others to be eminent at the bar or on the bench ; and some even to wear the livery of the church. In what shape can life have been presented to such men? What sense can they ever have gained of the organic unity of society? What respect can they ever have been taught for the temple of their bodies, or for the cardinal institutes of nature and of society? What regard for others can ever have been inculcated upon them when they think that money can atone for the utter degradation of a fellow-creature? Surely it is time to cry aloud and spare not, when men can pass for "educated" to whom the very elements of a true science of life are unknown, and who, with all literary, professional and social acquirements, are willing to descend in their daily practice to the lowest depths of infamy. Think of the two things --- "education" and brutal, merciless vice-going hand in hand ! Alas! it is not education; it is that wretched, sophistical veneering of accomplishments which usurps the name of education. It may embrace -in the case of medical men must embrace-a certain amount of scientific instruction; but what it lacks is the true scientific grasp of life as a whole. We are no fanatical believers in the saving efficacy of a little smattering, nor even of much special knowledge, of physics and chemistry; but we are firm believers in the moralizing effects of a true philosophy of life, supported and illustrated by constant reference to verifiable facts. All sciences are but parts of one great science, and the highest function of universal science is to teach us how to live. The state, in so far as it undertakes to fit the young for "positions in life," acts upon the old sophistical idea of education as a thing of accomplishments designed to promote individual success. Such

education cannot of itself have any moralizing effect, and may have a demoralizing. The change that is needed is to abandon that view, and to make education a preparation for life in the broadest sense. Whether the state can adopt the latter principle, and bring its teaching up to the proper level, remains to be seen. If it cannot, its condemnation is definitively pronounced, for no other conception of education will meet the requirements of the future.-Popular Science Monthly.

HARD WORK IN EDUCATION.

N a recent address made by the venerable Dr. Martineau to the graduates of Manchester New College, in England, he emphasized with much earnestness and vigour the necessity in education of hard work and personal effort on the part of the student. He thinks that while the old-fashioned practice of giving a youth studies that he specially disliked, for disciplinary purposes, was too ascetic, it is preferable to the prevalent custom of the present day, in which he selects only what he prefers, and feels at liberty to put aside all the rest. Probably, like many people of the old school, Dr. Martineau may somewhat exaggerate the value of ancient methods and depreciate modern improvements; but there is certainly enough truth in his criticisms to make all intelligent educators glad that he has uttered them.

It is not a question of the relative value of ancient or modern languages, of mathematical or scientific studies, of the ideal or the practical in education; it is, rather, whether or not the young people of our day shall have the development that can only come through laborious and self-

denying mental exertion. To follow through life what is distasteful, at the expense of pleasurable achievements, would, of course, be a waste of labour, talent and happiness; but the power of drudging at disagreeable tasks is necessary to any worthy work; and this power is never attained by one who always chooses and refuses in accordance with his inclination. The idea is prevclent that, as all mental work is disciplinary, it matters little which is selected, and we may safely leave it for the taste or the passing desire to decide. Now we know that some studies exercise one set of faculties and some another, and that, to develop a well-balanced mind, their harmonious action must be secured. But suppose each one to be capable of equal results, it still remains true that these results can only be reaped through patient, persevering, fagging labour; labour that asks no questions as to taste, preference or pleasure, but lays hold of the difficult problem or arduous task, whatever it may be, and conquers it by its own force. Such exertion, in such a spirit, is worth more to the student than any amount of knowledge poured into his mind by the most approved modern labour-saving method.

Not for a moment would we underrate the efforts that have been made to render study attractive and to convey knowledge in a systematic and impressive manner. No amount of thought or judgment is too great to devote to the science of education; no amount of judicious effort is too great for the teacher to put forth. Only let him not imagine that he alone can do all or most of the work. Unless he in some way stimulates his pupils to study for themselves, his labour will be in vain. This is the one great danger of the elective as at present organized system in some of our higher institutions The youth, too young of learning. or inexperienced to know what studies will best develop his powers, finding the choice in his own hands, is very naturally tempted to select those which either happen to attract his fancy, or which promise him an easy victory. Having chosen them from these motives, he looks for them to fulfil his hopes; consequently, if he finds that they are not so pleasant or so smooth as he imagined, he is disappointed, loses his interest, relaxes effort, and, perhaps, makes another change with the same result. On the other hand, if he is successful in his attempt, the issue is equally disastrous. Finding but little labour in a certain line of study, he continues it to the exclusion of those which would have taxed his utmost energies, and he thus loses the mental power which hard mental labour alone can give. Dr. Martineau well says: "I warn you that this enervated mood is the canker of manly thought and action."

If, however, the student had in previous years acquired habits of close and assiduous study, and if he were

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wise enough to recognize that only through maintaining these could he hope to receive any permanent benefit from a course of study, the case would be different. Then, indeed, his own choice, being made on rational grounds, would doubtless be the best thing for him. In fact, there is no doubt of the elective system being the wisest and most beneficial, just as soon as the student is prepared for it. When that is, is a question of grave importance, on the answer to which depends the value of an education to thousands of the rising generation.

To fit the young for the responsibility of choosing for themselves should be the aim of all education, from the kindergarten upwards; and for this purpose nothing is more essential than to habituate each pupil to hard study and close thinking. The habit of listless and half-way attention during protracted school hours in early life is fatal to intellectual vigour. For short periods, the mind of the child should be exercised briskly, and close attention and real work should be insisted on. Gradually these periods may be lengthened as the power increases, and thus the habit of mental labour and personal responsibility will be formed. If this point be kept in steady view in every educational system and by every teacher in his or her immediate contact with pupils, they may be fitted to reap the advantages of the elective system; but if, in our eagerness to attract the young and to smooth their paths of study, we remove from them the burdens of hard work and binding obligation, they will be unfitted to make choices for themselves, either in a University career or in the still more important and inevitable crises that await thera in Life.-Public Ledger.

SCRIPTURE LESSONS FOR SCHOOL AND HOME.

BY THE REV. J. WYCLIFFE GEDGE, M.A., INSPECTOR OF SCHOOLS FOR WINCHESTER, ENG. (NOTES FOR TEACHERS.)

NO. 9. THE SEVENTH COMMANDMENT.

TO the teacher. This lesson will require some little care. It will be best to dwell more on the positive duty of purity and temperence than on the sin forbidden, particularly with younger children, for whom these lessons are specially intended.

I. THE SIN FORBIDDEN—Adulter y. (Read Matt. xiv. 1-5.) Remind how, God made Adam and gave him Eve for his wife—what was Adam told to do? (Matt. xix. 4, 5.) To cleave to her—*i.e.*, to love and honour always, as long as they lived. What did Herod do? Left his own wife and took his brother's—breaking this Commandment.

This Commandment forbids any excess. See how children can break it. Food is necessary, but must not take too much. Sleep needful, but must get up at proper time. Pleasure right, but not carried to excess. So Commandment forbids gluttony, sloth, impurity and all sins of the body.

II. THE DUTY ENJOINED-Temperance. (Read Dan. i. 8-17.) A story in this chapter of three young menprinces of the Jews-had been taken captive with the rest of the Jewsreceived special honour-to live near the king as his courtiers (verse 4). What favour did Daniel ask? Was allowed rich food and wine-he and the three princes. What did they ask for? Why did they want simple food? Perhaps because the food had first been offered to idols-perhaps because knew might be tempted to take too much—at any rate, they chose to live simply, temperately, soberly. Did their *bodies* suffer? Were found to be fairer and fatter than those who had rich food and drink. Did their *minds* suffer? God gave them wisdom and knowledge. Did their *souls* suffer? Read afterwards how they chose death rather than worship other gods and sin against God.

Children may learn from them to be *temperate*—not necessarily keeping from all nice food or pleasure, but learning to be moderate in appetiteto keep their bodies in subjectionwill help to make their *bodies* healthy -not so likely to have headaches, or catch diseases, etc.-their minds clear -better able to learn lessons-their souls right before God. Therefore must never listen to-or speak-or do anything we should not like God to hear or see. Our bodies are meant to live in heaven-must watch and pray, so that they may be made ready for heaven now. (I Cor. vi. 19.)

LESSON. Blessed are the pure in heart, for they shall see God.

NO. 10. THE EIGHTH COMMANDMENT.

INTRODUCTION. Dishonesty said to be peculiarly the sin of these days. Wasting time, scamping work, gambling, dishonest weights, robbing employers. Teachers may well find out the special temptations likely to beset their children, and try to bring the lesson of honesty practically home.

I. THE SIN—Dishonesty. (Read Josh. vii. 11-26.) Story of a battle. Joshua and Israelites against city of Ai. Israelites defeated—why? Because have displeased God. What was the first city they took? What was to be done with spoil of Jericho? (Josh. vi. 24.) Was given to God used for His service. What had Achan done? How was he found out? Picture his feelings as the lot first gave his tribe—then his family household—himself. How was he punished? See what God thinks of this sin.

Commandment very short-only four words-perhaps more broken than any other. Many different ways; only time to mention a few. (a) First, actual stealing-i.e., taking other persons' things-money, clothes, books, etc. Children sometimes think no harm to take little things, such as pencils, knives, fruit, etc. Can the quantity taken make any diffirence? Must keep from *pilfering—picking*, such as lumps of sugar, biscuits, etc. Remind of Judas, who stole secretly money from the disciples' purse, and his awful sin and death. (b) Dishonesty another common kind of stealing—e.g., copying another child's lessons, thus stealing with the eyesriding in second-class carriage with third-class ticket-playing unfairly at games-getting credit for what did not deserve-taking unjust advantage of another's ignorance-using false | weights and measures—many other similar tricks. (c) Waste. This very frequent. Servant's time belongs tomistress—pupil-teacher's to her governess—errand boy's to employer—all our time to God. Any wilful waste breaks this Commandment. What did Christ tell disciples to do with crumbs after He fed the multitudes? What a lesson against waste?

II. THE DUTY-Honesty. (Read Gen. xxxix. 1-6.) All know the story of Joseph-sold by his brothers to Ishmaelites—taken to Egypt—bought by Potiphar-made overseer. Why did Potiphar treat him so? Joseph was honest and faithful. Treated hismaster's property as if his own-could be trusted. What a good character to get? All children must aim at same-to be honest and just in all they do, e ., restore anything given. them by accident in excess, such as. change for money-do their work. diligently and conscientiously-when, old enough work to get honest livelihood (Eph. iv. 28), not living upon others-spending working time-holiday-time - rest-time (Sundays), as those that must give an account. All this fulfils spirit of Commandment.

LESSON. Do all to the glory of God.

NOTES FOR TEACHERS.

THE school teachers in the State of Vermont are prohibited from using tobacco.

MR. JAS. HEATH, the present principal, takes charge of the Alliston Public School at the New Year, his assistants being Messrs. McDonald, Anderson, Birnie and Mackintosh.

THE Ontario Society of Artists purpose holding a Loan Exhibition of Oil and Water Color Pictures at their rooms, King St. West, Toronto, during the present month. Admission. free.

THERE is a hitch in school board! affairs in Beeton, owing to some defect or oversight relative to the Act incorporating the place as a village. The board finds that it is no board, but we trust this difficulty may be overcome, and that school will "be kept" as usual. A. J. MUNDELLA, late vice-president, Council of Education, said in a recent speech : It is a striking and encouraging fact that just as the attendance at the day schools has increased, the attendance at the Sunday school has increased in the same ratio.

It is understood that most of the students at Toronto Normal School this session have secured positions for 1886. The gentlemen, as a rule, refused to apply for less than \$500, and some of them were engaged at higher figures. The ladies have been engaged (a few of them say "hired") at from \$350 to \$400.

SENATOR GOWAN, of Barrie, who a short time ago sent his extra-sessional indemnity to Dr. Williamson for a scholarship in natural science, has now sent Principal Grant a cheque for \$400 for the endowment fund. The second donation is to be applied in founding a scholarship to be held by the student who intends to study law.

By a paragraph in the New York School Fournal, on the Walkerton whipping case, it appears that United States law is much like our own in such matters. We submit that in both countries the law is wrong. No teacher should be responsible for the behaviour of his pupils beyond the school Surely, in a question as premises. between parental and official authority, the former should naturally come first. If the teacher should act at all in cases of this kind, it ought to be only after the parents have refused to take any action. However, as the law stands, the teacher is responsible, and Mr. Telford deserves credit for his pluck.

COUNTRY SCHOOLS.—" The elevation of the country school is the grandest field of usefulness now open to the statesman and philanthropist." It is to be very much regretted that

the above statement is unquestionably true. You may scrutinize carefully the whole field of education and you will find the demand for improvement more imperative in the country school than in any other department. While at the same time you will find a greater lack of the elements of progress there than in any other department. Α vast majority of the citizens of our country receive all their education, so far as the work and influence of school life is concerned, in the country school. Our common schools, therefore, constitute the chief factor of our civilization. Hence, the thorough education of the masses is conceded to be the surest and best means of enlightening and elevating them.-Educational Gleaner.

But we wanted to say something in regard to boys and girls, and the necessity of forethought on the part of their parents and guardians. A great deal is to be learned at school besides that which is nominated by the Minister of Education, and a great deal is to be unlearned besides wrong educational theories. Parents should think over the probable temptations of their children. They should know something about the peculiar trials which await them, and fortify them by judicious counsel and loving advice. More than all, Christian parents should make the school life of their children the special subject of intercession at the throne of grace. Let it be but considered that the depravity of many little hearts soon becomes common property at school, aud that there are many potent influences which facilitate the undoing of home training, and the necessity of God's grace for the little ones will be very apparent. Let the school season be made a matter of forethought and prayer.—Extract.

EDUCATIONAL INSTITUTE OF SCOT-LAND.—The annual meeting of the Educational Institute of Scotland was held in Edinburgh recently. The retiring president, Mr Macarthur, Old Monkland, delivered an address, in which he dealt with many topics. He considered that every educational establishment, public or private, should be under Government surveillance, and enjoy proportionately Government aid. He pleaded for free education, condemned the present system of codes and payments by results as obstructive of true education, and advocated a decimal system of weights and measures, and an improved orthography. Mr. David Ross, Glasgow, was The finances installed as president. of the institute were reported to be satisfactory, and gratification was expressed that the Board of Examiners had been asked to undertake the preliminary examinations for the Royal Colleges of Physicians and Surgeons. deputation from England was Α received, and the deputies spoke on the present aspect of primary education. After some discussion, a resolution was adopted instructing the committee to prepare a bill with the view of establishing a widows' fund in connection with the institute.

LOOKING over our English exchanges we are struck with the evidences of what may be called the corporate capacity of British teachers. In matters of social and political reform they are almost a unit. When they want anything they determine, and then they speak right out. How different it is in this country. Not only are we without union, but we seem never to have realized that there is any necessity for it. The nearest approach we have to anything of the kind is in our Provincial Association, and we all know that much good has been effected through its efforts. But after all, the teachers of Ontario, as a body, are almost impotent. We hear whispers of a move being made for the establichment of a College of Pre-

ceptors. We take it that such an organization would be wholly independent of the Education Department, although there does not seem to be any good reason why the two should not be co-operative. In the establishment of such a college there are great possibilities; but for many years its existence would, in all probability, be precarious. Only thoroughpaced teachers would give it any support; but the effect of its existence would, in time, be to increase vastly the number of thorough-pacers, that is to say, of those who teach because they love teaching, and who intend to teach until they are too old and too wealthy to teach any longer.

THE BIBLE IN PUBLIC SCHOOLS .----An application was recently made in the Common Pleas Court of Mercer County, Pa., for an injunction to restrain the use of the King James version of the Bible and the "Gospel Hymns" in the opening exercises of the public schools. The movers were members of the Roman Catholic Church. They allege that, in their belief, " the only correct version of the Holy Bible is the version recognized, adopted and directed to be used in worship by said Roman Catholic Church, commonly known as the Douay Bible, and that all other English versions of the Sacred Scriptures are incorrect, unauthorized and sectarian in character; that in the public schools their children were, compelled to read and sing, or hear read and sung, that which is offensive to the plaintiffs and which the plaintiffs believe to be injurious to their children, or else to absent themselves from the opening exercises of said schools." This, the plaintiffs claimed, was coutrary to the constitution and laws of Pennsylvania, which guarantee the rights of conscience and prohibit sectarian instruction in the public schools.

In an elaborate opinion the Court holds that the complaint is not well

founded. The simple reading of the Scriptures in school is not an unlawful interference with the rights of conscience, nor is it prohibited sectarian instruction. The Court says that "it is not within the range of judicial authority to decide upon the correctness of either the King James or the Douay Bible. All versions stand equal before the law; and if directors have power to authorize the use of one in the public schools they have the same power to authorize the use of the other." According to this ruling Roman Catholics would have the right in a district where their directors were in the majority to have their own Bible used in the public schools.--New York Herald.

CARDINAL MANNING ON THE ENG-LISH SCHOOL SYSTEM.—At the last annual meeting of the Westminster Diocesan Education Fund Cardinal Manning presided and spoke at some length. Among his remarks were the following :—

"The great change in the education of the children of England was brought about by those who had previously been doing everything in their power, by immense self-denial, and contributions of millions of money in the advancement of education, and had covered the country with a vast net-Then came the work of education. whole Board school system, and to the Board schools at the present time the education rate was exclusively devoted, not to voluntary schools and to those who had done everything, but to the Board schools which followed. His opinion was that from that date the education in Christianity in England was put upon an inclined plane, for from the first period when the State in England took into its hands the education of the English people, it established a principle which contained in itself a claim to the schools and the control of them, and

not only of the schools, but of the children in them. Thus since 1870 the children in English schools were children of the State. Perhaps some people had been a little asleep at the time in not perceiving the full reach of that scheme. If anybody would take the trouble to read what was to be found as to the common school system in America, where the children were regarded as the children of the public at large, and would then look to the condition of education in France, where there was no authority whatever required, and the government of education was a sort of lay charge, his meaning would be understood. Those who had introduced the present educational system in England had, he maintained, included all the four points which constituted the French and American systemsof universal, secular, compulsory and free education. At the present time the two great principles of voluntary effort and State help, which were working together harmoniously before 1870, were put into antagonism, and unless they could be brought into some common field of reconciliation in some manner by which there would be room for both these systems-one which never ought to perish, because it was the only form in which liberty of conscience could be preserved, and the other, which he believed never would perish, because it was established on a broad basis, with all the powers of the State-unless these could be brought into something like harmony he was afraid the country would see that the irresistible power of the law would gradually starve or crush the free and the Christian education of this country. He believed that every denomination had decreased in the number of schools it had since the foundation of the Board school system, with the exception of the Catholic religion, the schools of which had gained."

ERRORS IN SPEECH.

BY JAMES MASON.

THE following, collected from many sources, are by no means all the common errors met with in speech; but there are quite enough to put you on your guard. When people set about murdering the English language, they usually begin with the small words: thus we find a great many errors arising from the wrong use of pronouns.

"You are stronger than her," says Mary, "and she is taller than me." Here are two common errors in one sentence—her should be she, and me should be I. "This is a secret," says Alice, "between you and I." Wrong, Alice; you should say "between you and me."

"Eliza went with Kate and *I*." Here, again *I* should be *me*. "Was it *her* who called me?" Her should be *s/k*.

"It is me who am to blame." Me should be *I*. In "let each of you mind *their* own business," the *their* should be *his* or *her*.

Who and which are often confused. Long ago both words used to be employed to stand for persons; but nowadays who is used when speaking of persons, and which when alluding to things. Thus, "the lady which I spoke to " ought to be "the lady to whom I spoke." "Who do you think I saw to-day?" is a phrase often heard. Who should be whom, "Who do you mean?" Say "Whom do you mean?" Many of our errors arise from attaching wrong meanings to vords.

Reverend and *reverent* are very different words, but they are often confused. Reverend is the subjective word, describing the feeling within a man as its subject; reverent is the objective word, describing the feeling with which a man is regarded—of which he is the object.

The words *lie* and *lay* are often wrongly used. The first is a neuter verb—"a vessel *lies* in the harbour." The other is an active transitive verb —"a hen *lays* an egg." It is decidedly bad grammar, then, to say, "My cousin *lays* ill of a fever"; "The books were *laying* on the table"; "The boat was *laying* outside the bar."

Another common error in regard to the meanings of words is found in such sentences as: "Lena walked down the *centre* of the street," and "the stream ran down the *centre* of the town." Both Lena's walking and the stream running are impossible performances, for a *centre* is a *point*.

Some people fail to distinguish between quantity and number, and say, "There was a *quantity* of people present," instead of, "There were a number." Thackeray and Sir Walter Scott have both fallen into this error. In connection with numbers, one frequently hears the *two first* used when it ought to be the *first two*. It is by no means a matter of indifference which you say. The girls at the top of two different classes would be the two first girls. The first and second girls of the same class would be the first two girls.

There are also errors connected with superfluous words. "Open out the parcel," is one of these. The "out" is not needed. "Lead sinks down in water." Down is superfluous. "Equally as well." Omit the as. "Whose are these here pins?" is a very common phrase, to be mended by omitting the "here."

For is often employed unnecessarily, as in "She came to Saratoga for to drink the waters." This would have passed as good grammar in old English, but it will not do in these times. "One of my great difficulties," says Annie, "is in connection with verbs. Should I say 'news is' or news are?" That depends entirely upon circumstances. Sometimes the verb should be in the plural, sometimes in the singular.

"Another difficulty! Should one say 'Either you or I are wrong?' or 'Either you or I am wrong?'" The latter is grammatically correct. We have an example of the verb in a wrong number in the sentence, "One of these houses were sold yesterday." Here the ear is misled by the plural noun "houses." We forget that the verb should be "was" agreeing in number with "one." "Each of the girls are to have a separate share." This an error of the same sort. Are. of course, should be is.

The question has been raised whether we should say "Two and two *is* four, or *are* four," and it has been laid down by some people as a rule that in all abstract cases, when we merely speak of numbers, the verb is better singular; but there is as much authority, perhaps more, on the other side.

A number of miscellaneous errors remain to be mentioned. "I shall be much pleased to accept your kind invitation for Wednesday first." This should be "I accept with pleasure," for there is nothing future about your acceptance. An every-day mis-, take among the half-educated consists in the use of *like* in the place of For example: "Like she did"; as. "Like I do now"; "Like we were"; "Like she told me." Six spoons full" and six spoonfuls" are different things, though often confounded. To take "six spoonfuls" only one spoon is needed, but for "six spoons full" you must have six spoons. The use of directly instead of immediately is a common error. "*Directly* Mary came," says Julia, "I went away." May one say "well-looking" instead of "good-looking?" No. Well-looking has no standing in respectable society. "Blanche is as different to Georgiana as she could be." Here to should be from. "I intended to have played on the piano to-day." This should be "I intended to play."-Central School Fournal.

TRUE AND FALSE CULTURE.

THE word "culture" has had a good deal of prominence in recent literature and still more in popular conversation. Some, who think they possess it, are apt to look with contempt on those who, in their judgment, are without this mark of refinement. Mental culture is certainly a very desirable thing, the value of which can hardly be over-estimated. But there is good reason to believe that there are wrong ideas of culture widely prevalent; and that the people who most ostentatiously use the word do not always possess the thing signified.

The popular idea of culture is polite manners, good taste in matters of art, familiarity with the usages of the best society, and those outward accomplishments which render social intercourse pleasant. These things are by no means unimportant. They contribute largely to make life agreeable and successful; though they are by no means the highest things. But the

kind of culture that consists in talking about culture, and in undue admiration of those who are pretentious and formal in their manners, is not a very desirable article. People whose wealth has grown faster than their intelligence sometimes in their anxiety to learn of those who, they think, know more about genteel society than themselves, are greatly in danger of wasting admiration on those who lay claim to high social position, and niake an outward show of fine manners, which is often a thin veneering that covers a good deal of coarseness and ignorance. All true politeness is the offspring of kindness of heart. Genuine courtesy is marked by simplicity, rather than by demonstrative manners or special assumptions of superiority.

What, then, is true culture? It is the symmetrical development of our mental and moral powers, in such a way as to enable us to fulfil the high purposes for which these powers were given. At the basis of all broad culture must be extensive knowledge of history, literature, art and science. Knowledge is the food on which the mind grows. Those who display ignorance of subjects that educated people are expected to know can never pass as persons of culture, however polished their manners may be. Euclid said to King Ptolemy: "There is no royal road to Geometry." Neither is there any royal, or easy, way to culture. Patient and protracted study is the price that all must pay for true mental culture. It is not a thing that can be

"THE common schools must continue to be taught by young men and women in their transition state—that is, before they settle down in life. These are the only ones who can do this work—not only, but the only ones who ought to do it. It is a part of their education." These words were uttered at a session of the University Convention held in 1873, and are as true now as then; and it is a shame that it is so. As things are going,

acquired in a certain number of lessons. But though knowledge is essential. the mere acquisition of knowledge is not culture, without the capacity to compare facts and draw deductions from them, in other words, the power to think. This is the real test of culture : Has the mind been trained to think? Is the man, or woman, able to use the knowledge gained? Are we wiser because of what we have learned? It should be borne in mind that culture is essential to improvement and mental This is a law of our being. strength. Every faculty may be drawn out and strengthened. In this age of intense mental activity, our young people should cherish an honest ambition to cultivate their mental powers. Whatever may deprive one of the opportunity of attending school or college, in books and periodicals may be found the best thoughts of the best minds, and information on all the great subjects of human thought. By mastering and digesting these truths and reasonings the power to think is strengthened; and the mind may become a potent instrument in all departments of thought and enquiry. While we should as far as practicable cultivate music, painting and all that ministers to a refined taste, we should especially furnish our young people with useful knowledge, and train them to think for themselves; always keeping in mind that any education which merely sharpens the intellect, without enlightening the conscience or improving the heart, is fatally one-sided and defective. - Christian Guardian.

it may be uttered as an axiom ten years to come—it may go on in 1900 as it has in 1800 —the schools continuing to be taught by young men and women who have not yet made up their minds what they will do. The great business before the friends of education is to put an end to this state of things. Here is a subject for the teachers in their associations to discuss.—New York School Journal.

NEW BRUNSWICK.

THE school system of New Brunswick is similar to that of Ontario in its general provisions. It is well organized and generally efficient. Some of the questions which have given a good deal of trouble in other Provinces have been happily arranged here. The school books, for instance, do not rouse the vigorous competition among publishers that is so well known in the West. So far as I have had opportunity to look into them, the books in use are well adapted to the requirements of the schools, and there is no mention made of any desire for change. How the question was settled, when or for how long I cannot tell, but the battle of the books is fought here for the present at any rate.

The question of Separate Schools has also been taken out of the region of controversy. In this city, for example, the Board of Public School Trustees control all the schools without distinction. All are alike under the supervision of the Secretary of the Board, who is also Inspector or Superintendent. The settlement of this question forms an interesting episode in the history of the educational matters in the city. Formerly. denominational schools existed in connection with the Roman Catholic Church, but in the effort to adjust the relations of these schools to those of the Public Schools, the Board proposed that they would lease the buildings in which the Separate Schools were taught from the ecclesiastical authorities whose property they were, taking the management of the schools into their own hands, requiring the same qualifications in the teachers and the same work to be done in the schools, making them, in fact, part of the school system of the city. This offer was accepted, and the arrangement has been carried out faithfully and, apparently, to the satisfaction of all concerned. The buildings thus held by the Board for school purposes are under their control from nine until four, or during whatever may be determined upon as the duration of school hours for the city schools. During these hours the schools are opened, conducted and closed according to the regulations of the Board, reading the Scriptures and prayer forming a part of the opening and closing exercises. The teachers are, of course, such as are recommended to the Board as teachers for these schools; but they have to pass the same examinations, teach on the same certificates, and in every respect conform to the regulations.

In the cities the schools are well conducted, the teachers are well qualified and energetic, and the buildings -many of them-are very handsome and well equipped. The Victoria in this city, for instance, for girls, having accommodation for 800 or 900 pupils, is a beautiful and imposing structure. In the rural districts, owing to the ruggedness of the country, in many places the sections are not laid out with the rectangular symmetry of those of Ontario and Manitoba; and many of the schools have to contend with the disadvantages of a sparse population and a limited provision. In some parts these unfavourable conditions are likely to continue, but in others there will be great improvement as the healthfulness and fertility of the Province become better known and the land is more completely occupied. The free school system is in operation; but there is no provision for securing attendance. The absence of a compulsory attendance clause is, perhaps, the principal defect in the school law of New Brunswick to-day.

The report of the Chief Superintendent shows that a very large number of children do not enter a school from one end of the year to the other. The number of children of school age -five to fifteen-in the Province is over 80,000; the number of names registered as in attendance at school is about 50,000. But the *irregularity* of the attendance of those who are registered is even more striking. Out of 50,000 registered as in attendance, the average actual attendance is only about 28,000. It is not possible to write these figures with any degree of satisfaction for, as the Chief Superintendent says, they show that out of 80,000 children of school age about 50,000 are out of school daily. This startlingly unsatisfactory condition might perhaps be partially explained on the ground of the difficulties of attendance in some parts of the country during the winter, the distance being so great. But even this explanation fails us and makes the matter worse, for in this city not more than one-half the children of school age

are registered as in attendance. This means, of course, the practical failure of the free school system. Besides, there is a practical injustice in taxing the people to secure a public benefit, unless means be at the same time taken to secure that benefit for the community which pays for it. It seems eminently wise that men should contribute to provide facilities for education whether they personally have children to be educated or not. It seems the discharge of a proper obligation by the State, and it is to the advantage of every one that his fellowcitizens have some measure of intelligence; but it is manifestly the right of those who do contribute under these circumstances to have secured to them the possession and enjoyment of these advantages. It is not fair that men should be required to provide a safeguard against the prevalence of ignorance and consequent vice, and at the same time be left to suffer from the presence of these evils, for the prevention or removal of which they are required to pay. Attention is being drawn to this, however, and it is probable that before long steps will be taken to provide a remedy.

G. B.

ST. JOHN, Oct., 1885.

CORRESPONDENCE.

A REPLY TO "X.' IN MONTHLY FOR NOVEMBER.

To the Editor of THE MONTHLY:

SIR,—I am tempted to venture an answer to "X." I am not sure if my reply will be satisfactory to your correspondent, it is barely so to myself. The ways of the Department are, alas! dark ways, and I am afraid they are likely to remain so, as long as the portfolio of education is in the hands of a politician.

Your correspondent is, no doubt,

aware that the Legislature vote annually a sum of money, somewhat in excess of eighty thousand dollars, toward the support of High Schools. This money is supposed to be distributed amongst the High Schools according to a basis approved of by the Governor-in-Council, which means simply that it is apportioned according to the sovereign and arbitrary will of the autocrat of our Bureau of Education. This "basis" has been during the past years—indeed, ever since the sacred trust of education was

mated to politics—in such a painful state of fluctuation that it has been well-nigh impossible to keep track of it, as has been pointed out frequently in your columns. Presumably, it should not be a very difficult task to make the appropriations, knowing, as the Department must do, the amount of money to be expended, the number of schools to receive it, and the principles that must guide such When, therefore, apportionments. "X." states that in the case of his High School, a sum is first added and then deducted so as "to bring the grant within the appropriation, the inference evidently is either that the authorities have stupidly blundered in their figures, or that the ? "basis" is somewhat impracticable, or that some constituencies receive more than their quota. This last suggestion, of course, points plainly to favouritism, and in support of this theory we refer "X." to the printed Report on Education for 1884. If "X." studies that production, fearfully and wonderfully made, specially in reference to the appropriations to High Schools, he will wonder why some schools have been so liberally dealt with, some of which are notorious for inefficiency, and if "X.' consider the "basis" in relation to such schools he will get abundance of ma-

terial for future correspondence. I regret that my answer is not more satisfactory, and that, as far as it goes, it reflects in a very pronounced way on the efficiency and purity of the Department. I was going to add that "X." might write to the authorities, but their oracle is so well skilled in Delphic utterance that he very possibly would be obliged to have the answer interpreted. How long is this state of things to continue? Is this not another proof of the failure-the disastrous failure-of our present system? Is there no patriotic legislator on either side of the House sufficiently influential to have a Royal Commission appointed to inquire faithfully and honestly into the working of our Department, and report to the House. There was a time when the efficiency of a school went for something, but now, as far as the grant is concerned, the master is all but powerless to be the means of increasing it. Well-nigh everything is now left to the Trustees. If they are liberal and expend bountifully it is well with the school; but if they are not, no increased effort on the part of the staff can atone for their neglect. The result is not difficult to Some schools, formerly disforecast. tinguished for their good name, are already on the "down grade," and more will follow. . M.

THE FIRST ENGLISH GRAMMAR.—To William Bullokar, a school-master in the reign of Elizabeth, must be ascribed the honour of writing the first work on the English Grammar. It was modestly entitled "A Treatise of Ortographia of English, by William Bullokar. London, 1580." As everybody in those days wrote poetry, most of the rules and definitions in this book, as well as the preface, were delivered in metre. In 1656 was published "W. Bullokar's abbreviation for his Grammar for English, extracted out of his Grammar at large, for speedy parsing of the English speech, and the easier coming to the knowledge of Grammar for other languages. Imprinted at London by Edmund Bollifant, MDLXX-XVI." Both books were printed in black letter, old English, with many curious affectations of spelling, and novelties in type.

Ben Johnson's Grammar was not written until about forty years after his death in 1637. It is entitled "The English Grammar made by Ben Johnson, for the benefit of all strangers, out of his observation of the English Language, now spoken and in use."

SCHOOL WORK.

MATHEMATICS.

ARCHIBALD MACMURCHY, M.A., TORONTO, Editor.

EDUCATION DEPARTMENT, ONTARIO.

> JULY EXAMINATIONS, 1885. First Class Teachers—Grade C. ELEMENTARY MECHANICS.

Examiner-J. C. Glashan.

I. Define velocity, constant velocity, variable velocity, and uniformly accelerated velocity. Explain how the mean velocity during a given time and the velocity at a given moment are determined and expressed.

State the law of composition of rectilinear motions and the law of composition of velocities.

A boy throws a stone at a railway train travelling at the rate of 30 miles per hour. If the stone be thrown at right angles to the railway track, and if the horizontal component of its velocity relative to the ground be 66 ft. per second, what will be its horizontal component relative to the train? (Draw a figure to illustrate your solution, marking on it the direction of the motions.)

I. Vel. of train=44 ft. per sec.; vel. of stone=66.

... rel. horizon. vel. = $\sqrt{22^2 + 66^2} = 22\sqrt{13}$

2. How are forces generally measured in statics and how in dynamics? Define any statical unit of force, and also any dynamical unit of force, and compare their magnitudes.

State the law of composition of concurrent forces.

A, B, C, D, are the angular points taken in order of a square with two-inch sides. A force of 8 lbs. acts from A towards B, one of I lb. from A towards D, one of 8 lbs. from C towards B, and one of 20 lbs. from C towards D. Determine the resultant of these four forces. (Draw the figure, representing the forces on a scale of 8 lbs. to the inch.) 2. Rt. of 8 and 20 is 12, and acts at a pt. in BC produced $\frac{1}{6}$ in fr. C.

Rt. of 1 and 8 is 7, and acts at a pt. in DC produced 3 in fr. C.

Rt. of 12 and 7 at right angles

 $=\sqrt{(12)^2+(7)^2}=\sqrt{193}$

3. Define moment of a force, couple, arm of a couple and moment of a couple.

State the principle of moments, the law of the composition of parallel forces and the laws of the composition of couples.

A uniform rod 6 ft. long and weighing 6 lbs. has weights of 2 lbs., 3 lbs., 4 lbs. and 5 lbs. suspended on it, in order, at distances 2 ft. apart. Determine the point about which it will balance, and the pressure on the point.

Had the 2 lbs., the 3 lbs. and the 5 lbs. all been upward pressures instead of weights, what would have been the resultant?

3. Wt. acts at middle pt. Let x be distance of fulcrum from middle pt. Denote it by F, taking moments about F.

6x + 3(1 + x) + 2(3 + x) = 4(1 - x) + 5(3 - x) 6x + 3 + 3x + 6 + 2x = 4 - 4x + 15 - 5x 11x + 9 = 19 - 9x 20x = 10 $x = \frac{1}{2}.$

... fulcrum is at dist. of 6 inches from m. pt and towards 5 lb. weight, and pressure is sum of weights and rod 20 lbs.

Taking moments about the middle point we have as resultant a force of two pounds tending to turn the rod about its middle point.

4. Distinguish between mass and weight, force and acceleration, force and workingpower (rate of doing work), momentum and energy.

A mass of 6 moving from rest under the action of a constant force acquires in 5 seconds a momentum of 150. Determine the force and the acceleration, also the velocity, the kinetic energy and the working-power at the end of the 5 seconds.

4. Pt = mv. : Pt = 150, *i.e.*, 5P = 150

and P=30, 30=6j, ..., 5=f, v=tf, ..., v=25, kinetic energy $= \frac{1}{2}, v^2 = \frac{1}{2} \times 6 \times 25^2 = 1875$.

The working-power is the product of the force into the velocity of its point of application in the direction of the force. $Pv = 30 \times 25 = 750$.

5. State Newton's laws of motion.

A mass of 10 lbs is urged along a rough horizontal plane by a force equal to the weight of 3 lbs., acting parallel to the plane, the co-efficient of friction being '05. Determine the acceleration.

5. $F = \mu R = .05 \times 10 = .5 = \frac{1}{2}$ moving force = $3 - \frac{1}{2} = 2\frac{1}{2}$. Now mass × acceleration = moving force, 10 × acceleration = $2\frac{1}{2}$, acceleration = $\frac{1}{4}$.

MODERN LANGUAGES.

Editors: { H. I. STRANG, B.A., Goderich. W. H. FRASER, B.A., Toronto.

EXERCISES IN ENGLISH.

I. Select, classify, and give the relation of the phrases in the following :---

(a) In the summer they live in tents made of skins.

(b) On our entrance, the foreman, leaving his work, came forward to meet us.

(c) The houses, which are built with great regularity, are well adapted to protect them against the severity of the climate.

(d) The habits of these people have been made familiar to us by the accounts of travellers who have from time to time visited the island.

(e) Near by may be seen a fortune-teller, with crafty look, explaining to some simpleton his destiny in life from a number of books arranged before him on a small table.

2. State the grammatical equivalence and relation of the dependent clauses in the following :--

(a) He came early that he might get a good seat.

(b) The plan that you have suggested is a very good one.

(c) The proposal that we should divide the proceeds seems fair.

(d) It was so dark that I could not see them.

(e) Can you show me the spot where you found it?

(f) I can't tell you when it happened.

3. Change the voice of the verbs in the following:---

(a) Here may be seen specimens of their workmanship.

(b) He has taken the greatest pains tomake it plain.

(c) The runners are made of whalebone, whenever that can be procured.

(d) The lawyer asked him several questions.

(e) Our opponents have lost sight of this fact.

4. Expand the following simple sentences into complex or compound :---

(a) He manifested no surprise on hearing the news.

(b) A marble pillar marks the scene of the memorable interview.

(c) After some weeks in prison they were allowed to return home.

(d) Two frigates escaped, only to be captured next day, however.

(e) They resolved to seek among strangers the freedom denied to them at home.

(f) Long before the expiration of his sentence they had become convinced of his innocence of the charges brought against him.

5. Divide into clauses, and tell the kindand relation of each :---

(a) In the new land that lay before them they sought a home where they might live as conscience directed them.

(b) As they advanced farther into the continent, they began to hear titlings of a boundless sea, which stretched away to the south and west.

(c) Wishing to know what had become of the moose, I followed the bloody trail for some miles, until I came to a spot where the animal had lain down for a time.

6. Arrange in as many ways as you can without destroying the sense, and say which you think best, and v.hy :--

(a) I shall never consent to such a proposal while I live.

(b) A scene of woe then ensued, the likeof which no eye had ever seen. (c) He had laid his books as usual on the desk that morning.

(d) He reads every morning after breakfast regularly six pages of Latin.

(c) I gained in this way at each turning nearly one hundred yards.

7. Analyze the following sentences, and parse the italicized words :---

(a) Like leviathans afloat lay their bulwarks on the brine.

(b) At the head of a little band of men, guided by a Mexican, he succeeded, after severe privations and imminent dangers, in crossing the isthmus.

(c) One of the boldest and most successful of early navigators was the celebrated Henry Hudson, discoverer of that vast inland sea now known by the name of Hudson Bay.

8. Combine the following into two paragraphs of three or four sentences each :---

Lord Halifax sent out a colony of four thousand people. He did this in 1749. He did it to strengthen the British power in Nova Scotia. Before winter a palisaded town was built. It was named Halifax after its founder. This aroused the jealousy of the French. They stirred up the Indians. The Indians harassed the infant settlement. The Indians massacred some of the inhabitants. They carried others to Louisburg. There they sold them for arms and ammunition. General Cornwallis was governor of Nova Scotia. He was obliged, in consequence of this state of affairs, to take decisive measures for the protection of the colony. The Acadians still refused to take the oath of allegiance. The council of Halifax declared them to be rebels and outlaws. It decreed their expulsion from the province. The outrages had been the work of a few turbulent spirits. The mass of the Acadian peasants seem to have been peaceful and inoffensive. The innocent were confounded with the guilty. All alike were exiled from their homes.

9. Divide the following into simple sentences, as in (8).

(a) The poor fellow was soon afterwards poisoned by his rivals, who were envious of the favour which had been shown him by the white men. (b) The small force which he had assembled was composed mainly of volunteers, who, although they knew little of war, were filled with a patriotic resolve to resist the invaders to the death.

(c) They made such a stout resistance that their foes were unable to land, and found it necessary to send a detachment higher up the river to a crossing that had, unfortunately, been left undefended.

10. What other words are pronounced like the following? Write sentences in which they are used correctly :--Hoard, isle, right, wrote, seed. council, night, seen, ascent, peer.

11. Indicate as nearly as you can the pronunciation of heinous, mortgage, malign, recipe, sonorous, colonel, chagrin, epoch, bicycle, almond, crochet.

12. What do the following contractions stand for respectively: -- Mme., pp. 11., U.S.A., Anon., P.S., N.B., Col., MSS., pro tem.

13. Show by examples what different parts of speech the following words may be : --right, clean, close, little, early, off,

14. Give all the inflected forms of child, me, easy, give, begin.

15. Point out any misused words in the following, and substitute a proper word in each case :---

(a) I calculate to start to-morrow.

(b) He spent the balance of the afternoon at home.

(c) Try and coax him to come.

(d) I can't mind where I saw it.

(e) It seems a pity of him to miss the chance.

(f) He got run over by a street car.

(g) He was sentenced to be hung on the 27th of May.

(h) They were walking in the centre of the street.

(i) That comes of eating unhealthy food.

(j) Did you ever see such a quantity of horses?

6. Which is correct?

(a) His principle (principal) reason for doing it.

(b) He does not practise (practice) what he preaches.

(c) They accused me with (of) taking it.

(d) An opportunity to avenge (revenge) his wrong.

(e) Reading about a hippotamus (hippopotamus).

17. Correct any errors in the following, giving reasons :---

(a) There is many other points of resemblance between them.

(b) He went in the house before you came.

(c) I am not doing this for fun but for profit.

(d) I felt sure I could do as well, if not better, than any of them.

(c) I found him seated at the hotel table with a glass of beer on both sides of him.

(/) We felt some curiosity to know whom the writer could have been.

(g) He ain't likely to give us another chance I don't suppose.

 (\hbar) I will pay the above reward to any one who will prove that these facts are untrue.

(i) Scarcely one in ten of them could write their names.

(j) I only wanted to see him for a few minutes.

(k) It may be either an adjective or adverb.

(1) He blames Nuncomar's death on Impey, whom, he thinks, did not act right.

NATURAL SCIENCE.

H. B. SPOTTON, M.A., Barrie, Editor.

THE POPULAR SCIENCE MONTHLY.

The November number of this excellent magazine is unusually good. The opening article on "Flying-Machines" is exceedingly entertaining as well as instructive. Perhaps the most noteworthy paper is Sir Lyon Playfair's address on the "Relations of Science to the Public Weal." It would be impossible to give a synopsis of the weighty utterances contained in it. It is especially interesting to Canadians on account of the references to Canada in connection with the visit of the British Association. We venture to give our readers the benefit of the following extract from the section of the address dealing with Science and Secondary Education. It is especially *a propos* just now, when a real effort is being made to turn the science teaching in our Canadian schools into the proper channel.

"The opponents of science education allege that it is not adapted for mental development, because scientific facts are often disjointed and exercise only the memory. Those who argue thus do not know what science is. No doubt an ignorant or half-informed teacher may present science as an accumulation of unconnected facts. At all times and in all subjects there are teachers without æsthetical or philosophical capacity-men who can only see carbonate of lime in a statue by Phidias or Praxiteles; who cannot survey zoology on account of its millions of species; or botany, because of its 130,000 distinct plants; men who can look at trees without getting a conception of a forest, and cannot distinguish a stately edifice from its bricks. To teach in that fashion is like going to the tree of science with its glorious fruit in order to pick up a handful of the dry fallen leaves from the ground. It is, however, true that, as science teaching has had less lengthened experience than that of literature, its methods of instruction are not so matured. Scientific and literary teaching have different methods; for while the teacher of literature rests on authority and on books for his guidance, the teacher of science discards authority and depends on facts at first hand, and on the book of nature for their interpretation. Natural Science more and more resolves itself into the teaching of the laboratory. In this way it can be used as a powerful means of quickening observation, and of quickening a faculty of induction after the manner of Zadig, the Babylonian described by Voltaire. Thus facts become surrounded by scientific conceptions, and are subordinated to order and law."

The other articles which we have not space to notice at any length are, "Modern Science and Modern Thought," "Twenty Years of Negro Education," "Two Wonderful Instruments," "A Free Colony of Lunatics," "The Art of Investing," "Concerning Clover"—a charming article in Grant Allen's best style—"The Problem of Higher Education," by Professor Eggert, of Iowa, "Origin of Colour in Animals," "The Motor Centres and the Will," "Home-Life of the Thibetans," and "Sketch of Sir Lyon Playfair." The editorial and miscellaneous articles are fully up to the Monthly's high standard.

THE CLASS-ROOM. DAVID BOYLE, Editor, Toronto.

ADMISSION TO HIGH SCHOOLS. AN INCIDENT AT RATISBON.

Robert Browning.—Born in 1812. Is an English poet. He has written a great deal, but is not very popular. The best known of his works is "The Ring and the Book."

Ratisbon.—A town in Bavaria, on the Danube, taken by Napoleon in 1809.

Napoleon.—The great French conqueror who gained possession of nearly the whole of Europe.

Lannes. — A marshal of France. He entered the army and followed Napoleon. He did good service at the battle of Austerlitz.

"Could suspect."—i.e., Could suspect he was mortally wounded.

"Flag-bird."—The eagle-flag adopted by Napoleon.

" Vans."-Wings.

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THE GEYSERS OF ICELAND.

Dufferin.—An Irishman of good family, born in 1826. He was made Governor-General of Canada in 1872; and was afterwards Viceroy of India. Some years ago he made a yacht voyage to Iceland, and published an account of it under the title "Letters from High Latitudes." The present selection is taken from this work.

"Still clear daylight."—Owing to the high latitude.

Geysers.—Boiling springs. The eruption is caused by steam. There are geysers also in New Zealand and in the western part of the United States.

"A rise."—Used in a double sense. Both cause the water to rise and make angry.

"Latent."-Not acting.

BATTLE OF THE BALTIC.

Thomas Campbell.—1777-1844. A Scottish poet. He worked hard and wrote in a very polished style. His poems are very popular. Some of them are: "The Pleasures of Hope," "Gertrude of Wyoming," "Ye Mariners of England," "Lochiel's Warning."

Battle of the Baltic.—Fought on April 2nd, 1801. The British fleet was sent out under Sir Hyde Parker, with Nelson second in command, to break up the armed neutrality maintained by Russia, Sweden and Denmark.

Nelson was England's "greatest sailor." He followed Napoleon through the Mediterranean and defeated him at the Battle of the Nile. He then was sent to the Baltic Sea where he won great success. He was engaged in the struggle with the French until in 1805 he destroyed the eneny's fleet at the battle of Trafalgar; but lost his own life in the battle.

" Leviathans."-Sea-monsters.

"The brine."-The water.

"The might of England."-The strength of England-the sailors.

" Van."-The foremost ships.

"Deadly space."-Because here the firing was felt.

"Adamantine."-Hard.

Elsinore.—A town and fortress on the Island of Zealand, commanding the entrance to the Baltic.

Riou .-- One of the captains.

"Mermaid's song condoles."—The mermaids, according to the belief of the sailors, would sit on a rock and comb their hair, or come and sing as a sign that some of the sailors would be drowned.

OCEAN.

Lord George Gordon Byron.—1788-1824. He was a great English poet who lived a very unhappy, dissipated life. He went to help the Greeks in their struggle for independence, and died in Greece. He wrote "Childe Harold," "Don Juan," "Hours of Idleness," and many other poems. This selection is taken from the last canto of "Childe Harold."

"*His control stops with the shore.*"—Man may destroy the earth, but cannot control the ocean.

"Save his own."-The wreck of himself.

"*His petty hope.*"—His only hope when tossed about by the ocean is to reach the shore; but the sea drowns him first, then casts him on the earth.

"Lay." -- Grammatical form is "lie." "Lay" has been used to rh, me with "bay."

"Armaments."-Fleets.

"Oak leviathans."—Leviathans are seamonsters. By oak leviathans Byron means ships made by man who is called in the next line their "clay creator."

"These." — In apposition with "armaments," and "oak leviathans."

"Armada's pride," etc. — The Spanish Armada was a fleet sent out by Spain in 1588 to conquer England. The Spanish were defeated by the English; but a great storm arose which finally destroyed the Armada. The battle of Trafalgar was won by Nelson in 1805 and a storm destroyed many of the captured vessels.

"Assyria, Greece, Rome, Carthage." — Great empires of the ancient world, now decayed and ruled by "the stranger, slave, or savage." But the ocean round their shores is the same now as it was in the ancient days.

"Azure brow."—The blue sea retains no mark of time.

" Glasses itself."-Reflects itself.

"Image of elernity."-Because "boundless, endless and sublime."

"A child of thee."—Byron was a great swimmer. It is said that he swam the Hellespont. He gives utterance to his delight in this last stanza.

THE LARK AT THE DIGGINGS.

Charles Reade.—Born in 1814. An English novel writer. His style is vigorous and full of incident. "The Wandering Heir," "Hard Cash," and "Foul Play" are among his works. The present selection is taken from "Never Too Late to Mend."

"Squatter."—One who settles on land without owning it. After a certain number of years a squatter becomes entitled to his land.

"English was written on it."—Everything about the place was like England.

"Lark "---" Tom " had understood that he was coming to have some fun.

"Exile."-The lark is an English bird.

" Sotto voce."-In a low tone.

"Dulce domum."—" Sweet Home." The refrain of a Latin song sung by the boys of Westminster school before the holidays.

ARITHMETICAL PROBLEMS.

By Leo. B. Davidson, Head Master, Public School, Sault Ste. Marie.

I. (a) The divisor is 17, the quotient is 15, the remainder is the greatest whole number possible. Find the dividend.

(b) The divisor and the quotient are equal, but if the divisor were twice what it is the quotient would be 15. Find the dividend. Ans. (a) 271; (b) 900.

2. (a) From what number must we take $\frac{1}{2} - \frac{1}{3} \div \frac{1}{4} + 2\frac{1}{3} \times 2\frac{1}{3}$ in order to leave $\frac{1}{2} - \frac{1}{3} \times \frac{1}{4}$ $+ 2\frac{1}{3} \div 2\frac{3}{3}$?

(b) If .71 of a number is 352, how much is .71 of the same number?

Ans. (a) 4; (b) 355.

3. A man has 10 acres of land. He sells it in village lots each containing 1 ac. 2 ro. 26 sq. per. 20 $\frac{1}{2}$ sq. yds. at \$200 per lot. Find (a) how much he gets for his land; (b) how much he gets per acre.

Ans. (a) \$1,200; (b) \$120.

4. A mechanic worked a certain number of days for 22.50. If he had worked 9 days longer he would have received 33.75. Find (a) his daily wages; (b) the number of days he worked.

Ans. (a) \$1.25; (b) 18 days.

5. A manufacturer sold to an agent a "Self-Binder" at a profit of $\frac{1}{4}$ of prime cost.

The agent sold it to a farmer for \$175, which was $\frac{1}{2}$ more than it cost him. Find (a) the prime cost of the machine; (b) the rate of profit made out of the farmer.

Ans. (a) \$100; (b) 75 per cent.

6. A farmer in driving to market observes that the hind wheel of his waggon which is 13 ft. in circumference has made exactly 180 turns less than the fore wheel which is 9 ft. in circumference. Find (a) how much less than a mile he has gone, (i) how many turns the smaller wheel has made.

Ans. (a) 5 yards; (b) 585.

7. A stationer bought 2 reams of note paper at \$1.75 per ream. He sold $\frac{3}{2}$ of it in small quantities at the rate of 6 sheets for 5 cents, and the balance at 12½ cents per quire. Find his gain (a) on the whole quantity of paper; (b) on the paper sold in small quantities. Ans. (a) \$3.30; (b) \$2.70.

8. A certain number of boys bought a basket of grapes containing $13\frac{1}{2}$ pounds at 10 cents per pound. One-third of the number agreed to pay 6 cents each, $\frac{1}{4}$ of them 8 cents each, and the others 9 cents each. Find (a) the number of boys; (b) the average contribution. Ans. (a) 18; (b) $7\frac{1}{2}$ cents.

9. When wood is worth \$3.25 per cord a merchant is billed \$34.12½ for a car-load 28 ft. long and 8 ft. wide. How high is the wood piled? Ans. 6 feet.

10. A reaping-machine takes a swathe of 13 ft. 9 in. How far will a team travel in reaping a 10 acre field? Ans. 6 miles.

CURIOUS ANSWERS.

The following specimens were culled, unchanged in spelling, expression or punctuation, from the answers to the history and literature papers at the last entrance examination.

HISTORY.

Question 2. "The wars of the Roses were started to rescue from infidels the sepecular of our Savour."

"A quarrel not much larger than a man's hand now in 1455 began to darken the Lancastrians."

"In the time of Henry VI. he became a

little silly and the imbesis (imbecile ?) Charles became regent during a time and as h^e once tasted royal blood he did not like to give it up when Henry became well, so there was a war arose."

3. "Elizabeth established religious, defeated the Aramanda, formed good laws, and invented the naval forces."

"As she was a Prodestan the art of religion was chiefly founded in England."

5. "Wm. Pitt was a prophice he told people what was going to happen when there were going to be wars or any thing like that."

"Wm. Pitt was a nobleman, he had a son and he was forced by a tyrant to try to kill his son. But he did it and he didn't hurt his son. The shot went right through the middle of the apple and Wm. Pitt was asked the reason he did it and he replied that if it had harmed his son that he would have killed the man who forced him to do it."

6. "This was commencent of penicular war which lasted 6 years in which wessley trampled upon many of bonepart's best generals."

7. "Mr. Gladstone has been primear of England for a long time but lately he has been thrown out by the conservatories."

8. "Henry VIII. was important because he married so often and got so many of his wives executed."

"Henry VIII. was important because he had six wives and only three children."

LITERATURE.

Question I (a) "Snowy wing," means "a white iceberg," "a wing "ll over snow."

"Shall fan" "she can fan herself with the wing that is cold."

(d) "Mart is a place that is cold, main is a place that is not so cold as mart," "Main is were it is sort of fence around were."

(h) "Groaning cargo of despair means a load of unhealthy food" "means the load is all over the ship and the men are groaning over it with despair," "means when they would be all drunk they would be making a dreadful noise and likely swearing and fighting," "Leathern drug means medicine wrapped in leather." (j) "We should express a feeling of joy," "surprise" "sorrow."

(k) "We should learn never to get drunk nor to be bad boys or girls."

Question 2 (a) "Frankness" means "dryness," "quietness," "pity," 'joyfulness," "keenness," "funny noise," "kind of rough and jolly." "Wistfully" means "stronly" "boldly," "cheerfully," "brightly." "wisely," "thoughtfully," "with thankfulness," "wonderfully," "very sharply."

"Waxing " means " getting sticky," "cold and hard like wax," " growing like wax," "pale and frightened," "separating," "dying and getting the colour of wax."

"Superadded means helped by an unseen hand," "said after him," "is half crying."

(b) "Rallied back means he received a little strength after he received the spirits."
(c) "Fluttered means fussed around."

" Throbbed means felt sorry," " didn't

know whether to go."(d) "That ligament, etc., means the scum

that came on his eyes was very thin, but it was never broken," "means that the skin which joins the bones was not broken."

CONTEMPORARY LITERATURE.

THE Montreal *Witness* will shortly celebrate its fortieth anniversary. Our contemporary is well and favourably known in Canada.

EVERY number of *Our Little Ones* for 1885 has maintained its reputation, as a pretty magazine in every way suitable for children.

THE Library Magazine continues to commend itself to a wide circle of readers by republishing good literature from magazines and reviews.

In the pages of the *Eclectic Magazine* are constantly found valuable articles, of interest to the reading public. In the number before us (November) there is an admirable selection, including two or three scientific articles and some short stories.

Littell's Living Age (Nov. 21.) is a good number, but it is scarcely necessary to suy so, for the Living Age seldom or never disappoints its readers. The page of verse which holds the place of honour must surely be selected by one who knows the poet's art well. A recent leading article in the London Spectator, entitled, "The Righteousness of Moderation" which can hardly fail to be read and pondered, closes the present number.

OUR contemporary, the Chicago Current, has triumphantly survived the many prophecies of its suspension. Its editorial comments on current events are incisive, shrewd and patriotic. Fiction and poetry also have no small space allotted to them. We will pass over a few remarks on Her Majesty, Queen Victoria, and many other less important personages, (such as the Captain of the *Algoma*), in silence, which is the most effective answer.

WE have before us the November number of *Electra*, a Southern Magazine published in Louisville, Ky., and edited by two ladies, which has many features to commend it to favourable consideration. Original verse and fiction, an occasional paper on history or travel, a medical department, and a wellconducted editorial department—such are the usual contents of a contemporary which we are glad to see.

A BRILLIANT array of artists and authors lend their aid to make the December Harper one of the finest numbers ever issued. The fiction is especially strong, including a farce by Mr. Howells which surpasses even the "Elevator" Story, and short stories by Elizabeth Stuart Phelps and Miss Murfree. Several of the great pictures of the Nativity are reproduced in the highest style of the engraver's art.

THE bi-monthly numbers of *Education* offer thoughts and make suggestions on the most essential part of the educator's work. In the last number, may be mentioned Prof. McCosh's article on "What an American

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University should be," and a happily-conceived paper "About the Minds of Little Children" by the Pev. M.A. Powers. There are also several articles on various aspects of education at the South.

WE beg to draw the attention of our readers to the announcements of the *Century* Company in regard to their publications (*Century* Magazine and *St Nicholas*) for the coming year, to be found in our advertising columns. The widely-read War Papers have no doubt been partly instrumental in causing the phenomenal increase in the circulation of the *Century* during 1885, but they have not been allowed to overshadow the other departments, as may be seen by reference to the November number, which is a particularly good one in several respects. *St Nicholas* has very many friends, and deservedly so.

Lippincott's Magazine. The November number of this popular monthly comes early to hand, the articles of most permanent interest being, perhaps, " The Peabody Museum of American Archæology "and "Queen Anne Architecture." In the first of these some account is given of this splendid endowment of Harvard University by the great philanthropist whose name it commemorates. The fiction is quite attractive ; clients would do well to ponder the result of "The Lady Lawyer's First Client," concluded this month, in which the client (a lady) settles her suit behind her counsel's back, for a ridiculously small sum of course, much less than the counsel had previously refused, and very much less than an enlightened jury was on the eve of awarding her against a railway company. [We regret very much that the foregoing notice was crowded out of last month's issue.]

SEED-THOUGHTS FOR THE GROWING LIFE. Selected by Mary E. Burt. 20 cents. Chicago: The Colegrove Book Co.

The "Seed-Thoughts" are three or four hundred quotations from Robert Browning, Marcus Aurelius, Longfellow and others, many of the best being anonymous. There is not too much poetry, indeed, it is a curious fact that there is, so far as we remember,

not one quotation from the greatest English poet. The history of the little book is given in the preface by the authoress. Teachers will find it interesting.

PEASE'S SINGING-BOOK FOR THE USE OF HIGH SCHOOLS AND MUSIC CLASSES. Boston : Ginn & Co.

Consists of a large number of progressive exercises and songs, designed for those wishing to read and understand music.

RIP VAN WINKLE. By Washington Irving. New York: Arthur Hinds, 3 W. 3rd St.

The "Amsterdam Edition" of Irving's famous story is a beautiful little book, artistic in design and execution. It is printed on pale-green paper in deep-blue ink, this combination having been lately pronounced by specialists to be the least injurious to eyesight.

A FIRST HIS. ORY OF ENGLAND. By Louise Creighton. London: Rivingtons. Third Edition.

Any one at all familiar with the work of this authoress in English history will not be at all surprised at the fair, candid, sensible and enthusiastic spirit in which the present volume is written. It contains probably from one-half to two-thirds as much matter as Miss Thompson's History of England (authorized); and, though comparisons are odious, we beg leave to say that the spirit of patriotism which breathes in this "First History" is almost undiscoverable in our authorized text-book.

ASTRONOMY FOR BEGINNERS. By F. Fellowes, M.A. New York : Jno. Wiley & Sons.

Designed for young children, this book really begins at the beginning, and forms a capital introduction to the study of astronomy.

FRANKLIN SQUARE SONG COLLECTION. No. 3. Selected by J. P. McCaskey. 50c. and \$1. New York : Harper & Brothers.

Among the two hundred songs and hymns which compose this collection, almost every

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school and home will find its favourites. A great advantage is secured by the careful arrangement of the songs and the introduction of apt quotations either on the more immediate subject of the song or on music in general.

THEORETICAL AND PRACTICAL BOOK-KEEPING. Williams and Rogers, Rochester.

This is not only one of the newest but one of the most complete works on book-keeping which we have seen. It deals with the method of keeping books in most of its phases, and the explanations are so full and clear that it may well be called self-instructing. It is of such a size that the examples supplied for the guidance of the student approximate to those in actual business. As a rule, however, the exercises are too lengthy to enable a student in a short time to obtain an intelligent grasp of the subject; and not sufficient attention is given to single entry, which, in spite of all the efforts against it of teachers of book-keeping, maintains its ground in the stores of a large portion of our retail dealers. The book is beautifully printed on fine paper.

GERMAN POETRY FOR SCHOOLS. Edited by C. H. Parry, M.A., and G. Gidley Robinson, M.A., Assistant-Masters at Charterhouse School.

A bright, attractive collection of German poems, selected from a great variety of sources, and supplied with a vocabulary. A few of the earlier poems are printed in both Roman and German type, and literally translated. If all this does not lure the beginner into the wide and pleasant fields of German poetry, how is it to be done?

The extracts in this little book of 180 pages are intended to test a candidate's ability to translate at sight a passage from an "unspecified author." For such a purpose great variety is necessary, and as little assistance as possible should be given. Mr. Lechner's collection, containing over 150 extracts, each about a page in length, from over sixty authors in various fields of literature, seems to do as much as can be done in such a very uncertain department.

THE GERMAN VERB-DRILL, presenting the Mechanism of the Colloquial and Written Language; adapted to Schools or Home Instruction. By Adolphe Dreyspring. New York: D. Appleton & Co., 1885. pp. 276.

The "German Verb-Drill" is intended to supplement a volume published some two years ago by the same author, and entitled "The Cumulative Method," or it may be used as an oral exercise book to any ordinary German grammar. Mr. Dreyspring recognizes a fact which is well known to all experienced teachers of language, that the verb is really of prime importance, and that a full mastery of its conjugation and a facility in its use, if once attained, make the remainder of the language easy. He also recognizes fully that to divorce theory from practice in language is to fail in both.

Books like this are excellent for oral practice, and the oral element in our teaching of language has been too frequently absent. For every rule or principle an example, both oral and written, and for every example a principle or a rule to be deduced should be the motio. We believe the Verb-Drill, or something like it, would remedy the deadness induced by the exclusive use of grammar and text, and that employed, as the author suggests, for ten or fifteen minutes, to vary the ordinary lessons, it would do much to awaken interest and make the study of language a thing of life. The system, even if not adopted, is worthy of examination on account of its freshness and originality.

THE NEW DRAWING BOOKS.

THE issue of a Canadian Series of Drawing-Books, authorized by the Minister of Education, and superseding the "American

GERMAN PASSAGES FOR PRACTICE IN UN-SEEN TRANSLATION. Edited by A. R. Lechner, Senior Master of Modern Languages, Modern School, Bedford. Rivingtons, Waterloo Place. London, 1885.

Text-Books of Art Education," formerly used in the Ontario Art School and elsewhere, naturally raised the expectation that the new series would be the work of men of experience and high reputation, and that it would be better adapted for our schools than that formerly in use.

With judgment, and a fair knowledge of progressive study and of the form which that study should take, it is not difficult to cull, from the many freehand examples extant, a sufficiency of good examples; or, indeed, a respectable collection of studies for a new series. Four books of the promised five are now before us, and puerile and unsatisfactory they prove to be, one of the most serious faults being a lamentable absence of unity. A number of petty, niggling designs, enough to give the beginner a dislike to drawing, are thrust among an otherwise fair selection. (Pages 9, 11 and 13, Book I., will exemplify). Such work is totally unsuitable for young pupils, or, indeed, for any pupil. Microscopic divisions of lines are subversive of the object specified in the synopsis. The pupil should acquire some skill in the use of the pencil, in the judgment of distances and proportion. In these books, so much of the construction and judgment of proportion is done for the pupil, and the examples to be copied are of so diminutive a size, that very little is left to be completed by the pupil, while the minimum exercise of "judgment" is required from him. He is moreover informed in the first paragraph of general directions, that he is to be "taught to rely solely upon the judgment of the eve in estimating form, distance and proportion." Five lines below this, he reads: "It is essential, however, that the teacher should have the means of testing the correctness of the drawings, and proving to his pupils the justice of his criticisms. Α pair of compasses and a rule divided into inches and fractional parts will suffice for the purpose, and these should always be at hand." Comment on this kind of teaching is needless.

SHAKESPEARE'S SELECT PLAYS.—"Twelfth Night." Edited by W. Aldis Wright, M.A. LL.D. New York and London: Macmillan & Co. Toron'o: R. W. Douglas & Co.

The "Clarendon Press" editions need no eulogy. Teachers and students are well aware that they are as nearly perfect as may be. In none is this more evident than in "Twelfth Night," and the "Merchant of Venice"; the latter being the text prescribed in English Literature for honor work at the Jun.or Matriculation of 1886 in the University of Toronto.

NATURAL HISTORY SZRIES. By James Johonnot. Books III. and IV. Neighbours with Claws and Hoofs and Their Kin. Neighbours with Wings and Fins and Some Others. For Boys and Girls. New York: D. Appleton & Co.

From title-page onwards, these books are beautiful, and bear witness, not only to the art of the engraver and printer, but also to the ability, industry and correct judgment of the editor. We have great pleasure in speaking of them in terms of high praise.

ELEMENTS OF INORGANIC CHEMISTRY, DESCRIPTIVE AND QUALITATIVE. By James H. Shepard, Instructor in Chemistry, Vpsilanti High School. D. C. Heath & Co., Boston, 1885.

There is probably no department in the curriculum of High School work that is so well supplied with text-books and works of reference as that of chemistry; yet we welcome this latest book, not because it adds anything to our present knowledge of this most exact of the physical sciences, but because it supplies a real want in educational literature. Science masters throughout the Province have felt the need of an elementary text-book of a higher grade than a primer that they could place in the hands of their pupils, with the expectation that it would prove more than a mere collection of facts to be memorized with difficulty, or an array of truths to be doubtfully assimilated. The author of this work is evidently a man who has had experience in teaching, and in teaching just such a class of pupils as we have in the High Schools of Ontario. The method he adopts, and the way in which he presents the subject, are the only ones practicable in our class-rooms, if the teaching of chemistry is to have any value. "This method contemplates," to quote the author's words in the chapter addressed to the teacher, " didactic instruction by the teacher; a good textbook, and as many books of reference as possible; much work by the student, who should keep a careful record of all work done, and who should recite frequently ; and work by the teacher, either in the presence of the class, when the class is large, or personal directions to the student when the class is small." The more important elements, non-metallic and metallic, with their t principal inorganic compounds, are briefly described, and the pupil is made acquainted with their characteristic properties and reactions by a series of simple experiments to be performed by the teacher before the class, or in some instances, where circumstances permit, by the pupil himself. The experiments chosen are such as best illustrate the subject under consideration, without, at the same time, requiring the use of such appa-

ratus as is to be found only in the best equipped laboratories of Europe. While proper attention is paid to the presentation of the facts of the science, due account also is taken of chemical theory; and the theories of Dalton and Avogadro, with their more important bearings, are very fairly dealt with. Especially commendable for clearness and simplicity is the chapter devoted to Binary Compounds, Acids, Bases, Salts, Chemical Nomenclature and Equations. The subjects perhaps least satisfactorily discussed are the Laws of Chemical Combination, the determination of Atomic Weights, and the definition and classification of the Metals But the faults in these respects are not sericus, and do not much impair the usefulness of the book; for they give a chance to the competent teacher to impart such supplementary instruction on these points as may best suit the requirements and capacity of his class. The most noteworthy, and probably the best, feature of the work is the attention given to such: matters as will cultivate the pupil's own powers of observation and give him a personal interest in the science. We therefore hearily commend it to the science teachers and pupils of Ontario as an efficient and reliable text-book.

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Our readers will observe that special attention has been given to the examination papers of this year in the July-August, September and October numbers of the Magazine; in many cases hints and answers are given, and for several papers solutions have b en furnished to all the questions. We hope subscribers and others will show in a practical way their intelligent appreciation of the valuable work done by the editors of the different departments of THE MONTHLY.

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